

(12) **INTER PARTES REVIEW CERTIFICATE** (3446th)

**United States Patent**  
**Stokking et al.**

(10) **Number:** **US 9,667,669 K1**  
(45) **Certificate Issued:** **Feb. 9, 2024**

---

(54) **MANAGING ASSOCIATED SESSIONS IN A NETWORK**

(75) **Inventors:** **Hans Maarten Stokking; Fabian Arthur Walraven; Mattijs Oskar van Deventer; Omar Aziz Niamut**

(73) **Assignee:** **KONINKLIJKE KPN N.V.**

**Trial Number:**

IPR2022-00557 filed Feb. 10, 2022

**Inter Partes Review Certificate for:**

**Patent No.:** **9,667,669**  
**Issued:** **May 30, 2017**  
**Appl. No.:** **13/144,385**  
**Filed:** **Jul. 13, 2011**

The results of IPR2022-00557 are reflected in this inter partes review certificate under 35 U.S.C. 318(b).

**INTER PARTES REVIEW CERTIFICATE**  
**U.S. Patent 9,667,669 K1**  
**Trial No. IPR2022-00557**  
**Certificate Issued Feb. 9, 2024**

**1**

**2**

AS A RESULT OF THE INTER PARTES  
REVIEW PROCEEDING, IT HAS BEEN  
DETERMINED THAT:

Claims **2, 3, 6** and **8** are found patentable.

**5**

Claims **1, 10-12, 21, 22, 24** and **25** are cancelled.

\* \* \* \* \*

NOTE: This order is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

---

**ERICSSON, INC.,**  
*Appellant*

v.

**KONINKLIJKE KPN N.V.,**  
*Appellee*

---

**2024-1240**

---

Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. IPR2022-  
00557.

---

**O R D E R**

The parties having so agreed, it is ordered that:

(1) The proceeding is DISMISSED under Fed. R. App.  
P. 42 (b).

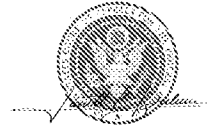
2

ERICSSON, INC. v. KONINKLIJKE KPN N.V.

(2) Each side shall bear their own costs.

FOR THE COURT

January 17, 2024  
Date



Jarrett B. Perlow  
Clerk of Court

**ISSUED AS A MANDATE: January 17, 2024**

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ERICSSON INC.,  
Petitioner,

v.

KONINKLIJKE KPN N.V.,  
Patent Owner.

IPR2022-00557  
Patent 9,667,669 B2

Before KEVIN F. TURNER, ROBERT J. WEINSCHENK, and  
RUSSELL E. CASS, *Administrative Patent Judges*.

Opinion for the Board filed by TURNER, *Administrative Patent Judge*.

Opinion dissenting-in-part and concurring-in-part filed by WEINSCHENK,  
*Administrative Patent Judge*.

TURNER, *Administrative Patent Judge*.

JUDGMENT  
Final Written Decision  
Determining Some Claims Unpatentable  
Denying Patent Owner's Motion to Amend  
*35 U.S.C. § 318(a)*

## I. INTRODUCTION

### A. Background

Ericsson Inc. and Telefonaktiebolaget LM Ericsson (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting institution of *inter partes* review of claims 1–3, 6, 8, 10–12, 21, 22, 24, and 25 of U.S. Patent No. 9,667,669 B2 (Ex. 1001, “the ’669 Patent”). Koninklijke KPN N.V. (“Patent Owner”) filed a Preliminary Response (Paper 5, “Prelim. Resp.”). On October 8, 2022, we instituted an *inter partes* review of all challenged claims based on all grounds in the Petition. Paper 8 (“Inst. Dec.”). Patent Owner filed a Response to the Petition (Paper 12, “PO Resp.”), Petitioner filed a Reply (Paper 18, “Pet. Reply”), and Patent Owner filed a Sur-reply (Paper 22, “PO Sur-reply”).

Patent Owner also filed a contingent Motion to Amend and a request for preliminary guidance (Paper 13, “MTA”), to which Petitioner filed an Opposition to the Motion to Amend (Paper 17, “Opp.”). The Board issued preliminary guidance on the Motion to Amend. Paper 21 (“PG”). Patent Owner filed a Reply to the Opposition (Paper 23, “PO Reply”), and Petitioner filed a Sur-reply (Paper 27, “Pet. Sur-reply”) thereto.

An oral hearing was held on July 13, 2023. A transcript of that hearing has been entered into the record. Paper 31.

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued under 35 U.S.C. § 318(a). For the reasons that follow, Petitioner has shown by a preponderance of the evidence that claims 1, 10–12, 21, 22, 24, and 25 are unpatentable, Petitioner has not shown by a preponderance of the evidence that claims 2, 3, 6, and 8 are unpatentable,

and we deny Patent Owner's contingent motion to amend with respect to proposed substitute claims 26–28.

*B. Related Proceedings*

Both parties identify the following judicial or administrative matter that would affect, or be affected by, a decision in this proceeding: *Versata Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson*, Case No. 2:21-cv-113 (E.D. Tex.). Pet. 2; Paper 4, 2.

*C. The '669 Patent*

The '669 Patent is titled “Managing Associated Sessions in a Network,” and is asserted to provide “a method and a system for managing associated multimedia sessions in a network,” including the provision of a composition session identifier. Ex. 1001, code (54), Abs. With the growth of IP Multi-Media Subsystem (IMS) architecture, IMS-enabled services are offered that combine sessions (also referred to as streams) from various sources such as audio, video, and other media. *Id.* at 1:23–37. According to the '669 Patent, IMS-enabled services permit an end user to be an active participant in a multimedia session having multiple underlying media sessions instead of a passive viewer. *Id.* at 1:38–40.

The '669 Patent also details that in prior art systems, the network element is unaware of the association between the various underlying media sessions that are combined to make up these multimedia services, such that the network element may not treat each underlying media session uniformly or in a manner conducive to the multimedia services, which could impact quality of service. Ex. 1001, 2:10–15. The '669 Patent discloses the use of a composition session to associate multiple underlying media sessions and

manages the associated sessions through one or more composition sessions.  
*Id.* at 3:25–43, 4:54–55.

In one embodiment, associated sessions are managed in an IMS-based Internet Protocol Television (IPTV) system, which uses Session Initiation Protocol (SIP) to setup and control media sessions between user equipment (UE) and a network element, such as a Service Control Function (SCF) or a Media Function (MF), with exemplary protocol flow illustrated in Figure 2, reproduced below. Ex. 1001, 7:39–42, 7:22–26, 7:29–30, 7:9–10.

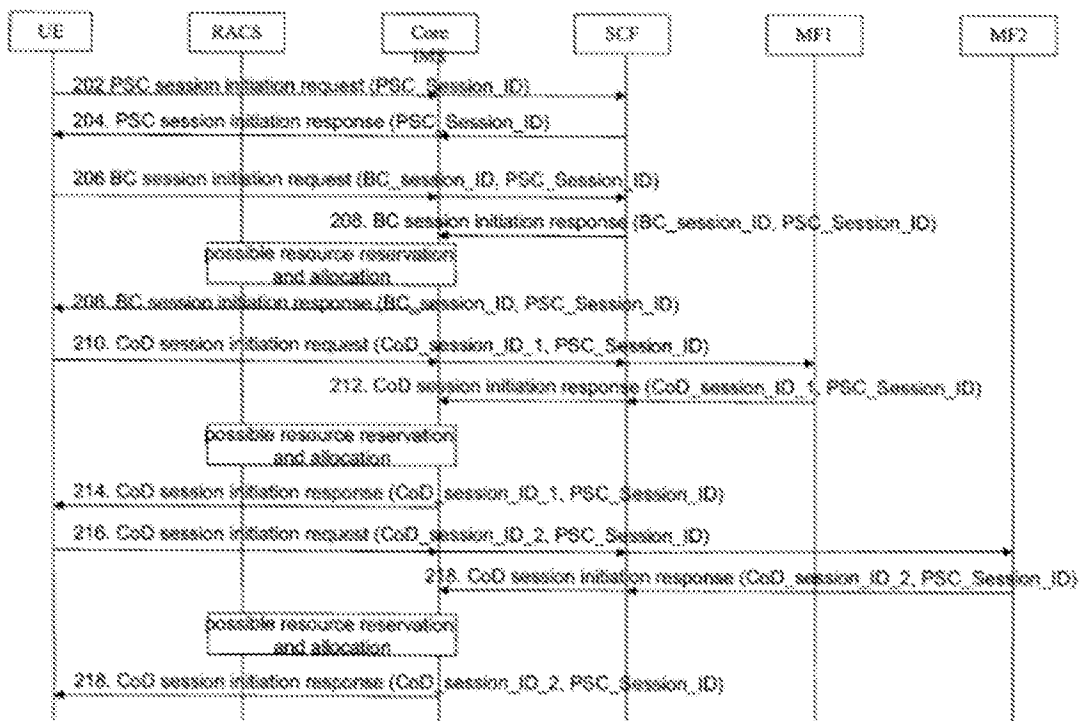


Figure 2

Figure 2 of the '669 Patent illustrating a flow diagram

In Figure 2, the composition session is a personalized stream or service composition (PSC) session, and the composition session identifier is referred to as PSC\_Session\_ID. The composition session identifier may be generated or created by the UE or the network element, or provided by a



third party, such as an application server or an Electronic Programming Guide. Ex. 1001, 8:1–5. The method associates underlying media sessions by exchanging the composition session identifier between the UE and the network element (for example, network elements SCF or MF1/MF2), to initiate the composition session and to initiate the associated media sessions.

*D. Challenged Claims*

Claims 1 and 21 are the sole independent claims challenged in this proceeding, with each of challenged claims 2, 3, 6, 8, 10–12, 22, 24, and 25 dependent on one of those claims, directly or indirectly. Independent claim 1 is considered to be representative and is reproduced below:

1. [1p] A method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

[1a] providing a composition session identifier for associating sessions in the network;

[1b] after providing the composition session identifier, exchanging the composition session identifier between a user equipment and the network element a first time;

[1c] associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment;

[1d] initiating establishment of a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more sessions; and

[1e] modifying the composition session, wherein modifying the composition session comprises using signaling in the composition session to terminate all of the two or more sessions.

Ex. 1001, 12:30–50 (with annotations provided by Petitioner, Pet. 25–50).

*E. Asserted Ground of Unpatentability & Evidence*

Petitioner asserts the following ground of unpatentability (Pet. 6, 21–72):

<b>Claims Challenged</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>
1–3, 6, 8, 10–12, 21, 22, 24, 25	103(a) <sup>1</sup>	Foti, <sup>2</sup> RFC 3261, <sup>3</sup> RFC 4566, <sup>4</sup> RFC 2326, <sup>5</sup> Wright, <sup>6</sup> Lloyd <sup>7</sup>

In the Petition, Petitioner relied on the declaration of Mr. Anthony Wechselberger (Ex. 1003). Petitioner submitted additional declarations of Mr. Wechselberger with its Reply and its Opposition to the Motion to Amend. Exs. 1023, 1026. Mr. Wechselberger was cross-examined by Patent Owner, and a transcript of his deposition was entered into the record.

---

<sup>1</sup> The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011), revised 35 U.S.C. § 103 effective March 16, 2013. Because the challenged patent claims priority to an application filed before March 16, 2013, we refer to the pre-AIA version of § 103.

<sup>2</sup> U.S. Patent Publication 2008/0151918 A1, filed Dec. 22, 2006, published Jun. 26, 2008 (Ex. 1006, “Foti”).

<sup>3</sup> J. Rosenberg et al., SIP: Session Initiated Protocol, RFC 3261, June 2002 (Ex. 1007, “RFC 3261”).

<sup>4</sup> M. Handley et al., SDP: Session Description Protocol, RFC 4566, Jul. 2006 (Ex. 1008, “RFC 4566”).

<sup>5</sup> H. Schulzrinne et al., Real Time Streaming Protocol (RTSP), RFC 2326, Apr. 1998 (Ex. 1009, “RFC 2326”).

<sup>6</sup> U.S. Patent Publication 2006/0039367 A1, filed Dec. 30, 2004, published Feb. 23, 2006 (Ex. 1010, “Wright”).

<sup>7</sup> European Patent Application 1777969 A1, filed Oct. 10, 2005, published Apr. 25, 2007 (Ex. 1011, “Lloyd”).

Ex. 2016. Patent Owner submitted declarations of Mr. Regis J. Bates, Jr. with its Response, its Motion to Amend, and its Reply. Exs. 2009, 2017, 2027. Mr. Bates was cross-examined by Petitioner, and transcripts of his deposition were entered into the record. Exs. 1022, 1035.

## II. ANALYSIS

### *A. Level of Ordinary Skill in the Art*

Petitioner, supported by Mr. Wechselberger’s testimony, proposes that a person of ordinary skill in the art at the time of the invention “would be a person with a B.S. degree in electrical engineering, computer engineering, or equivalent training or job experience, with two years of experience in computer networking technology, or a Master’s degree in electrical engineering, computer engineering, or other equivalent degree.” Pet. 13 (citing Ex. 1003 ¶ 47). Patent Owner indicates that it does not challenge the qualifications proposed by Petitioner for a person of ordinary skill in the art. PO Resp. 14.

We find Petitioner’s proposal consistent with the level of ordinary skill in the art reflected by the prior art of record, *see Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978), and, therefore, we continue to adopt Petitioner’s unopposed position as to the level of ordinary skill in the art for purposes of this decision.

### *B. Claim Construction*

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2020). The claim construction standard includes construing claims in accordance with

the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

Petitioner asserts that one claim term, “composition session,” requires explicit construction (Pet. 20–21), whereas Patent Owner asserts that the same claim term, plus two additional claim elements, namely “associated sessions” and “exchanging the composition session identifier,” should be construed expressly. PO Resp. 14–16. We consider the parties’ proposed, express constructions below.

1. “*associated sessions*”

With respect to the limitation “associated sessions,” Patent Owner asserted that the ’669 Patent defines those sessions as those that “should not be managed independent from each another,” and continues to assert the same in its Response. PO Resp. 14–15 (quoting Ex. 1001, 7:37–38). Based on the recitations of the Specification, we construe “associated sessions” as “sessions that should not be managed independent from each other,” as proffered by Patent Owner. Ex. 1001, 7:37–38.

2. “*composition session*”

With respect to the limitation “composition session,” Petitioner asserted that it should be construed as “a separate signaling session for managing the associated sessions that is initiated using a different signaling session than the associated sessions,” which Petitioner asserts to be consistent with the definition in the Specification and the applicant’s

statements made during prosecution. Pet. 20 (citing Ex. 1001, 3:61–4:1). Petitioner asserts that the patent applicant stressed during prosecution that the composition session is a session for management that is initiated separately and is different than the associated sessions, which differs from Patent Owner’s asserted construction of the term in the litigation as a “signaling session separate from the associated sessions.” *Id.* at 20–21 (citing Ex. 1002, 49–50, 52; Ex. 1017, ex. A, 32; Ex. 1020, 25–27).

Patent Owner asserts that the United States District Court for the Eastern District of Texas rejected Petitioner’s proposed construction in the District Court Case, and following briefing and oral argument in that proceeding, the District Court concluded that “composition session” means “a signaling session that is separate from the associated sessions and that is for facilitating management of the associated sessions.” PO Resp. 16. Having reviewed the District Court’s determination, we do not discern a significant difference in scope between it and Petitioner’s formulation, and we, thus, adopt its construction of “composition session” in the analysis below.

### 3. “exchange”

Claim 1 recites, in part, “exchanging the composition session identifier.” In its arguments countering the ground of unpatentability laid out in the Petition, Patent Owner asserted that the “Petition’s assertion that one-way transmission of one and only one SIP message is an ‘exchange’ as recited in Claim 1,” is contrary to the disclosures of Foti and RFC 3261. Prelim. Resp. 48–52 (quoting *id.* at 50). Patent Owner argues that Foti teaches that the SIP INVITE message and the OK message back, taken together, constitute an exchange, and that RFC 3261 discloses a two-phase

exchange of SDP messages. *Id.* at 50–51 (citing Ex. 1006 ¶¶ 7, 25, claims 12, 24; Ex. 1007, 15, 16, 79). This argument, however, excludes consideration of the Specification of the ’669 Patent, which discloses that “[t]he sending of such composition session identifier in either direction may be referred to as an ‘exchange.’” Ex. 1001, 3:18–20. As such, the plain and ordinary meaning of “exchanging the composition session identifier,” in the context of the Specification, is “sending the composition session identifier in either direction.” Patent Owner has acknowledged that construction. PO Resp. 16. We apply that construction in the analysis below.

#### 4. *Other terms*

We determine that it is not necessary to provide an express interpretation of any other claim terms. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

#### C. *Legal Standards – Obviousness*

The U.S. Supreme Court sets forth the framework for applying the statutory language of 35 U.S.C. § 103 in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966):

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

As explained by the Supreme Court in *KSR Int'l Co. v. Teleflex Inc.*,

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.

550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”)).

“Whether an ordinarily skilled artisan would have been motivated to modify the teachings of a reference is a question of fact.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1327 (Fed. Cir. 2016) (citations omitted). “[W]here a party argues a skilled artisan would have been motivated to combine references, it must show the artisan ‘would have had a reasonable expectation of success from doing so.’” *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1360–61 (Fed. Cir. 2017) (quoting *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068–69 (Fed. Cir. 2012)).

*D. Obviousness over Foti in view of RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd*

Petitioner asserts that the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd would have rendered the subject matter of claims 1–3, 6, 8, 10–12, 21, 22, 24, and 25 obvious to one of ordinary skill in the art at the time of the invention. Pet. 21–72. Patent Owner argues that

the Petition has failed to establish the requisite motivation to combine the cited references and the cited references do not teach or suggest at least limitations [1p], [1c], and [1d] of independent claim 1, and equivalent elements of independent claim 21. PO Resp. 20–35. Patent Owner also provides separate arguments regarding the patentability of dependent claims 2, 3, 6, 8, and 10 over the asserted references. *Id.* at 35–59. Additionally, Patent Owner argues that objective indicia of nonobviousness demonstrate that the challenged claims are not obvious over the asserted references. *Id.* at 59–63. We begin with brief discussions of the cited references, and then consider Petitioner’s arguments with respect to the references’ teachings applied to the instant claims as well as Patent Owner’s arguments asserting deficiencies in this ground of unpatentability.

1. *Foti*

*Foti* describes a method for managing media sessions by associating a media session to a SIP signaling session. Ex. 1006, code (54), Abs. *Foti* details that in prior art systems, the SIP signaling session is not linked to the RTSP media session that it creates, such that reliable identification and authentication of the user is difficult and prohibits the correlation of accounting information with the user for billing purposes. *Id.* ¶ 4. *Foti* teaches that linking the RTSP session to the SIP session facilitates management of the RTSP sessions, such that network operators can more accurately identify users to be charged for media transactions, reconcile accounting records, and detect fraud. *Id.* ¶ 5. *Foti*’s methods for establishing multimedia streaming sessions are embodied in an IPTV system that uses standard IMS and IETF protocols such as SIP, SDP, and RTSP. *Id.* ¶¶ 2, 3, 5.



When a user desires to watch content on UT 20, the “user issues an RTSP command from a remote control such as ‘PLAY,’ to start watching a movie.” Ex. 1006 ¶ 30. UT 20 next issues a SIP INVITE 64 message to AS 40, which contains an identification of the user, a SIP session ID, and a Uniform Resource Locator (URL) that identifies a particular MCS 30 and/or media program being requested. *Id.* UT 20 initiates a media session by sending a SIP INVITE message to AS 40. *Id.* ¶ 25. The signaling flow to complete this process is shown in Figure 4, as reproduced below:

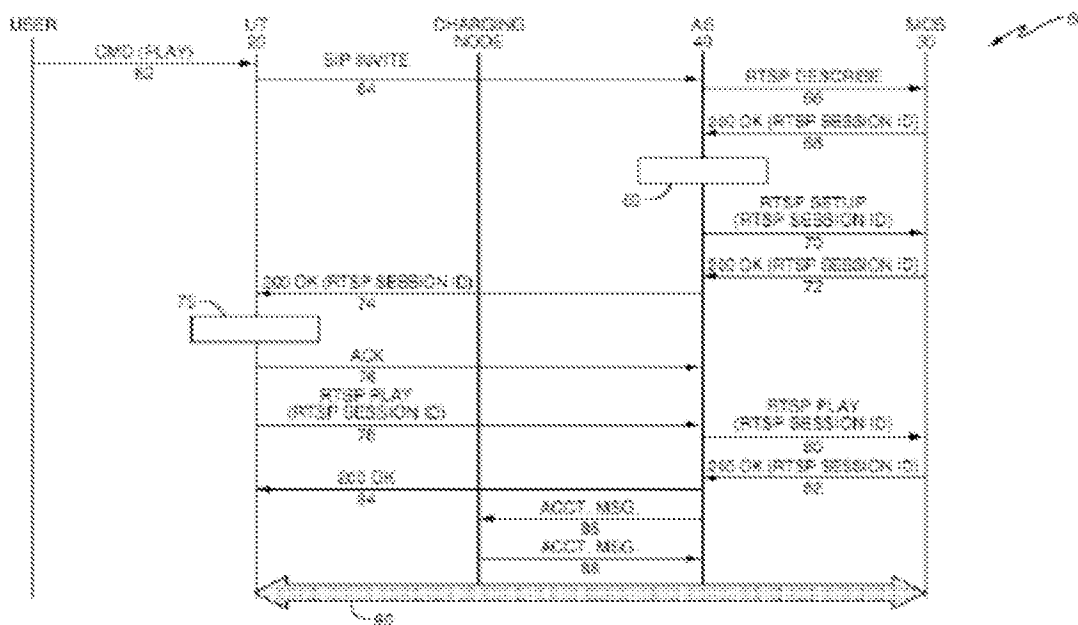


FIG. 4

Figure 4 of Foti illustrates the call flow according to one embodiment

Foti is directed to managing media sessions generally, and in certain embodiments, more than one RTSP session, through its RTSP session ID, may be linked to the same SIP session, through its SIP session ID. Ex. 1006 ¶ 28. Figure 3 illustrates that table 52 provides that RTSP2 and RTSP4, both RTSP session IDs, can be made to correspond to SIP2, a single SIP session

ID. *Id.* ¶ 28, Fig. 3. Table 52 may also store the user ID and the URL associated with the RTSP media session. *Id.* ¶ 28.

2. *RFC 3261, RFC 4566, and RFC 2326*

RFC 3261 is an IETF standard document describing the Session Initiated Protocol (SIP), which is a signaling protocol for creating, modifying, and terminating sessions. Ex. 1007, Abs. SIP is a component that can be used with other IETF protocols to build a multimedia architecture. *Id.* at 9–10.

RFC 4566 is an IETF standard document describing the Session Description Protocol (SDP), which is a protocol for describing media sessions for purposes of session initiation. Ex. 1008, Abs.

RFC 2326 is an IETF standard document describing the Real Time Streaming Protocol (RTSP). Ex. 1009, Abs. RTSP provides for the setup and teardown of real-time streaming media sessions, as well as providing mechanisms for real-time control of the streaming media such as PLAY and PAUSE. *Id.* at Abs., 33–37.

3. *Wright and Lloyd*

Wright describes methods for establishing media streams in IPTV systems using SIP messages. Ex. 1010 ¶ 8. Wright further discloses methods for terminating the media streams using SIP messages, whereby the termination includes the user equipment sending a SIP BYE message (as taught by RFC 3261), and the network responding to that message by terminating the media stream. *Id.* ¶¶ 8, 38, Fig. 6.

Lloyd is concerned with the transmission of video signals via a network, and describes methods for establishing media streams in video systems using SIP messaging and SDP to communicate information and

parameters that describe the media stream. Ex. 1011 ¶ 11. The SDP signaling can be used to reset the parameters of a video conferencing session and send them to the receiving end, including analyzing of network conditions, with periodic adjustments to the video frame rate being communicated to receivers via a “SDP message with new frame rate.”

*Id.* ¶ 12, Fig. 3.

4. *Proffered Motivation to Combine Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd*

Petitioner asserts that persons of ordinary skill in the art would have been motivated to combine Foti with RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd to arrive at the claimed invention. Pet. 21 (citing Ex. 1003 ¶¶ 79–85). Petitioner asserts that such skilled artisans would have been motivated to refer to these RFCs to implement the express teachings of Foti to manage RTSP sessions using a SIP session, SDP, and SIP session identifier, and would have had a reasonable expectation of success. *Id.* at 21–22. Additionally, Petitioner asserts that it would have been obvious to combine the teachings of Foti with those of Wright, since both Foti and Wright discuss establishing media sessions using SIP and RTSP protocols, and Wright discloses additional techniques for admission control whereby the network decides whether the session can be established based on the amount of available bandwidth. *Id.* at 23 (citing Ex. 1010 ¶¶ 5–7, 23, 36; Ex. 1003 ¶ 83).

Petitioner also asserts that Wright also teaches how to terminate the media session using a user-initiated SIP BYE message and that Foti discloses methods for continuing a media session in the event that the SIP session times out and the user desires to continue watching the media

session. *Id.* (citing Ex. 1010 ¶ 38, Fig. 6; Ex. 1006 ¶¶ 37–39). Petitioner asserts that skilled artisans would have been motivated to include Wright’s ability to terminate unwanted media sessions using a SIP BYE message in Foti’s system to complement Foti’s disclosed processes, and as this would have been an expected functionality of an IPTV service. *Id.* at 23–24 (citing Ex. 1003 ¶ 84). Lastly, Petitioner asserts that person of ordinary skill in the art would have been motivated to follow the teachings of Lloyd to modify Foti to support the known technique of adaptive video frame rate media streams to achieve better perceived quality of service from AS 40 and to be able to accommodate changes in network transmission capacity and to meet “the challenge of consistent provision of QoS.” *Id.* at 24–25 (citing Ex. 1011 ¶ 3; Ex. 1003 ¶ 85).

Patent Owner has asserted that there is no motivation to combine Foti, Wright, and RFC 3261 to arrive at [1e]. PO Resp. 34. Other than that, Patent Owner does not traverse the motivation to combined the asserted references. As such, we address Patent Owner’s arguments with respect to motivation to combine in the section below addressing element [1e] of independent claim 1.

As such, we continue to determine that Petitioner has sufficiently established that an ordinarily skilled artisan would have had a rationale to combine the teachings of Foti with RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd, and would have had a reasonable expectation of success in achieving that combination, as we determined in the Institution Decision. *See* Inst. Dec. 17–18. We continue to be persuaded that one of ordinary skill in the art would have consulted and utilized disclosures in the RFC references to understand and implement the protocols disclosed by Foti. We

are further persuaded by Petitioner’s arguments that such skilled artisans would have had a rationale to combine the teachings of Wright and Lloyd with those of Foti for the reasons provided. Petitioner has asserted that each of the supporting references would have been used by persons of ordinary skill in the art to modify or enhance the system described in Foti for the benefits described for the proposed changes. Absent reasons the references should not be combined, we determine that the motivation proffered by the Petition is sufficient to support the combination, under the preponderance of the evidence standard.

5. *Claim 1*

a. *Element [1p]: Preamble*

With respect to the preamble of claim 1, Petitioner asserts that Foti discloses a network which “includes a network element (AS 40) that manages media sessions between the network and at least one user equipment (user terminal (UT) 20).” Pet. 25 (citing Ex. 1006 ¶¶ 19–20, Fig. 1). Petitioner also asserts that Foti discloses associating the RTSP sessions and SIP session using AS40 to “link the RTSP session to the SIP signaling session used to setup the RTSP media session,” and that AS40 “correlates the RTSP session ID to the SIP session using, for example, information included within the SIP INVITE message previously received from the UT 20.” *Id.* at 26 (citing Ex. 1006 ¶¶ 26–27). Petitioner further asserts that Foti’s disclosure of linking and correlating the RTSP sessions to the SIP session discloses that the managed sessions are “associated” as claimed, and that Foti’s AS 40 performs specific management functions, such as identifying the user or its information. *Id.* at 26–27 (citing Ex. 1006 ¶¶ 18, 20; Ex. 1003 ¶ 88). Petitioner also asserts that persons of ordinary skill in

the art would have understood that Foti's system could be used to manage the associated RTSP sessions by setting up, modifying, or terminating the associated sessions, where those functions would have been understood as management functions. *Id.* at 26–27 (citing Ex. 1003 ¶ 89).

Patent Owner argues that the combination of references does not teach or suggest “associated sessions,” as recited in the preamble of independent claim 1. PO Rep. 20. Patent Owner argues that the bulk of Foti considers the linking of one RTSP ID with one SIP ID, and all of Foti that can be relied upon with respect to linked sessions is disclosed in paragraph 28 and Figure 3 of Foti. *Id.* at 21. Patent Owner continues that the section of Foti cited in the Petition does not indicate associated sessions, such that those sessions should not be managed independent of each other. *Id.* at 21–22; PO Sur-reply 21–22. Additionally, Patent Owner argues that the testimony of Petitioner's declarant cites only to those portions of Foti and provides no other evidence that the linked IDs indicates sessions that are related to each other. PO Rep. 22–23. Lastly, Patent Owner argues that the remaining references also do not teach or suggest “associated sessions,” such that the combination fails to teach or suggest the preamble of claim 1. *Id.* at 23–24.

Petitioner responds that the combination discloses “associated sessions” under Patent Owner's proposed construction, given that Foti discloses that sessions RTSP2 and RTSP4 are linked to the same SIP session ID, with “linking” and “associating” have the same meaning in this context. Pet. Reply 3–4 (citing Ex. 1026 ¶¶ 34–35; Ex. 1025, 29, 293). Petitioner also responds that Foti discloses how the RTSP sessions relate to each other on a higher level in that both media streams accessed by a user of UT are associated with the SIP session for management purposes (e.g.,

charging/accounting/fraud detection). *Id.* at 5 (citing Pet. 26–27; Ex. 1026 ¶ 37).

We are not persuaded by Patent Owner’s arguments with respect to the preamble of independent claim 1. As we determined in the Institution Decision, Foti clearly discusses table 52, illustrated in Figure 3, as having the media sessions identified by RTSP2 and RTSP 4 [] both linked to the signaling session identified by SIP2. *See* Ex. 1006 ¶ 28. We continue to determine that the linking of the multiple RTSP IDs with a single SIP ID, via the exchanged “correlation information,” would allow for facilitation of management of the two or more RTSP sessions, such that if the SIP session should terminate the AS would reject RTSP commands as invalid. *See* Inst. Dec. 24; Pet. 42; Ex. 1006 ¶¶ 36–37. We fail to determine a significant difference between “linking” two or more RTSP sessions with an SIP ID, as taught by Foti, and “associating two or more sessions with the composition session identifier,” recited later in claim 1.

Thus, we determine, on the present record, that Petitioner has established that Foti meets the limitations of the preamble of claim 1 for the reasons explained by Petitioner, by a preponderance of the evidence.

*b. Element [1a]: “providing a composition session identifier”*

With respect to the method step of providing a composition session identifier for associating sessions in the network, Petitioner asserts that Foti discloses that UT 20 provides a composition session identifier for associating RTSP sessions in the network, by generating a SIP session ID, and that one of ordinary skill in the art would have understood that for UT 20 to send the SIP INVITE containing the SIP session ID to AS 40, UT 20 first would have generated or provided the SIP session ID. Pet. 28 (citing

Ex. 1006 ¶¶ 25–27, 30; Ex. 1003 ¶ 90). Petitioner notes that “[t]his is also consistent with the disclosure of the ‘669 Patent, which states ‘the PSC ID may be implemented as a SIP Call ID (as defined in RFC 3261).’” *Id.* at 31 (quoting Ex. 1001, 9:44–45).

Patent Owner does not offer counter arguments with respect to this element of claim 1 in the Patent Owner Response. We determine, on the present record, that Petitioner has established that Foti meets the limitations of this element of claim 1 for the reasons explained by Petitioner, by a preponderance of the evidence.

*c. Element [1b]: “exchanging the composition session identifier”*

Claim 1 recites, in part, exchanging the composition session identifier between a user equipment and the network element a first time. Petitioner asserts that Foti discloses that after the UT 20 generates the SIP INVITE, including the composition session identifier, i.e., the SIP session ID, UT 20 sends the SIP INVITE to AS 40. Pet. 31–32 (citing Ex. 1006 ¶ 30, Fig. 4).

Patent Owner does not offer counter arguments with respect to this element of claim 1 in the Patent Owner Response. We determine, on the present record, that Petitioner has established that Foti meets the limitations of this element of claim 1 for the reasons explained by Petitioner, by a preponderance of the evidence.

*d. Element [1c]: “associating two or more sessions”*

Claim 1 recites, in part, associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment. Petitioner



asserts that Foti, alone or in combination with RFCs 4566, 3261, and 3388, discloses associating two or more RTSP sessions using the composition session identifier (i.e., SIP session ID). Pet. 33. Petitioner asserts that Figure 3 of Foti illustrates that two RTSP sessions are associated with a single SIP session identifier, and that Foti states that “[m]ore than one RTSP session ID may be linked to the same SIP session ID.” *Id.* at 35–36 (citing Ex. 1006 ¶ 27, Fig. 3).

Petitioner also asserts that Foti discloses that the 200 OK message to the UT 20 may contain the correlation information determined by AS40, which completes the association of the two or more sessions by AS 40 and allows the UT 20 to also associate the two or more sessions. Pet. 36–38 (citing Ex. 1006 ¶¶ 31–33, Fig. 4). As we discussed in the Institution Decision, the plain and ordinary meaning of “exchanging the composition session identifier,” in the context of the Specification, is “sending the composition session identifier in either direction.” Inst. Dec. 23. Given the description supplied in the Specification of the ’669 Patent, we agree with the Petition that the one-way transmission of a single message may be referred to as an “exchange.” Also, under the plain and ordinary meaning, the 200 OK message to the UT 20, would have been an exchange and would involve the exchange of the SIP session ID a second time in the timing diagram, i.e., Figure 4, of Foti.

Patent Owner argues that even considering the responsive 200 OK message, in Foti, as a possible second exchange, and, further positing that it meets the recited “exchanging . . . at least a second time,” the alleged second exchange leads at best to only a single RTSP session linked to the SIP session ID. PO Resp. 25–26 (citing Ex. 2009 ¶¶ 131–133); PO Sur-reply

19–20. Patent Owner also argues that “[t]o argue that Foti allegedly renders [1c] obvious requires addressing the necessity of more than two exchanges and whether and how any such additional exchange(s) would link more than one RTSP session ID to the SIP session ID—and why a POSITA would have done so.” *Id.* at 26.

Petitioner responds that two or more RTSP sessions are associated with the SIP session ID during the process shown in Foti’s Figure 4, such that after the SIP INVITE is received by AS 40 (the first exchange), more than one RTSP session is linked using Table 52, the 200 OK message is sent to UT 20 (the second exchange), and UT 20 then re-creates a local copy of Table 52 (including the more than one linked RTSP sessions, as disclosed in Fig. 3). Pet. Reply 7 (citing Pet. 33–38). Based on this, Petitioner asserts that Patent Owner is wrong in arguing that the second exchange leads only to a single RTSP session being linked to a SIP session ID. *Id.* (citing Ex. 1026 ¶ 43). Petitioner also counters Patent Owner’s argument that Foti never explains how the second RTSP session is setup, arguing that the claim does not require setting up sessions, only establishing a composition session to manage them. *Id.* at 8.

We are not persuaded by Patent Owner’s arguments with respect to this element of independent claim 1. As discussed above, we remain persuaded that Foti discloses the associating of two or more sessions, and that it does so through what the ’669 Patent would recognize as exchanges. Specifically, Foti teaches that AS 40 “correlates the RTSP session ID to the SIP session,” and that “[m]ore than one RTSP session ID may be linked to the same SIP session ID.” Ex. 1006 ¶¶ 27–28, Fig. 3. Foti also teaches that AS 40 “send[s] the correlation information to the UT 20” in a 200 OK

message. *Id.* ¶¶ 27, 32. Patent Owner asserts that “Foti does not teach anywhere *how* two RTSP session IDs can be linked to the *same* SIP session ID” (PO Sur-reply 19, emphases added), but Foti’s Figure 3 illustrates two or more RTSP sessions *are* associated with a single SIP session ID. Foti does not disclose the precise signaling that is involved to arrive at the associated sessions, but Petitioner has explained that Foti in view of RFC 3261 would have taught or suggested that the message sent would have included the same SIP Session ID previously used to achieve the associated sessions. *See* Pet. 38.

We determine, on the present record, that Petitioner has established that Foti meets the limitations of this element of claim 1 for the reasons explained by Petitioner, by a preponderance of the evidence.

*e. Element [Id]: “initiating establishment of a composition session”*

Claim 1 recites, in part, initiating establishment of a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more sessions. Petitioner asserts that a user interacts with UT 20 via a TV set to initiate the composition session (SIP signaling session) by sending a SIP INVITE to AS 40. Pet. 39 (citing Ex. 1006 ¶ 24). Petitioner also asserts that Foti discloses that the SIP signaling session is a composition session because the SIP signaling session is a separate session initiated by UT 20 using a SIP INVITE (64), while the RTSP session is a separate RTSP session set up by AS 40 and MCS 30 using different RTSP messages. *Id.* at

40 (citing Ex. 1006, Fig. 4). Petitioner further asserts that Foti's signaling session facilitates management of the two or more (RTSP) sessions, such that if the SIP session should terminate the AS would reject RTSP commands as invalid. *Id.* at 42 (citing Ex. 1006 ¶¶ 36–37). Petitioner also asserts that the composition session identifier is exchanged between the user equipment and the network as part of said establishment, as discussed above, and that Foti's SIP signaling session is different than the two or more (RTSP) sessions because the latter are initiated using different messages than the SIP signaling session, are set up using a different IETF protocol that is not SIP, and allow UT 20 to control the media stream using different messages. *Id.* at 45.

Patent Owner does not offer counter arguments with respect to this element of claim 1 in the Patent Owner Response. We determine, on the present record, that Petitioner has established that the recited combination of references meets the limitations of this element of claim 1 for the reasons explained by Petitioner, by a preponderance of the evidence.

*f. Element [1e]: “modifying the composition session”*

Claim 1 recites, in part, modifying the composition session, wherein modifying the composition session comprises using signaling in the composition session to terminate all of the two or more sessions. Petitioner asserts that it would have been obvious to modify Foti's system in light of the media stream teardown procedure taught by Wright. Pet. 45. Petitioner asserts that a person of ordinary skill in the art would have understood that Foti discloses a network-initiated procedure for tearing down the RTSP sessions when the SIP session times out or for other policy reason. *Id.* at 46 (citing Ex. 1003 ¶ 113). Petitioner further asserts that a user may desire to

end the SIP session and associated RTSP sessions by pushing a button on a remote control, as taught by Wright, through a desire to stop watching the on demand video or to turn off the UT. *Id.* at 46–47 (citing Ex. 1010 ¶ 38, Fig. 6; Ex. 1003 ¶ 114). Petitioner reiterates that such procedures would have been known to ordinarily skilled artisans, would have had a reasonable expectation of success, and would have resulted in the natural and predictable result of having the user’s desires be manifested. *Id.* at 49–50 (citing Ex. 1003 ¶¶ 116–117).

Patent Owner argues that Foti does not teach or suggest media session management by the SIP session, but rather discloses other methods, such as provided in the session illustrated in Figure 4 of Foti, with the session controlled by RTSP PLAY commands. PO Resp. 29–31 (citing Ex. 1006, Fig. 4; Ex. 2009 ¶¶ 149–151); PO Sur-reply 18. Patent Owner also argues that Wright does not expressly teach the use of a SIP BYE message to terminate two or more RTSP sessions, but rather only discloses that a customer may actuate a push button of a remote to terminate transmission of a media stream. *Id.* at 31 (citing Ex. 1010 ¶¶ 32, 38; Ex. 2009 ¶¶ 155–156). Patent Owner additionally argues that Petitioner’s declarant is unhelpful in testifying that “in response to a SIP BYE command from UT 20, AS 40 could cause MCS 30 to terminate the sessions using an RTSP TEARDOWN message as taught by RFC 2326,” because “could” is not the test for obviousness. *Id.* at 32–33 (citing Ex. 1003 ¶ 116; Ex. 2009 ¶¶ 160–162). Patent Owner also argues that the Petition’s assertion of using a SIP BYE message, in view of Wright and RFC 3261, would have been redundant to the actual processes employed by Foti, and would contradict its actual disclosure. PO Resp. 34 (citing Ex. 1022 ¶¶ 166–167); PO Sur-reply 18–19.

Petitioner responds that Patent Owner focuses on the individual references in isolation and not in combination, such that Patent Owner fails to rebut the obviousness of this element. Pet. Reply 9 (citing *Hulu, LLC v. SITO Mobile R&D IP*, IPR2021-00158, Paper 34, \*41 (PTAB Apr. 15, 2022)). Petitioner also responds that the Petition is clear that it relies on RFC 3261, RFC 2326, and Wright to render obvious modifying the composition session using signaling in the composition session (i.e., a SIP BYE message) to terminate any RTSP sessions associated with the SIP session. *Id.* Petitioner also asserts that the teardown methods of Foti and Wright are complementary and the user-initiated termination taught by Wright would have been considered a necessary IPTV feature. *Id.* at 9–10 (citing Ex. 1003 ¶¶ 83–84; Ex. 1026, ¶¶ 56–60). With respect to this latter argument by Petitioner, Patent Owner argues that it is raised for the first time in reply, such that we should not consider it, or that is based on unsupported testimony, such that we should give it little weight. PO Sur-reply 19 n.2.

Addressing Patent Owner’s last argument first, we disagree with Patent Owner’s assessment that Petitioner introduces this argument, i.e., the basic functionality of any IPTV service, for the first time in reply, such that we should disregard it. Mr. Wechselberger testified in his original testimony, filed with the Petition, that

A person of ordinary skill in the art would have been motivated to include the basic ability for the user to discontinue watching unwanted media streams, as this would be an expected and basic functionality of any IPTV service. This would have had the predictable result and benefit of an IPTV service that permits the user to terminate the media session using a button on her remote control.

Ex. 1003 ¶ 84. Although it may not provide specific citations to other evidence, we are persuaded that the testimony is correct in that it accurately describes the expectations of a user, and would be a natural requirement of such presentation systems. Further, we remain persuaded that it would have been obvious to allow for the termination of sessions together after they have been associated in the composition session, as recited in independent claim 1. We agree with Petitioner that RFC 3261, RFC 2326, and Wright disclose the use of a SIP Bye message and that one of ordinary skill in the art would have had the reasonable expectation that this procedure would successfully complement Foti's techniques for continuing the media session in the event that the user would like to continue watching a timed-out SIP session. *See id.* Further, we agree with Petitioner that Patent Owner's arguments are largely directed to the teachings of the individual references, and we disagree with Patent Owner's arguments that ordinarily skilled artisans would not have had a reason to combine the processes of RFC 3261, RFC 2326, and Wright with Foti's system. *See* Pet. 21–25 (citing Ex. 1003 ¶¶ 79–85).

As such, we determine, on the present record, that Petitioner has established that the recited combination of references meets the limitations of this element of claim 1 for the reasons explained by Petitioner, by a preponderance of the evidence.

6. *Proffered Evidence of Objective Indicia of Nonobviousness*

With respect to the sole ground of unpatentability supplied in the Petition, we must also consider any objective evidence of nonobviousness put forward by the parties. Petitioner acknowledges, and Patent Owner emphasizes, that Patent Owner submitted a European Telecommunications

Standards Institute (ETSI) Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN) Change Request related to the embodiments recited in the '669 Patent. PO Resp. 59 (citing Ex. 2008, 5; Ex. 2009 ¶ 259). Patent Owner further asserts that the standards agency adopted it and that adoption is industry praise and supports the nonobviousness of the challenged claims. Prelim. Resp. 59–60 (citing *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1334 (Fed. Cir. 2016)). Patent Owner also asserts that Petitioner's expert in the District Court Case, Dr. Jeffay, admitted that the Change Request was related to the invention claimed in the '669 Patent, and thus has nexus to the challenged claims, being reasonably commensurate with the scope of the challenged claims. *Id.* at 60 (citing Ex. 1015; Ex. 2009 ¶ 259).

In the Institution Decision, we asserted that we could not verify the nexus to the challenged claims merely through the testimony of Petitioner's expert in the District Court Case. Inst. Dec. 18–19. That expert testified: "I also *understand* that KPN and TNO submitted an ETSI TISPAN Change Request related to the invention claimed in the '669 Patent in January 2009." Ex. 2008, 5 (emphasis added). We further stated that although the expert's testimony is evidence, it is only weak evidence, as it is not supported by any underlying documentation, such as the Change Request itself or a comparison of that Change Request and the issued claims of the '669 Patent. Inst. Dec. 19. We provided that we remained open to further consideration of this evidence of nonobviousness through industry praise, but determined it to be insufficient to overcome the case for obviousness of the challenged claims provided in the Petition at that stage of the proceeding. *Id.*



In response, Patent Owner provides a showing that the Change Request “has nexus to and is reasonably commensurate with” independent claims 1 and 21. PO Resp. 60–63 (citing Ex. 1015, 2–4; Ex. 2009 ¶¶ 262–266). We agree with Patent Owner that its showing strengthens its case that there is nexus between the Change Request and independent claims 1 and 21, thus supplying industry praise, countering a determination of obviousness. We are not persuaded, however, that the evidence is sufficient in view of the strong case for the obviousness of independent claims 1 and 21. As discussed above, we are persuaded that the combination of references proffered in the Petition demonstrates the obviousness of the association of sessions, the establishment of a composition session, and modification thereof, as recited in the claim limitations in independent claims 1 and 21. Separate aspects of the Change Request are reflected in the dependent claims, discussed below, and are more relevant in showing the nonobviousness of those claims.

7. *Conclusion Regarding Independent Claim 1*

We have reviewed the arguments and evidence and we determine that Petitioner has established that the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd teaches or suggests all of the limitations of independent claim 1 for the reasons explained by Petitioner by a preponderance of the evidence.

8. *Independent Claim 21*

With respect to independent claim 21, Petitioner largely relies on its analysis provided for claim 1. *See* Pet. 64–66. With respect to the last limitation in claim 21, modifying, using signaling in the composition session, all of the two or more sessions, Petitioner argues that it has shown

that Foti and Wright teach or suggest terminating the SIP session. *Id.* at 65. Petitioner asserts that persons of ordinary skill in the art would have understood that terminating the two or more sessions is a form of modifying the sessions. *Id.* (citing Ex. 1003 ¶ 145). We concur with Petitioner’s analysis, including how the ’669 Patent describes terminating one or more sessions as being a type of modification of the composition session. *Id.* at 66 (citing Ex. 1001, 5:44–50). As such, we determine that Petitioner has sufficiently shown, by a preponderance of the evidence, that Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd teaches or suggests all of the limitations of independent claim 21.

9. *Dependent Claim 6*

Dependent claim 6 recites, in part, that the user equipment initiates the two or more associated sessions by sending two or more session initiation requests, with each request comprising the composition session identifier. Petitioner asserts that Foti teaches the subject matter of claim 6 through its discussion of element [1c] above, where more than one RTSP session ID may be linked to the same SIP session ID. Pet. 56. Petitioner further asserts that a second linked RTSP session would be established by repeating specific steps for each subsequent RTSP session, such as described in RFC 3261, by sending a new INVITE request, or re-INVITE, with a repeated SIP session ID. *Id.* at 56–57.

Patent Owner argues that Foti does not teach how to achieve “[m]ore than one RTSP session ID may be linked to the same SIP session ID.” PO Resp. 44. As discussed above, we are persuaded that it does teach the association or linking through its disclosure of Figure 3 of Foti, although Foti itself does not detail the specific signaling that it employs to achieve

this. Patent Owner also argues that Petitioner's own obviousness theory involves more than repeating steps for establishing an RTSP session because it would require the use of a SIP re-INVITE having the same SIP session ID to establish each subsequent RTSP session, and RFC 3261 does not discuss using a SIP re-INVITE to add an RTSP session to an existing SIP session, but only adding a media stream. *Id.* at 46–48 (citing Ex. 2009 ¶¶ 210–216). Patent Owner also cites to the cross-examination testimony of Mr. Wechselberger that persons of ordinary skill in the art would have “to dive into the details” to implement the SIP re-INVITE in Foti. *Id.* at 49 (citing Ex. 2016, 109:12–14, 109:16–25).

In response, Petitioner asserts Patent Owner is merely asserting that Petitioner is wrong, without explaining why. Pet. Reply 12–13. Petitioner also asserts that it would have been obvious to add a second RTSP media session using a SIP re-INVITE identifying the URL of a second media stream, that Patent Owner misinterprets the Petition's arguments as relying on inherency, and that Patent Owner “creates an illusory distinction between adding a media stream versus adding an RTSP media session.” *Id.* at 13–16 (citing Ex. 1026 79–82).

Patent Owner responds that Petitioner's Reply raises a new argument, presents unsupported testimony from Mr. Wechselberger, and denies what the Petition and Mr. Wechselberger said about Claim 6. PO Sur-reply 5. We agree with Patent Owner that the arguments raised in the Reply are not found in the Petition and they seek to expand what the Petitioner originally argued in the Petition. As Patent Owner points out, the Reply asserts that “[i]t would have been obvious to add a second RTSP session using a SIP re-INVITE identifying the URL of a second media stream,” but this is different

from what the Petition asserts, regarding claim 6. *Id.* at 6; *compare* Pet. 56–57 *with* Pet. Reply 12–16. We are not persuaded that this is merely an explanation of what the Petition asserted; rather, we are persuaded that this is a new theory, or at least an expansion of its prior theory, expounded upon for the first time in the Reply.

Patent Owner also argues that Petitioner’s assertion that there is no difference between a media stream and an RTSP session is unsupported, and we agree. PO Sur-reply 8. As Mr. Bates has testified, “adding a media stream is not the same as adding an RTSP session . . . . because a single RTSP session may be associated with multiple media streams by virtue of their inclusion in the session description (SDP).” Ex. 2009 ¶ 218 (citing Ex. 1008, 22). We are not persuaded by Mr. Wechselberger’s responsive testimony that “[t]his is a distinction without a difference” (Ex. 1026 ¶ 79), because we agree with Patent Owner it does not appear to be supported by any evidence in the record. PO Sur-reply 8.

As such, we are not persuaded that the Petition has demonstrated, by a preponderance of the evidence, the obviousness of claim 6.

*10. Dependent Claims 2, 3, and 8*

Dependent claim 2 requires the user equipment generating the composition session identifier, and requesting the initiation of the composition session with that identifier. The Petition asserts that its analysis of claim 2 is made “with respect to Claim 6 and is incorporated by reference here.” Pet. 51–52. Petitioner also provides that Patent Owner’s arguments, made with respect to claim 6, “appl[y] to both Claim 2 and 6, and for that reason both claims are addressed together in this section.” Pet. Reply 12. Given the discussion of claim 6, above, we find Patent Owner’s arguments

to be similarly persuasive with respect to claim 2. As such, we are not persuaded that Petition has demonstrated, by a preponderance of the evidence, the obviousness of claim 2. Dependent claim 3 depends from dependent claim 2, and thus recites the same elements by virtue of its dependence. For similar reasons, we are not persuaded that Petition has demonstrated, by a preponderance of the evidence, the obviousness of claim 3.

With respect to dependent claim 8, the Petition once again relies on the assertion that one of ordinary skill in the art “would have understood that the two linked RTSP sessions would be established using two or more 200 OK messages containing the SIP session identifier,” and would “merely require repeating steps 62 through 74 for each subsequent RTSP session.” Pet. 58 (citing Ex. 1003 ¶ 133). We agree with Patent Owner that the reasoning and asserted support are the same as the Petition makes with respect to claim 6, i.e., achieve the linking of more than one RTSP session ID to the same SIP session ID by merely repeating steps for each subsequent RTSP session. PO Resp. 55. Petitioner acknowledges that Patent Owner’s arguments regarding claim 8 are a repeat of “its arguments already addressed above with respect to Claims 2 and 6.” Pet. Reply 19. As such, we are not persuaded that Petition has demonstrated, by a preponderance of the evidence, the obviousness of claim 8.

*11. Dependent Claim 10*

Dependent claim 10 recites that the combined streams of the two or more associated sessions are presented to the user equipment as a personalized composed multimedia stream. Petitioner asserts that Foti discloses that its media streams may be media components of an IPTV

service including video on demand (VOD), web access, VOIP, and mobile voice. Pet. 59–60 (citing Ex. 1006 ¶ 2). Petitioner also asserts that persons of ordinary skill in the art “would have understood that VOD programs are delivered on demand to particular subscribers, web access is also specific to a subscribers’ choice of web access, and VOIP and voice servers are also specific to each subscriber’s calling choices.” *Id.* at 60 (citing Ex. 1003 ¶ 134). Petitioner also asserts that ordinarily skilled artisans would have understood that media streams are a personalized composition of services dictated by the choices of each individual subscriber. *Id.*

Patent Owner argues that Foti does not disclose a “personalized composed multimedia stream,” and that “Foti does not teach or suggest any relationship between RTSP2 or RTSP4 or any other RTSP sessions.” PO Resp. 56. Patent Owner also asserts that Petitioner’s assertions regarding how skilled artisans would have perceived that media streams “are nothing more than improper hindsight.” *Id.* at 57 (Ex. 2009 ¶ 248).

Petitioner responds that Patent Owner does not offer a claim construction for “personalized composed multimedia stream,” and Petitioner also responds that Patent Owner’s arguments that Foti does not teach or suggest any relationship between its RTSP media streams are the same as those made with respect to independent claim 1. Pet. Reply 20–21.

We agree with Petitioner. Neither party has construed “personalized composed multimedia stream,” such that we construe it according to the plain and ordinary meaning. It is reasonable that persons of ordinary skill in the art would have understood that media streams are a personalized composition of services dictated by the choices of each individual subscriber. *See* Ex. 1003 ¶ 134. Based on the assertions of the Petition, Foti

provides for the same. We are not persuaded that Patent Owner has distinguished the meaning of the claim limitation from the reasonable meaning that Petitioner has asserted in the Petition.

We also agree with Petitioner that Patent Owner's arguments regarding whether Foti discloses a relationship between RTSP sessions has been addressed above, and we are persuaded that Foti does disclose such a relationship through its establishment of media streams using SIP and RTSP messages as disclosed in Figure 4 of Foti. As such, we agree with Petitioner it would have been obvious to present a personalized composed multimedia stream, as Petitioner has asserted, and that the Petition has demonstrated the obviousness of claim 10 by a preponderance of the evidence.

*12. Dependent Claim 11*

Claim 11 recites that the network includes storage and the composition session identifier and associated session identifiers are stored in that storage. Petitioner asserts that Foti teaches that Table 52, which stores the correlation between SIP session ID and RTSP Session ID(s), can be stored as AS 40 and/or database 50. Pet. 61 (citing Ex. 1006 ¶ 28). Patent Owner does not raise arguments specifically against the obviousness of claim 11. *See* PO Resp. We agree with Petitioner that Foti discloses the stage recited in the claim and that the Petition has demonstrated the obviousness of claim 11 by a preponderance of the evidence.

*13. Dependent Claim 12*

Claim 12 recites modifying the composition session by modifying sessions therein or transferring one or more of the associated sessions. Petitioner asserts that RFC 3261 discloses that SIP protocols can be used to modify sessions by adding or deleting media streams or modifying the

parameters of a session. Pet. 62 (citing Ex. 1007, 86). Petitioner further asserts that it would have been considered a basic component of an IPTV service at the time to have allowed the user to change the media program being watched and/or downloaded, for example to change the bandwidth. *Id.* (citing Ex. 1003 ¶ 138). Patent Owner does not raise arguments specifically against the obviousness of claim 12. *See* PO Resp. We agree with Petitioner it would have been obvious to have allowed for the modification of the composition session, as Petitioner has asserted, and that the Petition has demonstrated the obviousness of claim 12 by a preponderance of the evidence.

*14. Dependent Claim 22*

Claim 22 recites that the modifying step includes modifying at least one of the two or more sessions based on a determined change in bandwidth availability. Petitioner asserts that such a modification would have been obvious over the combination in view of Lloyd's disclosure of a technique for adjusting the transmitted video frame rate as a function of network capacity. Pet. 66–70 (citing Ex. 1011 ¶¶ 8, 149, Fig. 3). Patent Owner does not raise arguments specifically against the obviousness of claim 22. *See* PO Resp. We agree with Petitioner it would have been obvious to have allowed for the modification based on network capacity, as Petitioner has asserted, and that the Petition has demonstrated the obviousness of claim 22 by a preponderance of the evidence.

*15. Dependent Claim 24*

Claim 24 recites that the modifying includes signaling in the composition session for a duration for all of the two or more sessions. Petitioner asserts that Foti discloses that the SIP session may be of a finite



duration and it may time-out, and that one of ordinary skill in the art would have understood that a duration of the session(s) would have been specified in the SIP/SDP message from the UT and would cause that session to be modified or timed-out. Pet. 70–71 (citing Ex. 1006 ¶ 36; Ex. 1003 ¶¶ 154–155). Patent Owner does not raise arguments specifically against the obviousness of claim 24. *See* PO Resp. We agree with Petitioner it would have been obvious to have utilized signaling to set a duration of the sessions, as Petitioner has asserted, and that the Petition has demonstrated the obviousness of claim 24 by a preponderance of the evidence.

*16. Dependent Claim 25*

Claim 25 recites that the modifying includes signaling in the composition session of a bandwidth requirement for the sessions. Petitioner asserts that specifying the bandwidth of the session and media was a known element of the standard SDP offer, it would have been obvious to include the bandwidth requirement for a session, and it would have been obvious in light of Lloyd to modify at least one session based on a change in bandwidth availability. Pet. 71–72 (citing Ex. 1003 ¶¶ 156–157). Patent Owner does not raise arguments specifically against the obviousness of claim 25. *See* PO Resp. We agree with Petitioner it would have been obvious to have utilized signaling to set a bandwidth requirement for the sessions, as Petitioner has asserted, and that the Petition has demonstrated the obviousness of claim 25 by a preponderance of the evidence.

*17. Conclusions Regarding Ground of Unpatentability*

We determine that Petitioner has shown by a preponderance of the evidence that the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd would have rendered the subject matter of claims 1, 11–

12, 21, 22, 24, and 25 obvious. We determine that Petitioner has not shown by a preponderance of the evidence that the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd would have rendered the subject matter of claims 2, 3, 6, and 8 obvious.

### III. CONTINGENT MOTION TO AMEND

Patent Owner filed a Motion to Amend proposing to substitute original claims 1, 12, and 21 with claims 26–28, contingent upon a finding of unpatentability of the original claims. MTA 1. As discussed below, we are persuaded by the arguments and evidence presented by Petitioner that proposed substitute claims 26–28 are not patentable.

#### *A. Requirements under 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121*

In this section, we determine whether the Motion to Amend meets the statutory and regulatory requirements set forth in 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121. Under those requirements, Patent Owner must show that: (1) the amendment responds to a ground of unpatentability involved in the trial; (2) the amendment does not seek to enlarge the scope of the claims of the patent or introduce new subject matter; (3) the amendment proposes a reasonable number of substitute claims; and (4) the proposed claims are supported in the original disclosure. 37 C.F.R. § 42.121; *Lectrosonics, Inc. v Zaxcom, Inc.*, IPR2018-01129, Paper 15 (PTAB Feb. 25, 2019) (precedential).

#### *1. Responsive to a Ground of Unpatentability*

For the reasons that follow, the Motion responds to a ground of unpatentability involved in the trial. 37 C.F.R. § 42.121(a)(2)(i).

Patent Owner’s Motion responds to the ground of unpatentability on which we instituted trial—that the combination of Foti, RFC 3261, RFC

4566, RFC 2326, Wright, and Lloyd would have rendered the challenged claims obvious. MTA 1–2, 15–25. Upon review of Patent Owner’s Motion, we agree that proposed substitute independent claims 26 and 28 and proposed substitute dependent claim 27 recite new elements, and new combinations of elements, constituting a *bona fide* response to the instituted ground. *See id.*

Petitioner contends that “Patent Owner (‘PO’) merely adds words to the Substitute Claims without explaining how they change claim scope or distinguish the prior art of record or known to PO,” and that “[t]he Substitute Claims are obvious under 35 U.S.C. § 103 in view of the Petition’s Ground 1: Foti in view of RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd (‘Petitioner’s combination’).” Opp. 1 (citing Pet. 21); *see also, e.g., id.* at 3 (“The MTA proposes amendments to specify the claimed sessions are ‘media sessions,’ but fails to include any argument as to how or why that amendment distinguishes the prior art.”), 5 (“PO’s amendment fails to distinguish any concept described by the ’669 Patent from Petitioner’s combination because Foti’s RTSP media sessions are the same types of ‘sessions’ described as being managed in the ’669 Patent.”), 20 (“PO attempts to distinguish Petitioner’s combination based on a limitation that it did not propose”).

We are persuaded, however, that the proposed substitute claims recite new elements that were not in the originally challenged claims, nor addressed in either the Petition<sup>8</sup> or Institution Decision—for example, (1) specifying the type of sessions as “media” sessions (claims 26, 27, 28), (2) introducing “two or more media sessions” and “management as a group

---

<sup>8</sup> Paper 2 (“Petition” or “Pet.”).

in the network” in the “providing” step as antecedent basis for further recitations of these terms in the “associating” and “initiating” steps (claim 26), (3) specifying that modifying at least one of the two or more media sessions “comprises sending a modification request comprising the composition session identifier” (claim 27), and (4) specifying that modifying all of the two or more media sessions “comprises pausing a data stream of each of the two or more media sessions” (claim 28). Moreover, in response to these newly recited elements, Petitioner presented new arguments and citations to address these elements in its Opposition, as well as Mr. Wechselberger’s updated, expert testimony. *See* Opp. 1–25 (citing Ex. 1023 as well as additional portions of Exs. 1006–1011). Petitioner’s contention that the proposed substitute claims are unpatentable over the same combination of prior art references does not mean Patent Owner’s proposed amendments fail to respond to a ground of unpatentability on which we instituted trial.

For at least these reasons, on this record, we determine that Patent Owner’s Motion responds to the ground of unpatentability on which we instituted trial.

## *2. Scope of the Claims*

For the reasons that follow, the substitute claims do not broaden a challenged claim in any respect that enlarges the scope of the claims of the patent. 35 U.S.C. § 316(d)(3); 37 C.F.R. § 42.121(a)(2)(ii).

Each of the proposed substitute claims include narrowing limitations. For example, each of proposed substitute claims 26, 27, and 28 is narrower than its corresponding original claim because it newly recites that the two or more sessions are “media” sessions. MTA 2, Claims App. A. As another

example, proposed substitute claim 26 is narrower because it establishes a new relationship between “providing a composition session identifier for associating two or more media sessions with each other for management as a group,” “associating *the* two or more media sessions,” and “initiating establishment of a composition session . . . for facilitating the management of the two or more media sessions as a group.” *Id.* And, as yet another example, proposed substitute claim 28 is narrower because it newly recites “wherein the modifying comprises pausing a data stream of each of the two or more media sessions.” *Id.*

Petitioner argues that Patent Owner fails to explain how (1) “adding ‘two or more’ narrows the scope of ‘sessions,’ which already is plural,” (2) “adding ‘with each other’ narrows the scope of ‘associating,’” and (3) “managing the sessions ‘as a group’ narrows the claimed managing of the associated sessions.” *Opp.* 8–10 (citing *MTA* 19–23). But even accepting Petitioner’s assertions as true, adding these terms does not broaden the scope of the claims, nor does their inclusion negate the other narrowing amendments of the proposed substitute claims discussed above.

For at least these reasons, on this record, we determine that proposed substitute claims 26, 27, and 28 do not enlarge the scope of the claims of the challenged patent.

### 3. *Reasonable Number of Substitute Claims*

Patent Owner proposes no more than 1 substitute claim for each of the challenged claims. *MTA* 1–2, Claims App. A (proposing substitute claims 26–28). Petitioner does not argue otherwise. *See generally* *Opp.* As such, we determine that Patent Owner has proposed a reasonable number of substitute claims. *See* 35 U.S.C. § 316(d)(1)(B).

4. *Support in the Original Disclosure*

On this record, we determine that Patent Owner has met its burden to show written-description support for the substitute claims. *See* 35 U.S.C. § 316(d)(3); 37 C.F.R. § 42.121(a)(2)(ii). Patent Owner appears to have identified adequate written description support for proposed substitute claims 26–28 in the ’385 application, the ’278 application, and the EP ’661 applications. *See* MTA 3–14 (citing various parts of the ’385 application, the ’278 application, and the EP ’661 applications).

Petitioner argues that “[t]o the extent PO contends Petitioner’s combination does not disclose ‘media’ sessions” or “associating ‘two or more media sessions with each other,’” “PO has not met its burden to demonstrate that it is entitled to these amendments.” *Opp.* 5–8, 15. Petitioner similarly argues that “to the extent PO later argues that [claim 28’s ‘wherein the modifying comprises pausing a data stream of each of the two or more media sessions’ amendment] requires pausing a Media Stream A of Session 1 and pausing Media Stream B of Session 2 in attempting to distinguish Petitioner’s combination, then PO’s amendment is not supported by the written description.” *Id.* at 25. Petitioner further argues that “PO has not demonstrated written description support for its 28[e] amendment ‘wherein the modifying comprises pausing a data stream of each of the two or more media sessions’” because “PO cites and the ’669 Patent discloses two pausing embodiments: (1) collectively pausing multiple streams and (2) pausing an individual stream,” but “PO fails to [provide] support for its proposed amendment to pause individual data streams of each of the two or more media sessions.” *Opp.* 23; *see also id.* at 23–25. For the reasons below, we are not persuaded by Petitioner’s argument.

It does appear that the disputed limitation is broadly recited such that it covers both (1) collectively pausing multiple streams and (2) pausing an individual stream for each session. Contrary to Petitioner's arguments, however, it also appears there is adequate written description support for both of these embodiments. *See* MTA 13–14 (citing Ex. 1002, 581:3–10, 581:14–20, 583:22–30, 586:13–18, 593:13–19, 647:3–10, 647:14–10, 649:22–30, 652:13–18, 659:13–19, 695:3–10, 695:14–20, 702:21–26, 703:21–26); Ex. 1001, 20:18–22 (claim 23). For example, as cited by Patent Owner, the '385 application discusses that “the group of sessions *may* be manipulated as if there [were] only one session[,] [f]or example,” via “collective [pausing] . . . of the data streams associated with the group of sessions.” Ex. 1002, 583:25–30. While this passage teaches that associated streams *may* be paused collectively, it also appears to teach that the associated streams may be paused individually. In other words, given the cited passage, one of ordinary skill in the art would understand that, in the '385 system, streams may be paused not only collectively but alternatively on an individual basis. Consistent with our understanding of the '385 disclosure and the embodiment recited in proposed substitute claim 28, claim 23 of the '669 patent recites a method for managing associated sessions in a network wherein modifying the two or more sessions comprises “selectively pausing data streams of the two or more sessions.” *See* Ex. 1001, 20:18–22 (claim 23). This too appears to teach that each stream may be paused individually rather than collectively.

In addition, the '385 application describes a network pausing a number of streams related to personalized television experiences, but not pausing a number of streams related to the background or recording

sessions. *See* Ex. 1002, 581:12–20; *see also id.* at 586:11–21 (describing a network element configured to pause a plurality of associated multimedia sessions related to a personalized TV service, but at the same time a downloading session is left untouched). This appears to teach “pausing a data stream of each of the two or more media sessions” as well because it describes the ability to selectively pause streams of multiple media sessions on an individual basis, and we find no disclosure that limits such selectivity to no more than a single stream or a single session.

Petitioner additionally argues that the “(2) pausing an individual stream” “embodiment contradicts PO’s construction of ‘associated media sessions’ as sessions that ‘should not be managed independent from each other’ because it manages (pauses) sessions independently.” Opp. 24 (citing Ex. 1023 ¶ 127). But the mere fact that the streams are paused individually does not necessarily mean that their corresponding sessions are being managed independently from each other. Nor does Petitioner or its expert present any persuasive evidence to support the assertion that pausing streams of two or more sessions individually would require managing the sessions independently from each other. *See* Opp. 24; Ex. 1023.

As such, for at least these reasons, on this record, we do not find that the amendments in claims 26–28 seek to add new subject matter.

*B. Patentability of the Substitute Claims*

For the reasons discussed below, we are persuaded that Petitioner has demonstrated, by a preponderance of the evidence, that proposed substitute claims 26–28 are unpatentable over the art of record.

Petitioner asserts that proposed substitute claims 26–28 are unpatentable under 35 U.S.C. § 103 for obviousness based on the



combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd. Opp. 1. Notably, Petitioner relies on the same prior art references as those asserted in the Petition, in response to which we instituted trial. *See, e.g.*, Pet. 6; Inst. Dec. 2, 26–27, 32. On this record, we determine that Petitioner (or the record) has shown, based on a preponderance of the evidence, that the proposed substitute claims are unpatentable.

*1. Proposed Substitute Independent Claim 26*

Proposed substitute independent claim 26 replaces original independent claim 1 and adds new elements. *See* MTA 1, Claims App. A.

26. (*As Amended from Claim 1*) A method for managing associated media sessions in a network, the network having a network element configured for managing associated media sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier for associating two or more media sessions with each other for management as a group in the network;

after providing the composition session identifier, exchanging the composition session identifier between a user equipment and the network element a first time;

associating the two or more media sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment;

initiating establishment of a composition session, the composition session being a signaling session for facilitating the management of the two or more media sessions as a group by the network element, and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more media sessions; and

modifying the composition session, wherein modifying the composition session comprises using signaling in the composition session to terminate all of the two or more media sessions.

MTA, Claims App. A 27–28.

Petitioner contends the subject matter of proposed substitute claim 26, including the following added elements: “media sessions,” “for associating two or more media sessions with each other for management as a group,” “associating the two or more media sessions,” and “for facilitating the management of the two or more media sessions as a group by the network element,” are rendered obvious by the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd. Opp. 2–5, 8–14, 15–16.

First, Petitioner contends that Foti discloses “media” sessions with its discussions of Real Time Streaming Media (RTSP) media sessions. Opp. 3–4 (citing Ex. 1006, Abstract, ¶¶ 1, 4–8, 10–11, 14, 16–17, 21–22, 25–29, 32–39, 41, Figs. 2B, 3, 6A–B; Ex. 1023 ¶¶ 31–38). We have reviewed the cited descriptions of Foti, and we agree with Petitioner’s contention that Foti discloses “media” sessions as recited. For example, Foti’s invention relates to “methods of managing *media* sessions,” and Foti explains that its “invention links a Real Time Streaming Protocol (RTSP) *media* session that streams media content to a User Terminal (UT) to a Session Initiation Protocol (SIP) session used to set up the RTSP *media* session.” Ex. 1006 ¶¶ 1, 5. Patent Owner also appears to acknowledge that the sessions described in Foti are “media” sessions. See MTA 16 (“Foti discloses ‘[l]inking the RTSP media session to the SIP session’”), 19 (discussing “the media sessions identified by RTSP2 and RTSP4” in paragraph 28 of Foti).

Second, Petitioner contends that Foti discloses “for associating two or more media sessions with each other,” and “associating the two or more media sessions.” Opp. 4, 8–10. Petitioner asserts that “Foti’s RTSP media sessions are ‘two or more media sessions,’” and “[i]f two [RTSP media sessions] are linked to the same object (here, the SIP session ID), they are associated with each other,” noting that “link and associate are synonyms.” Opp. 8–9 (citing Ex. 1006 ¶ 28, Fig. 3; Ex. 1023 ¶¶ 43; Ex. 1025, 29, 193). Petitioner adds that “Foti’s disclosure aligns with that of the ’669 Patent, which also discloses associating multimedia sessions” with each other “by assigning them to the same identifier,” “specifically disclos[ing] that ‘the multimedia session may be associated . . . with a composition session identifier’” so it “*may be associated with other multimedia sessions that may have already been assigned to that same . . . identifier.*” *Id.* at 9–10 (citing Ex. 1001, 3:17–34; Ex. 1022, 58:4–60:4; Ex. 1023 ¶¶ 45–47). Accordingly, Petitioner asserts that “[b]y linking two or more RTSP media sessions to the same SIP session ID, Foti discloses associating ‘two or more media sessions with each other’ in the same manner as described by the ’669 Patent.” *Id.* at 10 (citing Ex. 1006 ¶¶ 4, 26–29, Fig. 4; Ex. 1023 ¶ 47); *see also id.* at 4 (additionally citing Ex. 1023 ¶ 37 and asserting that “Foti’s RTSP sessions are ‘associated [media] sessions’ by virtue of more than one of them being linked to the same SIP session ID within table 52”).

We have reviewed the cited descriptions of Foti, and we determine that they support Petitioner’s contention that Foti discloses “associating the two or more media sessions with each other” as recited. For example, Figure 3 of Foti is reproduced below.

52

RTSP SESSION ID	SIP SESSION ID
RTSP1	SIP1
RTSP2	SIP2
RTSP3	SIP3
RTSP4	SIP2
⋮	⋮
⋮	⋮
RTSPn	SIPn

Figure 3 depicts “an exemplary table 52 that could be used to correlate the RTSP media session information to the SIP session information.”

Ex. 1006 ¶ 28, Fig. 3. As can be plainly seen, RTSP2 and RTSP4, both RTSP session IDs, correspond to SIP2, a single SIP session ID and, thus, relate to each other. *Id.* Accordingly, we agree with Petitioner that this figure and its associated description, which show linking of the multiple RTSP session IDs with a single SIP session ID, discloses “associating” the two or more media sessions “with each other” as recited. We also agree with Petitioner that Foti’s disclosure is consistent with the ’669 patent, which discusses that a single composition session identifier may be associated with multiple multimedia sessions. *See, e.g.*, Ex. 1001, 3:17–34. For at least these reasons, we are not persuaded by Patent Owner’s arguments that Foti fails to disclose or render obvious this feature, including the assertion that “[p]aragraph [0028] of Foti does not teach or suggest any relationship between RTSP2 or RTSP4 or any other RTSP sessions.” MTA 19.

Third, Petitioner contends that the proposed combination discloses or renders obvious that the associating of two or media sessions with each other is “for management as a group.” Opp. 10–14. In support of this contention, Petitioner makes the following assertions:

- (1) Foti discloses “for management as a group” because “[t]he very purpose of associating Foti’s media sessions is so that they can be managed ‘as a group,’” Opp. 11 (citing Ex. 1006 ¶ 1);
- (2) Foti discloses that [application server] AS 40 (a network element) manages the associated media sessions as a group,” *id.* at 10–11 (citing Ex. 1006 ¶¶ 1, 5, 17–20, 26–28, Fig. 1);
- (3) “Foti’s disclosure of billing, reconciling, and detecting fraud for the associated sessions for the user is managing those associated sessions as a group for that user,” *id.* at 11 (citing Ex. 1006 ¶¶ 5, 17, 31; Ex. 1023 ¶ 50);
- (4) “Foti expressly discloses that the ‘AS stores the correlation between the RTSP and SIP sessions in memory, and uses it to identify and/or authenticate a user, bill the user, and reconcile new SIP sessions with existing RTSP sessions and new RTSP sessions with existing SIP sessions,’” “[a]ll of these activities [being] examples of managing the RTSP sessions ‘as a group,’” *id.* at 12 (citing Ex. 1006 ¶ 6; Ex. 1023 ¶ 51);
- (5) “Foti also discloses management functions through its revival method, which establishes a new SIP session and links it to an existing RTSP media session to revive the existing RTSP session(s),” thereby “modifying the session,” which “PO concedes, . . . is a form of management,” *id.* (citing Ex. 1006 ¶ 37; Ex. 1007, Abstract, 9; Mot. 22; Ex. 2017 ¶ 129);
- (6) “To the extent Patent Owner asserts that Foti’s revival method only revives a single RTSP session, it would have been obvious to a POSITA to revive the two sessions taught by Fig. 3 using the same revival method Foti discloses for one RTSP session,” *id.* at 12–13 (citing Ex. 2016, 133:19–135:22; Ex. 1023 ¶ 52);
- (7) “Foti in view of RFC 3261 and Wright also discloses managing the associated sessions as a group” because RFC 3261 discloses “setting up, modifying, or terminating the associated sessions using signaling

- in the SIP session (i.e., a SIP BYE message),” “Wright discloses terminating all of the associated sessions, such as when the user turns off the television,” and “PO concedes that session modification or termination of RTSP sessions is a management (or at least ‘management-like’) function,” *id.* at 13 (citing Ex. 1007, Abstract, 9; Ex. 1010 ¶ 38, Fig. 6; Ex. 1023 ¶ 53; Mot. 22; Ex. 2017 ¶¶ 129, 130, 133);
- (8) contrary to Patent Owner’s position that Foti’s RTSP PLAY command applies only to one RTSP session, “[a] POSITA would have understood that in Foti’s system of managing multiple associated sessions, the RTSP PLAY command would be applied to multiple associated sessions,” and “similar management commands like PAUSE were well known,” as taught by RFC 2326, “and readily incorporated into Foti’s system,” *id.* at 13–14 (citing Ex. 1009, 6, 7–8, 34–37; Ex. 1023 ¶ 54; Mot. 22; Ex. 2017 ¶ 129); and
- (9) “[a] POSITA would have been motivated to apply the PAUSE feature of pausing a ‘group of streams’ disclosed in RFC 2326 to Foti’s system of managing multiple associated streams to pause or manage the associated streams ‘as a group’” because they “would have been motivated to refer to the RFCs to implement Foti and would have had a reasonable expectation of success because the protocols are intended to work together,” *id.* (citing Ex. 1023 ¶ 55).

We have reviewed the cited descriptions of Foti, RFC 3261, RFC 2326, and Wright, as well as the proposed motivations for combining the asserted teachings, and we determine that they support Petitioner’s contention that the proposed combination discloses or renders obvious that the associating of two or media sessions with each other is “for management as a group” as recited. For example, as Petitioner asserts, the very purpose of Foti is for managing media sessions (Ex. 1006 ¶ 1), more than one RTSP session ID may be correlated or linked to a single SIP session ID (*id.* ¶¶ 27–28, Fig. 3), and the AS 40 may employ such a correlation “to identify and/or authenticate the user, to bill the user for media services, to reconcile existing

RTSP sessions with newly established SIP sessions, and to reconcile charging records” (*id.* ¶ 27). We agree with Petitioner that these descriptions disclose or suggest managing the RTSP sessions “as a group.” *See* Opp. 11–12. RFC 2326 also discloses or suggests “for management as a group” because it describes a “protocol . . . intended to control multiple data delivery sessions,” in which a pause function may cause delivery of all currently active streams within a group to be halted. Ex. 1009, 1 (Abstract), 36. Petitioner’s proposed motivation to combine the asserted teachings of RFC 2326 with Foti is reasonable as well, and, Patent Owner does not present a persuasive rebuttal. *See* Opp. 14.

For reasons similar to those above, we agree with Petitioner that the proposed combination discloses or suggests “facilitating the management of the two or more media sessions as a group by the network element,” as further recited in proposed substitute claim 26. *See* discussion *supra*; Opp. 15–16. As Petitioner explains, “Foti’s RTSP sessions disclose the media sessions,” and “Petitioner’s combination discloses the management of the sessions as a group by the network element.” Opp. 15–16 (citing *id.* at 3–4, 10–14). Moreover, given Foti’s purpose of managing media sessions (Ex. 1006 ¶ 1), that more than one RTSP session ID may be correlated or linked to a single SIP session ID (*id.* ¶¶ 27–28, Fig. 3), and the many different management-related applications discussed in Foti and identified by Petitioner (*see* discussion *supra*; Opp. 10–14), it appears that implementing one or more of these applications would disclose or at least suggest “facilitating the management of the two or more media sessions as a group by the network element” as recited. *See, e.g.*, Opp. 15 (“Foti’s revival method *facilitates* management of the linked sessions as a group, consistent

with Foti’s purpose.”); Ex. 1023 ¶¶ 63–68. And, as we stated in the Institution Decision, “[w]e agree with Petitioner that the linking of the multiple RTSP [session] IDs with a single SIP [session] ID, via the exchanged “correlation information,” would allow for facilitation of management of the two or more RTSP sessions, such that if the SIP session should terminate the AS would reject RTSP commands as invalid.” Inst. Dec. 24 (citing Pet. 42; Ex. 1006 ¶¶ 36–37).

Patent Owner argues that Foti fails to disclose or render obvious this claim feature, citing various isolated disclosures of Foti as well as its expert declaration. *See, e.g.*, MTA 21 (“Foti’s description of more accurately identifying users to be charged for media transaction, reconciling accounting records, and detecting fraud, EX1006, ¶¶[0005], [0017], is not ‘facilitating the management of the two or more media sessions as a group by the network element’”); Ex. 2017 ¶ 127; *see also id.* at 22 (focusing solely on Foti’s disclosure of a single RTSP session controlled by RTSP PLAY commands); Ex. 1027 ¶ 129. These arguments are not persuasive because they lack sufficient supporting evidence and they do not fully appreciate what all the cited descriptions of Foti and the other asserted prior art, including the RFC protocols, in combination, would have taught or suggested to one of skill in the art. Non-obviousness cannot be established by attacking particular teachings individually where the rejection is based upon a combination of prior art teachings. *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (citing *In re Keller*, 642 F.2d 413, 425 (CCPA 1981)).

Accordingly, based on the current record, we determine that Petitioner has shown by a preponderance of the evidence that the combination of Foti,



RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd renders obvious the added limitations in proposed substitute independent claim 26.

2. *Proposed Substitute Dependent Claim 27*

Patent Owner also moves to replace original dependent claim 12 with proposed substitute dependent claim 27, which depends from proposed substitute claim 26, and adds new elements. *See* MTA 1, Claims App. A. In particular, proposed substitute dependent claim 27 amends original claim 12 to recite:

27. (*As Amended from Claim 12*) The method according to claim 1-26, the method further comprising:

modifying the composition session by at least one of (i) modifying at least one of two or more media sessions in the composition session, wherein the modifying at least one of two or more media sessions comprises sending a modification request comprising the composition session identifier, or (ii) transferring at least one of the two or more media sessions from the composition session to a further composition session or outside the composition session.

MTA, Claims App. A 29.

Petitioner contends the subject matter of proposed substitute claim 27, including the following added elements: “wherein the modifying at least one of two or more media sessions comprises sending a modification request comprising the composition session identifier,” are rendered obvious by the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd. Opp. 16–19.

Petitioner contends that “PO’s proposed amendment to Claim 27 fails to overcome Petitioner’s combination . . . , as it merely recites well-known functionality described in the SIP protocol.” Opp. 16 (citing Ex. 1023 ¶¶ 73–83). In particular, Petitioner asserts that “RFC 3261 discloses

modifying sessions by sending a SIP re-INVITE, which is a modification request.” *Id.* (citing Ex. 1007, 9, 16, 86). Petitioner reasons “[i]t would have been obvious to the POSITA to include the ability to modify the SIP session to add or remove RTSP media sessions,” and “it would have been a common design goal to allow the user of UT 20 to ‘flip the channels’ to watch different media programs stored by MCS 30.” *Id.* at 17 (citing Ex. 1023 ¶ 77).

Petitioner further asserts that its “combination discloses the modification request comprising the composition session identifier” because “Foti expressly contemplates sending subsequent SIP messages with the RTSP session ID,” and “one well known ‘subsequent SIP message’ disclosed by the IETF standard is the SIP re-INVITE,” which “would have included the composition session identifier.” *Id.* at 17–18 (citing Ex. 1006 ¶¶ 30, 33, Fig. 4; Ex. 1007, 86; Ex. 1023 ¶ 78). Petitioner reasons that “[a] POSITA would have understood Foti’s revival disclosure as including the composition session identifier in Foti’s ‘new SIP INVITE message’ (*i.e.*, the SIP re-INVITE)” in view of “RFC 3261[’s] . . . disclos[ure] that the ‘re-INVITE references the existing dialog so that the other party knows that it is to modify an existing session instead of establishing a new session.’” *Id.* at 18 (citing Ex. 1006 ¶ 39; Ex. 1007, 16; Ex. 1023 ¶ 78). Petitioner further reasons that “[a] POSITA would have understood that the re-INVITE applied to Foti’s system with multiple RTSP streams would include the composition session identifier so that Foti’s UT knows to modify the existing session.” *Id.* (additionally citing Ex. 1023 ¶ 79).

Petitioner also points out that “[s]ubstitute Claim 27 (amending Claim 12) recites two options for modifying the composition session separated by

an ‘or,’ and, other than adding the term ‘media’ as addressed above, PO only attempts to amend the first option but not the second option”—i.e., “transferring at least one of the two or more media sessions from the composition session to a further composition session or outside the composition session.” Opp. 19 (citing Mot. 29). Accordingly, Petitioner asserts that “option (ii), which is recited in the original claim, is disclosed or rendered obvious by Petitioner’s combination” as asserted in the Petition. *Id.* (citing Petition 63; Ex. 1003 ¶ 139; Ex. 1006 ¶¶ 37–39).

We have reviewed the cited descriptions of Foti and RFC 3261, as well as the proposed motivations for combining the asserted teachings, and we determine that they support Petitioner’s contention that the proposed combination discloses or suggests “wherein the modifying at least one of two or more media sessions comprises sending a modification request comprising the composition session identifier,” as recited.

For example, RFC 3261 discloses sending a modification request with its descriptions of (1) “SIP [as a] . . . tool for creating, modifying, and terminating sessions” (Ex. 1007, 9), (2) how to modify an actual, existing session (*id.* at 86), and (3) modifying an existing session by sending a SIP re-INVITE message (where modifying can involve changing addresses or ports, adding a media stream, deleting a media stream, or modifying the dialog and parameters) (*id.* at 16, 86). We also determine that Petitioner is correct in asserting that RFC 3261’s “[d]isclosure of adding and deleting media streams confirms that the modification by the SIP re-INVITE applies to ‘at least one of two or more media sessions.’” Opp. 17.

Furthermore, “Foti discloses the UT storing the correlation between the RTSP session [ID] and the SIP session used to create the RTSP media

session in order *to use the RTSP session ID in future SIP messages*,” which appears to disclose or suggest “a modification request comprising the composition session identifier.” Opp. 17 (citing Ex. 1006 ¶ 33) (emphasis added).

Petitioner’s proposed reasons to combine the asserted teachings of RFC 3261 with Foti appear to be reasonable as well (Opp. 17–19), and Patent Owner does not present a persuasive rebuttal. Patent Owner argues that Foti does not teach or suggest “the modifying . . . comprises sending a modification request comprising the composition session identifier” because the disclosed revival method uses a new SIP session ID. MTA 24. But, as Petitioner points out, and a person of ordinary skill would have recognized, “[w]hile Foti says the AS ‘*might* correlate a new SIP session ID,’ Foti’s use of ‘*might*’ recognizes and leaves open the possibility that the same SIP session ID may also be used.” Opp. 18–19 (citing Ex. 1036 ¶ 38; Ex. 1023 ¶ 81). In addition, we agree with Petitioner (Opp. 19) that because Foti appears to teach modifying a session using either a new SIP session ID or the same SIP session ID, Patent Owner is incorrect in asserting that Foti’s revival teachings undermine other claim limitations, including [26e]. MTA 24 (citing Ex. 2017 ¶¶ 152–153).

Accordingly, based on the current record, we determine that Petitioner has shown by a preponderance of the evidence that the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd renders obvious the added limitations in proposed substitute dependent claim 27.

2. *Proposed Substitute Independent Claim 28*

Proposed substitute independent claim 28 seeks to replace original claim 21 and adds new elements. *See* MTA 1, Claims App. A. In particular, proposed substitute independent claim 28 amends original claim 21 to recite:

28. (*As Amended from Claim 21*) A method for managing associated media sessions in a network, the network having a network element configured for managing associated media sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier for associating two or more media sessions with each other for management as a group in the network;

after providing the composition session identifier, exchanging the composition session identifier between a user equipment and the network element a first time;

associating the two or more media sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment;

initiating establishment of a composition session, the composition session being a signaling session for facilitating the management of the two or more media sessions as a group by the network element, and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more media sessions; and

modifying, using signaling in the composition session, all of the two or more media sessions, wherein the modifying comprises pausing a data stream of each of the two or more media sessions.

MTA, Claims App. A 30–31.

Many of the amendments in proposed substitute claim 28 are similar to the amendments in proposed substitute claim 26, including “media sessions,” “for associating two or more media sessions with each other for management as a group,” “associating the two or more media sessions,” and “for facilitating the management of the two or more media sessions as a group by the network element.” *Compare* Mot., Claims App. A 30–31, *with id.* at Claims App. A 27–28.

For these similar elements, Petitioner relies on the same arguments and evidence as were submitted for claim 26. Opp. 2–5, 8–14, 15–16. Accordingly, for the same reasons as discussed above for claim 26, we determine that Petitioner’s arguments and evidence show that the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd discloses or renders obvious these added elements of claim 28, by a preponderance of the evidence. *See* discussion *supra*, claim 26.

Proposed substitute claim 28 additionally recites “wherein the modifying comprises pausing a data stream of each of the two or more media sessions.” Petitioner contends its proposed combination discloses or renders obvious this claim element. Opp. 21–22. In particular, Petitioner asserts that “Wright discloses pausing a data stream,” and “RFC 2326 further discloses pausing a data stream in the scenario of multiple media streams (such as audio and video).” *Id.* at 21 (citing Ex. 1009, 33–37; Ex. 1010 ¶¶ 8, 32, 38). Petitioner reasons that “[i]t would have been obvious to a POSITA, applying Wright and RFC 2326’s pausing functions to Foti, to pause a data stream of each of the two or more media sessions,” “for example, if the user wanted to mute all audio across all associated media sessions.” *Id.* at 21–22 (citing Ex. 1023 ¶ 111). Petitioner further asserts

that “RFC2326 also discloses collectively pausing multiple media streams, such as audio and video.” *Id.* at 22 (citing Ex. 1009, 6, 7–8, 36).

We have reviewed the cited descriptions of Foti, Wright, and RFC 2326, as well as the proposed motivations for combining the asserted teachings, and we determine that they support Petitioner’s contention that the proposed combination discloses or suggests “wherein the modifying comprises pausing a data stream of each of the two or more media sessions,” as recited. For example, RFC 2326 discloses pausing multiple media sessions with its descriptions that “the client may issue a single play or pause message to control both the audio and video feeds,” and that a pause function may be used to halt delivery of all currently active streams within a group. Ex. 1009, 6, 36. Petitioner’s reasons to combine the asserted teachings of Foti, Wright, and RFC 2326 are persuasive, based on determinations we have made for the challenged, original claims, and Patent Owner does not present a persuasive rebuttal. *See* Opp. 21–22.

Patent Owner argues that Wright alone fails to teach or suggest “pausing a data stream of each of the two or more media sessions.” This argument, however, falls short because it attacks Wright individually where Petitioner relies on the combined teachings of Foti, Wright, and RFC 2326 for teaching or suggesting this claim element. *See Merck*, 800 F.2d at 1097; *Keller*, 642 F.2d at 425. Accordingly, based on the current record, we determine that Petitioner has shown, by a preponderance of the evidence, that the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd renders obvious the added limitations in proposed substitute independent claim 28.

IV. CONCLUSION

Petitioner has met its burden to show that claims 1, 10–12, 21, 22, 24, and 25 are unpatentable. Petitioner has not met its burden to show that claims 2, 3, 6, and 8 are unpatentable. Patent Owner’s contingent Motion to amend is denied, as summarized in the table below.

<b>Claims</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Claims Shown Unpatentable</b>	<b>Claims Not Shown Unpatentable</b>
1–3, 6, 8, 10–12, 21, 22, 24, 25	103	Foti, RFC 3261, RFC 4566, RFC 2326, Wright, Lloyd	1, 10–12, 21, 22, 24, 25	2, 3, 6, 8
<b>Overall Outcome</b>			1, 10–12, 21, 22, 24, 25	2, 3, 6, 8

<b>Motion to Amend Outcome</b>	<b>Claim(s)</b>
Original Claims Cancelled by Amendment	
Substitute Claims Proposed in the Amendment	26–28
Substitute Claims: Motion to Amend Granted	
Substitute Claims: Motion to Amend Denied	26–28
Substitute Claims: Not Reached	

V. ORDER

Accordingly, it is:

ORDERED that claims 1, 10–12, 21, 22, 24, and 25 of U.S. Patent 9,667,669 B2 are unpatentable;

FURTHER ORDERED that claims 2, 3, 6, and 8 of U.S. Patent 9,667,669 B2 are not determined to be unpatentable;

FURTHER ORDERED that Patent Owner’s contingent Motion to Amend is denied; and



IPR2022-00557  
Patent 9,667,669 B2

FURTHER ORDERED that, because this is a Final Written Decision, parties to this proceeding seeking judicial review of the Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2022-00557  
Patent 9,667,669 B2

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

ERICSSON INC.,  
Petitioner,

v.

KONINKLIJKE KPN N.V.,  
Patent Owner.

---

IPR2022-00557  
Patent 9,667,669 B2

---

Before KEVIN F. TURNER, ROBERT J. WEINSCHENK, and  
RUSSELL E. CASS, *Administrative Patent Judges*.

WEINSCHENK, *Administrative Patent Judge*, dissenting-in-part and  
concurring-in-part.

I respectfully dissent from the majority’s decision that Petitioner has shown that claims 1, 10–12, 21, 22, 24, and 25 are unpatentable, and I concur with the majority’s decision that Petitioner has not shown that claims 2, 3, 6, and 8 are unpatentable. I also concur with the majority’s decision denying Patent Owner’s contingent motion to amend.

Independent claim 1 recites “exchanging the composition session identifier between a user equipment and the network element a first time,” and “associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second

time.” Ex. 1001, 16:44–52. Independent claim 21 recites similar limitations. *Id.* at 19:26–20:3. Petitioner identifies the SIP INVITE message 64 in Foti’s Figure 4 as the first exchange of a SIP session ID, and the 200 OK message 74 in Foti’s Figure 4 as the second exchange of the SIP session ID. Pet. 31–34, 38. Petitioner argues that the 200 OK message 74 in Foti’s Figure 4 includes information linking two or more RTSP session IDs to the SIP session ID. *Id.* at 34–38.

In my view, Petitioner does not show sufficiently that the 200 OK message 74 in Foti’s Figure 4 includes information linking two or more RTSP sessions IDs with the SIP session ID. Foti teaches that a user terminal sends a SIP INVITE message to an application server. Ex. 1006 ¶ 30, Fig. 4. The SIP INVITE message may include a SIP session ID and a URL that identifies a requested media program. *Id.* ¶ 30. Foti teaches that the application server communicates with a media content server in order to establish an RTSP session and link the RTSP session ID to the SIP session ID received from the user terminal. *Id.* ¶¶ 30–31, Fig. 4. The application server then returns a 200 OK message to the user terminal that includes correlation information linking the RTSP session ID to the SIP session ID. *Id.* ¶¶ 32–33, Fig. 4. Foti teaches that the user terminal may store correlation information in a table, such as the table shown in Foti’s Figure 3. *Id.* ¶¶ 28, 33, Fig. 3.

For independent claims 1 and 21, Petitioner relies on Foti’s teaching that the aforementioned table may include information linking “[m]ore than one RTSP session ID . . . to the same SIP session ID.” Pet. 36; Ex. 1006 ¶ 28. For example, Foti’s Figure 3 shows a table linking RTSP2 and RTSP4 to SIP2. Pet. 36; Ex. 1006, Fig. 3. Petitioner asserts that Foti’s user

terminal populates the table in Figure 3 in the following manner: “[A]fter the SIP INVITE is received by AS 40 (the first exchange), more than one RTSP session is linked using Table 52, the 200 OK message is sent to UT 20 (the second exchange), and UT 20 then re-creates a local copy of Table 52 (including the more than one linked RTSP sessions, as disclosed in Fig. 3).” Pet. Reply 7; *see also* Pet. 36–37 (“AS 40 ‘returns a 200 OK message to the UT (line 74).’ . . . Foti describes that this message may contain the correlation information determined by AS 40, which completes the association [of] the two or more sessions by AS 40 and allows the UT 20 to also associate the two or more sessions.”).

I am not persuaded by Petitioner’s assertion. As discussed above, Foti teaches that a single 200 OK message includes information linking one RTSP session ID to one SIP session ID. Ex. 1006 ¶ 32 (“The 200 OK message sent to the UT 20 may include the information that the AS 40 used to link *the* RTSP session and *the* SIP session.”) (emphases added); *id.* ¶ 33 (“Upon receipt of the 200 OK message, the UT 20 extracts the correlation information and uses that information to link *the* RTSP session to *the* SIP session.”) (emphases added); *id.* at Fig. 4. Neither Petitioner nor Petitioner’s declarant identify any portion of Foti that expressly teaches a single 200 OK message with information linking two RTSP session IDs to one SIP session ID. *See* Pet. 33–38, 64; Pet. Reply 7–9; Ex. 1003 ¶¶ 97–102; Ex. 1026 ¶¶ 41–48. And neither Petitioner nor Petitioner’s declarant provide any specific reason why a person of ordinary skill in the art would have known or found

it obvious that Foti's process works in that manner.<sup>9</sup> *See* Pet. 33–38, 64; Pet. Reply 7–9; Ex. 1003 ¶¶ 97–102; Ex. 1026 ¶¶ 41–48. In fact, at the oral hearing, Petitioner acknowledged that the information in a single 200 OK message only populates one row of the table in Foti's Figure 3. Paper 31, 17:13–25.

I note that Petitioner presents a different theory for dependent claim 6. Pet. 55–57. Namely, Petitioner argues that “a POSITA would have understood that establishing a second linked RTSP session would merely require repeating steps 62 through 74 [in Foti's Figure 4] for each subsequent RTSP session.” *Id.* at 56. In other words, for claim 6, Petitioner asserts that a person of ordinary skill in the art would have understood that Foti uses two SIP INVITE messages 64 and two 200 OK messages 74 (i.e., repeats step 62 to 74 in Foti's Figure 4) to link two RTSP session IDs to one SIP session ID. *Id.* At the oral hearing, Petitioner seemed to argue that this theory applies to independent claims 1 and 21 as well. Paper 31, 17:13–18:5. But Petitioner did not present this theory for claims 1 and 21 in the Petition or Reply. *See* Pet. 33–38, 64; Pet. Reply 7–9; *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016); *Sanofi-Aventis Deutschland GmbH v. Mylan Pharm. Inc.*, 66 F.4th 1373, 1379 (Fed. Cir. 2023). Instead, in the Petition and Reply, Petitioner relies solely on its assertion that the single 200 OK message 74 in Foti's Figure 4 includes

---

<sup>9</sup> Petitioner's declarant asserts that it would have been “notoriously obvious” to a person of ordinary skill. Ex. 1026 ¶ 46. But, in my view, Petitioner's declarant does not explain sufficiently *why* it would have been obvious, especially in light of Foti's teaching that a single 200 OK message includes information linking one RTSP session ID to one SIP session ID. *See id.*

information linking two or more RTSP sessions IDs with the SIP session ID.  
Pet. 33–38, 64; Pet. Reply 7–9.

For the foregoing reasons, in my view, Petitioner does not show sufficiently that the asserted combination teaches all the limitation of independent claims 1 and 21. Further, because dependent claims 2, 3, 6, 8, 10–12, 22, 24, and 25 depend, directly or indirectly, from claims 1 or 21, Petitioner also does not show sufficiently that the asserted combination teaches the limitations of those claims. Thus, I would determine that Petitioner does not show by a preponderance of evidence that any of the challenged claims are unpatentable, and I would deny Petitioner’s contingent motion to amend as moot.

IPR2022-00557  
Patent 9,667,669 B2

For PETITIONER:

Chad C. Walters  
Douglas M. Kubehl  
Jeffrey S. Becker  
Melissa L. Muenks  
BAKER BOTTS LLP  
chad.walters@bakerbotts.com  
doug.kubehl@bakerbotts.com  
jeff.becker@bakerbotts.com  
melissa.muenks@bakerbotts.com

For PATENT OWNER:

Bradley J. Hulbert  
Eric R. Moran  
James L. Lovsin  
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP  
hulbert@mbhb.com  
moran@mbhb.com  
lovsin@mbhb.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

ERICSSON INC.,  
Petitioner,

v.

KONINKLIJKE KPN N.V.,  
Patent Owner.

---

IPR2022-00557  
Patent 9,667,669 B2

---

Before KEVIN F. TURNER, ROBERT J. WEINSCHENK, and  
RUSSELL E. CASS, *Administrative Patent Judges*.

TURNER, *Administrative Patent Judge*.

DECISION  
Granting Institution of *Inter Partes* Review  
35 U.S.C. § 314



## I. INTRODUCTION

### A. Background

Ericsson Inc. and Telefonaktiebolaget LM Ericsson (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting institution of *inter partes* review of claims 1–3, 6, 8, 10–12, 21, 22, 24, and 25 of U.S. Patent No. 9,667,669 B2 (Ex. 1001, “the ’669 Patent”). Koninklijke KPN N.V. (“Patent Owner”) filed a Preliminary Response (Paper 5, “Prelim. Resp.”). We additionally authorized the filing of a Reply by Petitioner to Patent Owner’s Preliminary Response (Paper 6, “Pet. Prelim. Reply”) and a Sur-reply by Patent Owner (Paper 7, “PO Prelim. Sur-reply”) to further consider the arguments of the parties with respect to the application of our discretion under 35 U.S.C. § 325(d).

An *inter partes* review may be instituted only if “the information presented in the petition . . . and any [preliminary] response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a) (2018). For the reasons given below, Petitioner has established a reasonable likelihood that it would prevail in showing the unpatentability of at least one of the challenged claims of the ’669 Patent. Accordingly, we institute an *inter partes* review of claims 1–3, 6, 8, 10–12, 21, 22, 24, and 25 of the ’669 Patent on the ground of unpatentability raised in the Petition.

### B. Related Proceedings

Both parties identify the following judicial or administrative matter that would affect, or be affected by, a decision in this proceeding: *Versata Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson*, Case No. 2:21-cv-113 (E.D. Tex.). Pet. 2; Paper 4, 2.

*C. The '669 Patent*

The '669 Patent is titled “Managing Associated Sessions in a Network,” and is asserted to provide “a method and a system for managing associated multimedia sessions in a network,” including the provision of a composition session identifier. Ex. 1001, code (54), Abs. With the growth of IP Multi-Media Subsystem (IMS) architecture, IMS-enabled services are offered that combine sessions (also referred to as streams) from various sources such as audio, video, and other media. *Id.* at 1:23–37. According to the '669 Patent, IMS-enabled services permit an end user to be an active participant in a multimedia session having multiple underlying media sessions instead of a passive viewer. *Id.* at 1:38–40.

The '669 Patent also details that in prior art systems, the network element is unaware of the association between the various underlying media sessions that are combined to make up these multimedia services, such that the network element may not treat each underlying media session uniformly or in a manner conducive to the multimedia services, which could impact quality of service. Ex. 1001, 2:10–15. The '669 Patent discloses the use of a composition session to associate multiple underlying media sessions and manages the associated sessions through one or more composition sessions. *Id.* at 3:25–43, 4:54–55.

In one embodiment, associated sessions are managed in an IMS-based Internet Protocol Television (IPTV) system, which uses Session Initiation Protocol (SIP) to setup and control media sessions between user equipment (UE) and a network element, such as a Service Control Function (SCF) or a Media Function (MF), with exemplary protocol flow illustrated in Figure 2, reproduced below. Ex. 1001, 7:39–42, 7:22–26, 7:29–30, 7:9–10.

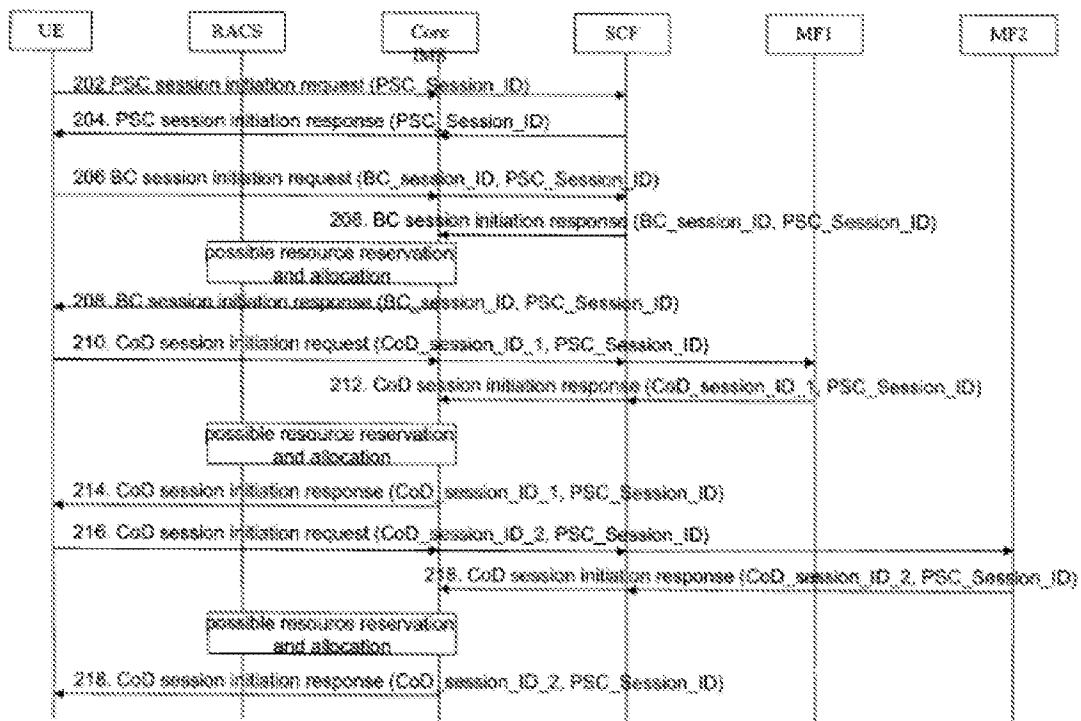


Figure 2

Figure 2 of the '669 Patent illustrating a flow diagram

In Figure 2, the composition session is a personalized stream or service composition (PSC) session, and the composition session identifier is referred to as PSC\_Session\_ID. The composition session identifier may be generated or created by the UE or the network element, or provided by a third party, such as an application server or an Electronic Programming Guide. Ex. 1001, 8:1–5. The method associates underlying media sessions by exchanging the composition session identifier between the UE and the network element (for example, network elements SCF or MF1/MF2), to initiate the composition session and to initiate the associated media sessions.

*D. Challenged Claims*

Claims 1 and 21 are the sole independent claims challenged in this proceeding, with each of challenged claims 2, 3, 6, 8, 10–12, 22, 24, and 25

dependent on one of those claims, directly or indirectly. Independent claim 1 is considered to be representative and is reproduced below:

1. [1p] A method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

[1a] providing a composition session identifier for associating sessions in the network;

[1b] after providing the composition session identifier, exchanging the composition session identifier between a user equipment and the network element a first time;

[1c] associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment;

[1d] initiating establishment of a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more sessions; and

[1e] modifying the composition session, wherein modifying the composition session comprises using signaling in the composition session to terminate all of the two or more sessions.

Ex. 1001, 12:30–50 (with annotations provided by Petitioner, Pet. 25–50).

*E. Asserted Ground of Unpatentability*

Petitioner asserts the following ground of unpatentability (Pet. 6, 21–72), supported by the declaration of Mr. Anthony Wechselberger (Ex. 1003):

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1–3, 6, 8, 10–12, 21, 22, 24, 25	103(a) <sup>1</sup>	Foti, <sup>2</sup> RFC 3261, <sup>3</sup> RFC 4566, <sup>4</sup> RFC 2326, <sup>5</sup> Wright, <sup>6</sup> Lloyd <sup>7</sup>

## II. ANALYSIS

### A. *Level of Ordinary Skill in the Art*

Petitioner, supported by Mr. Wechselberger’s testimony, proposes that a person of ordinary skill in the art at the time of the invention “would be a person with a B.S. degree in electrical engineering, computer engineering, or equivalent training or job experience, with two years of experience in computer networking technology, or a Master’s degree in electrical engineering, computer engineering, or other equivalent degree.” Pet. 13 (citing Ex. 1003 ¶ 47). Patent Owner indicates that it does not challenge the

---

<sup>1</sup> The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011), revised 35 U.S.C. § 103 effective March 16, 2013. Because the challenged patent claims priority to an application filed before March 16, 2013, we refer to the pre-AIA version of § 103.

<sup>2</sup> U.S. Patent Publication 2008/0151918 A1, filed Dec. 22, 2006, published Jun. 26, 2008 (Ex. 1006, “Foti”).

<sup>3</sup> J. Rosenberg et al., SIP: Session Initiated Protocol, RFC 3261, June 2002 (Ex. 1007, “RFC 3261”).

<sup>4</sup> M. Handley et al., SDP: Session Description Protocol, RFC 4566, Jul. 2006 (Ex. 1008, “RFC 4566”).

<sup>5</sup> H. Schulzrinne et al., Real Time Streaming Protocol (RTSP), RFC 2326, Apr. 1998 (Ex. 1009, “RFC 2326”).

<sup>6</sup> U.S. Patent Publication 2006/0039367 A1, filed Dec. 30, 2004, published Feb. 23, 2006 (Ex. 1010, “Wright”).

<sup>7</sup> European Patent Application 1777969 A1, filed Oct. 10, 2005, published Apr. 25, 2007 (Ex. 1011, “Lloyd”).

qualifications proposed by Petitioner for a person of ordinary skill in the art. Prelim. Resp. 26.

At this stage of the proceeding, we find Petitioner’s proposal consistent with the level of ordinary skill in the art reflected by the prior art of record, *see Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978), and, therefore, we adopt Petitioner’s unopposed position as to the level of ordinary skill in the art for purposes of this decision.

*B. Claim Construction*

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2020). The claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

Petitioner asserts that one claim term, “composition session,” requires explicit construction (Pet. 20–21), whereas Patent Owner asserts that the same claim term, plus one additional claim element, namely “associated sessions,” should be construed expressly. Prelim. Resp. 26–29.

We consider the parties' proposed, express constructions below, along with an additional claim element we determine to require explicit construction.

1. *“associated sessions”*

With respect to the limitation “associated sessions,” Patent Owner asserts that the '669 Patent defines those sessions as those that “should not be managed independent from each another.” Prelim. Resp. 26 (quoting Ex. 1001, 7:37–38). Based on the recitations of the Specification, we construe “associated sessions” as “sessions that should not be managed independent from each other,” as proffered by Patent Owner.

2. *“composition session”*

With respect to the limitation “composition session,” Petitioner asserts that it should be construed as “a separate signaling session for managing the associated sessions that is initiated using a different signaling session than the associated sessions,” which Petitioner asserts to be consistent with the definition in the Specification and the applicant's statements made during prosecution. Pet. 20 (citing Ex. 1001, 3:61–4:1). Petitioner asserts that the patent applicant stressed during prosecution that the composition session is a session for management that is initiated separately and is different than the associated sessions, which differs from Patent Owner's asserted construction of the term in the litigation as a “signaling session separate from the associated sessions.” *Id.* at 20–21 (citing Ex. 1002, 49–50, 52; Ex. 1017, ex. A, 32; Ex. 1020, 25–27).

Patent Owner asserts that the United States District Court for the Eastern District of Texas rejected Petitioner's proposed construction in the District Court Case, and following briefing and oral argument in that

proceeding, the District Court concluded that “composition session” means “a signaling session that is separate from the associated sessions and that is for facilitating management of the associated sessions.” Prelim. Resp. 28 (citing Ex. 2002, 84–90). Having reviewed the District Court’s determinations, we adopt its construction of “composition session” in the analysis below.

3. “*exchange*”

Claim 1 recites, in part, “exchanging the composition session identifier.” In its arguments countering the ground of unpatentability laid out in the Petition, Patent Owner asserts that the “Petition’s assertion that one-way transmission of one and only one SIP message is an ‘exchange’ as recited in Claim 1,” is contrary to the disclosures of Foti and RFC 3261. Prelim. Resp. 48–52 (quoting *id.* at 50). Patent Owner argues that Foti teaches that the SIP INVITE message and the OK message back, taken together, constitute an exchange, and that RFC 3261 discloses a two-phase exchange of SDP messages. *Id.* at 50–51 (citing Ex. 1006 ¶¶ 7, 25, claims 12, 24; Ex. 1007, 15, 16, 79). This argument, however, excludes consideration of the Specification of the ’669 Patent, which discloses that “[t]he sending of such composition session identifier in either direction may be referred to as an ‘exchange.’” Ex. 1001, 3:18–20. As such, the plain and ordinary meaning of “exchanging the composition session identifier,” in the context of the Specification, is “sending the composition session identifier in either direction.” We apply that construction in the analysis below.

4. *Other terms*

We determine that it is not necessary to provide an express interpretation of any other claim terms. *See Nidec Motor Corp. v.*



*Zhongshan Broad Ocean Motor Co. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

*C. Legal Standards – Obviousness*

The U.S. Supreme Court sets forth the framework for applying the statutory language of 35 U.S.C. § 103 in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966):

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

As explained by the Supreme Court in *KSR Int'l Co. v. Teleflex Inc.*,

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.

550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”)).

“Whether an ordinarily skilled artisan would have been motivated to modify the teachings of a reference is a question of fact.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1327 (Fed. Cir. 2016) (citations omitted). “[W]here a party argues a skilled artisan would have been motivated to combine references, it must show the artisan ‘would have had a reasonable expectation of success from doing so.’” *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1360–61 (Fed. Cir. 2017) (quoting *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068–69 (Fed. Cir. 2012)).

*D. Obviousness over Foti in view of RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd*

Petitioner asserts that the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd would have rendered the subject matter of claims 1–3, 6, 8, 10–12, 21, 22, 24, and 25 obvious to one of ordinary skill in the art at the time of the invention. Pet. 21–72. Patent Owner argues that the Petition has failed to establish the requisite motivation to combine the cited references, that the Petition fails to identify with particularity the argument and evidence against the challenged claims, and the cited references do not teach or suggest at least limitations [1p], [1c], and [1d] of claim 1. Prelim. Resp. 38–66. We begin with brief discussions of the cited references, and then consider Petitioner’s arguments with respect to the references’ teachings applied to the instant claims as well as Patent Owner’s arguments asserting deficiencies in this ground of unpatentability.

*1. Foti*

Foti describes a method for managing media sessions by associating a media session to a SIP signaling session. Ex. 1006, code (54), Abs. Foti

details that in prior art systems, the SIP signaling session is not linked to the RTSP media session that it creates, such that reliable identification and authentication of the user is difficult and prohibits the correlation of accounting information with the user for billing purposes. *Id.* ¶ 4. Foti teaches that linking the RTSP session to the SIP session facilitates management of the RTSP sessions, such that network operators can more accurately identify users to be charged for media transactions, reconcile accounting records, and detect fraud. *Id.* ¶ 5. Foti's methods for establishing multimedia streaming sessions are embodied in an IPTV system that uses standard IMS and IETF protocols such as SIP, SDP, and RTSP. *Id.* ¶¶ 2, 3, 5.

When a user desires to watch content on UT 20, the “user issues an RTSP command from a remote control such as ‘PLAY,’ to start watching a movie.” Ex. 1006 ¶ 30. UT 20 next issues a SIP INVITE 64 message to AS 40, which contains an identification of the user, a SIP session ID, and a Uniform Resource Locator (URL) that identifies a particular MCS 30 and/or media program being requested. *Id.* UT 20 initiates a media session by sending a SIP INVITE message to AS 40. *Id.* ¶ 25. The signaling flow to complete this process is shown in Figure 4, as reproduced below:

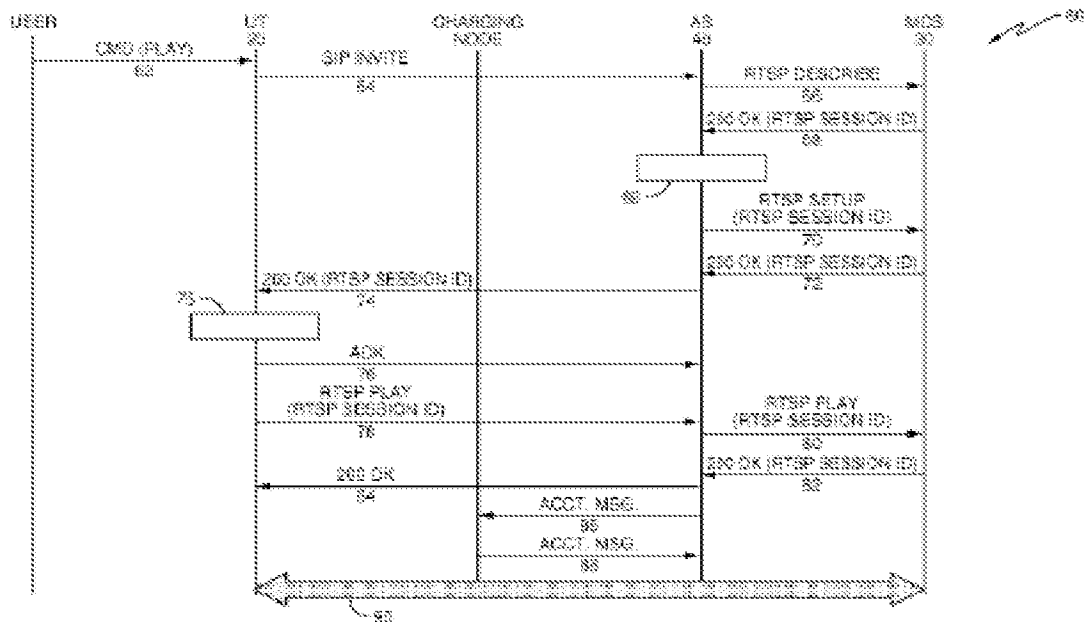


FIG. 4

Figure 4 of Foti illustrates the call flow according to one embodiment

Foti is directed to managing media sessions generally, and in certain embodiments, more than one RTSP session, through its RTSP session ID, may be linked to the same SIP session, through its SIP session ID. Ex. 1006 ¶ 28. Figure 3 illustrates that table 52 provides that RTSP2 and RTSP4, both RTSP session IDs, can be made to correspond to SIP2, a single SIP session ID. *Id.* ¶ 28, Fig. 3. Table 52 may also store the user ID and the URL associated with the RTSP media session. *Id.* ¶ 28.

2. RFC 3261, RFC 4566, and RFC 2326

RFC 3261 is an IETF standard document describing the Session Initiated Protocol (SIP), which is a signaling protocol for creating, modifying, and terminating sessions. Ex. 1007, Abs. SIP is a component that can be used with other IETF protocols to build a multimedia architecture. *Id.* at 9–10.

RFC 4566 is an IETF standard document describing the Session Description Protocol (SDP), which is a protocol for describing media sessions for purposes of session initiation. Ex. 1008, Abs.

RFC 2326 is an IETF standard document describing the Real Time Streaming Protocol (RTSP). Ex. 1009, Abs. RTSP provides for the setup and teardown of real-time streaming media sessions, as well as providing mechanisms for real-time control of the streaming media such as PLAY and PAUSE. *Id.* at Abs., 33–37.

### 3. *Wright, and Lloyd*

Wright describes methods for establishing media streams in IPTV systems using SIP messages. Ex. 1010 ¶ 8. Wright further discloses methods for terminating the media streams using SIP messages, whereby the termination includes the user equipment sending a SIP BYE message (as taught by RFC 3261), and the network responding to that message by terminating the media stream. *Id.* ¶¶ 8, 38, Fig. 6.

Lloyd is concerned with the transmission of video signals via a network, and describes methods for establishing media streams in video systems using SIP messaging and SDP to communication information and parameters that describe the media stream. Ex. 1011 ¶ 11. The SDP signaling can be used to reset the parameters of a video conferencing session and send them to the receiving end, including analyzing of network conditions, with periodic adjustments to the video frame rate being communicated to receivers via a “SDP message with new frame rate.” *Id.* ¶ 12, Fig. 3.

4. *Patent Owner's Arguments Regarding Mapping of Elements from the Prior Art to the Claims in the Petition*

Patent Owner asserts that the Petition does not identify the specific teachings of each of these references against the challenged claims, much less provide sufficient explanation as to how the multiple alternative mappings interact in its ground of unpatentability. Prelim. Resp. 42. Patent Owner further asserts that this failure to identify with particularity the alleged teachings of the challenged claims in the prior art supports denial of the Petition. *Id.* (citing *Juniper Networks, Inc. v. Core Optical Techs., LLC*, IPR2020-01664, Paper 9, 11–12, 16 (PTAB Apr. 16, 2021); *PayPal, Inc. v. IOENGINE, LLC*, IPR2019-00931, Paper 16, 28–32 (PTAB Oct. 29, 2019); *Elk Eng'g Sdn. Bhd. v. Wilco Marsh Buggies & Draglines, Inc.*, IPR2020-00344, Paper 7, 14–15 (PTAB June 23, 2020)). Patent Owner also asserts that the Petition's multiple alternative mappings of Foti and the IETF RFC standards “are ambiguous and leave the Patent Owner and the Board to guess what the combination actually is for Claim 1.” *Id.* at 42–43. Patent Owner points to specific incidences of these alleged ambiguities with respect to the Petition's analyses of claims 1 and 21. *Id.* at 43–47.

We determine, overall, that the intent of the single ground of unpatentability is clear with respect to the challenged claims. Taking Patent Owner's example, i.e., limitation [1c] (Prelim. Resp. 43–44), the RFC references detail additional aspects of certain protocols, such as SIP, SDP, and RTSP, as discussed above. Foti discusses each of these protocols, also as discussed above. *See* Ex. 1006 ¶¶ 2, 3, 5. One of ordinary skill in the art evaluating Foti would have had an understanding of the disclosed protocols, and would have looked to the RFCs to determine certain particular aspects, such as, for example, what elements make up a certain message in the

particular protocol, if those elements were not immediately recollected. The Petition's assertion that "Foti, alone and in view of RFCs 4566, 3261, and 3388" (Pet. 33) is understood as asserting that Foti teaches or suggests the functionality of element [1c] alone, with reference to the also-cited RFCs being necessary if particular aspects of the disclosed RFCs are needed to understand what one of ordinary skill in the art would have understood the protocols to cover. Similarly, with respect to elements [1p] and [1e], as well as claim 21, we can follow the logic of the Petition and understand how they are being applied to the claim elements.

5. *Proffered Motivation to Combine Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd*

Petitioner asserts that persons of ordinary skill in the art would have been motivated to combine Foti with RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd to arrive at the claimed invention. Pet. 21 (citing Ex. 1003 ¶¶ 79–85). Petitioner asserts that such skilled artisans would have been motivated to refer to these RFCs to implement the express teachings of Foti to manage RTSP sessions using a SIP session, SDP, and SIP session identifier, and would have had a reasonable expectation of success. *Id.* at 21–22. Additionally, Petitioner asserts that it would have been obvious to combine the teachings of Foti with those of Wright, since both Foti and Wright discuss establishing media sessions using SIP and RTSP protocols, and Wright discloses additional techniques for admission control whereby the network decides whether the session can be established based on the amount of available bandwidth. *Id.* at 23 (citing Ex. 1010 ¶¶ 5–7, 23, 36; Ex. 1003 ¶ 83). Petitioner also asserts that Wright also teaches how to terminate the media session using a user-initiated SIP BYE message and that Foti

discloses methods for continuing a media session in the event that the SIP session times out and the user desires to continue watching the media session. *Id.* (citing Ex. 1010 ¶ 38, Fig. 6; Ex. 1006 ¶¶ 37–39). Petitioner asserts that skilled artisans would have been motivated to include Wright’s ability to terminate unwanted media sessions using a SIP BYE message in Foti’s system to complement Foti’s discloses processes, and as this would have been an expected functionality of an IPTV service. *Id.* at 23–24 (citing Ex. 1003 ¶ 84). Lastly, Petitioner asserts that person of ordinary skill in the art would have been motivated to follow the teachings of Lloyd to modify Foti to support the known technique of adaptive video frame rate media streams to achieve better perceived quality of service from AS 40 and to be able to accommodate changes in network transmission capacity and to meet “the challenge of consistent provision of QoS.” *Id.* at 24–25 (citing Ex. 1011 ¶ 3; Ex. 1003 ¶ 85).

Patent Owner responds that neither the Petition nor Petitioner’s expert identifies how or why a person of ordinary skill in the art would have combined all six references in the manner recited in any of the challenged claims as a whole. Prelim. Resp. 40. Patent Owner takes issue that the Petition identifies separate motivations to combine the supporting references with Foti, but does not discuss a motivation to combine all six references. *Id.* at 40–41. We are not persuaded by Patent Owner’s argument to deny institution, as discussed below.

At this stage of the proceeding, on the present record, we determine that Petitioner has sufficiently established that an ordinarily skilled artisan would have had a rationale to combine the teachings of Foti with RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd, and would have had a reasonable



expectation of success from that combination. As discussed above, we are persuaded that one of ordinary skill in the art would have consulted and utilized disclosures in the RFC references to understand and implement the protocols disclosed by Foti. We are further persuaded by Petitioner's arguments that such skilled artisans would have had a rationale to combine the teachings of Wright and Lloyd with those of Foti for the reasons provided.

We are not persuaded by Patent Owner's argument. Petitioner has asserted that each of the supporting references would have been used by persons of ordinary skill in the art to modify or enhance the system described in Foti for the benefits described for the proposed changes. Absent reasons the references should not be combined, which Patent Owner has not pointed out, but accepting that Patent Owner has no burden of persuasion, we determine that the motivation proffered by the Petition is sufficient for institution.

*6. Proffered Evidence of Objective Indicia of Nonobviousness*

With respect to the sole ground of unpatentability supplied in the Petition, we must also consider any objective evidence of nonobviousness put forward by the parties. Petitioner acknowledges, and Patent Owner emphasizes, that Patent Owner submitted an European Telecommunications Standards Institute (ETSI) Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN) Change Request related to the embodiments recited in the '669 Patent. Ex. 2008, 5; Prelim. Resp. 1–2. Patent Owner further asserts that the standards agency adopted it and that adoption is industry praise and supports the nonobviousness of the challenged claims. Prelim. Resp. 6–7, 65 (citing

*WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1334 (Fed. Cir. 2016)). Patent Owner also asserts that Petitioner’s expert in the District Court Case, Dr. Jeffay, admitted that the Change Request was “related to the invention claimed in the ’669 Patent,” and thus has nexus to the challenged claims, being reasonably commensurate with the scope of the challenged claims. *Id.* at 65 (quoting Ex. 2008, 5).

On this record, however, we cannot verify the nexus to the challenged claims merely through the testimony of Petitioner’s expert in the District Court Case. That expert testified: “I also *understand* that KPN and TNO submitted an ETSI TISPAN Change Request related to the invention claimed in the ’669 Patent in January 2009.” Ex. 2008, 5 (emphasis added). Although the expert’s testimony is evidence, it is only weak evidence, as it is not supported by any underlying documentation, such as the Change Request itself or a comparison of that Change Request and the issued claims of the ’669 Patent. As such, we remain open to further consideration of this evidence of nonobviousness through industry praise, but determine it to be insufficient to overcome the case for obviousness of the challenged claims provided in the Petition at this stage of the proceeding.

7. *Claim 1*

a. *Element [1p]: Preamble*

With respect to the preamble of claim 1, Petitioner asserts that Foti discloses a network which “includes a network element (AS 40) that manages media sessions between the network and at least one user equipment (user terminal (UT) 20).” Pet. 25 (citing Ex. 1006 ¶¶ 19–20, Fig. 1). Petitioner also asserts that Foti discloses associating the RTSP sessions and SIP session using AS40 to “link the RTSP session to the SIP signaling

session used to setup the RTSP media session,” and that AS40 “correlates the RTSP session ID to the SIP session using, for example, information included within the SIP INVITE message previously received from the UT 20.” *Id.* at 26 (citing Ex. 1006 ¶¶ 26–27). Petitioner further asserts that Foti’s disclosure of linking and correlating the RTSP sessions to the SIP session discloses that the managed sessions are “associated” as claimed, and that Foti’s AS 40 performs specific management functions, such as identifying the user or its information. *Id.* at 26–27 (citing Ex. 1006 ¶¶ 18, 20; Ex. 1003 ¶ 88). Petitioner also asserts that persons of ordinary skill in the art would have understood that Foti’s system could be used to manage the associated RTSP sessions by setting up, modifying, or terminating the associated sessions, where those function would have been understood as management functions. *Id.* at 26–27 (citing Ex. 1003 ¶ 89).

Patent Owner argues that the Petition asserts that “Foti in light of the well-known IETF protocols introduced above discloses or renders obvious” limitation [1p], but never identifies which “IETF protocols introduced above” along with Foti disclose or render obvious limitation [1p]. Prelim. Resp. 62. Patent Owner also argues that the Petition only cites the abstract of RFC 3261 for limitation [1p], but that abstract does not teach or suggest “associated sessions” as recited in claim 1. *Id.* at 63. We are not persuaded by the deficiencies argued by Patent Owner because we are persuaded that the elements of the preamble are taught or suggested by Foti alone.

We find that at this stage of the proceeding, on the present record, Petitioner sufficiently establishes that Foti meets the limitations of the preamble of claim 1 for the reasons explained by Petitioner.

*b. Element [1a]: “providing a composition session identifier”*

With respect to the method step of providing a composition session identifier for associating sessions in the network, Petitioner asserts that Foti discloses that UT 20 provides a composition session identifier for associating RTSP sessions in the network, by generating a SIP session ID, and that one of ordinary skill in the art would have understood that for UT 20 to send the SIP INVITE containing the SIP session ID to AS 40, UT 20 first would have generated or provided the SIP session ID. Pet. 28 (citing Ex. 1006 ¶¶ 25–27, 30; Ex. 1003 ¶ 90). Petitioner notes that “[t]his is also consistent with the disclosure of the ‘669 Patent, which states “the PSC ID may be implemented as a SIP Call ID (as defined in RFC 3261).” *Id.* at 31 (quoting Ex. 1001, 9:44–45).

Patent Owner does not offer counter arguments with respect to this element of claim 1 in the Preliminary Response. We find that at this stage of the proceeding, on the present record, Petitioner sufficiently establishes that Foti meets this limitation of claim 1 for the reasons explained by Petitioner.

*c. Element [1b]: “exchanging the composition session identifier”*

Claim 1 recites, in part, exchanging the composition session identifier between a user equipment and the network element a first time. Petitioner asserts that Foti discloses that after the UT 20 generates the SIP INVITE, including the composition session identifier, i.e., the SIP session ID, UT 20 sends the SIP INVITE to AS 40. Pet. 31–32 (citing Ex. 1006 ¶ 30, Fig. 4).

Patent Owner does not offer counter arguments with respect to this element of claim 1 in the Preliminary Response. We find that at this stage of the proceeding, on the present record, Petitioner sufficiently establishes that Foti meets this limitation of claim 1 for the reasons explained by Petitioner.

*d. Element [1c]: “associating two or more sessions”*

Claim 1 recites, in part, associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment. Petitioner asserts that Foti, alone or in combination with RFCs 4566, 3261, and 3388, discloses associating two or more RTSP sessions using the composition session identifier (i.e., SIP session ID). Pet. 33. Petitioner asserts that Figure 3 of Foti illustrates that two RTSP sessions are associated with a single SIP session identifier, and that Foti states that “[m]ore than one RTSP session ID may be linked to the same SIP session ID.” *Id.* at 35–36 (citing Ex. 1006 ¶ 27, Fig. 3).

Petitioner also asserts that Foti discloses that the 200 OK message to the UT 20 may contain the correlation information determined by AS40, which completes the association the two or more sessions by AS 40 and allows the UT 20 to also associate the two or more sessions. Pet. 36–38 (citing Ex. 1006 ¶¶ 31–33, Fig. 4).

Patent Owner argues that Petitioner’s assertion that Foti discloses exchanging the composition session identifier at least a second time is unsupported by Foti and contrary to an IETF RFC standard asserted in the Petition. Prelim. Resp. 48. Patent Owner argues that the Petition misuses the term “exchange,” which would have been understood as “the actual exchange of messages—not one-way transmission of a single message from one component to another component.” *Id.* at 50 (citing Ex. 1006 ¶¶ 7, 24, claims 12, 24). Patent Owner also argues that “the Petition’s assertion that

one-way transmission of one and only one SIP message is an ‘exchange’ as recited in Claim 1 is contrary to RFC 3261 asserted in the Petition.” *Id.* at 50–51 (citing Ex. 1007, 15, 16, 79). We do not find Patent Owner’s arguments to be persuasive.

As discussed above, the plain and ordinary meaning of “exchanging the composition session identifier,” in the context of the Specification, is “sending the composition session identifier in either direction.” Given the description supplied in the Specification of the ’669 Patent, we are not persuaded that it is error for the Petition to refer to one-way transmission of a single message as an “exchange.” Also, under the plain and ordinary meaning, the 200 OK message to the UT 20, would have been an exchange and would involve the exchange of the SIP session ID a second time in the timing diagram, i.e., Figure 4, of Foti.

Patent Owner also argues that Foti does not support the Petition’s assertion that the linking of more than one RTSP session ID with the same SIP session ID is equivalent to associating two or more sessions with the composition session identifier. Prelim. Resp. 52. Patent Owner also argues that in each disclosure in Foti that recites the linking, it follows from a message exchange for establishing just one single media session, and underscores that Foti does not establish “two or more media sessions.” *Id.* Patent Owner also argues that Foti emphasizes how one RTSP session is linked to a SIP session ID and does not disclose how more than one RTSP session ID may be linked to the same SIP session ID. *Id.* at 53–54. We do not find Patent Owner’s arguments to be persuasive.

As asserted by the Petition (Pet. 33–36), Foti clearly discusses table 52, illustrated in Figure 3, as having “the media sessions identified by

RTSP2 and RTSP4 [] both linked to the signaling session identified by SIP2.” Ex. 1006 ¶ 28. Although Patent Owner argues that this is the sole disclosure in all of Foti, that does not diminish what the disclosure provides. We have no argument or evidence that would distinguish “linking” of identifiers, identifying sessions, from the claimed recitation of “associating two or more sessions with the composition session identifier.” Although Patent Owner is correct that the bulk of Foti considers the linking of one RTSP ID with one SIP ID, that does not negate its actual disclosure. We agree with Petitioner that the linking of the multiple RTSP IDs with a single SIP ID, via the exchanged “correlation information,” would allow for facilitation of management of the two or more RTSP sessions, such that if the SIP session should terminate the AS would reject RTSP commands as invalid. Pet. 42 (citing Ex. 1006 ¶¶ 36–37).

We find that at this stage of the proceeding, on the present record, Petitioner sufficiently establishes that Foti meets this limitation of claim 1 for the reasons explained by Petitioner.

*e. Element [1d]: “initiating establishment of a composition session”*

Claim 1 recites, in part, initiating establishment of a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more sessions. Petitioner asserts that a user interacts with UT 20 via a TV set to initiate the composition session (SIP signaling session) by sending a SIP INVITE to AS 40. Pet. 39 (citing Ex. 1006 ¶ 24). Petitioner

also asserts that Foti discloses that the SIP signaling session is a composition session because the SIP signaling session is a separate session initiated by UT 20 using a SIP INVITE (64), while the RTSP session is a separate RTSP session set up by AS 40 and MCS 30 using different RTSP messages. *Id.* at 40 (citing Ex. 1006, Fig. 4). Petitioner further asserts that Foti’s signaling session facilitates management of the two or more (RTSP) sessions, such that if the SIP session should terminate the AS would reject RTSP commands as invalid. *Id.* at 42 (citing Ex. 1006 ¶¶ 36–37). Petitioner also asserts that the composition session identifier is exchanged between the user equipment and the network as part of said establishment, as discussed above, and that Foti’s SIP signaling session is different than the two or more (RTSP) sessions because the latter are initiated using different messages than the SIP signaling session, are set up using a different IETF protocol that is not SIP, and allow UT 20 to control the media stream using different messages. *Id.* at 45.

Patent Owner argues that the Petition asserts that “Foti discloses” limitation [1d], but also cites RFC 2326 in the mapping of the limitation. Prelim. Resp. 63 (citing Pet. 39, 41). Patent Owner also argues that the cited portion of RFC 2326 does not teach or suggest “the composition session being a signaling session for facilitating management of the two or more sessions” as recited in claim 1. *Id.* We are not persuaded by the deficiencies argued by Patent Owner because we are persuaded that element [1d] is taught or suggested by Foti alone.

We find that at this stage of the proceeding, on the present record, Petitioner sufficiently establishes that Foti meets this limitation of claim 1 for the reasons explained by Petitioner.



*f. Element [1e]: “modifying the composition session”*

Claim 1 recites, in part, modifying the composition session, wherein modifying the composition session comprises using signaling in the composition session to terminate all of the two or more sessions. Petitioner asserts that it would have been obvious to modify Foti’s system in light of the media stream teardown procedure taught by Wright. Pet. 45. Petitioner asserts that a person of ordinary skill in the art would have understood that Foti discloses a network-initiated procedure for tearing down the RTSP sessions when the SIP session times out or for other policy reason. *Id.* at 46 (citing Ex. 1003 ¶ 113). Petitioner further asserts that a user may desire to end the SIP session and associated RTSP sessions by pushing a button on a remote control, as taught by Wright, through a desire to stop watching the on demand video or to turn off the UT. *Id.* at 46–47 (citing Ex. 1010 ¶ 38, Fig. 6; Ex. 1003 ¶ 114). Petitioner reiterates that such procedures would have been known to ordinarily skilled artisans, would have had a reasonable expectation of success, and would have resulted in the natural and predictable result of having the user’s desires be manifested. *Id.* at 49–50 (citing Ex. 1003 ¶¶ 116–117).

Patent Owner does not offer counter arguments with respect to this element of claim 1 in the Preliminary Response. We find that at this stage of the proceeding, on the present record, Petitioner sufficiently establishes that the teachings of Foti and Wright meet this limitation of claim 1 for the reasons explained by Petitioner.

*g. Conclusion*

We have reviewed the arguments and evidence and find that at this stage of the proceeding, on the present record, Petitioner sufficiently

establishes that the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd teaches or suggests all of the limitations of independent claim 1 for the reasons explained by Petitioner.

8. *Independent Claim 21; Dependent Claims 2, 3, 6, 8, 10–12, 22, 24, and 25*

With respect to independent claim 21, Petitioner largely relies on its analysis provided for claim 1. *See* Pet. 64–66. With respect to the last limitation in claim 21, modifying, using signaling in the composition session, all of the two or more sessions, Petitioner argues that it has shown that Foti and Wright teach or suggest terminating the SIP session. *Id.* at 65. Petitioner asserts that persons of ordinary skill in the art would have understood that terminating the two or more sessions is a form of modifying the sessions. *Id.* (citing Ex. 1003 ¶ 145). We concur with Petitioner’s analysis, including how the ’669 Patent describes terminating one or more sessions as being a type of modification of the composition session. *Id.* at 66 (citing Ex. 1001, 5:44–50). As such, we determine that Petitioner has sufficiently shown, for purposes of institution, that Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd teaches or suggests all of the limitations of independent claim 21.

We have also reviewed the Petition’s discussion of dependent claims 2, 3, 6, 8, 10–12, 22, 24, and 25 with respect to the single ground of unpatentability (Pet. 51–63, 66–72) and we determine at this stage of the proceeding, on the present record, Petitioner sufficiently establishes that the combined teachings of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd meet the limitations of those dependent claims for the reasons explained by Petitioner.

*E. Discretion under 35 U.S.C. § 325(d)*

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech, Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”); 35 U.S.C. § 314(a). Pursuant to 35 U.S.C. § 325(d), in determining whether to institute an *inter partes* review, “the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.” In evaluating arguments under § 325(d), we use

[a] two-part framework: (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.

*Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 8 (PTAB Feb. 13, 2020) (precedential); *see also Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017) (precedential as to Section III.C.5, first paragraph) (listing factors (a)–(f) to consider in evaluating the applicability of § 325(d)).

Patent Owner contends that we should deny the Petition under § 325(d) because Petitioner relies on “the IETF RFC standards asserted in the Petition—RFC 3261, RFC 2326, and RFC 4566—[which] are substantially the same as the ETSI TISPAN TSs and the OMA Service Guide [“the Presented Art”] considered by the USPTO.” Prelim. Resp. 30. Patent Owner asserts that the “Petition does not even attempt to explain how

the asserted IETF RFC standards are different from [the Presented Art] considered by the USPTO, much less show that the USPTO erred in evaluating the prior art.” *Id.* Patent Owner continues that the cited RFCs discussed in the Petition are cumulative to the Presented Art considered during the original prosecution of the application that issued as the ’669 Patent, citing exemplary points of overlap. *Id.* at 31–37.

Petitioner responds that “[a]ll references in Petitioner’s combination are new references that were neither cited nor considered during prosecution.” Pet. Prelim. Reply 1. Petitioner also responds that the examiner did not rely on the Presented Art, which were merely cited by the applicant, and also disputes Patent Owner’s arguments that the Presented Art describes indispensable references of which persons of ordinary skill in the art would have been aware. *Id.* at 2–3. Petitioner also asserts that the references relied upon in the Petition are not cumulative to the Presented Art, and that Patent Owner’s comparisons fail to consider the totality of the actual disclosures of the Presented Art. *Id.* at 3–5. Lastly, Petitioner asserts that even though we need not reach step two of *Advanced Bionics*, the Patent Office materially erred “because those claims are unpatentable for the reasons set forth in the Petition.” *Id.* at 5.

Patent Owner responds that the Presented Art is substantially the same as the RFCs cited and applied in the Petition, again relying on its analysis provided in the Preliminary Response. PO Prelim. Sur-reply 2 (citing Prelim. Resp. 31–37). Patent Owner also argues that “Petitioner’s response to these examples highlights the little to no material differences between the specific teachings.” *Id.* at 4 (citing Pet. Prelim. Reply 4–5). Additionally, Patent Owner argues that Petitioner has failed to show the Examiner

materially erred in evaluating the Presented Art considered during prosecution. *Id.* at 5.

Under *Advanced Bionics, Becton Dickinson* factors (a), (b), and (d) are considered in the evaluation of whether the same or substantially the same art or arguments were previously presented to the Office. *Advanced Bionics*, Paper 6 at 10. *Becton, Dickinson* identifies these three factors as (a) the similarities and material differences between the asserted art and the prior art involved during examination; (b) the cumulative nature of the asserted art and the prior art evaluated during examination; and (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art. *Becton, Dickinson*, Paper 8 at 17–18.

Before we consider the initial factors, we address Patent Owner’s implicit arguments, namely that “[i]f one considers the [Presented Art], they also take into account the IETF RFCs,” and what one of ordinary skill in the art “would have been aware of” in considering the Presented Art. PO Prelim. Sur-reply 2. What an examiner may have been aware of, unless recorded in the prosecution history, cannot be easily discerned and cannot form a basis for determining if references considered during prosecution are materially the same or are cumulative over reference cited in a petition. An examiner’s knowledge can be vast in his or her areas of expertise, and it would not be efficient to consider every reference an examiner considered but did not cite in our inquiry. In the instant case, we have no direct evidence that the examiner in the prosecution of the application that resulted the ’669 Patent applied the Presented Art or any other networking standard. Impugning known to an examiner widens the scope of any inquiry too

broadly, where actual references to the prosecution history are finite and definite.

Turning to factor (a), we agree that there are similarities between the Presented Art and the RFC cited in the Petition. However, the analysis would be incomplete without consideration of Foti, Wright, and Lloyd. Patent Owner has not pointed out references considered during prosecution that are cumulative of those additional references. As such, the similarities between the total asserted art in the Petition and the prior art (the Presented Art) involved during examination are not as great had merely the RFC references been the only references applied in the Petition. Similarly, with respect to factor (b), even if the Presented Art and the cited RFCs were completely cumulative, which we do not necessarily find, the Presented Art when compared to the RFCs plus Foti, Wright, and Lloyd is not cumulative. With respect to factor (d), the arguments are different, given that there has been no assertion of equivalent references for Foti and Wright, which make up the bulk of the arguments made in the Petition.

Accordingly, we do not find that any of *Becton Dickinson* factors (a), (b), and (d) are met for Petitioner's challenge based on the combination of Foti, RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd, and we find that the ground of unpatentability does not rely upon the same or substantially the same prior art or arguments considered during examination of the '669 Patent. *Oticon Medical AB v. Cochlear Ltd.*, IPR2019-00975, Paper 15 at 20 (PTAB Oct. 16, 2019) (precedential) (declining to exercise discretion when new, noncumulative prior art was asserted in the Petition). Having failed the first prong under *Advanced Bionics*, we need not determine whether Petitioner has demonstrated that the Office erred in a manner material to the

patentability of challenged claims. We conclude that the circumstances presented here do not warrant our exercise of discretion to deny institution based on § 325(d).

### III. CONCLUSION

For the foregoing reasons, Petitioner has demonstrated a reasonable likelihood that it would prevail in showing that at least one claim of the '699 Patent is unpatentable.

### IV. ORDER

Accordingly, it is:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted as to claims 1–3, 6, 8, 10–12, 21, 22, 24, and 25 of the '669 Patent on the following asserted grounds:

Claims 1–3, 6, 8, 10–12, 21, 22, 24, and 25 under 35 U.S.C. § 103(a) as unpatentable over Foti in view of RFC 3261, RFC 4566, RFC 2326, Wright, and Lloyd; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, the trial commencing on the entry date of this Decision.

IPR2022-00557  
Patent 9,667,669 B2

For PETITIONER:

Chad C. Walters  
Douglas M. Kubehl  
Jeffrey S. Becker  
Melissa L. Muenks  
BAKER BOTTS LLP  
[chad.walters@bakerbotts.com](mailto:chad.walters@bakerbotts.com)  
[doug.kubehl@bakerbotts.com](mailto:doug.kubehl@bakerbotts.com)  
[jeff.becker@bakerbotts.com](mailto:jeff.becker@bakerbotts.com)  
[melissa.muenks@bakerbotts.com](mailto:melissa.muenks@bakerbotts.com)

For PATENT OWNER:

Bradley J. Hulbert  
Eric R. Moran  
James L. Lovsin  
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP  
[hulbert@mbhb.com](mailto:hulbert@mbhb.com)  
[moran@mbhb.com](mailto:moran@mbhb.com)  
[lovsin@mbhb.com](mailto:lovsin@mbhb.com)



AO 120 (Rev. 08/10)

<b>TO: Mail Stop 8</b> <b>Director of the U.S. Patent and Trademark Office</b> <b>P.O. Box 1450</b> <b>Alexandria, VA 22313-1450</b>	<b>REPORT ON THE</b> <b>FILING OR DETERMINATION OF AN</b> <b>ACTION REGARDING A PATENT OR</b> <b>TRADEMARK</b>
---	---

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas on the following

Trademarks or  Patents. (  the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 2:21-cv-113	DATE FILED 3/31/2021	U.S. DISTRICT COURT Eastern District of Texas
PLAINTIFF KONINKLIJKE KPN N.V.		DEFENDANT TELEFONAKTIEBOLAGET LM ERICSSON and ERICSSON INC.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 RE48,089	7/7/2020	KONINKLIJKE KPN N.V.
2 8,881,235	11/4/2014	KONINKLIJKE KPN N.V.
3 9,253,637	2/2/2016	KONINKLIJKE KPN N.V.
4 9,549,426	11/10/2020	KONINKLIJKE KPN N.V.
5 9,667,669	5/30/2017	KONINKLIJKE KPN N.V.

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT FINAL JUDGMENT FOR PLAINTIFF
--

CLERK <i>David A. O'Poole</i>	(BY) DEPUTY CLERK CH	DATE 9/7/22
----------------------------------	-------------------------	----------------

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director  
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy



AO 120 (Rev. 08/10)

TO: <b>Mail Stop 8</b> <b>Director of the U.S. Patent and Trademark Office</b> <b>P.O. Box 1450</b> <b>Alexandria, VA 22313-1450</b>	<b>REPORT ON THE</b> <b>FILING OR DETERMINATION OF AN</b> <b>ACTION REGARDING A PATENT OR</b> <b>TRADEMARK</b>
---	---

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court For The District of Delaware on the following

Trademarks or  Patents. (  the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED 6/22/2018	U.S. DISTRICT COURT For The District of Delaware
PLAINTIFF KONINKLIJKE KPN N.V.		DEFENDANT TCL CORPORATION, TCL COMMUNICATION, INC., TCL COMMUNICATION TECHNOLOGY HOLDINGS LIMITED, TCT MOBILE, INC., TCT MOBILE (US) INC., and TCT MOBILE (US) HOLDINGS, INC.,
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 US 9,667,669 B2	5/30/2017	KONINKLIJKE KPN N.V.
2 US 9,654,330 B2	5/16/2017	KONINKLIJKE KPN N.V.
3		
4		
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
--------------------

CLERK	(BY) DEPUTY CLERK	DATE
-------	-------------------	------

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director  
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy



APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/144,385	05/30/2017	9667669	11-905-WO-US	5301

20306 7590 05/10/2017  
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP  
300 S. WACKER DRIVE  
32ND FLOOR  
CHICAGO, IL 60606

### ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

#### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)** (application filed on or after May 29, 2000)

The Patent Term Adjustment is 267 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Hans Maarten Stokking, Wateringen, NETHERLANDS;  
Fabian Arthur Walraven, Groningen, NETHERLANDS;  
Mattijs Oskar van Deventer, Leidschendam, NETHERLANDS;  
Omar Aziz Niamut, Vlaardingen, NETHERLANDS;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit [SelectUSA.gov](http://SelectUSA.gov).

**PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

20306 7590 01/25/2017  
**MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP**  
 300 S. WACKER DRIVE  
 32ND FLOOR  
 CHICAGO, IL 60606

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/144,385	07/13/2011	Hans Maarten Stokking	11-905-WO-US	5301

TITLE OF INVENTION: Managing Associated Sessions in a Network

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	04/25/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUONG, OANH	2441	709-228000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). <input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. <input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. <b>Use of a Customer Number is required.</b>	2. For printing on the patent front page, list (1) The names of up to 3 registered patent attorneys or agents OR, alternatively, (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
	1 <u>McDonnell Boehnen</u> <u>Hulbert &amp; Berghoff LLP</u> 2 _____ 3 _____

**3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)**

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE Koninklijke KPN N.V. Nederlandse Organisatie Voor Toegenast-Natuurwetenschappelijk Onderzoek TNO	(B) RESIDENCE: (CITY and STATE OR COUNTRY) The Hague, Netherlands Delft Netherlands
--	---

Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

4a. The following fee(s) are submitted: <input checked="" type="checkbox"/> Issue Fee <input type="checkbox"/> Publication Fee (No small entity discount permitted) <input type="checkbox"/> Advance Order - # of Copies _____	4b. Payment of Fee(s): ( <b>Please first reapply any previously paid issue fee shown above</b> ) <input type="checkbox"/> A check is enclosed. <input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached. <input checked="" type="checkbox"/> The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number <u>13-2490</u> (enclose an extra copy of this form).
---	---

**5. Change in Entity Status** (from status indicated above)

Applicant certifying micro entity status. See 37 CFR 1.29

Applicant asserting small entity status. See 37 CFR 1.27

Applicant changing to regular undiscounted fee status.

**NOTE:** Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

**NOTE:** If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

**NOTE:** Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Jason S. Kray/ Date April 24, 2017  
 Typed or printed name Jason S. Kray Registration No. 66,926

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	13144385
<b>Filing Date:</b>	13-Jul-2011
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Filer:</b>	Jason S. Kray
<b>Attorney Docket Number:</b>	11-905-WO-US

Filed as Large Entity

### Filing Fees for U.S. National Stage under 35 USC 371

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
UTILITY APPL ISSUE FEE	1501	1	960	960

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Extension-of-Time:</b>				
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>960</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	29002455
<b>Application Number:</b>	13144385
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	5301
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Customer Number:</b>	20306
<b>Filer:</b>	Jason S. Kray
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	11-905-WO-US
<b>Receipt Date:</b>	24-APR-2017
<b>Filing Date:</b>	13-JUL-2011
<b>Time Stamp:</b>	11:15:09
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$960
RAM confirmation Number	042417INTEFSW11160400
Deposit Account	132490
Authorized User	Jason Kray

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.21 (Miscellaneous fees and charges)  
 37 CFR 1.492 (National application filing, search, and examination fees)  
 37 CFR 1.492(a) (Basic national fee only)

**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	11-905-WO-US-- IssueFeeTransmittal.pdf	119162 7ebbccb9a33e4c52de62f59ba50bc2956ac9780c	no	1

**Warnings:**

**Information:**

2	Fee Worksheet (SB06)	fee-info.pdf	30348 1c9e5eeca780415256ee1561a543440942d5ecc8	no	2
---	----------------------	--------------	---	----	---

**Warnings:**

**Information:**

**Total Files Size (in bytes):** 149510

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**





NOTICE OF ALLOWANCE AND FEE(S) DUE

20306 7590 01/25/2017
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

Table with 2 columns: EXAMINER (DUONG, OANH), ART UNIT (2441), PAPER NUMBER (5301)

DATE MAILED: 01/25/2017

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

TITLE OF INVENTION: Managing Associated Sessions in a Network

Table with 7 columns: APPLN. TYPE, ENTITY STATUS, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies. If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above. If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)". For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

**PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

20306 7590 01/25/2017  
**MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP**  
 300 S. WACKER DRIVE  
 32ND FLOOR  
 CHICAGO, IL 60606

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)
_____ (Signature)
_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/144,385	07/13/2011	Hans Maarten Stokking	11-905-WO-US	5301

TITLE OF INVENTION: Managing Associated Sessions in a Network

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	04/25/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUONG, OANH	2441	709-228000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. <b>Use of a Customer Number is required.</b></p>	<p>2. For printing on the patent front page, list</p> <p>(1) The names of up to 3 registered patent attorneys or agents OR, alternatively, _____ 1</p> <p>(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. _____ 2</p> <p>_____ 3</p>
---	---

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE \_\_\_\_\_ (B) RESIDENCE: (CITY and STATE OR COUNTRY) \_\_\_\_\_

Please check the appropriate assignee category or categories (will not be printed on the patent) :  Individual  Corporation or other private group entity  Government

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).</p>
---	---

5. Change in Entity Status (from status indicated above)

Applicant certifying micro entity status. See 37 CFR 1.29

Applicant asserting small entity status. See 37 CFR 1.27

Applicant changing to regular undiscouted fee status.

**NOTE:** Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

**NOTE:** If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

**NOTE:** Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_



UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/144,385	07/13/2011	Hans Maarten Stokking	11-905-WO-US	5301

20306 7590 01/25/2017  
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP  
300 S. WACKER DRIVE  
32ND FLOOR  
CHICAGO, IL 60606

EXAMINER

DUONG, OANH

ART UNIT PAPER NUMBER

2441

DATE MAILED: 01/25/2017

**Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**  
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

### Privacy Act Statement

**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

<b>Notice of Allowability</b>	<b>Application No.</b> 13/144,385	<b>Applicant(s)</b> STOKKING ET AL.	
	<b>Examiner</b> OANH DUONG	<b>Art Unit</b> 2441	<b>AIA (First Inventor to File) Status</b> No

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to communication(s) filed on 10/21/2016.  
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.
2.  An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.
3.  The allowed claim(s) is/are 1,3-21,23 and 25-28. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

**Certified copies:**

- a)  All    b)  Some    \*c)  None of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  
 including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Examiner's Amendment/Comment                  |
| 2. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date <u>11/11/2016</u> | 6. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| 3. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                     | 7. <input type="checkbox"/> Other _____.                                  |
| 4. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____.   |   |

/OANH DUONG/  
Primary Examiner, Art Unit 2441

<b>Notice of References Cited</b>	Application/Control No. 13/144,385	Applicant(s)/Patent Under Reexamination STOKKING ET AL.	
	Examiner OANH DUONG	Art Unit 2441	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A US-2006/0136557 A1	06-2006	Schaedler; Richard E.	H04L29/06	709/203
*	B US-2006/0230168 A1	10-2006	Sung; Sang-Kyung	H04W4/08	709/230
*	C US-2004/0125756 A1	07-2004	Lepore, Michael P.	H04L29/06027	370/261
*	D US-2007/0005990 A1	01-2007	Sathish; Sailesh	H04L67/14	713/189
	E US-				
	F US-				
	G US-				
	H US-				
	I US-				
	J US-				
	K US-				
	L US-				
	M US-				

**FOREIGN PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

**NON-PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)				
	U				
	V				
	W				
	X				

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	13144385
	Filing Date	2011-07-13
	First Named Inventor	Hans Maarten Stokking
	Art Unit	2441
	Examiner Name	Oanh Duong
	Attorney Docket Number	11-905-WO-US

U.S.PATENTS							Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS							Remove
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> i	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button. Add

NON-PATENT LITERATURE DOCUMENTS							Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.					T <sup>5</sup>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	13144385	
Filing Date	2011-07-13	
First Named Inventor	Hans Maarten Stokking	
Art Unit	2441	
Examiner Name	Oanh Duong	
Attorney Docket Number	11-905-WO-US	

1	ETSI-TS182-027 Technical Specification; "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); IPTV Architecture; IPTV Functions Supported by the IMS Subsystem," European Telecommunications Standards Institute, dated February 2008, 57 pages.
2	ETSI-TS182-028 Technical Specification; "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); IPTV Architecture; Dedicated Subsystem for IPTV Functions," European Telecommunications Standards Institute, dated January 2008, 38 pages.
3	ETSI-TS183-063 Technical Specification; "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); IMS-Based IPTV Stage 3 Specification," European Telecommunications Standards Institute, dated June 2008, 127 pages.
4	ETSI-TS183-064 Technical Specification; "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); Dedicated IPTV Subsystem Stage 3 Specification," European Telecommunications Standards Institute, dated October 2008, 46 pages.

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature	/OANH DUONG/	Date Considered	01/23/2017
--------------------	--------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /O.D/



**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	13144385		
Filing Date	2011-07-13		
First Named Inventor	Hans Maarten Stokking		
Art Unit	2441		
Examiner Name	Oanh Duong		
Attorney Docket Number	11-905-WO-US		

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

- The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- A certification statement is not submitted herewith.

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Jason S. Kray/	Date (YYYY-MM-DD)	2016-11-11
Name/Print	Jason S. Kray	Registration Number	66,926

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Basic Search   Advanced Search   Publications   Browse   Databases

( composi\* n/5 session) and (media or multimedia) n/25 session n/2 (id or identifier or identification or number)



Full text    Peer reviewed   [Modify search](#)   [Recent searches](#)   [Save search/alert](#)

**Related searches**   There are no related searches for your search.

13 results

0 Ebook Central results

Search within

Cite   Email    Print   Save

Oldest first

Sort

Select 1-13   0 Selected items

[Brief view](#) | [Detailed view](#)

- 1 THE CONFERENCE ON COLLEGE COMPOSITION AND COMMUNICATION: A HISTORICAL STUDY OF ITS CONTINUING EDUCATION AND PROFESSIONALIZATION ACTIVITIES, 1949-1975.

BIRD, NANCY KENNEY. Virginia Polytechnic Institute and State University, ProQuest Dissertations Publishing, 1977. 7808114.

Cited by (2)

[Details](#)   Preview - PDF (1 MB)   Full text - PDF (16 MB)   Order a copy

[Preview M](#)

- 2 THE EFFECTS OF SMALL GUIDANCE GROUPS ON CHILDREN'S SELF-CONCEPTS  
WOTRING, NANCY NEAL ROBERTSON. Oklahoma State University, ProQuest Dissertations Publishing, 1979. 8013051.

[Details](#)   Preview - PDF (880 KB)   Full text - PDF (3 MB)   Order a copy

[Preview M](#)

- 3 Performance evaluation of real-time multimedia delivery architectures



Gopal, Chetan Bakthi. University of Massachusetts Lowell, ProQuest Dissertations Publishing, 1997. 9726259.

Abstract/Details Preview - PDF (1 MB) Full text - PDF (8 MB) Order a copy

[Preview M](#)

4



The effects of instructional media on group piano student performance achievement and attitude

Benson, Cynthia Ann Stephens. The University of Texas at Austin, ProQuest Dissertations Publishing, 1998. 9905676.

Cited by (1)

Abstract/Details Preview - PDF (929 KB) Full text - PDF (8 MB) Order a copy

[Preview M](#)

5



Group coordination support in networked multimedia systems

Dommei, Hans-Peter. University of California, Santa Cruz, ProQuest Dissertations Publishing, 1999. 9981473.

Abstract/Details Preview - PDF (675 KB) Full text - PDF (8 MB) Order a copy

[Preview M](#)

6



Meta-analysis of medical self-help groups

Barlow, Sally H; Burlingame, Gary M; Nebeker, R Scott; Anderson, Ed. *International Journal of Group Psychotherapy*; New York 50.1 (Jan 2000): 53-69.

Images (5)



Cited by (19) [References \(14\)](#)

Abstract/Details Full text Full text - PDF (1 MB)

[Preview M](#)

7



Facilitating intelligent media space collaboration via RASCAL: The reflectively adaptive synchronous coordination architectural framework

Robbins, Robert Wayne. University of Ottawa (Canada), ProQuest Dissertations Publishing, 2001. NQ67218.

Abstract/Details Preview - PDF (714 KB) Full text - PDF (13 MB) Order a copy




[Preview M](#)

8



Applying aggregate-level traffic control algorithms to improve network robustness

Chen, Xuan. University of Southern California, ProQuest Dissertations Publishing, 2004. 3145171.

Abstract/Details  Preview - PDF (709 KB)  Full text - PDF (4 MB)  Order a copy

Preview M

9



### Services for Internet telephony

Lennox, Jonathan Michael. Columbia University, ProQuest Dissertations Publishing, 2004. 3115356.

Abstract/Details  Preview - PDF (941 KB)  Full text - PDF (10 MB)  Order a copy

Preview M




10



### A facilitator's manual for use with a spirituality -oriented group intervention protocol in combat veterans with chronic combat-related post-traumatic stress disorder

Leoni, Jeffrey Joseph. Pepperdine University, ProQuest Dissertations Publishing, 2005. 3191656.

Cited by (4)

Abstract/Details  Preview - PDF (561 KB)  Full text - PDF (3 MB)  Order a copy

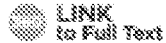
Preview M

11



### Examining the effects of media on learners' mental representations and cognitive processes in science

Carr, Adrienne L.. University of Cincinnati, ProQuest Dissertations Publishing, 2007. 3295429.

Abstract/Details 

Preview M

12



### Experience from continuing education using e-learning

Rolstadås, Asbjørn. *Journal of Intelligent Manufacturing*; London 24.3 (Jun 2013): 511-516.

Cited by (3) References (39)

Abstract/Details  Full text - PDF (199 KB)

Preview M




13



### Influence of Exercise Mode on Maternal, Fetal, and Neonatal Health Outcomes: The ENHANCED by Mom Project

Moyer, Carmen. East Carolina University, ProQuest Dissertations Publishing, 2014. 1564980.

References (103)

Abstract/Details  Preview - PDF (787 KB)  Full text - PDF (2 MB)  Order a copy

Preview M

Search Within

Items per page:

50

Change

Narrow results

Full text

M

Peer reviewed

M

Source type

?

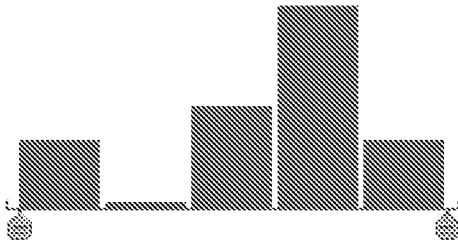
Dissertations & Theses (11)

Scholarly Journals (2)

Publication date

?

1977 - 2014 (decades)



Enter a date range

Update

Publication title

M

Document type

M

Subject

M

Classification

M

Location

M

Language

M

ProQuest®

[Contact Us](#)

[Terms and Conditions](#)


[Accessibility](#)

[Privacy Policy](#)

[Cookie Policy](#)

[Credits](#)

Copyright © 2017 ProQuest LLC.


<b>Issue Classification</b> 	<b>Application/Control No.</b> 13144385	<b>Applicant(s)/Patent Under Reexamination</b> STOKKING ET AL.	
	<b>Examiner</b> OANH DUONG	<b>Art Unit</b> 2441	

CPC						
Symbol					Type	Version
H04L		65		1069	F	2013-01-01
H04L		65		1083	I	2013-01-01
H04L		65		4007	I	2013-01-01

CPC Combination Sets					
Symbol		Type	Set	Ranking	Version


NONE		<b>Total Claims Allowed:</b>	
		25	
(Assistant Examiner)	(Date)	O.G. Print Claim(s)	O.G. Print Figure
/OANH DUONG/ Primary Examiner. Art Unit 2441	01/23/2017	1	6
(Primary Examiner)	(Date)		



<b>Issue Classification</b> 	<b>Application/Control No.</b> 13144385	<b>Applicant(s)/Patent Under Reexamination</b> STOKKING ET AL.
	<b>Examiner</b> OANH DUONG	<b>Art Unit</b> 2441

US ORIGINAL CLASSIFICATION						INTERNATIONAL CLASSIFICATION								
CLASS			SUBCLASS			CLAIMED				NON-CLAIMED				
						G	0	6	F	15 / 16 (2006.01.01)				
<b>CROSS REFERENCE(S)</b>														
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)													

NONE		<b>Total Claims Allowed:</b>	
(Assistant Examiner)	(Date)	25	
/OANH DUONG/ Primary Examiner. Art Unit 2441	01/23/2017	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	6

<b>Issue Classification</b> 	<b>Application/Control No.</b> 13144385	<b>Applicant(s)/Patent Under Reexamination</b> STOKKING ET AL.
	<b>Examiner</b> OANH DUONG	<b>Art Unit</b> 2441

<input type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b>																<input type="checkbox"/> <b>CPA</b>		<input type="checkbox"/> <b>T.D.</b>		<input type="checkbox"/> <b>R.1.47</b>	
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original						
1	1	19	17																		
	2	20	18																		
2	3	14	19																		
4	4	5	20																		
6	5	9	21																		
8	6		22																		
3	7	22	23																		
7	8		24																		
10	9	21	25																		
11	10	23	26																		
12	11	24	27																		
13	12	25	28																		
15	13																				
16	14																				
17	15																				
18	16																				

NONE		<b>Total Claims Allowed:</b>	
		25	
(Assistant Examiner)	(Date)	O.G. Print Claim(s)	O.G. Print Figure
/OANH DUONG/ Primary Examiner. Art Unit 2441	01/23/2017	1	6
(Primary Examiner)	(Date)		

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L15	0	13 and (adjust\$3 chang\$3 modify\$3) near15 (composition combin\$5 blend\$3 compos\$3 mix\$3 ) near2 session	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 10:31
L13	463	L12 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 10:29
L12	1048	request\$3 near20 (composit\$3 global\$2 correlat\$3 associat\$3) near2 (id identifier identification) near20 (mix\$3 combin\$3 correlat\$3 associat\$3 composit\$3) near2 session	USPAT	OR	ON	2017/01/23 10:29
L11	1	10 and modify\$3 near15 (composition combin\$5 blend\$3) near2 session	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 10:26
L10	459	STOKKING-HANS-MAARTEN.in. WALRAVEN-FABIAN-ARTHUR.in. VAN-DEVENTER-MATTIJS-OSKAR.in. NIAMUT-OMAR-AZIZ.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 10:25
L9	1	KONINKLIJKE-PTT-NEDERLAND-N-V.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 10:21
L5	1	4 and (compos\$3 near10 session same3 collectivel\$3 near10 (manag\$3 control\$4) near14 associat\$3 near10 sessions)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 09:39
L4	34921	(H04L65/1069 H04L65/4007 H04L65/1083).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 09:38
L3	1	(compos\$3 near10 session same collectivel\$3 near10 (manag\$3	US-PGPUB; USPAT;	OR	ON	2017/01/23 09:37

		control\$4) near14 associat\$3 near10 sessions)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
L2	28	1 and @ad< "20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 08:32
L1	43	modify\$3 near15 (composition combin\$3) near2 session	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 08:32
S124	43	modify\$3 near15 (composition combin\$3) near2 session	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 04:02
S123	5	S122 and @ad< "20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 02:19
S122	16	((initiat\$3 establish\$3 set\$4 adj up) near10 composition adj session)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 02:18
S121	111	composition adj session	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 02:17
S120	299	S119 and @ad< "20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 01:02
S119	519	(session near2 (id identifier identification number) near20 manag\$3 near20 (group set list) near2 sessions)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/23 01:01


## EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L7	21	((compos\$3 near10 session and (manag\$3 control\$4) near14 associat\$3 near10 sessions)).clm.	US-PGPUB; USPAT	OR	ON	2017/01/23 09:44

L6	0	((compos\$3 near10 session and collective\$3 near10 (manag\$3 control\$4) near14 associat\$3 near10 sessions)).clm.	US- PGPUB; USPAT	OR	ON	2017/01/23 09:44
----	---	---	------------------------	----	----	---------------------

1/ 23/ 2017 10:31:56 AM

C:\Users\oduong\Documents\EAST\Workspaces\13144385.wsp

<b>Search Notes</b>  	<b>Application/Control No.</b>  13144385	<b>Applicant(s)/Patent Under Reexamination</b>  STOKKING ET AL.
	<b>Examiner</b>  OANH DUONG	<b>Art Unit</b>  2441

CPC- SEARCHED		
Symbol	Date	Examiner
H04L65/1069, H04L65/4007, H04L65/1083	1/23/2017	O.D

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	203, 223, 227-227, 246	5/17/2014	O.D

SEARCH NOTES		
Search Notes	Date	Examiner
EAST text search of USPAT, JPO, EPO, DERWENT, IBM_TDB, US-PGPUB	1/23/2017	O.D
Inventor name & assignee search conducted	1/23/2017	O.D
seach NPL using ProQuest	1/23/2017	O.D

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
US-PGPUB, USPAT Text search	see interference search history	1/23/2017	O.D

--	--

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	13144385
	Filing Date	2011-07-13
	First Named Inventor	Hans Maarten Stokking
	Art Unit	2441
	Examiner Name	Oanh Duong
	Attorney Docket Number	11-905-WO-US

U.S.PATENTS							Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS							Remove
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> i	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS				Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>5</sup>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		13144385
Filing Date		2011-07-13
First Named Inventor	Hans Maarten Stokking	
Art Unit		2441
Examiner Name	Oanh Duong	
Attorney Docket Number		11-905-WO-US

1	ETSI-TS182-027 Technical Specification; "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); IPTV Architecture; IPTV Functions Supported by the IMS Subsystem," European Telecommunications Standards Institute, dated February 2008, 57 pages.
2	ETSI-TS182-028 Technical Specification; "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); IPTV Architecture; Dedicated Subsystem for IPTV Functions," European Telecommunications Standards Institute, dated January 2008, 38 pages.
3	ETSI-TS183-063 Technical Specification; "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); IMS-Based IPTV Stage 3 Specification," European Telecommunications Standards Institute, dated June 2008, 127 pages.
4	ETSI-TS183-064 Technical Specification; "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); Dedicated IPTV Subsystem Stage 3 Specification," European Telecommunications Standards Institute, dated October 2008, 46 pages.

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature	<input type="text"/>	Date Considered	<input type="text"/>
--------------------	----------------------	-----------------	----------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.



<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	13144385
	Filing Date	2011-07-13
	First Named Inventor	Hans Maarten Stokking
	Art Unit	2441
	Examiner Name	Oanh Duong
	Attorney Docket Number	11-905-WO-US

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

- The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- A certification statement is not submitted herewith.

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Jason S. Kray/	Date (YYYY-MM-DD)	2016-11-11
Name/Print	Jason S. Kray	Registration Number	66,926

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	13144385
<b>Filing Date:</b>	13-Jul-2011
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Filer:</b>	Jason S. Kray
<b>Attorney Docket Number:</b>	11-905-WO-US

Filed as Large Entity

### Filing Fees for U.S. National Stage under 35 USC 371

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
Submission- Information Disclosure Stmt	1806	1	180	180
<b>Total in USD (\$)</b>				<b>180</b>

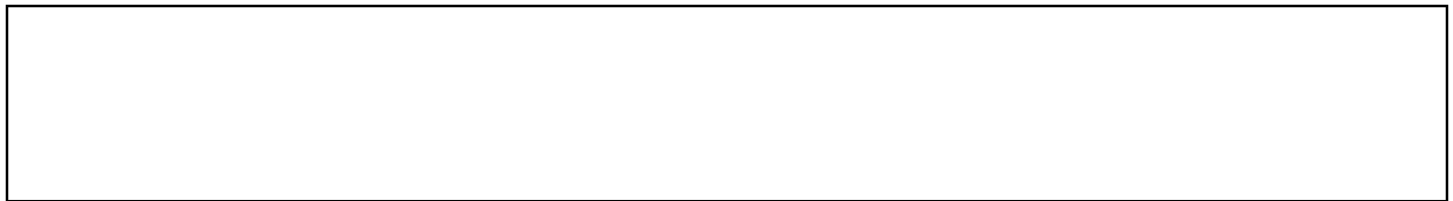
## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	27487695
<b>Application Number:</b>	13144385
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	5301
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Customer Number:</b>	20306
<b>Filer:</b>	Jason S. Kray
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	11-905-WO-US
<b>Receipt Date:</b>	11-NOV-2016
<b>Filing Date:</b>	13-JUL-2011
<b>Time Stamp:</b>	15:58:15
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$180
RAM confirmation Number	111416INTEFSW00012238132490
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:



**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	11-905-WO-US_3rdSupplementalIDS-SB08.pdf	612448 cd75877fb20aa98cb2a21e21f20df60fe0985354	no	4

**Warnings:**

**Information:**

A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.

2	Non Patent Literature	NPL--ETSI-TS182-027.pdf	2688355 a7b53e6c054c4b388084fce11b6bb873ee4acd62	no	57
---	-----------------------	-------------------------	---	----	----

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

3	Non Patent Literature	NPL--ETSI-TS182-028.pdf	1705797 43d72c5f1b396ad54a35df0fc88f3e212cf10fb	no	38
---	-----------------------	-------------------------	--	----	----

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

4	Non Patent Literature	NPL--ETSI-TS183-063.pdf	6183639 00a2bfc096191efbb7de96ee1d32ce83ce638c97	no	127
---	-----------------------	-------------------------	---	----	-----

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

5	Non Patent Literature	NPL--ETSI-TS183-064.pdf	2049501	no	46
			2eadab1916a9fbcecc8f80d0b4f34fff60426288		

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

6	Fee Worksheet (SB06)	fee-info.pdf	30454	no	2
			e2ab0206a913fcb9e8675e71b5a6789e0c7cf88		

**Warnings:**

**Information:**

<b>Total Files Size (in bytes):</b>	13270194
-------------------------------------	----------

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Attorney Docket No. 11-905-WO-US)**

<b>In re Application of:</b>	)	
	)	
<b>Hans Maarten Stokking et al.</b>	)	
	)	<b>Conf. No.: 5301</b>
<b>Appl. No.: 13/144,385</b>	)	
	)	<b>Art Unit: 2441</b>
<b>Filed: July 13, 2011</b>	)	
	)	<b>Examiner: Oanh Duong</b>
<b>Title: Managing Associated Sessions</b>	)	
<b>In A Network</b>	)	

**REPLY TO NON-FINAL OFFICE ACTION MAILED APRIL 26, 2016**

Mail Stop Amendment – via EFS  
Commissioner for Patents  
Alexandria, Virginia 22313-1450

Dear Commissioner:

This paper is in reply to the non-final Office Action dated April 26, 2016. Applicants hereby request a three-month extension, extending the time to respond to October 26, 2016 and, thus, this reply is timely. The Commissioner is authorized to deduct the extension fees from MBHB Deposit Account No. 13-2490, Order No. 11-905-WO-US. In reply thereto, Applicants respectfully request the Examiner to consider the following amendments and remarks

**Amendments to the claims** are reflected in the **Listing of Claims** which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 9 of this paper.



## AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently Amended) A method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier for associating sessions in the network;

after providing the composition session identifier, exchanging the composition session identifier between a user equipment and the network element a first time;

associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment; [[and]]

initiating establishment of a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more ~~associated~~ sessions; and

modifying the composition session, wherein modifying the composition session comprises using signaling in the composition session to terminate all of the two or more sessions.

2. (Canceled)

3. (Currently Amended) The method according to claim 1, wherein providing the composition identifier ~~the method further~~ comprises:

the user equipment generating the composition session identifier; and

sending a request for initiating the composition session from the user equipment to the network element, the request comprising the composition session identifier.

4. (Currently Amended) The method according to claim 1, wherein providing the composition identifier ~~the method further~~ comprises:

    sending a request for initiating the composition session from the user equipment to the network element;

    the network element generating the composition session identifier in response to the receipt of the request for initiating the composition session; and

    the network element sending the composition session identifier to the user equipment.

5. (Previously Presented) The method according to claim 1, wherein the method further comprises:

    the user equipment initiating the two or more associated sessions by sending two or more session initiation requests for a session to the network element, each request comprising the composition session identifier.

6. (Previously Presented) The method according to claim 1, wherein the method further comprises:

    the network element initiating the two or more associated sessions by sending two or more requests for a session to the user equipment, each request comprising the composition session identifier.

7. (Previously Presented) The method according to claim 3, wherein the request for initiating the composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers.

8. (Previously Presented) The method according to claim 5, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (CoD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier,

network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier.

9. (Previously Presented) The method according to claim 1, wherein combined streams of the two or more associated sessions are presented to the user equipment as a personalized composed multimedia stream.

10. (Previously Presented) The method according to claim 1, wherein the network further comprises storage, the method further comprising:

the network element storing the composition session identifier and two or more associated session identifiers in the storage.

11. (Currently Amended) The method according to claim 1, the method further comprising:

modifying the composition session, ~~wherein modifying the composition session comprises~~ by at least one of (i) ~~terminating or modifying one or more~~ at least one of the two or more sessions in the composition session, or (ii) transferring ~~one or more~~ at least one of the two or more sessions from the composition session to a further composition session or outside the composition session.

12. (Currently Amended) The method according to claim 1, wherein the network is an IP Multimedia Subsystem (IMS) network comprising an IMS core connected to a Service Control Function (SCF), wherein the SCF is configured for managing associated sessions between the network and the User Equipment, wherein the network element is the SCF.

13. (Currently Amended) A system for managing associated sessions in a network, the system comprising:

a network element; and

a user equipment,

wherein the network element is configured to (i) manage sessions between the network element and the user equipment, (ii) exchange a composition session identifier with the user equipment a first time, and (iii) associate two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with either the user equipment or a second user equipment different from the user equipment,

wherein the user equipment is configured to (i) provide the composition session identifier and (ii) after providing the composition identifier, exchange the composition session identifier with the network element, and

at least one of the network element or the user equipment is configured to initiate a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions, and

wherein the network element is configured to modify the composition session using signaling in the composition session to terminate all of the two or more sessions.

14. (Previously Presented) The user equipment of claim 13, wherein the user equipment comprises:

an ID generator for generating the composition session identifier; and

a multimedia client configured to (i) receive the composition session identifier from the ID generator, (ii) exchange the composition session identifier with the network element, (iii) initiate one or more multimedia sessions with the network element, and (iv) exchange the composition session identifier with the network element during set up of the multimedia sessions.

15. (Previously Presented) The user equipment according to claim 14, wherein the user equipment is configured to initiate the composition session.

16. (Previously Presented) The network element of claim 13, wherein the network element comprises:

a session manager configured to exchange the composition session identifier with the user equipment and to set up and modify multimedia sessions; and

storage configured to store composition session information, the composition session information comprising information regarding composition session identifiers and the two or more associated sessions.

17. (Currently Amended) The network element according to claim 16, further configured for at least one of initiating, terminating or modifying ~~[[a]]~~ the composition session.

18. (Previously Presented) The network element according to claim 16, the network element further comprising:

an ID generator configured to generate the composition session identifier.

19. (Previously Presented) A non-transitory computer readable medium having stored thereon software instructions that, if executed by a user equipment or a network element, cause the user equipment or the network element to perform operations comprising the method according to claim 1.

20. (Currently Amended) The method according to claim 4, wherein the request for initiating a composition session further comprises one or more session identifiers and, ~~optionally,~~ resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers.

21. (Previously Presented) The method according to claim 6, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (CoD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier,

network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier.

22. (Canceled)

23. (Currently Amended) The method according to claim ~~[[1]]~~ 25, ~~wherein the method further comprises modifying the composition session,~~ wherein modifying, using the composition session, comprises ~~at least one of (i) modifying at least one of the two or more sessions based on a determined change in bandwidth availability or (ii) selectively pausing data streams of the two or more sessions in response to a detection of an incoming call destined for the user equipment.~~

24. (Canceled)

25. (New) A method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier for associating sessions in the network;

after providing the composition session identifier, exchanging the composition session identifier between a user equipment and the network element a first time;

associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment;

initiating establishment of a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more sessions; and

modifying, using signaling in the composition session, all of the two or more sessions.

26. (New) The method according to claim 25, wherein modifying the composition session, using the signaling in the composition session, comprises selectively pausing data streams of the two or more sessions in response to a detection of an incoming call destined for the user equipment.

27. (New) The method according to claim 25, wherein modifying, using the signaling in the composition session, comprises signaling in the composition session a duration for all of the two or more sessions.

28. (New) The method according to claim 25, wherein modifying, using the signaling in the composition session, comprises signaling in the composition session a bandwidth requirement for all of the two or more sessions.

## **REMARKS/ARGUMENTS**

Claims 1, 3-21, and 23-24 are presently pending. By this amendment, claims 1, 3, 4, 11-13, 17, 20, and 23 are amended. Claim 24 is canceled. Claims 25-28 are added. Claims 1, 3-21, 23, and 25-28 will be pending in the present application after entry of this amendment.

Applicants expressly reserve the right to pursue in a continuation application, perhaps along with other subject matter, the subject matter of any of the claims as they were prior to the current amendments, since Applicants do not intend to give up coverage of that scope and does not acquiesce in any assertion by the Office in the Office Action that is not expressly addressed by these remarks.

### **I. Applicants' Summary of Examiner Interview**

Applicants' representative would like to thank Examiner Duong for the courtesies extended during the telephone interview on September 9, 2016. During the interview, the participants discussed the rejection of claim 1 under 35 U.S.C. § 102 and claim 11 under 35 U.S.C. § 103. In particular, Applicants' representative and inventor, Hans Stokking, explained that Jansson fails to disclose or suggest various features recited in claim 1, including a composition session that is a signaling session for facilitating management of other sessions. The Examiner indicated that no management is positively recited in claim 1 and suggested that Applicants consider amendments to positively recite using the composition session to manage the other sessions. Although Applicants do not acquiesce to any assertion in the Office Action, Applicants have amended the pending claims in this response along the lines suggested by the Examiner during the telephone interview in the interest of expediting prosecution.

The participants also discussed that claim 24 was properly added in Applicants' prior response, but mistakenly not entered. The Examiner suggested that Applicants resubmit the amendment adding claim 24, and requested Applicants identify support in the specification for the subject matter of claim 24. In this response, Applicants have canceled claim 24.

No agreement was reached during the telephone interview.



## II. Claim Rejections – 35 U.S.C. §§ 102(b), 103(a)

Claims 1, 3-8, 10, and 12-21 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Publ. No. 2008/0089344 (“Jansen”). Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jansen in view U.S. Publ. No. 2010/0121956 (“Hoffpauir”). Claims and 11 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jansen in view U.S. Pat. No. 8,289,965 (“Bugenhagen”). Reconsideration and withdrawal of these rejections is respectfully requested for at least the following reasons.

### A. Independent Claim 1

Amended independent claim 1 is not anticipated by Jansson for at least the following reasons.

#### 1. Jansson Fails to Disclose a “Composition Session Being A Signaling Session for Facilitating Management of the Two or More Session.”

Independent claim 1 recites, among other features, “associating two or more sessions with the composition session identifier ... [and] initiating establishment of a composition session, the composition session being a *signaling session for facilitating management of the two or more sessions* and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more sessions.” (Emphasis added).

Claim 1 is thus directed to a method for managing associated sessions in a network by, among other things, (a) associating two or more sessions with a composition session identifier **and** (b) initiating a separate signaling session (referred to as a “composition session”) for facilitating management of the associated sessions. As explained below, the Jansson reference cited in the Office Action discloses a concept having some similarities to the composition identifier, but does not disclose or suggest the composition session recited in claim 1.

#### a) *The Composition Session Identifier*

With respect to the composition session identifier, for example, the present application explains:

Whenever a multimedia session is set up, either initiated by a network element or by the user equipment, and an allocated composition session identifier is exchanged, the multimedia session may be associated under control of the

network element with a composition session identifier. That way it may be associated with other multimedia sessions that may have already been assigned to the same composition session identifier.

Further, the network centric association of sessions enables the management of a group of sessions from within the network separate from other sessions that are not part of the group. Hence, using the composition session identifier the group of sessions may be manipulated as if there were only one session. For example it allows collective pausing (for example in response to an incoming call, destined for the user equipment), replaying, diverting of the data streams associated with the group of sessions.

In addition, the invention enables intergroup management of the sessions. If for instance bandwidth constraints appear in the network and a group of sessions and one separate session to the same user equipment exists, the session management logic in the network element may select the separate session to be terminated, leaving the group of associated sessions intact.

Specification at p. 5, ln. 14 to p. 6, ln. 3. In one aspect, the present application discloses that the network can store the composition session identifier along with information about the associated sessions in a session database, and the network can use this information stored in the database to manage the group of sessions as described above. Specification at p. 9, lns. 22-26; p. 15, ln. 6 to p. 16, ln. 3.

Jansson discloses an approach that is similar in some ways. Jansson discloses that its “invention creates and exchanges between the parties, a globally unique correlation identifier during SIP session setup to allow for association and correlation of SIP sessions. The correlation may then be used by network and session entities to perform different services.” Jansson, paras. [0008]. For example, Jansson discloses that the correlation identifier can be used to display “text from a chat session and video from another session in the same terminal window” or apply “some special charging scheme to a multi-service session comprised of two or more individual sessions.” Jansson, para. [0005]. To do so, Jansson teaches that the parties involved in the sessions “store the correlation ID in a local correlation table or other mapping construct.” Jansson, para. [0059].

*b) The Composition Session As a Signaling Session*

Unlike Jansson, however, the present application discloses that “[a]lthough in principle it may be sufficient to just generate a composition session identifier and store this in a place in the

network under control of a network element, which is in charge of managing the associated sessions, there may be advantages in *initiating a separate signaling session (composition session) as well.*” Specification at p. 6, Ins. 15-21 (emphasis added). Indeed, the present application explains that a “composition session may be used for the management of associated sessions and various kinds of signaling between the user equipment and a network element associated with to this task. Such signaling may include [for example] agreeing on the duration of all sessions or negotiations regarding to bandwidth requirements (for all associated sessions together).” Specification at p. 6, Ins. 26-32. The present application further explains that:

In addition, initiating such a composition session may provide for more effective use of resources in the network and on the user equipment. For example using a composition session network initiated teardown of associated sessions may require less signaling to the user equipment. Further, continuous screening of all signaling messages for the presence of a composition session identifier, and subsequently probing the service logic (whether in the user equipment or in the network element) for a next course of action may be avoided. Messages only related to individual sessions (within a group of associated sessions) may not require such probing.

Specification at p. 6, ln. 33 to p. 7, ln. 9.

An example composition session, which is a signaling session separate from the associated sessions, is depicted and described in the present application with respect to Figure 2.

An annotated version of Figure 2 of the present application is provided below:

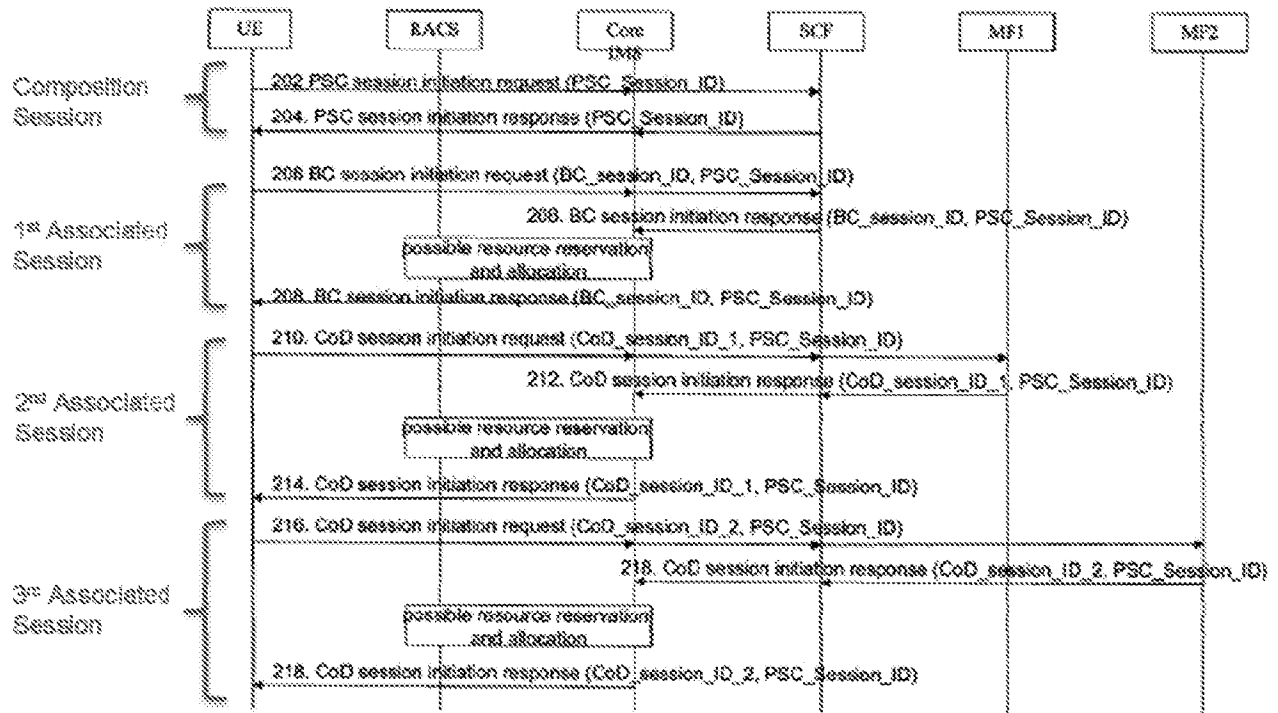


Figure 2

The present application states:

FIG. 2 depicts one exemplary protocol flow 200 representing the initiation of a composition session, in this case a personalized stream or service composition (PSC) session, using a composition session identifier and the subsequent association of three multimedia sessions to the composition session using the composition session identifier. In this example, the associated multimedia sessions comprise three sessions: a broadcast (BC) session comprising a first video stream and first and second Content-on-Demand (CoD) sessions comprising a second and third video stream respectively.

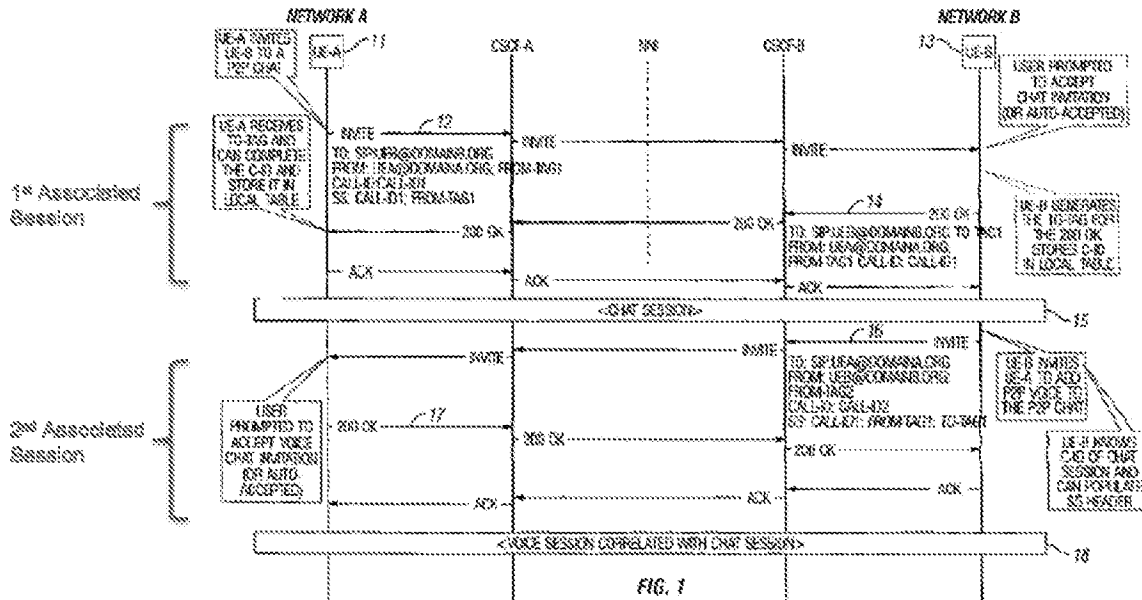
Specification at p. 16, Ins. 4-21. As shown in Figure 2, the composition session is established separately from the three associated multimedia sessions. As such, signaling for managing the associated sessions can be carried out using the composition session so that, for example, there is no need to probe each of the individual multimedia sessions. Specification at p. 6, ln. 33 to p. 7, ln. 9.

Notably, Jansson does not disclose or suggest initiating a separate signaling session in addition to the multimedia sessions correlated with the correlation identifier. As such, Jansson fails to disclose or suggest initiating a “composition session [which is] a signaling session for facilitating management of the two or more sessions” as recited in claim 1. With respect to this feature, the Office Action alleges that Jansson discloses:

initiating a composition session (i.e., this invention creates and exchanges a correlation ID during session establishment, page 2 paragraph [0018]), the composition session being a signaling session for facilitating management of the two or more sessions (i.e., Fig. 1 is a signaling diagram illustrating the flow of messages between various network entities when establishing a SIP session utilizing a Same-Session header including correlation ID which is used when establishing future session, page 2 paragraph [0059]) and exchanging the composition session identifier between the user equipment and the network element, the composition session . . . being different from the two or more associated sessions (i.e., establishing a SIP session utilizing a Same-Session header with correlation ID...use the correlation ID when establishing future (i.e., different) sessions, page 2 paragraph [0059]).

Office Action, page 4. In other words, the Office Action takes the position that Jansson discloses initiating a composition session based on Jansson teaching of SIP signaling that initiates each of the associated multimedia sessions.

Significantly, however, because the cited SIP signaling initiates only the associated multimedia sessions in Jansson, the cited SIP signaling does not initiate a signaling session that is different from the associate multimedia sessions, as recited for the composition session in claim 1. Indeed, there is no separate signaling session, which can be considered a composition session as shown above in Figure 2 of the present application and recited in claim 1. Jansson’s failure to disclose a separate composition session that is different from the associated multimedia sessions can be seen, for instance, by comparing the above annotated Figure 2 of the present application with the following annotated version of Figure 1 in Jansson:



Unlike Figure 2 of the present application above, there is no separate signaling session for managing the first and second associated sessions in Figure 1 of Jansson, which can be a composition session as recited in claim 1.

Moreover, the Office Action’s interpretation of the cited SIP signaling in Jansson as the recited composition session is contrary to MPEP § 2111, which requires that the claims are given “their broadest reasonable construction *in light of the specification* as it would be interpreted by one of ordinary skill in the art.” MPEP § 2111 (“The broadest reasonable interpretation does not mean the broadest possible interpretation. Rather, the meaning given to a claim term must be consistent with the ordinary and customary meaning of the term (unless the term has been given a special definition in the specification), *and must be consistent with the use of the claim term in the specification and drawings.*”) (emphasis added). As explained above, the specification of the present application explicitly differentiates the recited composition session (i.e., a different signaling session) from individual SIP signaling of each associated multimedia session. Specification at p. 6, lns. 15-21 (“Although in principle it may be sufficient to just generate a composition session identifier and store this in a place in the network under control of a network element, which is in charge of managing the associated sessions, there may be advantages in *initiating a separate signaling session (composition session) as well.*”) (emphasis added). As

such, it is improper to interpret the recited composition session as suggested in the Office Action.

For at least the reasons explained above, Jansson fails to disclose at least the above-recited feature of claim 1 and, thus, claim 1 is not anticipated by Jansson.

2. *Jansson Fails to Disclose “modifying using signaling in the composition session, all of the two or more sessions”*

As noted above, the Examiner indicated during the telephone interview that no management is positively recited in claim 1 and suggested that Applicants consider amendments to positively recite using the composition session to manage the other sessions. Although Applicants do not acquiesce to any assertion in the Office Action, Applicants have amended the pending claims in this response along the lines suggested by the Examiner during the telephone interview in the interest of expediting prosecution.

In particular, amended independent claim 1 recites, among other features, “modifying the composition session, wherein modifying the composition session comprises using signaling in the composition session to terminate all of the two or more sessions.” (Emphasis added). Jansson fails to disclose or suggest at least this feature. As noted above Jansson does not disclose a composition session for managing the associated sessions and, thus, Jansson also does not disclose using signaling in a composition session to terminate all of the associated sessions.

Moreover, Jansson does not even disclose modifying the multimedia sessions. Rather, Jansson discloses correlating sessions for the purpose of “know[ing] whether two or more sessions ... are correlated in some sense[,] ... displaying text from a chat session and video from another session in the same terminal[, or] ... applying some special charging scheme.” Jansson, para. [0005].

For at least the reason that Jansson fails to disclose or suggest “modifying using signaling in the composition session, all of the two or more sessions,” independent claim 1 is not anticipated by Jansson.

3. *Jansson Fails to Disclose “Associating Two or More Sessions with the Composition Session Identifier by Exchanging the Composition Session Identifier At Least a Second Time”*

Independent claim 1 also recites, among other features, “exchanging the composition session identifier between a user equipment and the network element a first time; *associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time.*” (Emphasis added).

Jansson also fails to disclose or suggest at least this feature of claim 1. The Office Action asserts that paragraph [0016] of Jansson discloses exchanging a composition session identifier a first time and paragraph [0061] of Jansson discloses exchanging the composition session identifier a second time to associate two or more sessions. Office Action, page 3. The cited portions of Jansson do not support this assertion in the Office Action. Rather, at best, paragraphs [0016] and [0061] describe the same, single exchange of a correlation identifier.

In paragraph [0016], Jansson provides a general overview of the principle of operation of its “invention” by stating:

The invention creates and exchanges between the parties, a globally unique correlation identifier during SIP session setup to allow for association and correlation of SIP sessions.

Applicants note that, in describing its “invention” at a high level of abstraction in paragraph [0016], Jansson suggests only a single exchange of the correlation identifier.

Later, in paragraph [0061], Jansson describes an embodiment of its “invention” with reference to Figure 1 of Jansson. In particular, paragraph [0061] of Jansson discloses:

Still referring to FIG. 1, at some later point in time, UE-B 13 adds a VoIP component to the ongoing chat by establishing a new SIP session. In order to correlate the new session to the existing one, UE-B uses the dialogue ID (i.e., session identifier) of the ongoing chat session as a key to perform a search in the correlation table and fetch the correlation ID for use in the correlation procedure. UE-B places the correlation ID in a Same-Session header of the INVITE message 16 and sends it to UE-A 11.

The Office Action asserts that the alleged second exchange of the correlation identifier occurs when the “UE-B places the correlation ID in a Same-Session header of the INVITE message 16 and sends it to UE-A 11.” Office Action, page 3. Significantly, however, this is only the first exchange of the correlation identifier. There is no exchange of the correlation identifier prior to message 16 in Figure 1.



In Jansson, the correlation identifier consists of three parameters – namely, a Call-ID, To-Tag, and From-Tag in a Same-Session Header. Jansson, paras. [0019], [0059]. Notably, the only message in which these three parameters are exchanged in the Same-Session Header is message 16. Jansson, para. [0062] (stating “message 16 ... containing a complete correlation ID (i.e., with all three parameters)”). Indeed, Jansson explicitly states that the Same-Session Header of message 12 includes only “two out of three of the correlation ID parameters (i.e., the Call-ID and the From-Tag).” Jansson, para. [0059]. And Jansson states that message 14 includes the “third parameter (i.e., the To-Tag).” *Id.* This is because Jansson discloses that “the Call-ID and From-Tag are derived from the INVITE request [i.e., message 12], and the To-Tag is derived from the 200 OK response [i.e., message 14] to the request.” Jansson, para. [0023]. As such, all three parameters of the correlation identifier are not exchanged in the Same-Session Header of message 12 and all three parameters of the correlation identifier are not exchanged in the Same-Session Header of message 14<sup>1</sup>. Accordingly, Jansson exchanges the correlation identifier only one time in Figure 1 – in message 16.

In view of the foregoing, Applicant respectfully submits that the Office Action has employed flawed logic to reject claim 1. In particular, it is flawed logic to cite a general teaching of an invention at a high-level of abstraction as a first exchange and then cite a specific embodiment of that same general teaching as a second exchange in Jansson. The cited first and second exchanges are the same, single exchange.

During the interview, the Examiner suggested that Jansson could be considered to exchange the correlation ID before message 16 because the message 12 transmitted part of the correlation identifier from UE-A to UE-B, and message 14 transmitted the remaining part of the correlation identifier from UE-B to UE-A. However, such an interpretation is contrary to the definition of “exchange” at page 4, line 33 to page 5, line 11 of the specification of the present application, which provides that an exchange occurs when the whole composition identifier to be transmitted from one entity to another. As such, the Examiner’s suggested interpretation would be contrary to MPEP § 2111, which requires that the claims are given “their broadest reasonable construction *in light of the specification* as it would be interpreted by one of ordinary skill in the

---

<sup>1</sup> By way of analogy, transmitting building blocks of the correlation ID without placing those building blocks together in the Same-Session Header in a particular order does not constitute an exchange of the correlational ID in

art.” MPEP § 2111 (“The broadest reasonable interpretation does not mean the broadest possible interpretation. Rather, the meaning given to a claim term must be consistent with the ordinary and customary meaning of the term (unless the term has been given a special definition in the specification), *and must be consistent with the use of the claim term in the specification and drawings.*”) (emphasis added).

For at least these reasons, Jansson fails to disclose or suggest the above-recited feature of claim 1. As such, independent claim 1 is not anticipated by Jansson.

4. *Jansson Fails to Disclose “Providing a Composition Session Identifier”*

Even if Jansson taught a first exchange of the composition session identifier prior to message 16 (which it does not for the reasons explained above), Jansson would still fail to disclose or suggest providing the composition session identifier as recited in amended claim 1. More particularly, amended independent claim 1 recites, among other features, “providing a composition session identifier for associating sessions in the network; [and] *after providing the composition session identifier*, exchanging the composition session identifier between a user equipment and the network element a first time.” (Emphasis added). Accordingly, amended claim 1 involves providing the composition session identifier before exchanging the composition session identifier a first time.

Jansson fails to disclose or suggest at least this feature. Rather, Jansson discloses that the alleged composition identifier is provided by (1) UE-A populating “the Same-Session header of the INVITE message 12 with two out of three of the correlation ID parameters (i.e., the Call-ID and the From-Tag)” and then (2) the “third parameter (i.e., the To-Tag) is created by UE-B 13 and is included in the 200 OK response message 14.” Jansson, para. [0059]. Jansson also discloses that “the Call-ID and From-Tag are derived from the INVITE request [i.e., message 12], and the To-Tag is derived from the 200 OK response [i.e., message 14] to the request.” Jansson, para. [0023]. As such, UE-A and UE-B are provided with the alleged composition identifier after exchanging the INVITE message 12 and the 200 OK response message 14. Thus, in contrast to claim 1, the alleged first exchange of the composition identifier in messages 12 and 14 is *not* after providing the alleged composition session identifier in Jansson.

---

the same way as transporting a bunch of separate bricks does not constitute transporting an assembled brick wall.

For at least this additional reason, independent claim 1 is not anticipated by Jansson.

B. Independent Claim 13

Independent claim 13 recites, among other features:

- associate two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time
- at least one of the network element or the user equipment is configured to initiate a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions
- wherein the network element is configured to modify the composition session using signaling in the composition session to terminate all of the two or more sessions
- wherein the user equipment is configured to (i) provide the composition session identifier and (ii) after providing the composition identifier, exchange the composition session identifier with the network element.

As explained above with respect to independent claim 1, Jansson fails to disclose or suggest at least these features. Accordingly, independent claim 13 is also not anticipated by Jansson.

C. Dependent Claims 3-12 and 14-21

Claims 3-12 and 14-21 depend directly or indirectly from independent claims 1 and 13. Hoffpauir and Bugenhagen do not address the deficiencies of Jansson explained above. Accordingly, for at least the reasons explained above with respect to claims 1 and 13, claims 3-12 and 14-21 are also patentable over Jansson, Hoffpauir, Bugenhagen, or the combination thereof.

Further, the dependent claim 12 is also patentable for at least the reason that Jansson fails to disclose or suggest “exchanging the composition session identifier *between a user equipment and the network element* a first time ... wherein the SCF is configured for managing associated

sessions between the network and the User Equipment, *wherein the network element is the SCF.*” (Emphasis added).

In the Examiner’s Summary of the Interview, the Examiner indicated that “since, in Fig1, UE-B is connected to network B, therefore, UE-B is an element on the network or network element.” See Interview Summary dated September 14, 2016. Significantly, however, the Examiner’s interpretation of the recited network element being a user equipment device (UE-B) is not applicable to amended claim 12, which recites that the network element is the SCF. For at least this additional reason, claim 12 is not anticipated by Jansson.

D. Claims 23 and 25-28

Independent claim 25 recites, among other features:

- associate two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time
- at least one of the network element or the user equipment is configured to initiate a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions
- wherein the network element is configured modify, using signaling in the composition session, all of the two or more sessions
- after providing the composition session identifier, exchanging the composition session identifier between a user equipment and the network element a first time.

As explained above with respect to independent claim 1, Jansson fails to disclose or suggest at least these features. Accordingly, independent claim 25 is also not anticipated by Jansson.

Claims 23 and 26-28 depend directly or indirectly from independent claim 25. Hoffpauir and Bugenhagen do not address the deficiencies of Jansson explained above. Accordingly, for at least the reasons explained above with respect to independent claim 25, dependent claims 23 and 26-28 are also patentable over Jansson, Hoffpauir, Bugenhagen, or the combination thereof.

**CONCLUSION**

Applicants submit that the claims are in a condition for allowance and action toward that end is earnestly solicited. If there are any matters which may be resolved or clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at the number indicated.

The Commissioner is authorized to deduct the fee for the three-month extension and the addition of three (3) total claims in excess of twenty (20) total claims from the deposit account below. No other fee is believed due; however, the Commissioner is authorized to deduct any necessary fees (except payment of the issue fee), or to credit any over payment, to MBHB Deposit Account No. 13-2490, Order No. 11-905-WO-US.

Respectfully submitted,

Date: October 21, 2016

By: /Jason S. Kray /  
Jason S. Kray  
Reg. No. 66,926  
**McDonnell, Boehnen, Hulbert & Berghoff**  
300 S. Wacker Drive, Suite 3100  
Chicago, Illinois 60606  
(312) 913-2125 – phone

Attorney for Applicants

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b>		Docket Number (Optional) 11-905-WO-US
Application Number 13/144,385	Filed July 13, 2011	
For <b>Managing Associated Sessions In a Network</b>		
Art Unit 2441	Examiner Oanh Duong	

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee	
<input type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ _____
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$ _____
<input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$ <u>1,400.00</u>
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$ _____
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$ _____

Applicant asserts small entity status. See 37 CFR 1.27.

Applicant certifies micro entity status. See 37 CFR 1.29.  
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

A check in the amount of the fee is enclosed.

Payment by credit card. Form PTO-2038 is attached.

The Director has already been authorized to charge fees in this application to a Deposit Account.

The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to  
Deposit Account Number 132490

Payment made via EFS-Web.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

I am the

applicant/inventor.

assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).

attorney or agent of record. Registration number 66,926

attorney or agent acting under 37 CFR 1.34. Registration number \_\_\_\_\_.

/Jason S. Kray/

Signature

October 21, 2016

Date

Jason S. Kray

Typed or printed name

312-913-0001

Telephone Number

**NOTE:** This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below\*.

\* Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	13144385
<b>Filing Date:</b>	13-Jul-2011
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Filer:</b>	Jason S. Kray
<b>Attorney Docket Number:</b>	11-905-WO-US

Filed as Large Entity

**Filing Fees for U.S. National Stage under 35 USC 371**

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
CLAIMS IN EXCESS OF 20	1615	3	80	240

**Miscellaneous-Filing:**

**Petition:**

**Patent-Appeals-and-Interference:**

**Post-Allowance-and-Post-Issuance:**



Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Extension-of-Time:</b>				
Extension - 3 months with \$0 paid	1253	1	1400	1400
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>1640</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	27282826
<b>Application Number:</b>	13144385
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	5301
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Customer Number:</b>	20306
<b>Filer:</b>	Jason S. Kray
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	11-905-WO-US
<b>Receipt Date:</b>	21-OCT-2016
<b>Filing Date:</b>	13-JUL-2011
<b>Time Stamp:</b>	14:43:21
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$1640
RAM confirmation Number	102416INTEFSW00001045132490
Deposit Account	132490
Authorized User	Jason Kray

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		11-905-WO-US--Response.pdf	701912 892914f753ee219dcf5c92040d5d8580a28fcb0a	yes	22
<b>Multipart Description/PDF files in .zip description</b>					
<b>Document Description</b>			<b>Start</b>	<b>End</b>	
Amendment/Req. Reconsideration-After Non-Final Reject			1	1	
Claims			2	8	
Applicant Arguments/Remarks Made in an Amendment			9	22	
<b>Warnings:</b>					
<b>Information:</b>					
2	Extension of Time	11-905-WO-US--Petition3-MoExtensionTime.pdf	187811 bd4cb05c8db58eaa1f689cd2d1947dd4f50a848a	no	2
<b>Warnings:</b>					
<b>Information:</b>					
3	Fee Worksheet (SB06)	fee-info.pdf	32355 59d47d8ead52d3118f089dca01963fdbfca62b9	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			922078		

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875	Application or Docket Number <b>13/144,385</b>	Filing Date <b>07/13/2011</b>	<input type="checkbox"/> To be Mailed
---	---	----------------------------------	---------------------------------------

ENTITY:  LARGE  SMALL  MICRO

**APPLICATION AS FILED – PART I**

FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

**APPLICATION AS AMENDED – PART II**

AMENDMENT	(Column 1)	(Column 2)	(Column 3)	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	<b>10/21/2016</b>	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR			
	Total (37 CFR 1.16(i))	* 25	Minus ** 21	= 4	X \$80 =	320
	Independent (37 CFR 1.16(h))	* 3	Minus ***3	= 0	X \$420 =	0
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
					TOTAL ADD'L FEE	<b>320</b>

AMENDMENT	(Column 1)	(Column 2)	(Column 3)	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR			
	Total (37 CFR 1.16(i))	*	Minus **	=	X \$ =	
	Independent (37 CFR 1.16(h))	*	Minus ***	=	X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
					TOTAL ADD'L FEE	

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.  
 \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".  
 \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".  
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE  
DORIS BURNS

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
13/144,385 07/13/2011 Hans Maarten Stokking 11-905-WO-US 5301

20306 7590 09/14/2016
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER

DUONG, OANH

ART UNIT PAPER NUMBER

2441

MAIL DATE DELIVERY MODE

09/14/2016

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Applicant-Initiated Interview Summary</b>	<b>Application No.</b> 13/144,385	<b>Applicant(s)</b> STOKKING ET AL.	
	<b>Examiner</b> OANH DUONG	<b>Art Unit</b> 2441	

All participants (applicant, applicant's representative, PTO personnel):

- (1) OANH DUONG. (3) Jason S. Kray (Reg. # 66,926).  
(2) Hanks Maarten Stokking. (4) \_\_\_\_\_.

Date of Interview: 09 September 2016.

Type:  Telephonic  Video Conference  
 Personal [copy given to:  applicant  applicant's representative]

Exhibit shown or demonstration conducted:  Yes  No.  
If Yes, brief description: \_\_\_\_\_.

Issues Discussed 101 112 102 103 Others  
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1.

Identification of prior art discussed: Jansson et al., US 2008/0089344 A1.

**Substance of Interview**

(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

See Continuation Sheet.

**Applicant recordation instructions:** The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

**Examiner recordation instructions:** Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

Attachment

/OANH DUONG/  
Primary Examiner, Art Unit 2441

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: First, Claim 24 was discussed. Examiner admitted that claim 24 was overlooked and explained how Jansson's teachings still read on the limitation of claim 24. For example, Jansson, Fig. 1 and page 2 paragraph [0059], discloses UE-A sends INVITE signal to UE-B and UE-B sends the completed correlation identifier to the UE-A in the OK signal in response to the INVITE signal which read on "the composition session does not transport media" recited in claim 24 since INVITE and OK messages do not transport any media. Second, "network element" was discussed. Examiner indicated that since, in Fig1, UE-B is connected to network B, therefore, UE-B is an element on the network or network element. Third, exchanging of composition session identifier at least a second time was discussed. Examiner explained that UE-B sends correlation identifier in OK message to UE-A for a first time, correlation ID is included in SS header when establishing future sessions, for example, chat and voice sessions in Fig. 1 which includes exchanging the correlation ID at least a second time. Fourth, "composition session taught by Jansson is not a signaling session" was discussed. Examiner explained that the session includes sending INVITE message/signal and receiving OK response message/signal read on signaling session. Finally, the signaling session for facilitating management of the two or more sessions was discussed. No actual "management" is recited in the claim, and the (signaling) session itself cannot manage other session(s). In addition, please review Response to Arguments in Office Action mailed 04/26/2016. Also, examiner requested Applicant to point out the support from Applicant's specification for newly added claim 24 since claim 24 recites a negative limitation.

- 2 -

**CONTINUATION SHEET FOR APPLICANT INITIATED INTERVIEW REQUEST FORM**

Application No.: 13/144,385  
First Named Inventor: Hans Maarten Stokking  
Filed: July 13, 2011  
Title: Managing Associated Sessions In A Network  
Art Unit: 2441  
Examiner: Oanh Duong  
Docket No.: 11-905-WO-US

For discussion purposes only

Independent claim 1 recites, among other features, "associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time." Independent claim 1 also recites, among other features, "initiating a composition session, the composition session being a *signaling session for facilitating management* of the two or more sessions."

During the interview, Applicants will explain that:

1. There is no second exchange of the alleged composition session identifier in Jansson.
2. The cited embodiment in Jansson does not involve a network element.
3. The alleged composition session taught by Jansson is not a signaling session.
4. The alleged composition session taught by Jansson does not facilitate management of other sessions.

Further, Applicant notes that claim 24 was added in the amendments to the claims filed on January 25, 2016. Significantly, however, the Office Action failed to enter claim 24 or explain how claim 24 is allegedly taught by the references cited in the Office Action. Applicant would like to discuss this matter during the telephone interview.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
13/144,385 07/13/2011 Hans Maarten Stokking 11-905-WO-US 5301

20306 7590 04/26/2016
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER

DUONG, OANH

ART UNIT PAPER NUMBER

2441

MAIL DATE DELIVERY MODE

04/26/2016

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No. 13/144,385		Applicant(s) STOKKING ET AL.	
Examiner OANH DUONG		Art Unit 2441	AIA (First Inventor to File) Status No

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1)  Responsive to communication(s) filed on 01/25/2016.  
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.
- 2a)  This action is **FINAL**.                                2b)  This action is non-final.
- 3)  An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims\*

- 5)  Claim(s) 1, 3-21 and 23 is/are pending in the application.  
     5a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 6)  Claim(s) \_\_\_\_\_ is/are allowed.
- 7)  Claim(s) 1, 3-21 and 23 is/are rejected.
- 8)  Claim(s) \_\_\_\_\_ is/are objected to.
- 9)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

\* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).

### Application Papers

- 10)  The specification is objected to by the Examiner.
- 11)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

### Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

#### Certified copies:

- a)  All    b)  Some\*\*    c)  None of the:
1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 3) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)<br>Paper No(s)/Mail Date <u>01/26/2016</u> | 4) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The present application is being examined under the pre-AIA first to invent provisions.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/25/2016 has been entered.
  
2. Claims 1, 3-21 and 23 are presented for examination.  
Claims 2 and 22 have been cancelled.
  
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
  
4. Claims 1, 3-8, 10 and 12-21 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Jansson et al (hereafter, "Jansson"), US 2008/0089344 A1.

Regarding claims 1 and 13, Jansson teaches a method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier (i.e., *a correlation ID*) for associating sessions in the network (i.e., *create and exchange a globally unique correlation ID...the exchange of the globally unique correlation ID provides the ability to associate and correlate independent sessions, page 2 paragraph [0018]*);

exchanging the composition session identifier between a user equipment and the network element a first time (i.e., *the invention creates and exchanges between parties, correlation identifier during SIP session setup to allow for association and correlation of SIP sessions...the term "entities" is used to encompass all terminals, agents, and nodes and the like that may be parties to session, page 1 paragraph [0016]*);

associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time (i.e., *at some later point in time (i.e., a second time), in order to correlate the new session to the existing one... UE-B places the correlation ID in a Same-Session header of the INVITE message and sends it to UE-A 11, Fig. 1 page 3 paragraph [0061]*), wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment (i.e., *at some later point in time... UE-B places the correlation ID in a Same-Session header of the INVITE message and send it to UE-A 11, page 3 paragraph [0061]*); and

initiating establishment of a composition session (i.e., *this invention creates and exchanges a correlation ID during session establishment, page 2 paragraph [0018]*), the composition session being a signaling session for facilitating management of the two or more sessions (i.e., *Fig. 1 is a signaling diagram illustrating the flow of messages between various network entities when establishing a SIP session utilizing a Same-Session header including correlation ID which is used when establishing future sessions, page 2 paragraph [0059]*), and exchanging the composition session identifier between the user equipment and the network element as part of said establishment (i.e., *this invention creates and exchanges a correlation ID during session establishment, page 2 paragraph [0018]*), the composition session being different from the two or more associated sessions (i.e., *establishing a SIP session utilizing a Same-Session header with correlation ID...use the correlation ID when establishing future (i.e., different) sessions, page 2 paragraph [0059]*).

Regarding claims 3 and 14, Jansson teaches the method according to claim 1, wherein the method further comprises:

the user equipment generating the composition session identifier and sending a request for initiating the composition session from the user equipment to the network element, the request comprising the composition session identifier (*i.e., UE-A 11 populates the Same-Session header of the INVITE message with correlation ID parameters, Fig. 1 and page 2 paragraph 0059*).

Art Unit: 2441

Regarding claim 4, Jansson teaches the method according to claim 1, wherein the method further comprises:

sending a request for initiating the composition session from the user equipment to the network element (i.e., *Jansson, Fig. 1 and page 2 paragraph [0059]*), *discloses INVITE request 12 is sent from UE-A 11 in NETWORK A to UE-B 13 in NETWORK B*); the network element (i.e., UE-B) generating the composition session identifier in response to the receipt of the request for initiating the composition session (i.e., *Jansson, in Fig. 1 and page 2 paragraph [0059]*, *discloses UE-B places the correlation ID in the INVITE message 16*); and the network element sending the composition session identifier to the user equipment (i.e., *Jansson, Fig. 1 paragraph [0059]*, *discloses UE-B places the correlation ID in the INVITE message 16 and sends it to UE-A 11*).

Regarding claim 5, Jansson teaches the method according to claim 1, wherein the method further comprises:

the user equipment initiating the two or more associated sessions by sending two or more session initiation requests for a session to the network element, each request comprising the composition session identifier (i.e., page 4 paragraphs [0083]-[0084]).

Regarding claim 6, Jansson teaches the method according to claim 1, wherein the method further comprises:



Art Unit: 2441

the network element initiating the two or more associated sessions by sending two or more requests for a session to the user equipment, each request comprising the composition session identifier (i.e., *once the establishment procedure is complete, both parties may store the correlation ID and use the correlation ID when establishing future sessions, page 2 paragraph [0059]*)),

Regarding claim 7, Jansson teaches the method according to claim 3, wherein the request for initiating the composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers (i.e., page 2 paragraph [0059]).

Regarding claim 8, Jansson teaches the method according to claim 5, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (COD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier (i.e., page 2 paragraph [0018]).

Regarding claim 10, Jansson teaches the method according to claim 1, wherein the network further comprises storage, the method further comprising: the network element storing the composition session identifier and two or more associated session identifiers in the storage (i.e., page 2 paragraph [0059]).

Regarding claim 12, Jansson teaches the method according to claim 1, wherein the network is an IP Multimedia Subsystem (IMS) network comprising an IMS core connected to a Service Control Function (SCF), wherein the SCF is configured for managing associated sessions between the network and the User Equipment (i.e., Fig. 1).

Regarding claim 15, Jansson teaches the user equipment according to claim 14, wherein the user equipment is configured to initiate the composition session (i.e., Fig. 1).

Regarding claims 16-17, those claims recite limitations that are similar to claims 10-11, same rationale of rejection is applicable.

Regarding claim 18, Jansson teaches the network element according to claim 16, the network element further comprising: an ID generator configured to generate the composition session identifier (i.e., page 1 paragraph [0016]).

Regarding claim 19, this claim recite a computer program product comprising software code portions configured for, when run in the memory of a user equipment or a network element, executing the method steps according to claim 1; same rationale of rejection is applicable.

Regarding claim 20, Jansson teaches the method according to claim 4, wherein the request for initiating a composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers (i.e., page 2 paragraph [0059]).

Regarding claim 21, Jansson teaches the method according to claim 6, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (COD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier (i.e., page 2 paragraph [0018]).

5. Claim 9 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Jansson in view of Hoffpaur, US 2010/0121956 A1.

Regarding claim 9, Jansson teaches the method according to claim 1.

Jansson does not teach wherein combined streams of the two or more associated sessions are presented to the user as a personalized composed multimedia stream.

Hoffpaur teaches system wherein at least one session may be created at a server (seen in abstract). Hoffpaur teaches wherein combined streams of the two or more associated sessions are presented to the user as a personalized composed multimedia stream (i.e., page 4 paragraph [0037]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Jansson to present combined streams of the associated sessions to the user as a personalized composed multimedia stream as taught by Hoffpaur. One would be motivated to do so allow single stream to be presented to the user regardless of how many physical endpoints are used in the multimedia service processing (i.e., Hoffpaur, page 4 paragraph [0038]).

6. Claims 11 and 23 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Jansson in view of Bugenhagen et al. (hereafter, "Bugenhagen"), US 8,289,965 B2.

Regarding claim 23, Jansson teaches the method of claim 1.

Jansson does not explicitly teach wherein the method further comprises modifying the composition session, wherein modifying the composition session comprises at least one of (i) modifying at least one of the two or more sessions based on a determined change in bandwidth availability or (ii) selectively pausing data streams of the two or more sessions in response to a detection of an incoming call destined for the user equipment.

Bugenhagen teaches a method for establishing a communication session includes receiving a request to initiate a communications session (seen in abstract). Bugenhagen teaches modifying the composition session, wherein modifying the composition session comprises at least one of (i) modifying at least one of the two or more sessions based on a determined change in bandwidth availability or (ii) selectively pausing data streams of the two or more sessions in response to a detection of an incoming call destined for the user equipment (i.e., col. 9 lines 6-18 and 41-63).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Jansson to modify the composition session comprises at least modifying at least one of the two or more sessions based on a determined change in bandwidth availability as taught by Bugenhagen. One would be motivated to do so to offer improvements for initiating and controlling communications sessions (i.e., Bugenhagen, col. 1 lines 21-23).

Regarding claim 11, this claim recites limitations that are similar to claim 23, same rationale of rejection is applicable.

### ***Response to Arguments***

7. Applicant's arguments filed 01/25/2016 have been fully considered but they are not persuasive.

In the remarks, Applicants argued in substance that

(A) The Office fails to show that Jansson discloses "Exchanging the composition session identifier between a user equipment and the network element a first time because Office Action cites to portions of Jansson that are directed to P2P embodiment, which do not include a network element.

As to point (A), Jansson, in page 1 paragraph [0016], discloses: the invention creates and exchanges a correlation ID between parties...it should be noted that sessions may be conducted between fixed terminals, mobile terminals, user agents, network nodes, and the like. The term "entities" is used to encompass all terminals, agents, nodes, and the like that may be parties to sessions. Therefore, entities disclosed by Jansson include a network node/element.

(B) the Office Action fails to establish a prima facies case of anticipation because the Office Action improperly combines multiple, distinct embodiments.

As to point (B), Examiner asserts that all cited portions from Jansson reference in this Office Action are directed to the same invention.

(C) Jansson fails to disclose associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time.

As to point (C), Jansson does disclose associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time (*i.e., at some later point in time (i.e., a second time), in order to correlate the new session to the existing one... UE-B places the correlation ID in a Same-Session header of the INVITE message and sends it to UE-A 11, Fig. 1 page 3 paragraph [0061]*).

(D) Jansson fails to disclose initiating establishment of a composition session.

As to point (D), Jansson does disclose initiating establishment of a composition session (*i.e., this invention creates and exchanges a correlation ID during session establishment, page 2 paragraph [0018]*).

(E) Jansson fails to disclose exchanging the composition session identifier between the user equipment and the network element as part of the establishment of the composition session.

As to point (E), Jansson does teach exchanging the composition session identifier between the user equipment and the network element as part of the establishment of the composition session (i.e., *this invention creates and exchanges a correlation ID during session establishment, page 2 paragraph [0018]*).

(F) The Office Action does not appear to give patentable weight to "composition session being a signaling session for facilitating management of the two or more sessions.

As to point (F), Jansson, in Fig 1 and *Fig. 1 page 2 paragraph [0059]*, discloses: Fig. 1 is a signaling diagram illustrating the flow of messages between various network entities when establishing a SIP (i.e., signaling) session utilizing a Same-Session header including correlation ID which is used when establishing future sessions. Therefore, Janson teaches composition session being a signaling session for facilitating management of the two or more sessions.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OANH DUONG whose telephone number is (571)272-3983. The examiner can normally be reached on Monday- Friday, 9:30PM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2441

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OANH DUONG/  
Primary Examiner, Art Unit 2441

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	13144385
	Filing Date	2011-07-13
	First Named Inventor	Hans Maarten Stokking
	Art Unit	2441
	Examiner Name	Oanh Duong
	Attorney Docket Number	11-905-WO-US

U.S.PATENTS							Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS							Remove
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> i	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1	WO 2007/035160	WO	A1	2007-03-29	Telefonaktiebolaget LM Ericsson		
	2	WO 2008/121032	WO	A1	2008-10-09	Telefonaktiebolaget LM Ericsson		

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS							Remove
---------------------------------	--	--	--	--	--	--	--------

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /O.D./

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	13144385	
Filing Date	2011-07-13	
First Named Inventor	Hans Maarten Stokking	
Art Unit	2441	
Examiner Name	Oanh Duong	
Attorney Docket Number	11-905-WO-US	

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1	Durand et al., "A Metadata Model Supporting Scalable Interactive TV Services," Multimedia Modeling Conference (Jan. 2005) 6 pages.	
	2	Rauschenbach et al., "A Scalable Interactive TV Service Supporting Synchronized Delivery Over Broadcast and Broadband Networks," International Broadcasting Conference 2014, Amsterdam, The Netherlands, 8 pages.	
	3	OMA, "Service Guide for Mobile Broadcast Services," Open Mobile Alliance, OMA-TS-BCAST_Service_Guide-V1_1-2008-07-07-D, Copyright 2008, Open Mobile Alliance Ltd., 213 pages.	
	4	ERICSSON, "Personalized and Interactive TV Enabled by IMS," 284 23-001 Uen Rev A, September 2008, 18 pages.	
	5	NEM4U, "Deliverable: D5.1 - Demo Scenarios," dated December 24, 2008, Copyright iNEM4U Public, 29 pages.	
	6	NEM4U, "Deliverable: 1.2 - iNEM4U System Requirements and Technology Survey," dated March 30, 2008, Copyright NEM4U Consortium Public, 33 pages.	
	7	NEM4U, "Deliverable: D1.1 - iNEM4U Usage Scenarios," dated April 30, 2008, Copyright iNEM4U Public, 58 pages.	

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature	/Oanh Duong/	Date Considered	04/21/2016
--------------------	--------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	13144385		
Filing Date	2011-07-13		
First Named Inventor	Hans Maarten Stokking		
Art Unit	2441		
Examiner Name	Oanh Duong		
Attorney Docket Number	11-905-WO-US		

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Jason S. Kray/	Date (YYYY-MM-DD)	2016-01-26
Name/Print	Jason S. Kray	Registration Number	66,926


This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

<b>Index of Claims</b>  	<b>Application/Control No.</b>  13144385	<b>Applicant(s)/Patent Under Reexamination</b>  STOKING ET AL.
	<b>Examiner</b>  OANH DUONG	<b>Art Unit</b>  2441

✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	04/21/2016							
	1	✓							
	2	-							
	3	✓							
	4	✓							
	5	✓							
	6	✓							
	7	✓							
	8	✓							
	9	✓							
	10	✓							
	11	✓							
	12	✓							
	13	✓							
	14	✓							
	15	✓							
	16	✓							
	17	✓							
	18	✓							
	19	✓							
	20	✓							
	21	✓							
	22	-							
	23	✓							

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S117	64	S116 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/21 10:32
S116	133	request\$3 near20 (composit\$3 global\$2 correlat\$3 associat\$3) near2 (id identifier identification) near20 (mix\$3 combin\$3 correlat\$3 associat\$3 composit\$3) near2 (two more plurality number variety different) near2 sessions	USPAT	OR	ON	2016/04/21 10:32
S115	460	S114 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/21 10:29
S114	909	request\$3 near20 (composit\$3 global\$2 correlat\$3 associat\$3) near2 (id identifier identification) near20 (mix\$3 combin\$3 correlat\$3 associat\$3 composit\$3) near2 session	USPAT	OR	ON	2016/04/21 10:29
S113	669	S112 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/21 10:15
S112	1267	request\$3 near20 (composit\$3 global\$2 correlat\$3 associat\$3) near2 (id identifier identification) near20 session	USPAT	OR	ON	2016/04/21 10:14
S111	8	S110 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/19 18:27
S110	13	SIP near3 message same exchang\$3 near20 (session near4 (id identifier identification))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2016/04/19 18:27

			DERWENT; IBM_TDB			
S109	6	S108 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/19 16:41
S108	25	associat\$3 near10 multimedia adj session near10 (id identifier identification)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/19 16:41
S107	26	S106 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 23:00
S106	32	S103 and (center central proxy server (network adj (device element)) intermediate gateway) near20 associat\$3 near10 (multiple number plurality variety) near2 sessions	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 22:59
S105	2	S103 same3 (center central proxy server (network adj (device element)) intermediate gateway) near20 associat\$3 near10 (multiple number plurality variety) near2 sessions	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 22:58
S104	2	S103 same (center central proxy server (network adj (device element)) intermediate gateway) near20 associat\$3 near10 (multiple number plurality variety) near2 sessions	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 22:54
S103	418	(composit\$3 aggregat\$3 mix\$3 combin\$5 singl\$3) adj session near2 (id identifier identification)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 22:52
S102	344	(composit\$3 aggregat\$3 mix\$3 combin\$5 singl\$3) adj session adj (id identifier identification)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 22:52
S101	3	("20070033249").PN.	US-PGPUB; USPAT; USOCR;	OR	OFF	2016/04/18 22:21




			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S100	6	("2007033249").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/04/18 22:21
S99	0	S98 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 22:19
S98	11	composition adj session adj (id identifier identification)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 22:18
S97	52	S95 and S96	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 21:51
S96	198219	(establish\$3 set\$4 initiat\$3) near5 session	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 21:50
S95	73	S94 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 21:50
S94	153	S93 same (id identifier identification)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 21:50
S93	781	(composition combined mixed aggregated augmented) adj session	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 21:49
S92	22	S91 and @ad<"20090119"	US-PGPUB;	OR	ON	2016/04/18

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			21:34
S91	29	(compos\$3 combin\$3 mix\$3 aggregat\$3 augment\$5) near10 associat\$3 near10 (media multimedia) near2 sessions	USPAT	OR	ON	2016/04/18 21:34
S90	1917	manag\$3 near15 associat\$3 near5 session	USPAT	OR	ON	2016/04/18 21:26
S89	10	S88 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 21:15
S88	21	establish\$5 near10 composition near2 session	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 21:15
S87	51	S86 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 19:00
S86	77	establish\$3 near15 (combin\$3 mix\$3 composit\$3) near2 session same signal\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/18 18:59

4/ 21/ 2016 10:15:12 PM

C:\Users\oduong\Documents\EAST\Workspaces\13144385.wsp

<b>Search Notes</b>  	<b>Application/Control No.</b>  13144385	<b>Applicant(s)/Patent Under Reexamination</b>  STOKING ET AL.
	<b>Examiner</b>  OANH DUONG	<b>Art Unit</b>  2441

CPC- SEARCHED		
Symbol	Date	Examiner
H04L65/1016 OR H04L65/1069 OR H04L67/14 OR H04L65/1083 OR H04M15/57 OR H04M15/8228 OR H04M2215/208 OR H04M2215/7833	5/17/2014	O.D

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	203, 223, 227-227, 246	5/17/2014	O.D

SEARCH NOTES		
Search Notes	Date	Examiner
EAST text search of USPAT, JPO, EPO, DERWENT, IBM_TDB, US-PGPUB	4/21/2016	O.D

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

--	--

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	13144385
	Filing Date	2011-07-13
	First Named Inventor	Hans Maarten Stokking
	Art Unit	2441
	Examiner Name	Oanh Duong
	Attorney Docket Number	11-905-WO-US

U.S.PATENTS							Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS							Remove
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> i	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1	WO 2007/035160	WO	A1	2007-03-29	Telefonaktiebolaget LM Ericsson		
	2	WO 2008/121032	WO	A1	2008-10-09	Telefonaktiebolaget LM Ericsson		

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS							Remove
---------------------------------	--	--	--	--	--	--	--------

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	13144385
Filing Date	2011-07-13
First Named Inventor	Hans Maarten Stokking
Art Unit	2441
Examiner Name	Oanh Duong
Attorney Docket Number	11-905-WO-US

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1	Durand et al., "A Metadata Model Supporting Scalable Interactive TV Services," Multimedia Modeling Conference (Jan. 2005) 6 pages.	
	2	Rauschenbach et al., "A Scalable Interactive TV Service Supporting Synchronized Delivery Over Broadcast and Broadband Networks," International Broadcasting Conference 2014, Amsterdam, The Netherlands, 8 pages.	
	3	OMA, "Service Guide for Mobile Broadcast Services," Open Mobile Alliance, OMA-TS-BCAST_Service_Guide-V1_1-2008-07-07-D, Copyright 2008, Open Mobile Alliance Ltd., 213 pages.	
	4	ERICSSON, "Personalized and Interactive TV Enabled by IMS," 284 23-001 Uen Rev A, September 2008, 18 pages.	
	5	NEM4U, "Deliverable: D5.1 - Demo Scenarios," dated December 24, 2008, Copyright iNEM4U Public, 29 pages.	
	6	NEM4U, "Deliverable: 1.2 - iNEM4U System Requirements and Technology Survey," dated March 30, 2008, Copyright iNEM4U Consortium Public, 33 pages.	
	7	NEM4U, "Deliverable: D1.1 - iNEM4U Usage Scenarios," dated April 30, 2008, Copyright iNEM4U Public, 58 pages.	

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature	<input type="text"/>	Date Considered	<input type="text"/>
--------------------	----------------------	-----------------	----------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	13144385
	Filing Date	2011-07-13
	First Named Inventor	Hans Maarten Stokking
	Art Unit	2441
	Examiner Name	Oanh Duong
	Attorney Docket Number	11-905-WO-US

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Jason S. Kray/	Date (YYYY-MM-DD)	2016-01-26
Name/Print	Jason S. Kray	Registration Number	66,926

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	24722309
<b>Application Number:</b>	13144385
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	5301
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Customer Number:</b>	20306
<b>Filer:</b>	Jason S. Kray
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	11-905-WO-US
<b>Receipt Date:</b>	26-JAN-2016
<b>Filing Date:</b>	13-JUL-2011
<b>Time Stamp:</b>	11:56:12
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	no
------------------------	----

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	11-905-WO- US_2ndSupplementalIDS-SB08. pdf	612919  <small>8f3872a5c6af6c199f698441440aee4d21828850</small>	no	4

### Warnings:

### Information:



A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.

2	Non Patent Literature	NPL-Durandetal.pdf	560554 f90946d61704d3ae43eba1630e995228ef1 41e02	no	6
---	-----------------------	--------------------	--	----	---

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

3	Non Patent Literature	NPL-Raushenbachetal- ScalableInteractiveTVService. pdf	729930 d93d41abd4850b90b5ead604cb7233fb74 1d2c73	no	8
---	-----------------------	--	--	----	---

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

4	Non Patent Literature	NPL-OMA- ServiceGuideForMobileBroadca stServices.pdf	15967911 3e81fca6291c7a68a4ab33cc0681c309d6a0 4b11	no	213
---	-----------------------	--	--	----	-----

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

5	Non Patent Literature	NPL- PersonalizedInteractiveTVEnabl edByIMS.pdf	1538763 d487431e703663d8148ab8c81b34630097 300038	no	18
---	-----------------------	---	---	----	----

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

6	Non Patent Literature	NPL-iNEM4U-DemoScenarios. pdf	1676849 c6811bc82c64fcb94b5c6f012c4479e1a9b9 8d58	no	29
---	-----------------------	----------------------------------	---	----	----

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

7	Non Patent Literature	NPL-iNEM4U- SystemRequirementsTechnolo gySurvey.pdf	2155229 565a5614418004bae263e9c363cf45c01b3 9504f	no	33
---	-----------------------	---	---	----	----

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

8	Non Patent Literature	NPL-iNEM4U-UsageScenariosFinal.pdf	1676849 852589a94792f1aafe23002f3aad3dac354f763c	no	29
---	-----------------------	------------------------------------	---	----	----

**Warnings:**

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

**Information:**

<b>Total Files Size (in bytes):</b>	24919004
-------------------------------------	----------

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

**REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL  
(Submitted Only via EFS-Web)**

Application Number	13/144,385	Filing Date	2011-07-13	Docket Number (if applicable)	11-905-WO-US	Art Unit	2441
First Named Inventor	Hans Maarten Stokking			Examiner Name	Oanh Duong		

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**  
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

**SUBMISSION REQUIRED UNDER 37 CFR 1.114**

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_

Other \_\_\_\_\_

Enclosed

Amendment/Reply

Information Disclosure Statement (IDS)

Affidavit(s)/ Declaration(s)

Other

**MISCELLANEOUS**

Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months \_\_\_\_\_  
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

Other \_\_\_\_\_

**FEES**

**The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**

The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

<input checked="" type="checkbox"/> Patent Practitioner Signature
<input type="checkbox"/> Applicant Signature

Signature of Registered U.S. Patent Practitioner			
Signature	Jason S. Kray/	Date (YYYY-MM-DD)	2016-01-25
Name	Jason S. Kray	Registration Number	66926

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b>		Docket Number (Optional) 11-905-WO-US
Application Number 13/144,385	Filed July 13, 2011	
For <b>Managing Associated Sessions In a Network</b>		
Art Unit 2441	Examiner Oanh Duong	

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee	
<input checked="" type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ <u>200.00</u>
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$ _____
<input type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$ _____
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$ _____
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$ _____

Applicant asserts small entity status. See 37 CFR 1.27.

Applicant certifies micro entity status. See 37 CFR 1.29.  
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

A check in the amount of the fee is enclosed.

Payment by credit card. Form PTO-2038 is attached.

The Director has already been authorized to charge fees in this application to a Deposit Account.

The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to  
Deposit Account Number 13-2490

Payment made via EFS-Web.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

I am the

applicant/inventor.

assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).

attorney or agent of record. Registration number 66,926

attorney or agent acting under 37 CFR 1.34. Registration number \_\_\_\_\_.

/Jason S. Kray/

Signature

January 25, 2016

Date

Jason S. Kray

Typed or printed name

312-913-2125

Telephone Number

**NOTE:** This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below\*.

\* Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	13144385
<b>Filing Date:</b>	13-Jul-2011
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Filer:</b>	Jason S. Kray
<b>Attorney Docket Number:</b>	11-905-WO-US

Filed as Large Entity

### Filing Fees for U.S. National Stage under 35 USC 371

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
Claims in excess of 20	1615	1	80	80

**Miscellaneous-Filing:**

**Petition:**

**Patent-Appeals-and-Interference:**

**Post-Allowance-and-Post-Issuance:**



Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Extension-of-Time:</b>				
Extension - 1 month with \$0 paid	1251	1	200	200
<b>Miscellaneous:</b>				
RCE- 2nd and Subsequent Request	1820	1	1700	1700
<b>Total in USD (\$)</b>				<b>1980</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	24710392
<b>Application Number:</b>	13144385
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	5301
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Customer Number:</b>	20306
<b>Filer:</b>	Jason S. Kray
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	11-905-WO-US
<b>Receipt Date:</b>	25-JAN-2016
<b>Filing Date:</b>	13-JUL-2011
<b>Time Stamp:</b>	12:17:54
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1980
RAM confirmation Number	12013
Deposit Account	132490
Authorized User	KRAY, JASON S.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 CFR 1.492 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 CFR 1.21 (Miscellaneous fees and charges)

Charge any Additional Fees required under 37 CFR 1.492(a) (basic national fee only)

**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Response After Final Action	11-905-WO-US_ResponseToFinalOA.pdf	216480 4e5011a9fc7602da4427a726a875b69b1a4994a9	no	20
<b>Warnings:</b>					
<b>Information:</b>					
2	Request for Continued Examination (RCE)	11-905-WO-US_RCE-RequestContinuedExamination.pdf	697886 ba7d09a8fa4f7b70f79278f90517662cc7c85d6c	no	3
<b>Warnings:</b>					
<b>Information:</b>					
3	Extension of Time	11-905-WO-US_Petition1-MonthExtensionTime.pdf	187816 74c659df0051cdba9fd3ad8a0f238f418532b118	no	2
<b>Warnings:</b>					
<b>Information:</b>					
4	Fee Worksheet (SB06)	fee-info.pdf	34252 c7401eff6d0fb6de36ca36e02b631ba3b765e41	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			1136434		

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Attorney Docket No. 11-905-WO-US)**

<b>In re Application of:</b>	)	
	)	
<b>Hans Maarten Stokking et al.</b>	)	
	)	<b>Conf. No.: 5301</b>
<b>Serial No.: 13/144,385</b>	)	
	)	<b>Art Unit: 2441</b>
<b>Filed: July 13, 2011</b>	)	
	)	<b>Examiner: Oanh Duong</b>
<b>Title: Managing Associated Sessions</b>	)	
<b>In A Network</b>	)	

**AMENDMENT UNDER 37. C.F.R. §1.114 AND  
REPLY TO FINAL OFFICE ACTION MAILED JUNE 11, 2015**

Mail Stop Amendment – via EFS  
Commissioner for Patents  
Alexandria, Virginia 22313-1450

Dear Commissioner:

This paper is a submission along with a Request for Continued Examination (RCE) in compliance with 37 C.F.R § 1.114 and in reply to the Final Office Action mailed June 11, 2015. A notice of pre-appeal brief was filed and a Notice of Panel Decision issued, which indicated that the time period for reply is one month from the mailing of Notice of Panel Decision (i.e., January 2, 2016) The Applicant hereby requests a one-month extension, extending the time to respond to February 2, 2016 and, thus, this RCE and amendment is being timely. Applicants respectfully request the Examiner to consider the following amendments and remarks.

**Amendments to the claims** are reflected in the **Listing of Claims** which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 8 of this paper.

## LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently Amended) A method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier for associating sessions in the network;

exchanging the composition session identifier between a user equipment and the network element a first time;

associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with ~~either~~ the user equipment ~~or a second user equipment different from the user equipment~~; and

initiating establishment of a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element as part of said establishment, the composition session being different from the two or more associated sessions.

2. (Canceled)

3. (Previously Presented) The method according to claim 1, wherein the method further comprises:

the user equipment generating the composition session identifier; and

sending a request for initiating the composition session from the user equipment to the network element, the request comprising the composition session identifier.

4. (Previously Presented) The method according to claim 1, wherein the method further comprises:

    sending a request for initiating the composition session from the user equipment to the network element;

    the network element generating the composition session identifier in response to the receipt of the request for initiating the composition session; and

    the network element sending the composition session identifier to the user equipment.

5. (Currently Amended) The method according to claim 1, wherein the method further comprises:

    the user equipment initiating the two or more associated sessions by sending two or more session initiation requests for a session to the network element, each request comprising the composition session identifier, ~~the two or more session initiation requests being different from the composition session.~~

6. (Currently Amended) The method according to claim 1, wherein the method further comprises:

    the network element initiating the two or more associated sessions by sending two or more requests for a session to the user equipment, each request comprising the composition session identifier, ~~the two or more requests being different from the composition session.~~

7. (Previously Presented) The method according to claim 3, wherein the request for initiating the composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers.

8. (Previously Presented) The method according to claim 5, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (CoD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier,

network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier.

9. (Previously Presented) The method according to claim 1, wherein combined streams of the two or more associated sessions are presented to the user equipment as a personalized composed multimedia stream.

10. (Previously Presented) The method according to claim 1, wherein the network further comprises storage, the method further comprising:

the network element storing the composition session identifier and two or more associated session identifiers in the storage.

11. (Previously Presented) The method according to claim 1, the method further comprising:  
modifying the composition session, wherein modifying the composition session comprises at least one of (i) terminating or modifying one or more sessions in the composition session, or (ii) transferring one or more sessions from the composition session to a further composition session or outside the composition session.

12. (Previously presented) The method according to claim 1, wherein the network is an IP Multimedia Subsystem (IMS) network comprising an IMS core connected to a Service Control Function (SCF), wherein the SCF is configured for managing associated sessions between the network and the User Equipment.

13. (Previously Presented) A system for managing associated sessions in a network, the system comprising:

a network element; and

a user equipment,

wherein the network element is configured to (i) manage sessions between the network element and the user equipment, (ii) exchange a composition session identifier with the user equipment a first time, and (iii) associate two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with either the user equipment or a second user equipment different from the user equipment,

wherein the user equipment is configured to (i) provide the composition session identifier and (ii) exchange the composition session identifier with the network element, and

at least one of the network element or the user equipment is configured to initiate a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.

14. (Previously Presented) The user equipment of claim 13, wherein the user equipment comprises:

an ID generator for generating the composition session identifier; and

a multimedia client configured to (i) receive the composition session identifier from the ID generator, (ii) exchange the composition session identifier with the network element, (iii) initiate one or more multimedia sessions with the network element, and (iv) exchange the composition session identifier with the network element during set up of the multimedia sessions.

15. (Previously Presented) The user equipment according to claim 14, wherein the user equipment is configured to initiate the composition session.

16. (Previously Presented) The network element of claim 13, wherein the network element comprises:



a session manager configured to exchange the composition session identifier with the user equipment and to set up and modify multimedia sessions; and

storage configured to store composition session information, the composition session information comprising information regarding composition session identifiers and the two or more associated sessions.

17. (Previously Presented) The network element according to claim 16, further configured for at least one of initiating, terminating or modifying a composition session.

18. (Previously Presented) The network element according to claim 16, the network element further comprising:

an ID generator configured to generate the composition session identifier.

19. (Previously Presented) A non-transitory computer readable medium having stored thereon software instructions that, if executed by a user equipment or a network element, cause the user equipment or the network element to perform operations comprising the method according to claim 1.

20. (Previously presented) The method according to claim 4, wherein the request for initiating a composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers.

21. (Previously Presented) The method according to claim 6, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (CoD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a

Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier.

22. (Canceled)

23. (Previously Presented) The method according to claim 1, wherein the method further comprises modifying the composition session, wherein modifying the composition session comprises at least one of (i) modifying at least one of the two or more sessions based on a determined change in bandwidth availability or (ii) selectively pausing data streams of the two or more sessions in response to a detection of an incoming call destined for the user equipment.

24. (New) The method according to claim 1, wherein the composition session does not transport media.

## REMARKS/ARGUMENTS

Claims 1, 3-21, and 23 are presently pending. By this amendment, claims 1, 5-6 and 13 are amended. Claim 24 has been added. Claims 1, 3-21, and 23-24 will be pending in the present application after entry of this amendment.

### **I. Claim Rejections – 35 U.S.C. § 112**

Claims 5-6 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite due to the recited phrase “the two or more session initiation requests being different from the composition session.” Office Action, page 2. In response, Applicants have amended claims 5-6 by deleting this phrase. As such, the rejection under § 112 is now moot. Reconsideration and withdrawal of the rejection is respectfully requested.

### **II. Claim Rejections – 35 U.S.C. §§ 102(b), 103(a)**

Claims 1, 3-8, and 10-21 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Publ. No. 2008/0089344 (“Jansen”). Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jansen in view U.S. Publ. No. 2010/0121956 (“Hoffpauir”). Claim 23 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jansen in view U.S. Pat. No. 8,289,965 (“Bugenhagen”). Reconsideration and withdrawal of these rejections is respectfully requested for at least the following reasons.

#### **A. Independent Claim 1**

Amended independent claim 1 is not anticipated by Jansson for at least the following reasons.

1. *The Office Action Fails to Show that Jansson Discloses “Exchanging the Composition Session Identifier between a User Equipment and the Network Element a First Time.”*

Independent claim 1 recites, *inter alia*, “exchanging the composition session identifier ***between a user equipment and the network element*** a first time.” (Emphasis added).

The Office Action alleges that this feature of claim 1 is taught by paragraph [0008] of Jansson. Office Action, page 3. Paragraph [0008] of Jansson discloses:

The present invention provides a system and method for correlating communication sessions. The invention creates and exchanges between the parties, a globally unique correlation identifier during SIP session setup to allow for association and correlation of SIP sessions. The correlation information may then be used by network and session entities to perform different services.

Notably, Jansson’s disclosure that a correlation identifier “between parties” does not meet the specific language of the above-recited feature of claim 1. In particular, a teaching of an exchange between parties is not an express or inherent disclosure of an exchange between a user equipment and a network element. Indeed, to support its contention that Jansson discloses other features of claim 1, the Office Action cites to portions of Jansson that are specifically directed to a point-to-point (P2P) embodiment, which do not include a network element. Accordingly, the Office Action’s reliance on paragraph [0008] as allegedly teaching the recited exchanging between a user equipment and a network element is misplaced. For at least this first reason, the rejection of claim 1 under § 102 is improper.

2. *The Office Action Fails to Establish a Prima Facie Case of Anticipation Because the Office Action Improperly Combines Multiple, Distinct Embodiments.*

Additionally, Applicants respectfully submit that the rejection under § 102 is also improper for at least the reason that it impermissibly combines multiple, distinct embodiments in Jansson in an attempt to arrive at the subject matter recited in claim 1.

“A prior art reference - in order to anticipate under 35 U.S.C. § 102 - must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements arranged as in the claim.” *Net MoneyIn, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008), quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983); MPEP § 2131. “A reference that discloses all of the claimed [elements], but not in the order claimed, would not anticipate, because the reference would be missing any disclosure of the limitations of the claimed invention “arranged as in the claim.” [Moreover,] ... the “arranged as in the claim” requirement applies to all claims and refers to the need for an anticipatory reference to show all of the limitations of the claims arranged or combined in the same way as recited in the claims, not merely in a particular order. *Net MoneyIn*, 545 F.3d at

1369. Further, according to the Federal Circuit, “claims cannot be ‘treated ... as mere catalogs of separate parts, in disregard of the part-to-part relationships set forth in the claims and that give the claims their meaning.’” *Therasense v. Becton, Dickinson & Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010) (emphasis added), quoting *Lindemann Maschinenfabrik GMBH v. Am. Hoist & Derrick Co.*, 730 F.2d 1452, 1459 (Fed. Cir. 1984). Thus, even if the cited reference describes all of the features of a claim included in the subject patent application (which Jansson does not as explained below), an anticipation rejection is deficient if the cited elements are not arranged as required by the claim. MPEP § 2131.

Independent claim 1 recites, among other features, “associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment.”

The Office Action alleges that these features of claim 1 are taught paragraphs [0018]-[0033] of Jansson. Office Action, pages 3-4. Notably, however, the cited paragraphs correspond to two distinct embodiments in Jansson. Paragraphs [0018]-[0032] relate to a P2P embodiment, whereas paragraph [0033] relates to a business-to-business (B2B) user agent (UA) embodiment. As described by Jansson, these are distinctly different embodiments, which have unique design considerations. For example, paragraph [0033] of Jansson explains that the B2B UA embodiment utilizes the B2B UA as an intermediary and requires “additional logic” in both in the UAs and in the B2B UA. Because the Office Action rejects claim 1 as anticipated based on multiple, distinct embodiments of Jansson, the rejection of claim 1 under § 102 is improper. MPEP § 2131.

3. *Jansson Fails to Disclose “Associating Two or More Sessions with the Composition Session Identifier by Exchanging the Composition Session Identifier At Least a Second Time”*

Nonetheless, Jansson fails to disclose “associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with the user equipment” as

recited in claim 1. First, the P2P embodiment of paragraphs [0018]-[0032] does not disclose or suggest the above-recited network element. Rather, as noted above, the P2P embodiment involves communication between user equipment devices. Further, the P2P embodiment at paragraphs [0018]-[0032] does not disclose “associating two or more session with the composition identifier *by exchanging the composition session at least a second time.*” Rather, as explained in paragraph [0023] of Jansson, the correlation ID is generated locally at each user equipment from different portions of information that are transmitted in different messages – namely, the Call-ID, To-Tag, and From-Tag. Significantly, the correlation ID is not actually exchanged itself to associate the sessions in the P2P embodiment of Jansson. Accordingly, contrary to the assertion in the Office Action, paragraphs [0018]-[0032] fail to disclose or suggest the above-recited feature of claim 1.

Additionally, the B2B UA embodiment disclosed at paragraphs [0033]-[0036] of Jansson fail to disclose the above-recited feature of claim 1. In particular, this embodiment fails to disclose two exchanges of the composition session identifier between a single user equipment (i.e., the same user equipment that first exchanged the composition identifier) and a network element, whereby the second exchange causes the association of at least two sessions with the composition session identifier (as recited in claim 1). Rather, paragraph [0033] of Jansson discloses that two different user equipment devices (UAs) each have its own independent session with an intermediary (which appears to be the alleged network element in the Office Action). Thus, paragraph [0033] does not disclose that a correlation ID is exchanged twice with the same UA, whereby the second time leads to association of sessions.

In view of the foregoing, Applicants respectfully submit that the different embodiments disclosed in paragraphs [0018]-[0033] (which were cited in the Office Action) fail to disclose or suggest at least the above-recited features of claim 1. For at least this additional reason, the rejection under § 102 based on Jansson is improper.

Based on Applicants’ review, the other embodiments of Jansson also fail to disclose or suggest at least the above-recited feature of claim 1. For example, in the “dial-in” embodiment disclosed at paragraphs [0037]-[0039] of Jansson, it can be seen that a completely different identifier, a single focal point URI, is used as correlation ID. This ID is generated by a conference factory, and not by the user equipment using info from a combination of exchanges.

Accordingly, this embodiment is mutually exclusive of the P2P embodiment and the B2B UA embodiment described above.

Although in Jansson discloses that, in the “dial-in” embodiment, the created correlation ID is sent once from the conference factory to the creating UA (in a 200 SIP OK message, see Jansson, para. [0037]), it is not exchange twice between the same conference factory and the same creating UA, whereby such (specific) second exchange associates two sessions. Instead, the correlation ID is sent a second time from another UA (called the receiver) to the conference factory (see Jansson, para. [0039]), whereby this second exchange causes the association of sessions. This teaching is thus different from the above-recited feature of claim 1, and makes sense in the context of this Jansson example, which teaches the set-up of a conference call between different UA’s through dialing-in on a conference factory.

Additionally, for example, in the “dial-out” embodiment disclosed at paragraphs [0040]-[0057], Jansson also discloses the use of the single focal point URI as the identifier, which again is significantly different from the identifier of the other embodiments. This ID is also generated by a conference factory, and not by the user equipment using info from a combination of exchanges. Accordingly, this embodiment is also mutually exclusive of the P2P embodiment and the B2B UA embodiment described above.

In the “dial-out” embodiment, Jansson teaches that the thus created correlation ID is sent only once from the conference factory to the creating UA (the ‘focal point URI’ in a 200 SIP OK message, Jansson paragraph [0049]), it is not exchange twice between the same conference factory and the same creating UA, whereby such (specific) second exchange associates two sessions. Instead, the correlation ID is sent a second time to another focal point (see Jansson paras. [0040], [0053], [0057]), which focal point ultimately INVITES the second UE (dial-out). Accordingly, this teaching is thus different than the above-recited feature of claim 1, and makes sense in the context of this Jansson example, which teaches the set-up of a conference call between different UA’s through dialing-out from a focal point.

For at least these reasons, Jansson fails to disclose or suggest “associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second

time comprises the network element exchanging the composition session identifier with the user equipment.” Accordingly, claim 1 is not anticipated by Jansson for at least this reason.

4. *Jansson Fails to Disclose “Initiating Establishment of a Composition Session.”*

Independent claim 1 also recites, among other features, “initiating establishment of a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element as part of said establishment.”

Jansson fails to disclose or suggest at least the above-recited feature of claim 1. With respect to this feature, the Office Action alleges that Jansson discloses:

initiating a composition session (i.e., session 36), the composition session being a signaling session for facilitating management of the two or more sessions (i.e., sessions 38 and 39) and exchanging the composition session identifier between the user equipment and the network element, the composition session . . . being different from the two or more associated sessions (i.e., create and exchange between parties globally unique correlation identifier during SIP session setup, page 1 paragraph [0008] and page 2 paragraphs [0058]-[0059], and figures 1 and 4).

OA, page 5. Applicants respectfully disagree.

Jansson discloses that the alleged composition session 36 is a “chat session 36” and the alleged two or more sessions are a “VoIP session 38” and a “data session 39.” Jansson, para. [0084]. Notably, the chat session 36 of Jansson is not a separate signaling session for facilitating management of the VoIP session 38 and the data session 39. Rather, Jansson discloses that the chat session 36, the VoIP session 38, and the data session 39 are all “communication sessions” that can be correlated with one another. Jansson, paras. [0004]-[0006]; [0084]. That is, the role played by the chat session 36 in the Jansson system is the same as the role played by the VoIP session 38 and the data session 39 – they are all sessions providing media content.

***Significantly, none of these communication sessions 36, 38, 39 in Jansson facilitate management of any other session.*** In Jansson, the communication sessions 36, 38, 39 are correlated by storing information in a table so that the system can apply “some special charging scheme to a multi-service session comprised of two or more individual sessions.” Jansson,



paras. [0005], [0059]-[0060]. Otherwise, the sessions 36, 38, 39 do not interact with each other in Jansson. Indeed, Jansson is silent as to how any of the sessions such as, for example, the chat session 36 can be used to manage or otherwise provide signaling for any other session. Thus, at best, Jansson discloses just generating the alleged composition session identifier and storing it some place in the network.

Because Jansson fails to disclose a composition session, the method of claim 1 provides a number of example advantages over the Jansson method. In particular, as noted above for example, the present application explains that, by employing the composition session of claim 1, “continuous screening of all signaling messages for the presence of a composition session identifier, and subsequently probing the service logic (whether in the user equipment or in the network element) for a next course of action may be avoided. Messages only related to individual sessions (within a group of associated sessions) may not require such probing.” Specification at p. 7, Ins. 4-9. The Jansson method does not achieve this efficiency. Rather, because Jansson does not disclose a separate signaling session for facilitating the management of the sessions 36-39, the sessions 36-39 would need to be continuously screened and individually probed to manage the sessions 36-39.

For at least the reasons explained above, Jansson fails to disclose at least the above-recited feature of claim 1 and, thus, claim 1 is not anticipated by Jansson.

In the “Response to Arguments” Section, the Office Action appears to indicate that paragraph [0008] of Jansson teaches “signaling session (i.e., SIP session) as broadly cited in the claim(s).” Office Action, page 8. However, this comment does not show that Jansson teaches “initiating a composition session, *the composition session being a signaling session for facilitating management of the two or more sessions.*” SIP messaging utilized to setup the sessions 36, 38, 39 is not a “signaling session for facilitating the management of the two or more sessions” as recited in claim 1. For example, Jansson is silent as to the SIP messaging for setting up the chat session 36 being utilized to manage either the VoIP session 38 or the data session 39. Rather, the VoIP session 38 and the data session 39 utilize their own separate SIP messaging to setup those sessions. Thus, the SIP messaging for any particular session in Jansson is only used to manage that session and not any other session. For at least this reason, the Examiner’s response does not address the deficiencies of Jansson explained above.

5. *Jansson Fails to Disclose “Exchanging the Composition Session Identifier Between the User Equipment and the Network Element As Part of the Establishment” of the Composition Session*

As noted above, amended independent claim 1 recites, among other features, “initiating establishment of a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element as part of said establishment.” (Emphasis added).

Jansson also fails to disclose or suggest this feature for at least the reason that Jansson does not disclose that a correlation ID is exchanged during establishment of a session. Rather, as explained above for example, Jansson discloses that the correlation ID is locally generated by each UA in the P2P embodiment. Jansson, para. [0023]. Additionally, for example, Applicants note that neither paragraph [0084] nor Figure 4 provide any suggestion that during establishment of the chat session, a correlation ID is exchanged, or that a network element would be involved in such exchange (e.g., one would not typically chat with a network element).

6. *The Rejection of Claim 1 is Clearly Erroneous Because it is Based on a Legal Deficiency*

Further, the Office clearly erred in rejecting claim 1, because the Office Action does not appear to give patentable weight to the recited feature of “the composition session *being a signaling session for facilitating management of the two or more sessions.*” (Emphasis Added). In the “Response to Arguments” section, the Office Action indicates that “‘for facilitating management of two or more sessions’ in claim 1 is interpreted to be a statement of intended use since no actual management is claimed.” Office Action, page 11. Based on this reasoning, the Office appears to have not given patentable weight to this feature of claim 1. This position in the Office Action is legally deficient.

In *In re Jasinski*, No. 2012-1482, 2013 WL 563285 (Fed. Cir. Feb. 15, 2013), the Federal Circuit considered the issue of when patentable weight should be given to a phrase recited in the preamble and in the body of a claim. In that case, the USPTO refused to give patentable weight to either the phrase “verifying the accuracy” in a claim preamble or the phrase “to verify the

accuracy” in the body of the claim.<sup>1</sup> *Id.* Rather, the USPTO argued that those phrases were statements of intended purpose of a step rather than placing the actual limitation on the step itself. *Id.* The Federal Circuit disagreed, finding that the “to verify the accuracy” phrase refers to the “essence of the invention” and “provides the criteria by which the previously-recited comparing limitation is analyzed.” *Id.* Accordingly, the Federal Circuit held that the phrase “to verify the accuracy” must be given patentable weight. *Id.*

*In re Jasinski* is analogous to the present case. In the present application, the preamble of claim 1 recites “a method of managing associated sessions in a network” and the body of claim 1 recites initiating a composition session ... being a signaling session for facilitating management of the two or more sessions.” Thus, in claim 1, the phrases “managing associated sessions” and “facilitating management” refer to the “essence of the invention” and “provides the criteria by which the previously-recited [initiating a composition session] is analyzed” for the same reasons articulated by the Federal Circuit in *In re Jasinski*. *Id.* Accordingly, contrary to the Office Action, the phrase “the composition session being a signaling session for facilitating management of two or more sessions” must be given patentable weight. For at least this reason, the Office Action fails to set forth a *prima facie* rejection of claim 1.

For at least these reasons, independent claim 1 is not anticipated by Jansson.

#### B. Independent Claim 13

Independent claim 13 recites, *inter alia*, “at least one of the network element or the user equipment is configured to initiate a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.” As explained above with respect to independent claim 1, Jansson fails to disclose or suggest at least these features. Rather, Jansson is silent as to any separate signaling session for managing the associated sessions. Accordingly, independent claim 13 is also patentable over Jansson.

---

<sup>1</sup> The claim at issue recited “A method for verifying the accuracy of logical-to-physical mapping software ... comparing said fail memory locations derived by said logical-to-physical mapping software to said various predetermined memory locations to verify the accuracy of said logical-to-physical mapping software.”

C. Dependent Claims 3-12, 14-21, and 23-24

Claims 3-12, 14-21, and 23-24 depend directly or indirectly from independent claims 1 and 13. Hoffpauir and Bugenhagen do not address the deficiencies of Jansson explained above. Accordingly, for at least the reasons explained above with respect to claims 1 and 13, claims 3-12, 14-21, and 23-24 are also patentable over Jansson, Hoffpauir, Bugenhagen, or the combination thereof.

Further, the following dependent claims are also patentable for at least the additional reasons explained below.

1. *Claim 3*

Claim 3 recites, among other features, “the user equipment generating the composition session identifier; and sending a request for initiating the composition session from the user equipment to the network element, the request comprising the composition session identifier.”

The Office Action alleges that Jansson discloses these features at paragraphs [0016]-[0033]. As an initial matter, the rejection of claim 3 under § 102 is improper for at the least reason that it impermissibly attempts to combine two distinct embodiments in Jansson. *Net MoneyIn, Inc.*, 545 F.3d at 1369; MPEP § 2131. Indeed, as explained above, paragraphs [0018]-[0032] relate to the P2P embodiment, whereas paragraph [0033] of Jansson refers to the B2B UA embodiment.

Additionally, as explained above, the P2P embodiment in paragraphs [0018]-[0032] of Jansson does not include a network element and, thus, the P2P embodiment does not provide a disclosure of “sending a request for initiating the composition session from the user equipment to the network element” as recited in claim 3.

The B2B UA embodiment disclosed in paragraphs [0033]-[0036] and [0063]-[0071] and illustrated in Fig. 2 of Jansson is also deficient. In this embodiment, the correlation ID in this section is locally generated from the following parameters: CALL-ID1 and FROM-TAG1 (ONLY present in INVITE 22 and 24), and TO-TAG1 (ONLY present in SIP 200 OK message 25 and 27). Jansson, paras. [0063]-[0071], Fig. 2. As can thus be seen in Fig. 2 of Jansson, the first INVITE (22) which is a session initiation request from UE-A (11) to the UAS, does not contain the correlation-ID (the alleged composition session identifier). As such, it does not

correspond to a “request comprising the composition session identifier” as recited in claim 3. As can further be seen in Fig. 2, the second INVITE (24) which is a session initiation request from UAC (11) to the UAS, also does not contain the correlation-ID (the alleged composition session identifier). As such, it also does not correspond to the request recited in claim 3.

For at least these additional reasons, claim 3 is patentable over Jansson, Hoffpauir, Bugenhagen, or the combination thereof.

2. *Claim 4*

Claim 4 recites, among other features, “sending a request for initiating the composition session from the user equipment to the network element; the network element generating the composition session identifier in response to the receipt of the request for initiating the composition session; and the network element sending the composition session identifier to the user equipment.”

The Office Action alleges that paragraph [0059] of Jansson provides a teaching of the above-recited features. Applicants respectfully disagree. First, paragraph [0059] of Jansson does not teach a session between a network element and a user equipment. Rather, paragraph [0059] of Jansson relates to the P2P embodiment, which does not include a network element as explained above. Second, paragraph [0059] does not teach a composition session. Rather, paragraph [0059] teaches a chat session and a VoIP session correlated to each other. Accordingly, paragraph [0059] of Jansson does not teach the generation of a composition session identifier by a network element and sending that composition session identifier to a user equipment.

To the extent the Office considers the dial-in and dial-out embodiments as teaching a network element that generates a correlation ID and sends this to a user equipment in response to an invitation from the user equipment, Applicants note that Jansson would still fail to anticipate claim 4 for at least the reason that (i) it is improper to pick and choose elements from distinct embodiments in an anticipation rejection and (ii) those embodiments suffer from the deficiencies noted above in Section II(A)(3).

For at least these additional reasons, claim 4 is patentable over Jansson, Hoffpauir, Bugenhagen, or the combination thereof.

3. *Claim 6*

Claim 6 recites, among other features, “the network element initiating the two or more associated sessions by sending two or more requests for a session to the user equipment, each request comprising the composition session identifier.”

As explained above, the only embodiments in Jansson that involve a network element which arguably initiates a session are the B2B UA and dial-out embodiments of Jansson. However, as explained above, in the B2B UA examples shown in Jansson (even the most elaborated one related to fig.2), the correlation ID is not exchanged, let alone sent in an INVITE from the B2B UA to a single UA [e.g. fig2. teaches only ONE session request (INVITE) being sent from the B2B UA to a UE-B, which request doesn’t even contain the Correlation ID.

In the dial-out example of Jansson, the focal point receiving a REFER from a UE-A does send a SIP INVITE (a session request) including a correlation ID to another UE. However this is only shown for a first session, and the mechanism for a further session is not shown.

For at least these additional reasons, claim 6 is patentable over Jansson, Hoffpauir, Bugenhagen, or the combination thereof.

#### 4. *Claim 11*

Claim 11 recites, among other features, “modifying the composition session, wherein modifying the composition session comprises at least one of (i) terminating or modifying one or more sessions in the composition session, or (ii) transferring one or more sessions from the composition session to a further composition session or outside the composition session.”

The Office Action applies paragraph [0085] of Jansson as allegedly disclosing these features. Applicants respectfully disagree. Rather, paragraph [0085] of Jansson teaches a change of a correlation ID of a session. This would in practice mean that an already correlated session could become correlated to other (already) sessions it was not previously correlated to.

Paragraph [0085] does not teach the existence of one or more composition sessions though. Nor does it teach any form of modifying a composition session, such as through terminating or modifying one or more sessions in the composition session, as recited in claim 11.

Furthermore it appears not taught by Jansson to ‘de-correlate’ a session (e.g. to move a session outside the composition session, which is different from moving a session between composition sessions).

For at least these additional reasons, claim 11 is patentable over Jansson, Hoffpauir, Bugenhagen, or the combination thereof.

### **CONCLUSION**

Applicants submit that the claims are in a condition for allowance and action toward that end is earnestly solicited. If there are any matters which may be resolved or clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at the number indicated.

The Commissioner is authorized to deduct the fee for the RCE, the fee for the one-month extension, and the fee for the addition of one (1) total claim in excess of twenty (20) total claims from the deposit account below. No other fee is believed due; however, the Commissioner is authorized to deduct any necessary fees (except payment of the issue fee), or to credit any over payment, to MBHB Deposit Account No. 13-2490, Order No. 11-905-WO-US.

Respectfully submitted,

Date: January 25, 2016

By: /Jason S. Kray, Reg. No. 66,926/  
Jason S. Kray  
Reg. No. 66,926  
**McDonnell, Boehnen, Hulbert & Berghoff**  
300 S. Wacker Drive, Suite 3100  
Chicago, Illinois 60606  
(312) 913-2125 – phone

Attorney for Applicants



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
13/144,385 07/13/2011 Hans Maarten Stokking 11-905-WO-US 5301

20306 7590 12/02/2015
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER

DUONG, OANH

ART UNIT PAPER NUMBER

2441

MAIL DATE DELIVERY MODE

12/02/2015

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



<b>Notice of Panel Decision from Pre-Appeal Brief Review</b>	<b>Application No.</b> 13/144,385	<b>Applicant(s)</b> STOKKING ET AL.
	<b>Examiner</b> OANH DUONG	<b>Art Unit</b> 2441

This is in response to the Pre-Appeal Brief Request for Review filed 09 October, 2015.

1.  **Improper Request** – The Request is improper and a conference will not be held for the following reason(s):

- The Notice of Appeal has not been filed concurrent with the Pre-Appeal Brief Request.
- The request does not include reasons why a review is appropriate.
- A proposed amendment is included with the Pre-Appeal Brief request.
- Other: .

The time period for filing a response continues to run from the receipt date of the Notice of Appeal or from the mail date of the last Office communication, if no Notice of Appeal has been received.

2.  **Proceed to Board of Patent Appeals and Interferences** – A Pre-Appeal Brief conference has been held. The application remains under appeal because there is at least one actual issue for appeal. Applicant is required to submit an appeal brief in accordance with 37 CFR 41.37. The time period for filing an appeal brief will be reset to be one month from mailing this decision, or the balance of the two-month time period running from the receipt of the notice of appeal, whichever is greater. Further, the time period for filing of the appeal brief is extendible under 37 CFR 1.136 based upon the mail date of this decision or the receipt date of the notice of appeal, as applicable.

- The panel has determined the status of the claim(s) is as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 1, 3-21 and 23.  
 Claim(s) withdrawn from consideration: \_\_\_\_\_.

3.  **Allowable application** – A conference has been held. The rejection is withdrawn and a Notice of Allowance will be mailed. Prosecution on the merits remains closed. No further action is required by applicant at this time.

4.  **Reopen Prosecution** – A conference has been held. The rejection is withdrawn and a new Office action will be mailed. No further action is required by applicant at this time.

All participants:

(1) OANH DUONG.

(3) WING CHAN.

(2) QUANG NGUYEN.

(4) \_\_\_\_\_.

/QUANG N NGUYEN/  
Primary Examiner, Art Unit 2441

/OANH DUONG/  
Primary Examiner, Art Unit 2441

/WING F. CHAN/  
Supervisory Patent Examiner,  
Art Unit 2441

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.:	13/144,385	Docket No.:	11-905-WO-US
Confirmation No.:	5301	Customer No.:	20306
Inventor:	Hans Maarten Stokking et al.	TC/A.U.:	2441
Filed:	July 13, 2011	Examiner:	Oanh Duong
Title:	Managing Associated Sessions In A Network		

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Dear Commissioner:

This Pre-Appeal Brief Request for Review is being filed with a Notice of Appeal in response to the final office action mailed on June 11, 2015 (“OA”). Applicants request a one-month extension, extending the time to responds to October 11, 2015 and, thus, this response is being timely filed.

I. The Recited Subject Matter of Claim 1

Claim 1 is generally directed to a method of managing associated sessions in a network by, among other things, associating two or more sessions with a composition session and initiating a composition session for facilitating management of the associated sessions. With respect to the composition session identifier, for example, the present application explains:

Whenever a multimedia session is set up, either initiated by a network element or by the user equipment, and an allocated composition session identifier is exchanged, the multimedia session may be associated under control of the network element with a composition session identifier. That way it may be associated with other multimedia sessions that may have already been assigned to the same composition session identifier.

Further, the network centric association of sessions enables the management of a group of sessions from within the network separate from other sessions that are not part of the group. Hence, using the composition session identifier the group of sessions may be manipulated as if there were only one session. For example it allows collective pausing (for example in response to an incoming call, destined for the user equipment), replaying, diverting of the data streams associated with the group of sessions.

In addition, the invention enables intergroup management of the sessions. If for instance bandwidth constrains appear in the network and a group of sessions and one separate session to the same user equipment exists, the session management logic in the network element may select the separate session to be terminated, leaving the group of associated sessions intact.

Specification at p. 5, ln. 14 to p. 6, ln. 3.

The present application further explains that “[a]lthough in principle it may be sufficient to just generate a composition session identifier and store this in a place in the network under control of a network element, which is in charge of managing the associated sessions, there may be advantages in initiating a separate signaling session (composition session) as well.” Specification at p. 6, lns. 15-21. Indeed, the present application explains that a “composition session may be used for the management

of associated sessions and various kinds of signaling between the user equipment and a network element associated with to this task. Such signaling may include [for example] agreeing on the duration of all sessions or negotiations regarding to bandwidth requirements (for all associated sessions together).” Specification at p. 6, lns. 26-32. The present application further explains that “[i]n addition, initiating such a composition session may provide for more effective use of resources in the network and on the user equipment. For example using a composition session network initiated teardown of associated sessions may require less signaling to the user equipment. Further, continuous screening of all signaling messages for the presence of a composition session identifier, and subsequently probing the service logic (whether in the user equipment or in the network element) for a next course of action may be avoided. Messages only related to individual sessions (within a group of associated sessions) may not require such probing.” Specification at p. 6, ln. 33 to p. 7, ln. 9.

## II. The Rejection of Claim 1 is Clearly Erroneous Because Jansson Fails to Disclose or Suggest Initiating a Composition Session

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Publ. No. 2008/0089344 (“Jansson”). However, the OA clearly erred in rejecting claim 1, because Jansson does not teach (expressly or inherently) all of the elements of any of these claims. Therefore, Jansson cannot anticipate any of the claims.

With respect to claim 1, the main point of disagreement between the Examiner and the Applicants relates to the claim element of “initiating a composition session, *the composition session being a signaling session for facilitating management of the two or more sessions* and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.” (Emphasis Added). In view of the explanation in Section I above, the method recited in claim 1 involves initiating a composition session, which is a separate signaling session for managing the associated sessions, as opposed to “just generat[ing] a composition session identifier and stor[ing] this in a place in the network under control of a network element.” Specification at p. 6, lns. 15-21.

Jansson fails to disclose or suggest at least the above-recited feature of claim 1. With respect to this feature, the OA alleges that Jansson discloses:

initiating a composition session (i.e., session 36), the composition session being a signaling session for facilitating management of the two or more sessions (i.e., sessions 38 and 39) and exchanging the composition session identifier between the user equipment and the network element, the composition session . . . being different from the

two or more associated sessions (i.e., create and exchange between parties globally unique correlation identifier during SIP session setup, page 1 paragraph [0008] and page 2 paragraphs [0058]-[0059], and figures 1 and 4).

OA, page 5. Applicants respectfully disagree.

Jansson discloses that the alleged composition session 36 is a “chat session 36” and the alleged two or more sessions are a “VoIP session 38” and a “data session 39.” Jansson, para. [0084]. Notably, the chat session 36 of Jansson is not a separate signaling session for facilitating management of the VoIP session 38 and the data session 39. Rather, Jansson discloses that the chat session 36, the VoIP session 38, and the data session 39 are all “communication sessions” that can be correlated with one another. Jansson, paras. [0004]-[0006]; [0084]. That is, the role played by the chat session 36 in the Jansson system is the same as the role played by the VoIP session 38 and the data session 39 – they are all sessions providing media content.

***Significantly, none of these communication sessions 36, 38, 39 in Jansson facilitate management of any other session.*** In Jansson, the communication sessions 36, 38, 39 are correlated by storing information in a table so that the system can apply “some special charging scheme to a multi-service session comprised of two or more individual sessions.” Jansson, paras. [0005], [0059]-[0060]. Otherwise, the sessions 36, 38, 39 do not interact with each other in Jansson. Indeed, Jansson is silent as to how any of the sessions such as, for example, the chat session 36 can be used to manage or otherwise provide signaling for any other session. Thus, at best, Jansson discloses just generating the alleged composition session identifier and storing it some place in the network.

Because Jansson fails to disclose a composition session, the method of claim 1 provides a number of example advantages over the Jansson method. In particular, as noted above for example, the present application explains that, by employing the composition session of claim 1, “continuous screening of all signaling messages for the presence of a composition session identifier, and subsequently probing the service logic (whether in the user equipment or in the network element) for a next course of action may be avoided. Messages only related to individual sessions (within a group of associated sessions) may not require such probing.” Specification at p. 7, lns. 4-9. The Jansson method does not achieve this efficiency. Rather, because Jansson does not disclose a separate signaling session for facilitating the management of the sessions 36-39, the sessions 36-39 would need to be continuously screened and individually probed to manage the sessions 36-39.

For at least the reasons explained above, Jansson fails to disclose at least the above-recited feature of claim 1 and, thus, the rejection of claim 1 based on Jansson is clear error. In the "Response to Arguments" section of the OA, the Examiner responded to various remarks made in the Applicants' response filed February 17, 2015. However, the Examiner's response does not explain away the clear error noted above.

In the "Response to Arguments" Section, the OA appears to indicate that paragraph [0008] of Jansson teaches "signaling session (i.e., SIP session) as broadly cited in the claim(s)." OA, page 8. However, this comment does not explain away the Examiner's clear error, as it does not show that Jansson teaches "initiating a composition session, *the composition session being a signaling session for facilitating management of the two or more sessions.*" SIP messaging utilized to setup the sessions 36, 38, 39 is not a "signaling session for facilitating the management of the two or more sessions" as recited in claim 1. For example, Jansson is silent as to the SIP messaging for setting up the chat session 36 being utilized to manage either the VoIP session 38 or the data session 39. Rather, the VoIP session 38 and the data session 39 utilize their own separate SIP messaging to setup those sessions. Thus, the SIP messaging for any particular session in Jansson is only used to manage that session and not any other session. For at least this reason, the Examiner's response does not explain away the clear error in the Final OA with respect to claim 1

### III. The Rejection of Claim 1 is Clearly Erroneous Because it is Based on a Legal Deficiency

Further, the Examiner clearly erred in rejecting claim 1, because the Examiner does not appear to give patentable weight to the recited feature of "the composition session *being a signaling session for facilitating management of the two or more sessions.*" (Emphasis Added). In the "Response to Arguments" section, the Final Office Action indicates that "'for facilitating management of two or more sessions' in claim 1 is interpreted to be a statement of intended use since no actual management is claimed." OA, page 11. Based on this reasoning, the OA appears to have not given patentable weight to this feature of claim 1. This position in the OA is legally deficient.

In *In re Jasinski*, No. 2012-1482, 2013 WL 563285 (Fed. Cir. Feb. 15, 2013), the Federal Circuit considered the issue of when patentable weight should be given to a phrase recited in the preamble and in the body of a claim. In that case, the USPTO refused to give patentable weight to either the phrase "verifying the accuracy" in a claim preamble or the phrase "to verify the accuracy" in

the body of the claim.<sup>1</sup> *Id.* Rather, the USPTO argued that those phrases were statements of intended purpose of a step rather than placing the actual limitation on the step itself. *Id.* The Federal Circuit disagreed, finding that the “to verify the accuracy” phrase refers to the “essence of the invention” and “provides the criteria by which the previously-recited comparing limitation is analyzed.” *Id.* Accordingly, the Federal Circuit held that the phrase “to verify the accuracy” must be given patentable weight. *Id.*

*In re Jasinski* is analogous to the present case. In the present application, the preamble of claim 1 recites “a method of managing associated sessions in a network” and the body of claim 1 recites initiating a composition session ... being a signaling session for facilitating management of the two or more sessions.” Thus, in claim 1, the phrases “managing associated sessions” and “facilitating management” refer to the “essence of the invention” and “provides the criteria by which the previously-recited [initiating a composition session] is analyzed” for the same reasons articulated by the Federal Circuit in *In re Jasinski*. *Id.* Accordingly, contrary to the OA, the phrase “the composition session being a signaling session for facilitating management of two or more sessions” must be given patentable weight. For at least this reason, the OA fails to set forth a *prima facie* rejection of claim 1.

#### IV. Conclusion

In view of the foregoing, the OA is clearly erroneous at least because (i) Jansson does not disclose or suggest all recited features of claim 1 and/or (ii) the OA improperly failed to give patentable weight to all recited features of claim 1.<sup>2</sup> Applicant respectfully submits that claim 1 is allowable for at least these reasons. In addition, dependent claims 3-12, 19-21, and 23 are allowable at least for the same reasons as independent claim 1.<sup>3</sup> Withdrawal of the rejections is respectfully requested.

Respectfully submitted,

Date: October 9, 2015

By: /Jason S. Kray, Reg. No. 66,926/  
Jason S. Kray, Reg. No. 66,926  
**McDonnell Boehnen Hulbert & Berghoff LLP**  
(312) 913-2125

---

<sup>1</sup> The claim at issue recited “A method for verifying the accuracy of logical-to-physical mapping software ... comparing said fail memory locations derived by said logical-to-physical mapping software to said various predetermined memory locations to verify the accuracy of said logical-to-physical mapping software.”

<sup>2</sup> Although not specifically addressed in this pre-appeal brief due to page limit constraints, independent claim 13 is also not anticipated by Jansson for similar reasons. Thus, dependent claims 14-18 are also not anticipated by Jansson.

<sup>3</sup> Applicants submit that claims 5-6 are clear and definite to the skilled artisan.

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	13144385
<b>Filing Date:</b>	13-Jul-2011
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Filer:</b>	Jason S. Kray
<b>Attorney Docket Number:</b>	11-905-WO-US

Filed as Large Entity

### Filing Fees for U.S. National Stage under 35 USC 371

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
Notice of Appeal	1401	1	800	800

**Post-Allowance-and-Post-Issuance:**

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Extension-of-Time:</b>				
Extension - 1 month with \$0 paid	1251	1	200	200
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>1000</b>



## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	23740385
<b>Application Number:</b>	13144385
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	5301
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Customer Number:</b>	20306
<b>Filer:</b>	Jason S. Kray
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	11-905-WO-US
<b>Receipt Date:</b>	09-OCT-2015
<b>Filing Date:</b>	13-JUL-2011
<b>Time Stamp:</b>	14:59:19
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1000
RAM confirmation Number	1243
Deposit Account	132490
Authorized User	KRAY, JASON S.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. 1.492 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Notice of Appeal Filed	11-905-WO-US_NoticeOfAppeal.pdf	211156	no	2
			dcf387eb2e91d93094111f960225f81d95f7a3e		
<b>Warnings:</b>					
<b>Information:</b>					
2	Extension of Time	11-905-WO-US_PetitionOne-MonthExtensionTime.pdf	187784	no	2
			6cfc91b0b6b1038cb0fa3d7bce500c1e54e850e4		
<b>Warnings:</b>					
<b>Information:</b>					
3	Pre-Brief Conference request	11-905-WO-US_Preappeal.pdf	137652	no	5
			4e44093ecb98f1e1d3ab5da4894642c8810ac768		
<b>Warnings:</b>					
<b>Information:</b>					
4	Fee Worksheet (SB06)	fee-info.pdf	31949	no	2
			c1097b0730e1d807729e6728f30de0fab7a82447		
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			568541		

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>NOTICE OF APPEAL FROM THE EXAMINER TO THE PATENT TRIAL AND APPEAL BOARD</b>		Docket Number (Optional) 11-905-WO-US	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO EFS-Web transmitted to the USPTO, or or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]  on _____  Signature _____ Typed or printed name _____		In re Application of Hans Maarten Stokking et al.	
		Application Number 13/144,385	Filed July 13, 2011
		For <b>Managing Associated Sessions In a Network</b>	
		Art Unit 2441	Examiner Oanh Duong

Applicant hereby **appeals** to the Patent Trial and Appeal Board from the last decision of the examiner.The fee for this Notice of Appeal is (37 CFR 41.20(b)(1)) \$ 800.00

- Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by half, and the resulting fee is: \$ \_\_\_\_\_
- A check in the amount of the fee is enclosed.
- Payment by credit card. Form PTO-2038 is attached.
- The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 13-2490.
- A petition for an extension of time under 37 CFR 1.136(a) (PTO/SB/22) is enclosed.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

I am the

- applicant/inventor. /Jason S. Kray/  
Signature
- assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96) Jason S. Kray  
Typed or printed name
- attorney or agent of record. 66,926  
Registration number 312.913.2125  
Telephone number
- attorney or agent acting under 37 CFR 1.34.  
Registration number if acting under 37 CFR 1.34. \_\_\_\_\_ October 9, 2015  
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

 \*Total of \_\_\_\_\_ forms are submitted.This collection of information is required by 37 CFR 41.31. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b>		Docket Number (Optional) 11-905-WO-US
Application Number 13/144,385	Filed July 13, 2011	
For <b>Managing Associated Sessions In a Network</b>		
Art Unit 2441	Examiner Oanh Duong	

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee	
<input checked="" type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ <u>200.00</u>
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$ _____
<input type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$ _____
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$ _____
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$ _____

Applicant asserts small entity status. See 37 CFR 1.27.

Applicant certifies micro entity status. See 37 CFR 1.29.  
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

A check in the amount of the fee is enclosed.

Payment by credit card. Form PTO-2038 is attached.

The Director has already been authorized to charge fees in this application to a Deposit Account.

The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to  
Deposit Account Number 13-2490

Payment made via EFS-Web.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

I am the

applicant/inventor.

assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).

attorney or agent of record. Registration number 66,926

attorney or agent acting under 37 CFR 1.34. Registration number \_\_\_\_\_.

/Jason S. Kray/

October 9, 2015

Signature

Date

Jason S. Kray

312-913-2125

Typed or printed name

Telephone Number

**NOTE:** This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below\*.

\* Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

## Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
13/144,385 07/13/2011 Hans Maarten Stokking 11-905-WO-US 5301

20306 7590 09/01/2015
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER

DUONG, OANH

ART UNIT PAPER NUMBER

2441

MAIL DATE DELIVERY MODE

09/01/2015

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Applicant-Initiated Interview Summary</b>	<b>Application No.</b> 13/144,385	<b>Applicant(s)</b> STOKKING ET AL.	
	<b>Examiner</b> OANH DUONG	<b>Art Unit</b> 2441	

All participants (applicant, applicant's representative, PTO personnel):

- (1) OANH DUONG. (3) \_\_\_\_\_.
- (2) Jason S. Kray (Reg. # 66,926). (4) \_\_\_\_\_.

Date of Interview: 26 August 2015.

Type:  Telephonic  Video Conference  
 Personal [copy given to:  applicant  applicant's representative]

Exhibit shown or demonstration conducted:  Yes  No.  
If Yes, brief description: \_\_\_\_\_.

Issues Discussed 101 112 102 103 Others  
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1.

Identification of prior art discussed: Jansson et al (US 2008/0089344 A1).

**Substance of Interview**

(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The feature "the composition session being a signaling session for facilitating management of the two or more sessions" was discussed; however, no agreement was reached. Examiner indicated that Jansson, in page 1 paragraph [0008], discloses "The invention creates and exchanges between the parties, a globally unique correlation identifier during SIP session setup to allow for association and correlation of SIP sessions"; therefore the teachings of Jansson read on "the composition session being a signaling session for facilitating management of the two or more session" as broadly recited in the claim(s) .

**Applicant recordation instructions:** The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

**Examiner recordation instructions:** Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

Attachment

/OANH DUONG/  
Primary Examiner, Art Unit 2441



## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

### Applicant Initiated Interview Request Form

Application No. 13/144,385 First Named Inventor: Hans Maarten Stokking  
 Examiner: Oanh Duong Art Unit: 2441 Status of Application: Final

**Tentative Participants:**

- (1) Oanh Duong (Examiner) (2) Jason S. Kray, Reg. No 66,926  
 (3) \_\_\_\_\_ (4) \_\_\_\_\_

Proposed Date of Interview: August 26, 2015 Proposed Time: 2pm EST

**Type of Interview Requested:**

- (1)  Telephonic (2)  Personal (3)  Video Conference

Exhibit To Be Shown or Demonstrated:  YES  NO

If yes, provide brief description: \_\_\_\_\_

### Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>35 USC § 112</u>	<u>Cl. 5-6</u>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) <u>35 USC § 102</u>	<u>Cls. 1 &amp; 13</u>	<u>Jansson</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Continuation Sheet Attached

**Brief Description of Arguments to be Presented:**

Applicants refer to proposed amendments and remarks present on the continuation sheet.

An interview was conducted on the above-identified application on \_\_\_\_\_

**NOTE:**  
 This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP §713.01). This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

/Jason S. Kray, Reg. No. 66,926/  
 Applicant/Applicant's Representative Signature

\_\_\_\_\_  
 Examiner/SPE Signature

Jason S. Kray  
 Typed/Printed Name of Applicant or Representative

66,926  
 Registration Number, if applicable

**CONTINUATION SHEET FOR APPLICANT INITIATED INTERVIEW REQUEST FORM**

Application No.: 13/144,385

First Named Inventor: Hans Maarten Stokking

Filed: July 13, 2011

Title: Managing Associated Sessions In A Network

Art Unit: 2441

Examiner: Oanh Duong

Docket No.: 11-905-WO-US

For discussion purposes only

Claims 5-6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because it is allegedly "not clear what applicant intended to claim by reciting 'the two or more session initiation requests being different from the composition session.'" Office Action, page 2. In response, Applicants propose to amend claims 5-6 to delete this phrase from the claims.

Independent claim 1 recites, *inter alia*, "initiating a composition session, the composition session being a *signaling session for facilitating management* of the two or more sessions and exchanging the composition session identifier between the user equipment and the network session, the composition session being different from the two or more associated sessions." (Emphasis Added). Independent claim 13 recites, *inter alia*, "at least one of the network element or the user equipment is configured to initiate a composition session, the composition session being a *signaling session for facilitating management* of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions." (Emphasis Added).

In Applicants' last reply, Applicants explained how Jansson fails to disclose or suggest at least this feature. In the "Response to Arguments" section, the Final Office Action indicates that "for facilitating management of two or more sessions" in claims 1 and 13 are interpreted to be statements of intended use since no actual management is claimed. Based on this reasoning, the Final Office Action gave not patentability weight to this element of the claims.

Applicants respectfully disagree with the position taken in the Final Office Action. Applicants direct the Examiner's attention to the Federal Circuit's opinion in *In re Janssen*, 2013 WL 563285 (Fed. Cir. 2013) (a copy of which is attached). In that case, the USPTO refused to give patentable weight to either the preamble statement of "verifying the accuracy" or the phrase "to verify the accuracy" in the body of the claim. Rather, the USPTO argued that those were statements of intended purpose of a step rather than placing the actual limitation on the step itself. The Federal Circuit disagreed, finding that the "to verify the accuracy"

clause refers to the "essence of the invention" and "provides the criteria by which the previously-recited comparing limitation is analyzed."

*In re Janisukski* is analogous to the present case. For example, in claim 1, the preamble recites "a method of managing associated sessions in a network" and later recites initiating a composition session . . . being as signaling session for facilitating management of the two or more sessions." Thus, the phrases "managing associated sessions" and "facilitating management" refer to the "essence of the invention" and "provides the criteria by which the previously-recited [initiating a composition session] is analyzed." A similar analysis follows for claim 13.

Applicants thus wish to discuss the rejection of the present claims further during the telephone interview.

---

MONICA B. LATEEF, Associate Solicitor, Office of the Solicitor, United States Patent and Trademark Office, of Alexandria, Virginia. With her on the brief were RAYMOND T. CHEN, Solicitor, and SCOTT C. WEIDENFELLER, Associate Solicitor.

ANTHONY P. NG, Yutell Isidore Ng Russell, PLLC, of Austin, Texas, argued for appellants.

---

Decided: February 15, 2013

---

Appeal from the United States Patent and Trademark Office, Board of Patent Appeals and Interferences.

---

2012-1482

---

IN RE ERIC JASINSKI, MICHAEL RICHARD OUELLETTE, AND JEREMY PAUL ROWLAND, *Appellants*.

---

**United States Court of Appeals  
for the Federal Circuit**

NOTE: This disposition is nonprecedential.

Claim 1 of the '508 application is representative:

The '508 application discloses a built in self-test (BIST) control function that generates "simulated" memory failures at predetermined physical locations in a memory device. A memory tester then tests the memory device and records the logical memory addresses of any locations having errors. Logical-to-physical mapping software maps the logical memory addresses to physical addresses within the memory device. Finally, to "verify the accuracy of [the] logical-to-physical mapping software," the physical addresses mapped by the logical-to-physical mapping software is compared to the predetermined or "simulated" physical addresses at which the BIST control function generated memory failures.

The '508 application relates to the diagnosis of memory device failures. When a memory tester detects a failure in a memory device, the logical address of the memory error must be translated into a physical address within the memory device. This translation is typically performed by logical-to-physical mapping software. The '508 application claims systems and methods for verifying the accuracy of this logical-to-physical mapping software.

BACKGROUND

Eric Jasinski et al. appeal from the decision of the Board of Patent Appeals and Interferences (Board) affirming the examiner's rejection of all claims during prosecution of patent application number 10/906,508 ('508 application). For the reasons set forth below, we reverse and remand.

MOORE, Circuit Judge.

Before PROST, CLEVENGER, and MOORE, Circuit Judges.

IN RE: ERIC JASINSKI

2

U.S.C. § 1295(a)(4).

Mr. Jasinski appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4).

The Patent and Trademark Office (PTO) rejected all claims in the '508 application as anticipated by U.S. Patent No. 5,912,901 to Adams. The Board affirmed, concluding that the language, "[to verify/verifying] the accuracy of [said] logical-to-physical mapping software," recited in the preambles and "comparing" limitations of claims 1, 9, and 17 is a statement of intended use and does not limit the claims. The Board also concluded that even if this language is limiting, Adams discloses it.

Mr. Jasinski appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4).

The Patent and Trademark Office (PTO) rejected all claims in the '508 application as anticipated by U.S. Patent No. 5,912,901 to Adams. The Board affirmed, concluding that the language, "[to verify/verifying] the accuracy of [said] logical-to-physical mapping software," recited in the preambles and "comparing" limitations of claims 1, 9, and 17 is a statement of intended use and does not limit the claims. The Board also concluded that even if this language is limiting, Adams discloses it.

508 application claim 1 (emphases added).

*mapping software.*

*verify the accuracy of said logical-to-physical*

[d] comparing said fail memory locations derived by said logical-to-physical mapping software to said various predetermined memory locations to *verify the accuracy of said logical-to-physical mapping software.*

physical mapping software; and

fail memory locations derived by said logical-to-physical mapping software; and

fail bit map indicates physical locations of all fails indicated by said memory tester, wherein physical mapping software based on all memory [c] generating a bit fail map by said logical-to-physical mapping software based on all memory fails indicated by said memory tester, wherein said bit fail map indicates physical locations of all fail memory locations derived by said logical-to-physical mapping software; and

er;

[b] testing said memory array via a memory tester; memory array of a memory device;

fails at various predetermined locations within a function to generate multiple simulated memory [a] providing a built-in self test (BIST) fail control memory devices, said method comprising:

A method for *verifying the accuracy of logical-to-physical mapping software* designed for testing memory devices, said method comprising:

We agree with Mr. Jasinski. Not only does the "to verify/verify" language refer to the "essence of the invention," it also provides the criteria by which the previously-recited comparing limitation is analyzed. We thus conclude that the "to verify/verify" language is limiting. See *Vizio, Inc. v. Int'l Trade Comm'n*, 605 F.3d 1330, 1341 (Fed. Cir. 2010) ("[T]he for decoding language . . . is properly construed as a limitation, and not merely a

The government responds that the "to verify/verify" language is nothing more than a statement of intended purpose. It contends that the Board's conclusions were reasonable because the claims do not inform a person of ordinary skill how the comparing or concluding steps are executed.

Mr. Jasinski argues that the Board erred by failing to give "patentable weight" to the preamble language "verifying the accuracy of logical-to-physical mapping software" in the comparing steps of the same claims and similar language in dependent claims 8, 16, and 24. Mr. Jasinski argues that the "to verify/verify" language should be considered a limitation because it is "the essence of the invention."

A.

Anticipation is a question of fact. *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991). We uphold the Board's factual findings unless they are not supported by substantial evidence. *In re Garlside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000). We review the Board's "broadest reasonable" claim interpretation *de novo*. *In re Abbott Diabetes Care Inc.*, 696 F.3d 1142, 1148 (Fed. Cir. 2012).

#### DISCUSSION

IN RE: ERIC JASINSKI

4



The government, however, has failed to establish an-  
 ticipation. The Adams reference does not disclose verify-  
 ing the accuracy of logical-to-physical mapping software.  
 Adams merely discloses a BIST routine for detecting  
 errors within a memory device by comparing memory  
*contents* with a predetermined bit pattern. The fact that  
 it states that the output of the mapping can be used in  
 additional "failure analysis" is not the same thing as  
 disclosing those additional types of failure analysis.  
 Adams does not disclose the detection of errors in logical-  
 to-physical mapping software by the comparing of sets of

The government argues that Adams discloses map-  
 ping logical addresses to physical addresses using logical-  
 to-physical mapping software and that the output of such  
 mapping is used in additional "failure analysis." The  
 government argues that one of ordinary skill in the art  
 would deduce that one of the possible failures detected by  
 additional "failure analysis" is defective logical-to-physical  
 mapping software.

Mr. Jasinski argues that Adams does not teach verify-  
 ing the accuracy of the logical-to-physical mapping soft-  
 ware. Mr. Jasinski concedes that Adams teaches  
 comparing the contents read from a memory device with a  
 predetermined bit pattern that was previously written  
 into the memory device. Mr. Jasinski argues, however,  
 that Adams does not teach verifying the accuracy of the  
 logical-to-physical mapping software by comparing the set  
 of physical locations at which memory errors were detect-  
 ed (determined by the logical-to-physical mapping soft-  
 ware) with the set of various predetermined physical  
 memory locations at which the BIST routine generated  
 errors.

B.

statement of purpose or intended use for the invention,  
 because 'decoding' is the essence or a fundamental charac-  
 teristic of the claimed invention.").

1 On appeal, Mr. Jasinski also argues that Adams fails to disclose the generation of "multiple simulated memory fails at various predetermined locations" as required by the first step of claim 1. On appeal, the government contends that we ought not consider this distinction between Adams and the claims at issue because Mr. Jasinski did not raise the issue below. On remand, however, should prosecution continue, Mr. Jasinski would be free to argue this distinction.

## REVERSED AND REMANDED.

6 IN RE: ERIC JASINSKI

physical memory *locations* as claimed, and thus does not anticipate. Adams nowhere indicates that "failure analysis" would include defective logical-to-physical mapping software, and it also fails to explain how that analysis would be performed. Although some of the government's arguments appear to suggest that the claims at issue may have been obvious, that issue is not before us on appeal. The only rejection made by the examiner and affirmed by the Board is anticipation by a single reference. That reference, Adams, simply does not anticipate. According-ly, the decision of the Board is



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
13/144,385 07/13/2011 Hans Maarten Stokking 11-905-WO-US 5301

20306 7590 06/11/2015
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER

DUONG, OANH

ART UNIT PAPER NUMBER

2441

MAIL DATE DELIVERY MODE

06/11/2015

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 13/144,385	<b>Applicant(s)</b> STOKKING ET AL.	
	<b>Examiner</b> OANH DUONG	<b>Art Unit</b> 2441	<b>AIA (First Inventor to File) Status</b> No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 02/17/2015.  
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.
- 2a)  This action is **FINAL**.                                    2b)  This action is non-final.
- 3)  An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims\***

- 5)  Claim(s) 1,3-21 and 23 is/are pending in the application.  
5a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 6)  Claim(s) \_\_\_\_\_ is/are allowed.
- 7)  Claim(s) 1, 3-21 and 23 is/are rejected.
- 8)  Claim(s) \_\_\_\_\_ is/are objected to.
- 9)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

\* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).

**Application Papers**

- 10)  The specification is objected to by the Examiner.
- 11)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

**Certified copies:**

- a)  All    b)  Some\*\*    c)  None of the:
  - 1.  Certified copies of the priority documents have been received.
  - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)  
Paper No(s)/Mail Date 03/30/2015
- 3)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 4)  Other: \_\_\_\_\_.

### **DETAILED ACTION**

The present application is being examined under the pre-AIA first to invent provisions.

1. Claims 1 and 3-21 are presented for examination.  
Claims 2 and 22 have been cancelled.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5 and 6 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

It is not clear what applicant intended to claim by reciting "the two or more session initiation requests being different from the composition session." It is clearly

Art Unit: 2441

seen that request(s) cannot be a (composition) session, or request(s) is different from the session.

4. Claims 1, 3-8 and 10-21 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Jansson et al (hereafter, "Jansson"), US 2008/0089344 A1.

Regarding claims 1 and 13, Jansson teaches a method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier (i.e., *a globally unique correlation identifier*) for associating sessions in the network (i.e., *creating a globally unique correlation identifier, page 1 paragraph [0009]*);

exchanging the composition session identifier between a user equipment and the network element a first time (i.e., *exchange between parties, the globally unique correlation identifier, page 1 paragraph [0008]*);

associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time (i.e., *the exchange of the globally unique correlation ID provides the ability to associate and correlate independent sessions, page 2 paragraph [0018]*), wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with either the user equipment or a second user

Art Unit: 2441

equipment different from the user equipment (i.e., page 2 paragraphs [0018]-[0033])  
,and

initiating a composition session (i.e., session 36), the composition session being a signaling session for facilitating management of the two or more sessions (i.e., sessions 38 and 39) and exchanging the composition session identifier between the user equipment and the network element, the composition session (i.e., being different from the two or more associated sessions (i.e., *create and exchange between parties globally unique correlation identifier during SIP session setup, page 1 paragraph [0008] and page 2 paragraphs [0058]-[0059], and figs 1 and 4*)

Regarding claims 3 and 14, Jansson teaches the method according to claim 1, wherein the method further comprises:

the user equipment generating the composition session identifier (i.e., page 1 paragraph [0016]-[page 2 paragraph [0033]); and

sending a request for initiating the composition session from the user equipment to the network element, the request comprising the composition session identifier (i.e., page 1 paragraph [0016]-[page 2 paragraph [0033]).

Regarding claim 4, Jansson teaches the method according to claim 1, wherein the method further comprises:

sending a request for initiating the composition session from the user equipment to the network element (i.e., page 2 paragraph [0059]); the network element generating

Art Unit: 2441

the composition session identifier in response to the receipt of the request for initiating the composition session (i.e., page 2 paragraph [0059]); and the network element sending the composition session identifier to the user equipment (i.e., Fig. 1 paragraph [0059]).

Regarding claim 5, Jansson teaches the method according to claim 1, wherein the method further comprises:

the user equipment initiating the two or more associated sessions by sending two or more session initiation requests for a session to the network element, each request comprising the composition session identifier (i.e., page 4 paragraphs [0083]-[0084]), the two or more session initiation requests being different from the composition session (i.e., page 3 paragraphs [0020]-[0058]).

Regarding claim 6, Jansson teaches the method according to claim 1, wherein the method further comprises:

the network element initiating the two or more associated sessions by sending two or more requests for a session to the user equipment, each request comprising the composition session identifier (i.e., page 4 paragraph [0091]), the two or more session initiation requests being different from the composition session (i.e., TABLE 3 page 3 paragraphs [0020]-[0058] and page 4 paragraphs [0083]-[0084]).



Art Unit: 2441

Regarding claim 7, Jansson teaches the method according to claim 3, wherein the request for initiating the composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers (i.e., page 2 paragraph [0059]).

Regarding claim 8, Jansson teaches the method according to claim 5, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (COD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier (i.e., page 2 paragraph [0018]).

Regarding claim 10, Jansson teaches the method according to claim 1, wherein the network further comprises storage, the method further comprising: the network element storing the composition session identifier and two or more associated session identifiers in the storage (i.e., page 2 paragraph [0059]).

Art Unit: 2441

Regarding claim 11, Janson teaches the method according to claim 1, the method further comprising: modifying the composition session, wherein modifying the composition session comprises at least one of (i) terminating or modifying one or more sessions in the composition session, or ii) transferring one or more sessions from the composition session to a further composition session or outside the composition session (i.e., page 4 paragraph [0085]).

Regarding claim 12, Jansson teaches the method according to claim 1, wherein the network is an IP Multimedia Subsystem (IMS) network comprising an IMS core connected to a Service Control Function (SCF), wherein the SCF is configured for managing associated sessions between the network and the User Equipment (i.e., Fig. 1).

Regarding claim 15, Jansson teaches the user equipment according to claim 14, wherein the user equipment is configured to initiate the composition session (i.e., Fig. 1).

Regarding claims 16-17, those claims recite limitations that are similar to claims 10-11, same rationale of rejection is applicable.

Regarding claim 18, Jansson teaches the network element according to claim 16, the network element further comprising: an ID generator configured to generate the composition session identifier (i.e., page 1 paragraph [0016]).

Regarding claim 19, this claim recite a computer program product comprising software code portions configured for, when run in the memory of a user equipment or a network element, executing the method steps according to claim 1; same rationale of rejection is applicable.

Regarding claim 20, Jansson teaches the method according to claim 4, wherein the request for initiating a composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers (i.e., page 2 paragraph [0059]).

Regarding claim 21, Jansson teaches the method according to claim 6, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (COD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications

Art Unit: 2441

Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier (i.e., page 2 paragraph [0018]).

5. Claim 9 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Jansson in view of Hoffpauir, US 2010/0121956 A1.

Regarding claim 9, Jansson teaches the method according to claim 1.

Jansson does not teach wherein combined streams of the two or more associated sessions are presented to the user as a personalized composed multimedia stream.

Hoffpauir teaches system wherein at least one session may be created at a server (seen in abstract). Hoffpauir teaches wherein combined streams of the two or more associated sessions are presented to the user as a personalized composed multimedia stream (i.e., page 4 paragraph [0037]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Jansson to present combined streams of the associated sessions to the user as a personalized composed multimedia stream as taught by Hoffpauir. One would be motivated to do so allow single stream to be presented to the user regardless of how many physical endpoints are used in the multimedia service processing (i.e., Hoffpauir, page 4 paragraph [0038]).

Art Unit: 2441

6. Claim 23 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Jansson in view of Bugenhagen et al. (hereafter, "Bugenhagen"), US 8,289,965 B2.

Regarding claim 23, Jansson teaches the method of claim 1.

Jansson does not explicitly teach wherein the method further comprises modifying the composition session, wherein modifying the composition session comprises at least one of (i) modifying at least one of the two or more sessions based on a determined change in bandwidth availability or (ii) selectively pausing data streams of the two or more sessions in response to a detection of an incoming call destined for the user equipment.

Bugenhagen teaches a method for establishing a communication session includes receiving a request to initiate a communications session (seen in abstract). Bugenhagen teaches modifying the composition session, wherein modifying the composition session comprises at least one of (i) modifying at least one of the two or more sessions based on a determined change in bandwidth availability or (ii) selectively pausing data streams of the two or more sessions in response to a detection of an incoming call destined for the user equipment (i.e., col. 9 lines 6-18 and 41-63).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Jansson to modify the composition session comprises at least modifying at least one of the two or more sessions based on a determined change in bandwidth availability as taught by Bugenhagen. One would be

Art Unit: 2441

motivated to do so to offer improvements for initiating and controlling communications sessions (i.e., Bugenhagen, col. 1 lines 21-23).

### ***Response to Arguments***

7. Applicant's arguments filed 02/17/215 have been fully considered but they are not persuasive.

In the remarks, Applicants argued in substance that

(A) Prior art (i.e., Janson) does not disclose signaling session for facilitating the management of the media sessions, the media sessions must be continuously screened and individually probed to manage the sessions.

As to point (A),

First, the statements "for facilitating management of the two or more sessions" in claims 1 and 13 are interpreted to be statements of intended use since no actual management is claimed.

Second, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the media sessions must be continuously screened and individually probed to manage the sessions") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As a result, Janson, in page 1 paragraph [0008], does teach signaling session (i.e., SIP session) as broadly cited in the claim(s).

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OANH DUONG whose telephone number is (571)272-3983. The examiner can normally be reached on Monday- Friday, 9:30PM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2441

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OANH DUONG/  
Primary Examiner, Art Unit 2441



<b>Notice of References Cited</b>	Application/Control No. 13/144,385	Applicant(s)/Patent Under Reexamination STOKKING ET AL.	
	Examiner OANH DUONG	Art Unit 2441	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A US-9,042,378 B2	05-2015	Rasanen, Juha	370/354
*	B US-8,289,965 B2	10-2012	Bugenhagen et al.	370/392
*	C US-7,817,648 B2	10-2010	Rasanen, Juha	370/401
	D US-			
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			

**FOREIGN PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

**NON-PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)				
	U				
	V				
	W				
	X				

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	13144385
	Filing Date	2011-07-13
	First Named Inventor	Hans Maarten Stokking
	Art Unit	2441
	Examiner Name	Oanh Duong
	Attorney Docket Number	11-905-WO-US

U.S. PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

U.S. PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

Add

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> j	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
/O.D./	1	CN 1732665 A	CN	A	2008-02-08	Cisco Technology, Inc. (Corres to WO2004-062229A1)		<input type="checkbox"/>
/O.D./	2	JP 2005-293065	JP		2005-10-20	Sharp Corporation		<input type="checkbox"/>
/O.D./	3	WO 2004-062229 A1	WO	A1	2004-07-22	Cisco Technology, Inc. (Corres to CN1732665A)		<input type="checkbox"/>

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	13144385
	Filing Date	2011-07-13
	First Named Inventor	Hans Maarten Stokking
	Art Unit	2441
	Examiner Name	Oanh Duong
	Attorney Docket Number	11-905-WO-US

If you wish to add additional Foreign Patent Document citation information please click the Add button **Add**

**NON-PATENT LITERATURE DOCUMENTS** **Remove**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1		<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button **Add**

**EXAMINER SIGNATURE**

Examiner Signature	/Oanh Duong/	Date Considered	06/10/2015
--------------------	--------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	13144385		
Filing Date	2011-07-13		
First Named Inventor	Hans Maarten Stokking		
Art Unit	2441		
Examiner Name	Oanh Duong		
Attorney Docket Number	11-905-WO-US		

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Jason S. Kray/	Date (YYYY-MM-DD)	2015-03-30
Name/Print	Jason S. Kray	Registration Number	66,926

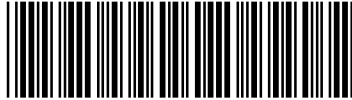
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

<b>Index of Claims</b>  	<b>Application/Control No.</b>  13144385	<b>Applicant(s)/Patent Under Reexamination</b>  STOKKING ET AL.
	<b>Examiner</b>  OANH DUONG	<b>Art Unit</b>  2441

✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	06/09/2015							
	1	✓							
	2	-							
	3	✓							
	4	✓							
	5	✓							
	6	✓							
	7	✓							
	8	✓							
	9	✓							
	10	✓							
	11	✓							
	12	✓							
	13	✓							
	14	✓							
	15	✓							
	16	✓							
	17	✓							
	18	✓							
	19	✓							
	20	✓							
	21	✓							
	22	-							
	23	✓							

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number		13144385	
	Filing Date		2011-07-13	
	First Named Inventor	Hans Maarten Stokking		
	Art Unit		2441	
	Examiner Name	Oanh Duong		
	Attorney Docket Number		11-905-WO-US	

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> j	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1	CN 1732665 A	CN	A	2008-02-08	Cisco Technology, Inc. (Corres to WO2004-062229A1)		<input type="checkbox"/>
	2	JP 2005-293065	JP		2005-10-20	Sharp Corporation		<input type="checkbox"/>
	3	WO 2004-062229 A1	WO	A1	2004-07-22	Cisco Technology, Inc. (Corres to CN1732665A)		<input type="checkbox"/>

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number		13144385
	Filing Date		2011-07-13
	First Named Inventor	Hans Maarten Stokking	
	Art Unit		2441
	Examiner Name	Oanh Duong	
	Attorney Docket Number		11-905-WO-US

If you wish to add additional Foreign Patent Document citation information please click the Add button **Add**

**NON-PATENT LITERATURE DOCUMENTS** **Remove**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1		<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button **Add**

**EXAMINER SIGNATURE**

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.



**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	13144385		
Filing Date	2011-07-13		
First Named Inventor	Hans Maarten Stokking		
Art Unit	2441		
Examiner Name	Oanh Duong		
Attorney Docket Number	11-905-WO-US		

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Jason S. Kray/	Date (YYYY-MM-DD)	2015-03-30
Name/Print	Jason S. Kray	Registration Number	66,926

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



# [12] 发明专利申请公开说明书

[21] 申请号 200380108058.8

[43] 公开日 2006年2月8日

[11] 公开号 CN 1732665A

[22] 申请日 2003.11.26  
 [21] 申请号 200380108058.8  
 [30] 优先权  
     [32] 2002.12.30 [33] US [31] 10/334,546  
 [86] 国际申请 PCT/US2003/038183 2003.11.26  
 [87] 国际公布 WO2004/062229 英 2004.7.22  
 [85] 进入国家阶段日期 2005.6.30  
 [71] 申请人 思科技术公司  
     地址 美国加利福尼亚州  
 [72] 发明人 迈克尔·P·莱波雷  
             斯蒂夫·R·奎特诺  
             保罗·H·基兹瓦特  
             丹尼尔·L·肖尔

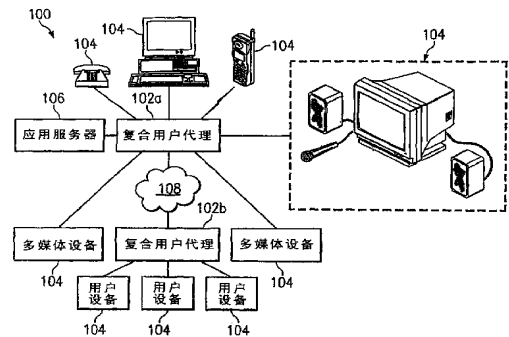
[74] 专利代理机构 北京东方亿思知识产权代理有限  
 责任公司  
 代理人 王 怡

权利要求书 6 页 说明书 13 页 附图 7 页

[54] 发明名称  
 多媒体会话控制器

### [57] 摘要

一种用于管理多媒体会话的方法，包括接收对发起包括第一媒体和第二媒体的多媒体会话的请求。该方法还包括建立与第一设备的第一委托会话以传递第一媒体，并且将第一委托会话与多媒体会话相关联。



1. 一种用于管理多媒体会话的方法，包括：  
接收请求以发起多媒体会话，所述多媒体会话具有第一媒体和第二媒  
5 体；  
建立与第一设备的第一委托会话以传递所述第一媒体；以及  
将所述第一委托会话与所述多媒体会话相关联。
2. 如权利要求 1 所述的方法，其中：  
所述第一媒体是语音；并且  
10 所述第二媒体是即时消息。
3. 如权利要求 1 所述的方法，还包括：  
建立与第二设备的第二委托会话以传递所述第二媒体；以及  
将所述第二委托会话与所述多媒体会话相关联。
4. 如权利要求 3 所述的方法，其中关联所述第一委托会话的步骤包  
15 括：  
建立与远程设备的多媒体会话；以及  
将所述第一委托会话与所述多媒体会话相关联。
5. 如权利要求 4 所述的方法，其中所述远程设备与所述第一设备传  
递第一媒体，与所述第二设备传递第二媒体。
- 20 6. 如权利要求 5 所述的方法，其中所述远程设备进行以下操作：  
建立到第三设备的第三委托会话，以与所述第一设备传递第一媒体；  
以及  
建立到第四设备的第四委托会话，以与所述第二设备传递第二媒体。
7. 如权利要求 1 所述的方法，其中：  
25 所述方法的步骤由复合控制器执行；并且  
所述方法还包括通过执行所述复合控制器的应用来向用户输出所述第  
二媒体。
8. 如权利要求 1 所述的方法，其中所述请求接收自应用编程接口。
9. 一种用于管理多媒体会话的方法，包括：

- 接收第一邀请命令，以发起具有第一媒体和第二媒体的多媒体会话；  
传递第二邀请命令，以建立与第一设备的第一委托会话，从而传递第一媒体；以及  
将所述第一委托会话与所述多媒体会话相关联。
- 5 10. 如权利要求 9 所述的方法，其中：  
所述第一媒体是语音；并且  
所述第二媒体是数据。
11. 如权利要求 9 所述的方法，还包括：  
传递第三邀请命令，以建立与第二设备的第二委托会话，从而传递第二媒体；以及  
10 将所述第二委托会话与所述多媒体会话相关联。
12. 如权利要求 9 所述的方法，其中关联所述第一委托会话的步骤包括：  
建立与远程设备的主会话；以及  
15 将所述第一委托会话与所述主会话相关联。
13. 如权利要求 9 所述的方法，其中所述远程设备与所述第一设备传递第一媒体，与第二设备传递第二媒体。
14. 如权利要求 9 所述的方法，其中所述远程设备进行以下操作：  
建立到第三设备的第三委托会话，以与所述第一设备传递第一媒体；  
20 以及  
建立到第四设备的第四委托会话，以与所述第二设备传递第二媒体。
15. 如权利要求 9 所述的方法，其中所述请求接收自应用编程接口。
16. 如权利要求 9 所述的方法，其中：  
所述邀请消息具有由通信协议指定的格式；以及  
25 所述通信协议包括允许一个或多个通信设备彼此建立通信会话的对等协议。
17. 一种复合控制器，包括：  
第一接口，其可操作来接收请求，以发起具有第一和第二媒体的多媒体会话；

- 第二接口，其可操作来建立与第一委托用户代理的第一委托会话，以及与所述第一委托用户代理交换所述第一媒体；以及
- 处理器，其可操作来将所述第一委托会话与所述多媒体会话相关联。
18. 如权利要求 17 所述的复合控制器，其中：
- 5 所述第一媒体是语音；并且  
所述第二媒体是数据。
19. 如权利要求 18 所述的复合控制器，其中：
- 所述第二接口还可操作来建立与第二委托用户代理的第二委托会话以传递所述第二媒体；以及
- 10 所述处理器还可操作来将所述第二委托会话与所述多媒体会话相关联。
20. 如权利要求 17 所述的复合控制器，其中所述处理器还可操作来建立与远程设备的主会话。
21. 如权利要求 17 所述的复合控制器，还包括可操作来向用户传递
- 15 所述第二媒体的用户接口。
22. 如权利要求 17 所述的复合控制器，其中：
- 所述第一接口包括应用编程接口；并且  
所述请求接收自应用。
23. 包含在计算机可读介质中的逻辑，该逻辑可操作来：
- 20 接收请求以发起多媒体会话，所述多媒体会话具有第一媒体和第二媒体；  
建立与第一设备的第一委托会话以传递所述第一媒体；以及  
将所述第一委托会话与所述多媒体会话相关联。
24. 如权利要求 23 所述的逻辑，其中关联所述第一委托会话的步骤
- 25 包括：  
建立与远程设备的主会话；以及  
将所述第一委托会话与所述主会话相关联。
25. 如权利要求 23 所述的逻辑，其中所述逻辑还可操作来：  
建立与第二设备的第二委托会话，以传递所述第二媒体；以及

将所述第二委托会话与所述多媒体会话相关联。

26. 一种复合控制器，包括：

用于接收请求以发起主多媒体会话的装置，所述主多媒体会话具有第一媒体和第二媒体；

5 用于建立与第一设备的第一委托会话以传递所述第一媒体的装置；以及

用于将所述第一委托会话与所述多媒体会话相关联的装置。

27. 如权利要求 26 所述的系统，还包括：

10 用于建立与第二设备的第二委托会话以传递所述第二媒体的装置；以及

用于将所述第二委托会话与所述多媒体会话相关联的装置。

28. 一种系统，包括：

第一复合控制器；

15 第二复合控制器，其可操作来建立包括至少两种媒体类型的、与所述第一复合控制器的主多媒体会话；

耦合到所述第一复合控制器的第一通信设备，其可操作来在对应于所述媒体类型之一的第一媒体会话中交换媒体，其中所述第一媒体会话与所述主多媒体会话相关联，所述第一媒体会话由所述复合控制器控制；

20 耦合到所述第二复合控制器的第二通信设备，其可操作来在对应于所述媒体类型之一的第二媒体会话中交换媒体，其中所述第二媒体会话与所述主多媒体会话相关联，所述第二媒体会话由所述第二复合控制器控制；以及

25 第三通信设备，其可操作来在对应于所述媒体类型之一的第三媒体会话中交换媒体，其中所述第三媒体会话与所述主多媒体会话相关联，并且所述第三媒体会话由所述复合控制器之一控制。

29. 如权利要求 28 所述的系统，其中：

所述第一和第二复合控制器都包括可操作来输出第一媒体类型的用户接口；

所述第一和第二通信设备可操作来输出第二媒体类型；并且

所述主多媒体会话中的所述至少两种媒体类型包括所述第一和第二媒体类型。

30. 如权利要求 28 所述的系统，其中所述第三通信设备包括所述第一复合控制器的输出设备。

5       31. 如权利要求 28 所述的系统，其中：

所述第三通信设备耦合到所述第一复合控制器；并且

所述第三通信设备所交换的媒体类型不同于所述第一通信设备所交换的媒体类型。

32. 一种用于管理多媒体会话的方法，包括：

10       提供运行会话发起协议的复合控制器以及耦接到所述复合控制器的通信设备；

在所述复合控制器与一个或多个远程设备之间交换第一会话发起协议消息，以建立包括至少两种媒体类型的、与所述远程设备的主多媒体会话；

15       与所述通信设备交换第二会话发起协议消息，以建立包括从所述至少两种媒体类型中选出的至少一种媒体类型的委托媒体会话；以及

将所述委托媒体会话与所述主多媒体会话相关联。

33. 如权利要求 32 所述的方法，其中交换所述第一会话发起协议消息的步骤包括：

20       向所述通信设备传递用于所述委托媒体会话的会话发起协议邀请消息；

从所述通信设备接收用于所述委托媒体会话的会话发起协议 OK 消息；以及

向所述通信设备传递对所述 OK 消息的确认。

25       34. 如权利要求 32 所述的方法，其中交换所述第二会话发起协议消息的步骤包括：

传递用于所述主多媒体会话的会话发起协议邀请消息；以及

接收用于所述主多媒体会话的会话发起协议 OK 消息。

35. 如权利要求 32 所述的方法，其中：



交换所述第一会话发起协议消息的步骤包括：

从所述通信设备接收用于所述委托媒体会话的第一会话发起协议邀请消息；以及

传递第一会话发起协议 OK 消息；并且

5 交换所述第二会话发起协议消息的步骤包括：

响应于接收到所述第一会话发起协议邀请消息，选择用于所述主多媒体会话的一种或多种额外的媒体类型；

向所述一个或多个远程设备传递用于所述主多媒体会话的第二会话发起协议邀请消息；以及

10 接收响应于所述第二会话发起协议邀请消息的第二会话发起协议 OK 消息，其中所述第一会话发起协议 OK 消息是响应于接收到所述第二会话发起协议 OK 消息而被传递的。

## 多媒体会话控制器

### 5 技术领域

本发明一般地涉及电信系统，更具体地说，涉及用于多媒体会话的复合控制器。

### 背景技术

- 10 例如会话发起协议（SIP）之类的分散式通信协议允许不需要集中呼叫控制的通信会话。这些通信协议允许设备彼此直接交换媒体，而不是通过例如呼叫管理器之类的中间媒介来进行交换。每个设备与其对等体之间建立独立的控制和媒体流。

### 15 发明内容

根据本发明，与用于分散式通信协议的用户代理有关的缺点和问题被显著减少或消除。具体地说，本发明的某些实施例提供了处理涉及与一个或多个用户设备的委托（delegated）媒体会话的多媒体会话的复合控制器。这提供了允许多个媒体设备参与一个多媒体会话的方法。

- 20 根据本发明的一个实施例，提供了一种用于管理多媒体会话的方法，其包括接收对发起多媒体会话的请求，所述多媒体会话包括第一媒体和第二媒体。该方法还包括建立与第一设备的第一委托会话以传递所述第一媒体，以及将所述第一委托会话与所述多媒体会话相关联。

- 25 根据本发明的另一实施例，提供了一种复合控制器，其包括第一接口、第二接口和处理器。所述第一接口接收对发起具有第一和第二媒体的多媒体会话的请求。所述第二接口建立与委托用户代理的委托会话，以与所述委托用户代理交换所述第一媒体。所述处理器将所述第一委托会话与所述多媒体会话相关联。

本发明的某些实施例重要技术优点包括增加了媒体和可用于分布式通

信协议的专用特定设备的多样性。对复合控制器的使用允许多个设备的通信能力被合并入同一通信会话中，而无需每种设备建立单独的通信连接。这提高了整体效率，并降低了建立和控制多媒体连接的复杂度。

5 根据下面的附图、描述和权利要求，本发明的其它技术优点将对本领域的技术人员变得非常明显。而且，虽然上面已列举了具体的优点，但是各种实施例可包括所列优点中的全部、一些或一个优点也不包括。

### 附图说明

10 参照下面的描述并结合附图，可获得对本发明及其优点的更全面理解，在附图中：

图 1 示出了根据本发明的一个实施例的通信系统；

图 2 示出了图 1 的系统中的复合控制器；

图 3 示出了可由图 2 的复合控制器存储的会话信息表的示例；

15 图 4 是示出了在用户代理处，响应于请求而发起多媒体会话的方法的一个示例的流程图；

图 5 是示出了用于在复合控制器处发起多媒体会话的方法的示例的流程图；

图 6 是示出了用于在坞接（dock）到复合控制器的设备处发起多媒体会话的方法的示例的流程图；

20 图 7 是用于在复合控制器处接收对于多媒体会话的 SIP 请求的呼叫流示意图；

图 8 是在复合控制器处使用 SIP 来发起多媒体会话的呼叫流示意图；  
以及

25 图 9 是用于在坞接到运行 SIP 的复合控制器的设备处发起多媒体会话的呼叫流示意图。

### 具体实施方式

图 1 所示的通信系统 100 包括复合控制器（CC）102a 和 102b（统称为“CC 102”），用于管理与端点 104 的通信会话。复合控制器 102 建立

与一个或多个其它用户代理的主多媒体会话，其中所述其它用户代理可以是复合型的，也可以不是复合型的。CC 102 在端点 104 之间建立委托媒体会话，并将其与主多媒体会话相关联，以使每个单独的端点 104 处理适当类型的媒体，同时对每个会话的控制由复合控制器 102 处理。于是，复合  
5 控制器 102 允许由 CC 102 所控制的单个多媒体会话中的不同媒体类型终止于不同的端点 104。其媒体会话被 CC 102 管理的端点 104 被称为“坞接端点”。坞接端点 104 可以较持久的方式坞接，从而坞接端点 104 的所有通信可由 CC 102 管理。或者，端点 104 可以根据需要从与 CC 102 相关联的端点集合中有选择地被坞接，以使特定的端点 104 从事自我管理式媒体会  
10 话，除非端点 104 被 CC 102 坞接。这样的端点 104 被称为“可用端点”。

术语“多媒体会话”泛指多种媒体类型的任何交换，并包括媒体的交换和用于管理每个媒体交换的控制或信令信息的任何有关交换。媒体类型可包括语音、视频、数据或任何其它合适形式的信息。信息的交换可根据  
15 允许端点 104 建立与其它端点 104 的独立媒体会话的任何合适的协议而发生。协议可包括会话发起协议（SIP）和任何其它对等、分布式或其它合适的通信协议。在多媒体会话中，CC 102 处理用于坞接端点 104 和其它设备之间的媒体交换的信令和/或控制信息。因为媒体交换是由 CC 102 控制的，所以它们被称为委托媒体会话。CC 102 还可以使用本地应用（称为  
20 “本地媒体会话”）来处理特定类型的媒体。

复合控制器（CC）102 是指建立主多媒体会话的任何硬件和/或软件。在主多媒体会话中，CC 102 管理多个媒体会话，并将多媒体会话中的各种媒体交换指定到一个或多个委托会话。CC 102 维护关于耦合到 CC 102 的可用端点 104 的信息，从而当 CC 102 接收到多媒体请求时，它可以确定  
25 多个可被委托以会话的可用端点 104。CC 102 还可包括处理多媒体会话中的一种或多种媒体类型的合适的硬件、软件或其它组件或应用。例如，CC 102 可以将语音和视频委托给合适的端点 104，而直接处理例如即时消息应用之类的数据交换。在管理单个媒体会话时，CC 102 可与单个的端点 104 或管理对应的端点 104 集合的媒体会话的远程 CC 102 交换信令和/或

控制信息。

端点 104 是指用于与其它端点 104 交换一种或多种媒体的任何设备、应用、硬件和/或软件。例如，端点 104 可包括模拟、数字或因特网协议（IP）电话、个人计算机、视频会议装备、无线通信设备、个人数字助理（PDA）、软件应用，或任何其它合适的设备或应用。在特定实施例中，端点 104 被装备为使用 SIP 来与其它设备协商通信会话。

应用服务器 106 代表任何服务器、处理器、计算机，或其它用于管理 CC 102 的合适组件。应用服务器 106 提供用于 CC 102 的用户接口，其允许用户发起多媒体会话、执行 CC 102 的任何合适的配置或任何合适的控制或管理任务。应用服务器 106 可包括任何合适的输入或输出设备，例如键盘、鼠标、图形用户接口（GUI）。通过提供用于 CC 102 的控制接口，应用服务器 106 的某些实施例允许用户管理多个媒体设备，就像它们是一个多媒体设备一样。

在操作中，CC 102 接收对涉及一种或多种媒体类型的通信会话的请求。CC 102 识别通信请求中的媒体类型，并且基于所述媒体类型，CC 102 识别能够处理每种媒体的可用端点 104。CC 102 还可在本地媒体会话中直接处理特定的媒体类型。当 CC 102 尝试发起与所选择的端点 104 的委托媒体会话时，CC 102 可以回复通信请求的发送者，向其表明：CC 102 正在尝试建立会话。为了建立委托媒体会话，CC 102 建立与端点 104 的控制连接，使得 CC 102 可以控制通过端点 104 的媒体交换。一旦建立了与端点 104 的委托媒体会话，CC 102 就建立与通信请求的发送者的主多媒体会话。然后，端点 104 在 CC 102 所管理的委托会话中交换媒体，而 CC 102 在本地媒体会话中交换媒体。

CC 102 也可以发起多媒体会话。CC 102 的用户发起对多媒体通信的请求。响应于该请求，CC 102 通过参考所存储的信息或通过询问可用端点 104 以确定它们的能力，来确定哪些媒体类型可用于委托或本地媒体会话。一旦可用媒体类型已被探知，则 CC 102 就将包括对每个所选媒体类型的请求的多媒体会话请求传递给所选择的一个或多个目的地。如果通信请求被接受，则 CC 102 建立任何委托会话和本地会话，从而端点 104 和/

或 CC 102 可开始与目的地交换媒体。

在多媒体会话期间，CC 102 也可以添加或删除特定的媒体类型。例如，如果端点 104 的用户希望交换视频，则用户之一可传递视频请求。CC 102 接收对添加媒体类型的请求，确定该媒体是否能在委托或本地媒体会话中处理，并且建立合适类型的会话。类似地，CC 102 可以通过终止用于某媒体类型的委托会话，而从多媒体会话中删除该媒体类型。

CC 102 还可接收来自端点 104 的对发起多媒体通信或添加媒体的请求。当请求是对多媒体会话的请求时，CC 102 接收该请求、认识到该请求来自端点 104，并且（可能和任何其它合适的媒体请求一起）中继该通信请求。例如，如果 CC 102 具有额外的即时消息能力，则 CC 102 可与语音通信请求一起请求即时消息会话。如果该通信请求被接受，则 CC 102 建立与请求端点 104 的委托媒体会话以及任何其它合适的本地或委托会话，这些会话都与主多媒体会话相关联。

图 2 更详细地示出了 CC 102 的具体实施例。CC 102 包括处理器 202、存储器 204，以及接口。接口包括网络接口 206、设备接口 208，以及应用编程接口 212。虽然接口被示为单独的部件，但是应当理解多个接口的功能可共享同一硬件和/或软件。

处理器 202 代表用于处理信息和执行与 CC 102 的功能有关的任何合适的任务的任意硬件和/或软件。处理器 202 可包括微处理器、微控制器、数字信号处理器（DSP），或任何其它合适的硬件和/或软件。存储器 204 代表任何易失性或非易失性信息存储介质，包括磁介质、光介质、本地组件、远程组件、可清除介质、CD-ROM、DVD-ROM，或任何其它合适形式的信息存储设备。

接口代表任何真实或虚拟的端口或连接，包括允许 CC 102 与系统 100 的其它组件交换信息的任何合适的硬件和/或软件。网络接口 206 与其它 CC 102 或未坞接到 CC 102 的端点 104 交换信息，该信息可以包括媒体和/或信令或控制信息。设备接口 208 与坞接到 CC 102 的端点 104 交换信息。设备接口 208 包括端口 210，每个端口 210 都对应于到坞接端点 104 之一的真实或虚拟连接。CC 102 可通过端口 210 来识别所接收的信息的

源，其中所述信息是从端口 210 处接收的。应用编程接口（API）212 代表允许应用服务器 106 控制 CC 102 的操作的连接。

存储器 204 存储 CC 102 用来建立并管理主多媒体会话、委托媒体会话和本地媒体会话的信息。代码 214 代表被包含在计算机可读介质中的指令，所述指令被处理器 202 执行以执行各种任务。介质类型 216 表明可被  
5 CC 102 及其相关联的端点 104 处理的各种媒体。设备标识符 218 唯一地标识了可用于坞接的端点 104。媒体类型 216 和设备标识符 218 可在表或映射中相互关连，所述表或映射将每种媒体类型与一个或多个处理该媒体类型的设备相关联。本地媒体接口 220 代表用于处理 CC 102 本地的特定类型  
10 的媒体会话的指令。会话信息 222 维护活动的主多媒体会话、委托媒体会话和本地媒体会话的记录，还维护本地和委托会话与它们各自的主会话之间的关联。

在操作中，CC 102 建立并管理主多媒体会话和相关联的委托和本地媒体会话。在接收到来自网络接口 206 的对多媒体会话的请求后，CC 102 首先通过将  
15 该请求与存储在存储器 204 中的媒体类型 216 进行比较，来识别所请求的媒体类型。如果在媒体类型 216 中未发现特定媒体类型，则 CC 102 可使用网络接口 206，将错误消息返回到呼叫者。对于在存储器 204 中发现的媒体类型，CC 102 建立用于每种媒体类型的媒体会话。

为了建立媒体会话，CC 102 首先咨询设备标识符 218 和本地媒体接口  
20 220，以确定用于处理每种媒体的可用资源。CC 102 对由本地媒体接口 220 所支持的媒体类型建立本地媒体会话，并通过在会话信息 222 中存储适当的信息来标识这些会话。CC 102 使用设备接口 208 来接触端点 104，以请求与能够处理剩余媒体类型的端点 104 进行会话。如果请求成功，则  
25 CC 102 建立与所选择的端点 104 的委托媒体会话，并更新会话信息 222 以反映新的委托会话。一旦所有的媒体类型都被分配给委托或本地会话，CC 102 就建立与多媒体通信请求的发送者的主多媒体会话，并更新会话信息 222，从而使委托和本地媒体会话与主会话相关联。CC 102 还可从 API 212 接收各种命令，包括对发起与其它 CC 102 或端点 104 的多媒体会话的请求。

图 3 示出了 CC 102 可用来组织关于端点 104、媒体类型 216 和会话信息 222 的信息的表 300。表 300 对被组织为 4 列的信息进行关联。列 302 列出了用于处理媒体会话的可用设备，如用任意合适的标识符所标识的那样。在所描述的实施例中，设备由因特网协议 (IP) 地址标识。端点 IP 地址 310 标识对应于特定端点 310 的目的地址。本地地址 302 代表用于 CC 102 自身的 IP 地址。

媒体类型 304 表明每个特定媒体类型 304 所关联的设备地址。例如，如果即时消息应用由 CC 102 处理，则特定媒体类型 304 “即时消息”与本地地址 302 相关联。每种媒体类型可与多个设备相关联，从而 CC 102 可以根据需要或希望而建立与任何或所有可用媒体设备的媒体会话。类似地，特定的设备可处理多种媒体。CC 102 可使用媒体类型列 304 和设备地址列 302 中的信息来确定用于处理多媒体通信请求中每种媒体类型的特定设备。

活动会话标识符 306 可根据任何合适的排列 (例如发起会话的顺序) 而被分配。当新的会话被建立和现存的会话被终止时，CC 102 更新活动会话列 306 以反映这些变化。不具有活动媒体会话的设备可被分配以 0 值或被列为不活动。

主会话标识符 308 代表用于与每个活动媒体会话 306 相关联的主多媒体会话的标识符。例如，在涉及语音和视频二者的媒体会话中，两者的媒体会话标识符 306 可与同一主会话标识符 308 相关联。同样，当相关联的媒体会话被发起或终止时，CC 102 更新列 308 以反映新的相关联的媒体会话。

虽然已经描述了表 300 的具体实施例，但是应当理解，CC 102 可使用额外的或不同的信息来建立和管理媒体会话，而且可以任何合适的格式来实现上述组织。例如，信息可被组织在有关的数据库或其它信息格式中。CC 102 可在接收到来自 API 212 或坞接端点 104 的新通信请求时，才发现可用的通信资源，而不是保持对设备能力的持续记录，因此允许信息在将设备添加到 CC 102 或从 CC 102 删除设备时被保存。用于设备和媒体会话的特定标识符也可变化。这种变化并不干扰 CC 102 的基本操作。



图 4 是示出了响应于通信请求，使用 CC 102 来发起多媒体会话的方法的一个示例的流程图 400。在步骤 402，CC 102 接收来自发送者的对发起多媒体通信会话的请求。在步骤 404，CC 102 识别该多媒体请求的媒体类型。在步骤 406，CC 102 选择所述媒体类型之一，并在步骤 408 确定该媒体类型是否被支持。如果所选媒体类型不被支持，则 CC 102 可在步骤 410 向通信请求的发送者返回错误消息。如果所选媒体类型被支持，则 CC 102 继续建立用于该媒体类型的媒体会话。

为了建立媒体会话，CC 102 在步骤 412 确定支持该媒体类型的设备。该设备可以是可用端点 104 或在 CC 102 自身上运行的本地媒体处置器（handler）。然后在步骤 414，CC 102 请求将由 CC 102 控制的委托会话。在本地媒体会话情形下，CC 102 可在步骤 414 启动该应用。然后在步骤 416，CC 102 确定对委托会话的请求是否被接受。如果请求被接受，则 CC 102 在步骤 418 建立与该设备的委托会话。如果请求被驳回（由于通信设备中的错误或故障或任何其它原因），CC 102 在步骤 420 尝试定位到支持该媒体类型的另一设备。如果定位到了另一设备，则在步骤 414，CC 102 尝试建立与该设备的媒体会话。否则，CC 102 确定该媒体类型不被支持，并且在步骤 410 发送错误消息。

当用于所选媒体类型的媒体会话被建立后，在步骤 422，CC 102 确定是否存在未被分配到媒体会话的剩余媒体类型。如果存在剩余媒体类型，则 CC 102 从步骤 406 开始，继续建立用于所述媒体类型的媒体会话。否则，CC 102 建立与目的地的主多媒体会话。

在步骤 424，CC 102 传递对多媒体通信请求的接受信息。该接受信息可包括错误消息或其它表明特定媒体类型不被支持的指示。在步骤 426，CC 102 发起用于委托会话的控制信息交换，并且在步骤 428，基于所述控制信息来发起设备之间的媒体交换。

图 5 是示出了由用户发起的、用于使 CC 102 建立与目的地的多媒体会话的请求的流程图 500。在步骤 502，CC 102 接收对发起多媒体会话的命令。该请求可以通过 API 212 或端点 104 而由用户发起的，例如当呼叫者拿起电话的话筒并拨号时。或者，该请求可由 CC 102 的子例程、应

用服务器 106 上的应用或任何其它合适的控制器自动发起。用户或通信请求的发起者可指定具体的媒体类型，或允许根据默认值、根据 CC 102 能够处理的媒体类型或根据任何其它合适的方法来选择媒体类型。对发起通信的请求还包括通信连接的目的地。

5            在一个实施例中，CC 102 通过在步骤 504 请求端点 104 的能力来确定可用媒体类型。在步骤 506，CC 102 接收任意坞接设备的能力。在可替换实施例中，对多媒体会话的请求的发起者可指定媒体类型，该媒体类型可根据默认值而被选择，或通过与目的地通信来确定通信另一端所支持的媒体类型而被确定。一般地，CC 102 可使用任何适当的方法来选择媒体类型。

10

一旦 CC 102 通过任意一种上述方法确定了可用的媒体类型，则在步骤 510，CC 102 将对多媒体会话的请求传递到所请求的目的地。如果 CC 102 在步骤 512 接收到接受信息，则在步骤 516，CC 102 建立由 CC 102 控制的委托或本地媒体会话。CC 102 继续建立媒体会话（由从判断步骤 518

15 出发的流代表），直到所有媒体类型都分别与媒体会话相关联。一旦媒体会话被建立，则 CC 102 在步骤 520 向目的地确认多媒体会话，并在步骤 522 向各个设备确认它们各自的委托会话。然后，设备可以开始在由 CC 102 控制的本地和委托媒体会话中交换媒体。

图 6 是示出了用于从坞接到 CC 102 的设备发起多媒体会话和用于向

20 现存多媒体会话添加新的媒体类型的方法的一个示例的流程图 600。在步骤 602，CC 102 接收来自坞接端点 104 的、对发起与目的地的通信连接请求。在步骤 604，CC 102 确定什么额外媒体对通信可用。或者，坞接端点 104 的用户可指定某些媒体类型作为通信请求的一部分。一旦媒体类型被确定，则在步骤 606，CC 102 将多媒体会话请求传递到所选目的地。然后

25 在步骤 608，CC 102 接收来自目的地的接受信息。

然后，对于每种所请求的媒体类型，CC 102 建立委托或本地媒体会话。在步骤 610，CC 102 选择媒体类型。在步骤 612，CC 102 建立委托或本地媒体会话。判断步骤 614 继续建立媒体会话的循环，直到多媒体会话的所有媒体类型都与媒体会话相关联。当所有媒体会话都被建立时，在步

骤 616, CC 102 建立与目的地的主多媒体会话。

在多媒体会话期间, CC 102 可向多媒体会话添加一种或多种媒体。对媒体类型的添加或减少的请求可例如经由 API 222 而直接从用户处接收到, 或经由网络接口 206 而从远程设备接收到。下面的描述给出了从 CC 102 的用户接收添加请求的示例, 但是一般地, 添加或减少请求可以任何合适的方式被接收。在步骤 618, CC 102 从 API 212 接收添加媒体的请求。在步骤 620, CC 102 识别本地或坞接设备来处理该媒体类型。然后在步骤 622—626, CC 102 建立与该设备的媒体会话。

在步骤 622, CC 102 请求与所选设备的新委托会话。CC 102 在步骤 624 接收来自所选设备的接受信息, 并在步骤 626 建立与该设备的委托会话。然后在步骤 628, CC 102 使用多媒体会话的通信连接发送对添加新媒体的请求。在步骤 630, CC 102 接收来自目的地的接受信息, 并在步骤 632 将新媒体会话与主多媒体会话相关联。如果来自 API 212 的添加请求包括多个媒体类型, 则 CC 102 可以对每种额外的媒体类型重复步骤 620 到 632。

在某些情形下, 目的地设备或坞接设备可能由于故障、不支持所选媒体或其它适当理由而拒绝对通信连接的请求。在此情形下, CC 102 可发送错误消息到尝试向现存多媒体会话添加媒体的一方, 不论该方是 CC 102 的用户还是目的地 CC 102 或端点 104 的用户。

图 7—9 是示出了在 SIP 环境下, CC 102 的操作示例的呼叫流示意图, 具体地说, 示出了 CC 102 与其它设备交换的 SIP 消息。SIP 术语“用户代理”是指处理特定媒体类型的端点 104。图 7 示出了到使用 SIP 的 CC 102 的特定实施例的传入多媒体呼叫的呼叫流 700 的示例。呼叫流 700 涉及源用户代理(源 UA) 702, 其发送多媒体请求到具有两个坞接设备(语音委托用户代理(语音委托 UA) 706 和视频委托用户代理(视频委托 UA) 708)的复合控制器(CC) 704。源 UA 702 代表 CC 704 与之通信的另一端点 104 或 CC 102。“源”是指这样的事实, 即 UA 702 是对发起多媒体会话的请求的发出者; 当 UA 702 接收来自 CC 704 的对发起多媒体会话的请求时, 它也可以被称为“目的地 UA” 704。

CC 704 从源 UA 702 接收用于涉及语音、视频和即时消息这 3 种媒体类型的多媒体会话的邀请消息 710。当 CC 704 尝试建立用于语音和视频的适当的委托会话时，它作出临时的“尝试”响应 711。在所示实施例中，CC 102 在本地处理即时消息媒体。

5        为了建立委托语音会话，CC 704 发送邀请消息 712 到语音委托 UA 706。语音委托 UA 706 响应以接受信息 (OK) 714，CC 704 返回确认 (ACK) 716，表明已接收到 OK 714。一旦该接受信息被确认，就认为委托语音会话已建立。为了建立委托视频会话，CC 704 发送邀请 718 到视频委托 UA 708，接收 OK 720 响应，并用 ACK 722 来确认 OK 720。这就建立了委托视频会话。

10       一旦委托会话被建立，CC 704 就通过向源 UA 702 发送用于多媒体会话的 OK 724 来更新它的临时响应。源 UA 返回 ACK 726，从而在源 UA 702 和 CC 704 之间建立多媒体会话。然后，源 UA 702 与适当的目的地 UA 交换媒体。语音媒体流 728 被传递给语音委托 UA 706，而 CC 704 处理与语音媒体流 728 相关联的相关信令和/或控制信息。视频媒体流 730 被类似地传递到视频委托 UA 708。即时消息媒体流 732 被 CC 704 在本地处理，因此即时消息媒体流 732 终止于 CC 704。

20       图 8 示出了响应于从 API 212 接收的命令或接收命令的其他合适的方法，由 CC 704 发起的多媒体呼叫的呼叫流 800 的示例。响应于接收发起多媒体会话的命令，CC 704 通过传递用于请求核实能力的“无媒体要约 (no media offer)”消息 802 和 810 来确定设备的可用性。语音委托 UA 706 响应以语音 OK 804，表明它支持语音媒体，而视频委托 UA 708 响应以视频 OK 812。CC 102 用 ACK 消息 806 和 814 来向每个设备对语音 OK 804 和视频 OK 812 进行确认。ACK 消息 806 和 814 还包括保持请求，表明 UA 706 和 708 应当在待机模式中等待媒体会话的建立。

25       在 CC 704 探知坞接 UA 706 和 708 的能力后，CC 704 传递邀请消息 816 到目的地 UA 702 (称为“目的地 UA”是因为它接收对发起多媒体会话的请求)。该邀请消息可以包括对应于先前确定的媒体能力的任意媒体类型以及 CC 704 所支持的任意媒体类型，例如所示实施例中的即时消

息。对于该请求中的所有媒体类型，目的地 UA 对该请求响应以 OK 818，如上面结合图 7 所述。响应于 OK 818，CC 704 发送邀请消息 820 到语音委托 UA 706，发送邀请消息 824 到视频委托 UA 708，以建立与这些设备的媒体会话。语音委托 UA 706 响应以语音 OK 824，而视频委托 UA 708 响应以视频 OK 826。CC 704 可进行检查以确定语音 OK 824 和视频 OK 826 与能力检查中的语音 OK 804 和视频 OK 812 相匹配。如果它们不匹配，则 CC 704 可确定 CC 704 的实际能力不匹配到目的地 UA 702 的邀请消息 816 中所表明的能力，在此情形下，必须放弃所尝试的多媒体连接的部分或全部，或者采取其它补救动作。

假设媒体会话都恰好匹配，则 CC 704 通过传递 ACK 消息 828 来向目的地 UA 确认多媒体会话。CC 704 还通过传递 ACK 消息 830 和 832 来向语音委托 UA 706 和视频委托 UA 708 确认委托媒体会话。一旦所有适当的多媒体和委托会话都被接受和确认，则即时消息媒体流 834、语音媒体流 836 和视频媒体流 838 就在目的地 UA 702 和处理每种媒体类型的各个设备之间被建立。

图 9 是由坞接设备发起的多媒体会话的呼叫流 900 的示例，其包括在呼叫期间添加媒体。在所示实施例中，语音委托用户代理 706 将想要发送给目的地 UA 702 的语音邀请消息 902 发送到 CC 704。CC 704 识别出邀请消息 902 是针对目的地 UA 702 的，并且还确定了该呼叫可能希望的任意额外媒体。CC 704 可基于邀请消息 902 本身或基于对它自身能力和/或坞接设备能力的内部确定而作出此确定。在所示实施例中，CC 704 确定即时消息（CC 704 所支持的一种媒体类型）将被添加到语音邀请消息 902 中。

一旦多媒体请求的媒体已被确定，CC 704 就传递多媒体邀请 904 到目的地 UA 702。目的地 UA 702 响应以多媒体 OK 消息 906，然后 CC 704 对多媒体 OK 消息 906 响应以 ACK 消息 908。CC 704 还使用语音 OK 910 来接受来自语音委托 UA 706 的原始语音邀请消息 902，从而建立与语音委托 UA 706 的委托语音会话。语音委托 UA 706 以 ACK 消息 912 来确认委托语音会话。然后，即时消息媒体流 916 和语音媒体流 918 被建立在用于这些媒体类型的各个设备之间。

在多媒体呼叫期间，CC 704 从 API 212 接收对添加视频的请求 918。响应于请求 918，CC 704 发送“无媒体要约”消息 920 到视频委托 UA 708，以核实其视频能力。视频委托 UA 响应以视频 OK 922，CC 704 用 ACK 消息 924 来确认视频 OK 922，在向多媒体会话添加视频时，该消息  
5 将视频委托 UA 708 置于保持状态。

一旦视频委托会话被建立，CC 704 就向目的地 UA 702 传递邀请请求 926，该请求包括来自原始多媒体会话的语音和即时消息，还包括视频。目的地 UA 702 返回多媒体 OK 928，其指定了将在多媒体会话中使用的媒体类型。有时，例如当目的地 UA 702 在语音通信中支持一种语音媒体，  
10 而在视频会议中支持不同类型的语音媒体时，目的地 UA 702 可在响应中请求不同的媒体类型。如方框 930 所示，然后，CC 704 可重新邀请语音委托 UA 进入支持新的语音类型的语音会话，如果新的语音类型不被支持，则 CC 704 可能放弃对添加视频的尝试。

假设多媒体 OK 928 中的所有媒体都被支持，则 CC 704 可添加视频到  
15 多媒体会话。CC 704 发送视频邀请消息 932 到视频委托 UA 708，视频委托 UA 708 响应以视频 OK 934。如果视频 OK 934 不匹配视频 OK 922，则 CC 702 可确定多媒体邀请 926 中传递的视频类型不被支持，并且可能放弃对添加视频的尝试，如方框 936 所示。否则，CC 702 用 ACK 消息 940 向视频委托 UA 708 确认委托视频会话，并用 ACK 消息 938 向目的地 UA  
20 702 确认新的多媒体会话，包括视频。然后，目的地 UA 702 使用视频媒体流 942 来与视频委托 UA 708 交换视频。

虽然利用几个实施例描述了本发明，但是本领域的技术人员可对其作出多种改变、变化、替换、变型以及修改，本发明将包括这些改变、变化、替换、变型以及修改，它们都落在所附权利要求的范围内。

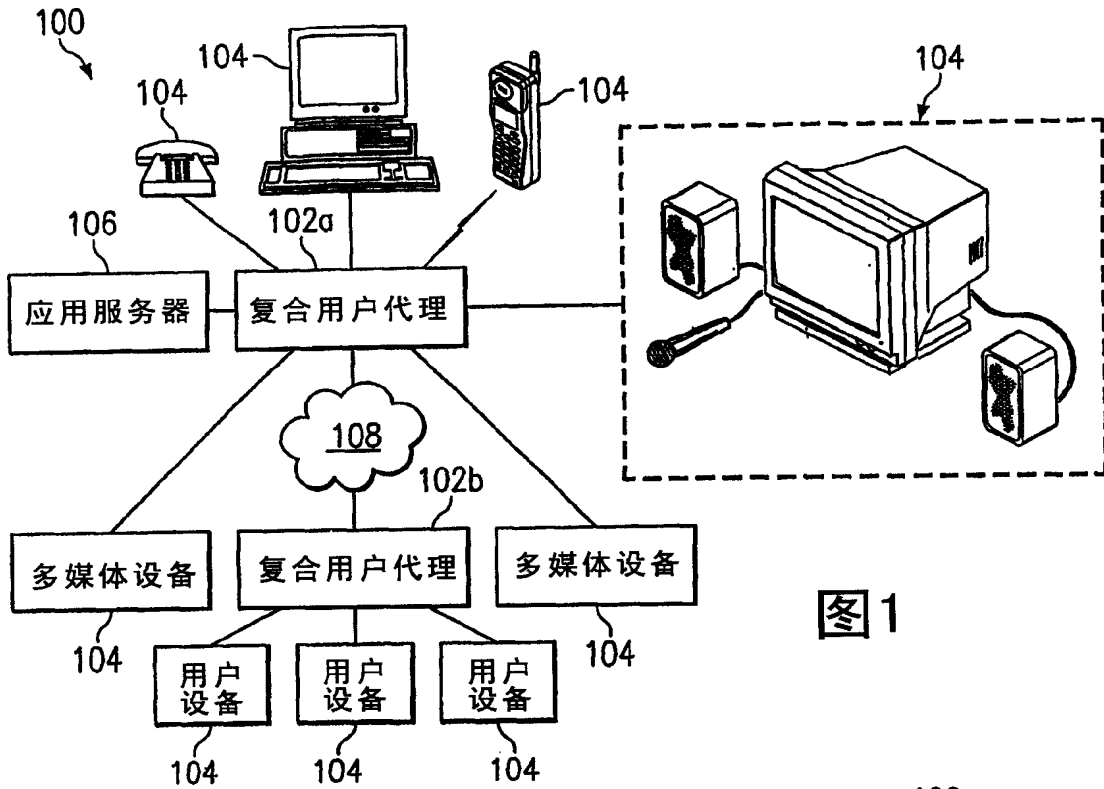


图1

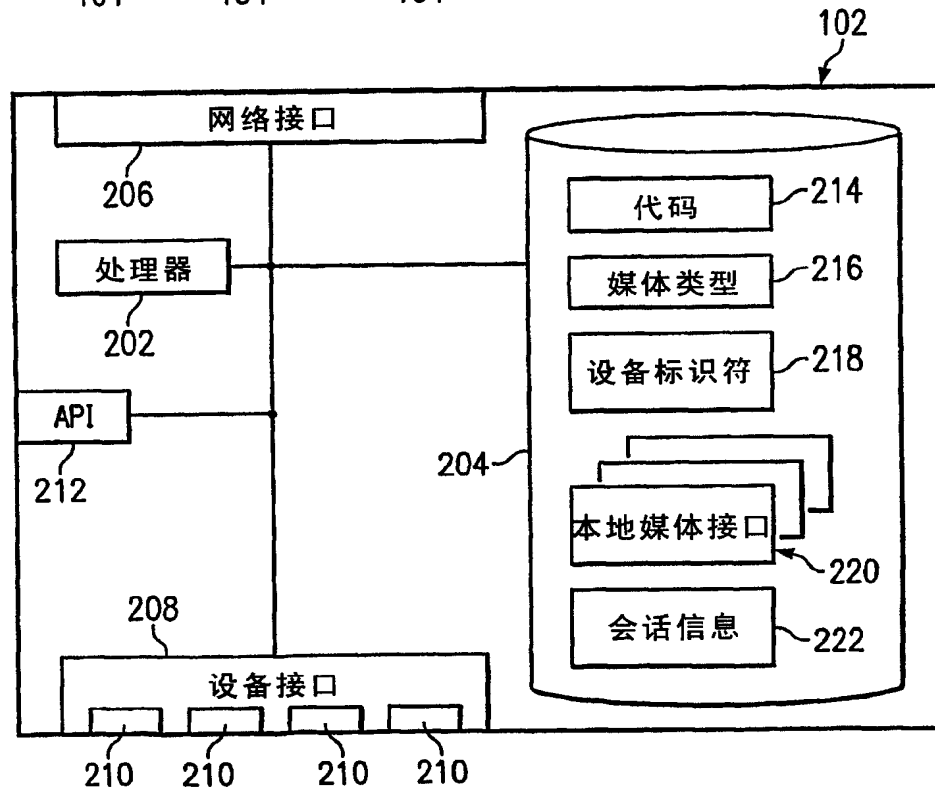


图2

302 设备地址	304 媒体类型	306 活动会话	300 308 相关联的主会话
1.2.3.4	语音	1	1
1.2.3.5	视频	2	1
1.2.3.1 (本地)	即时消息	0	0

图3

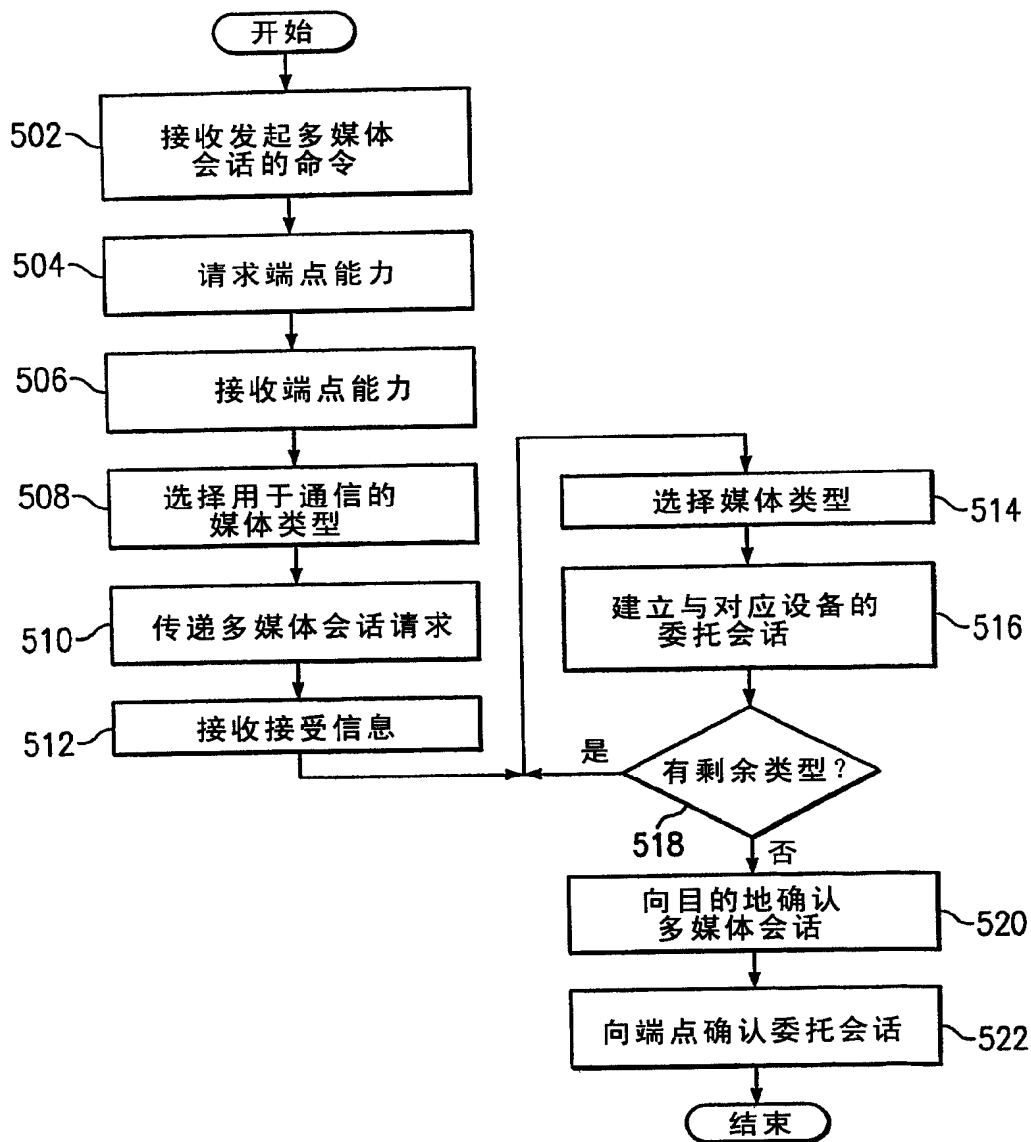


图5



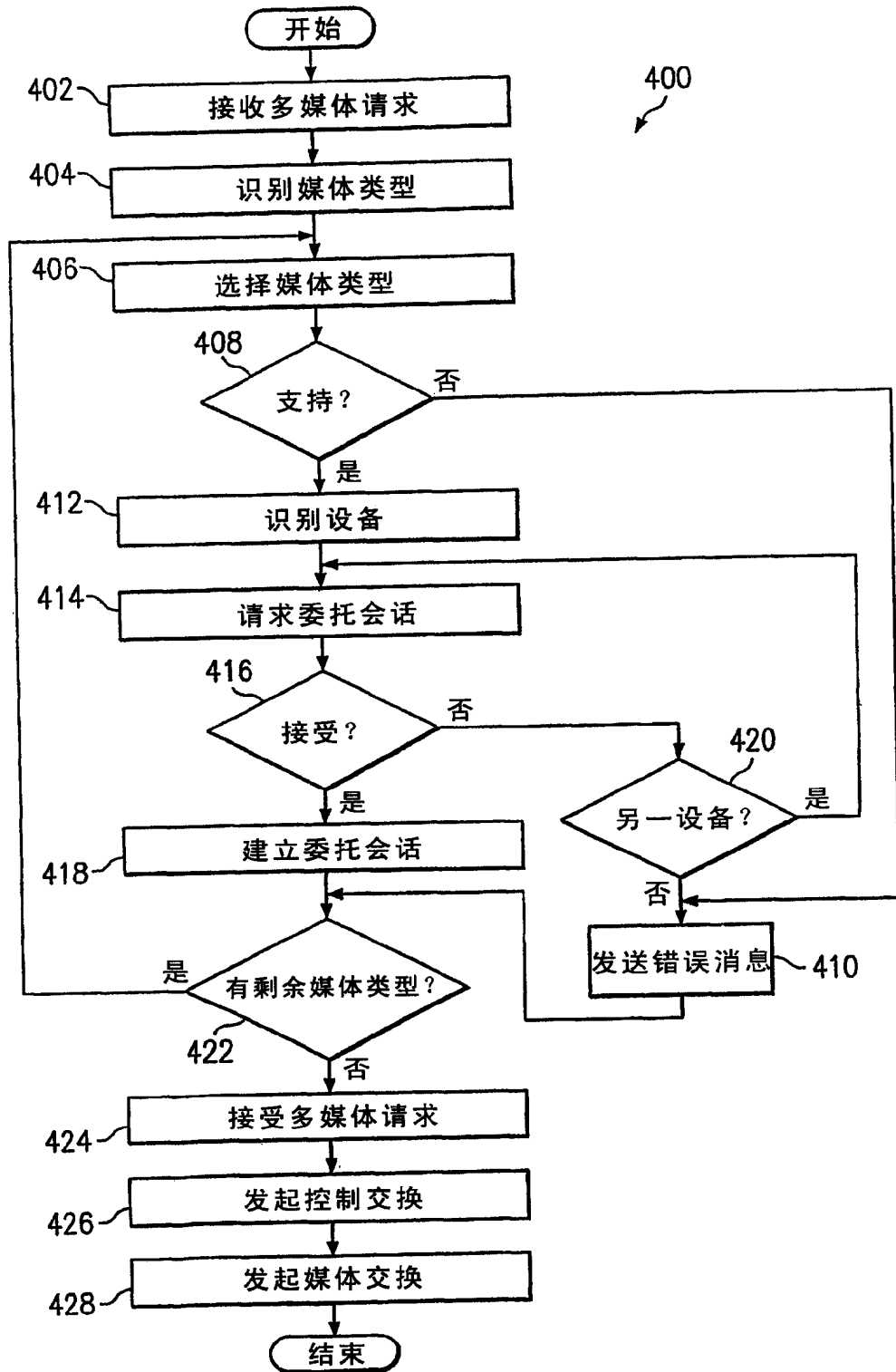


图4

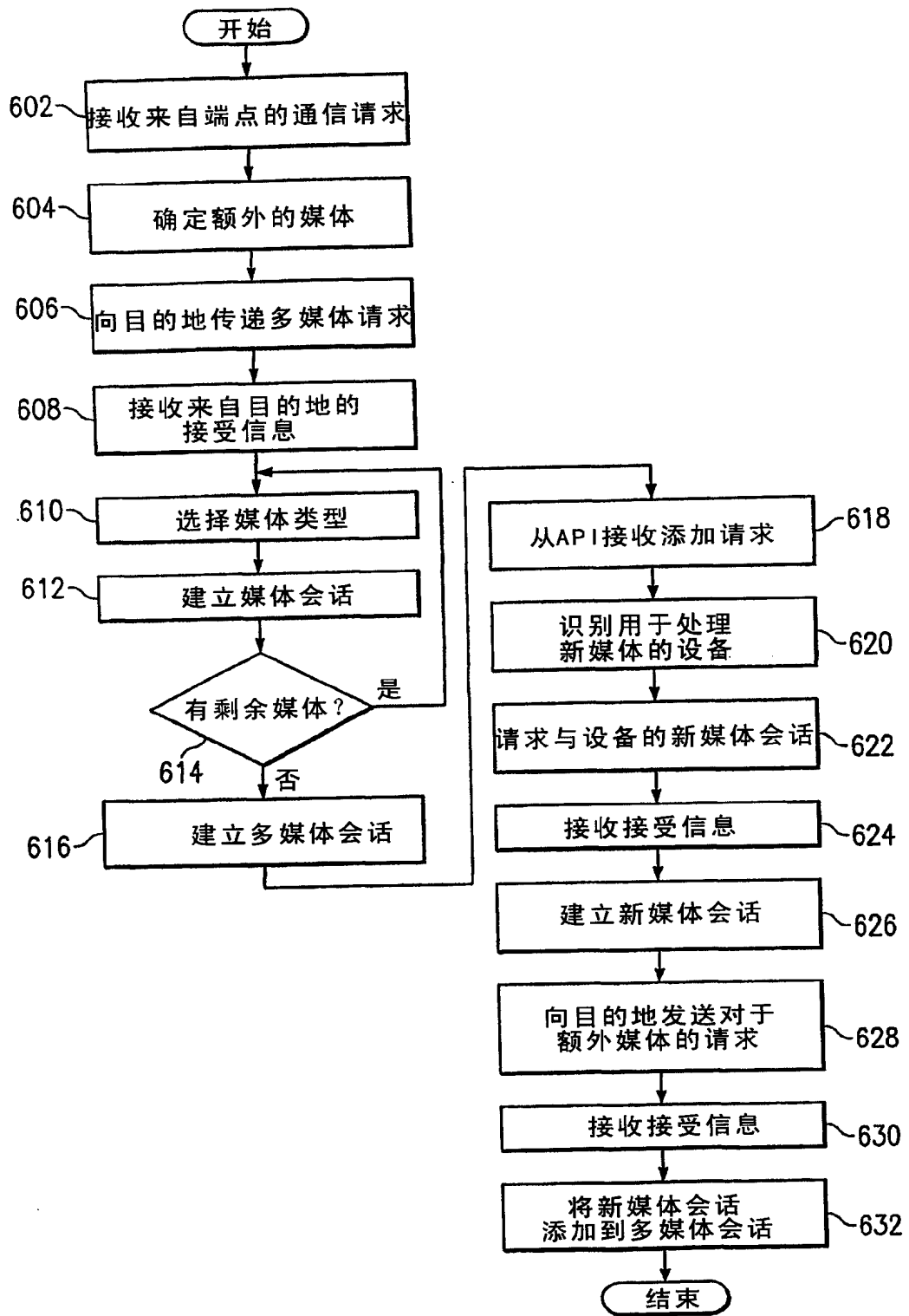


图6

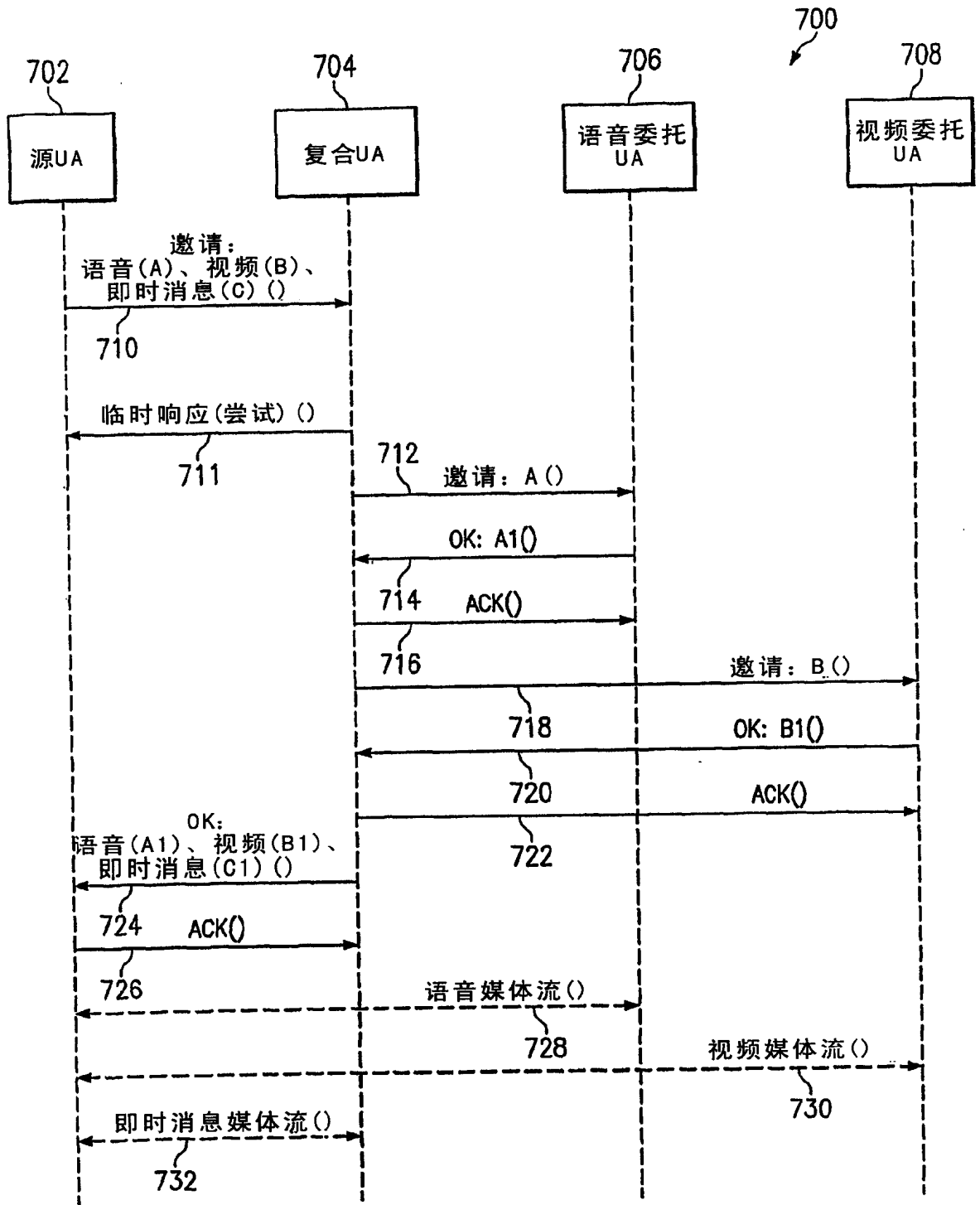


图7

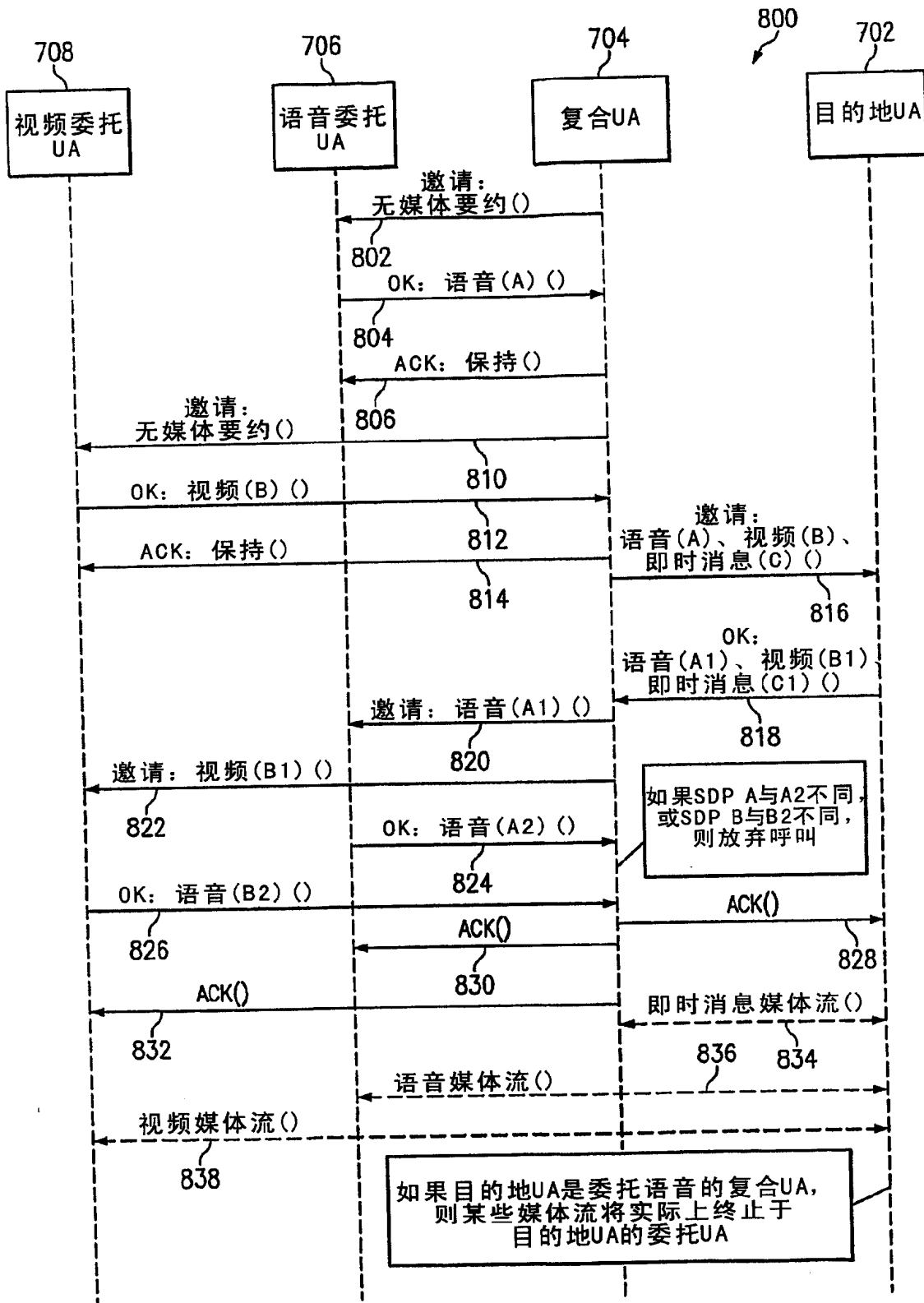


图8

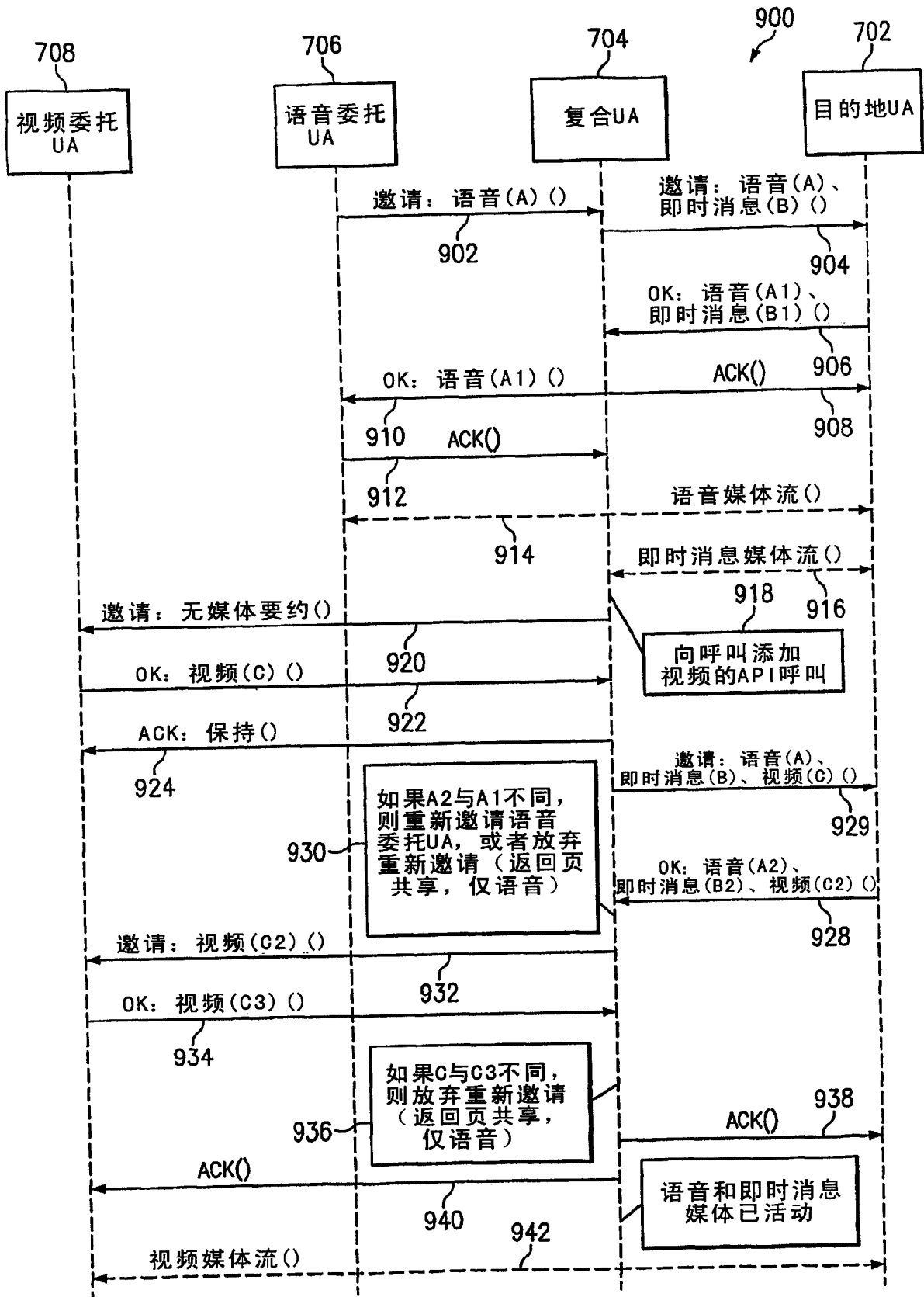


图9

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
22 July 2004 (22.07.2004)

PCT

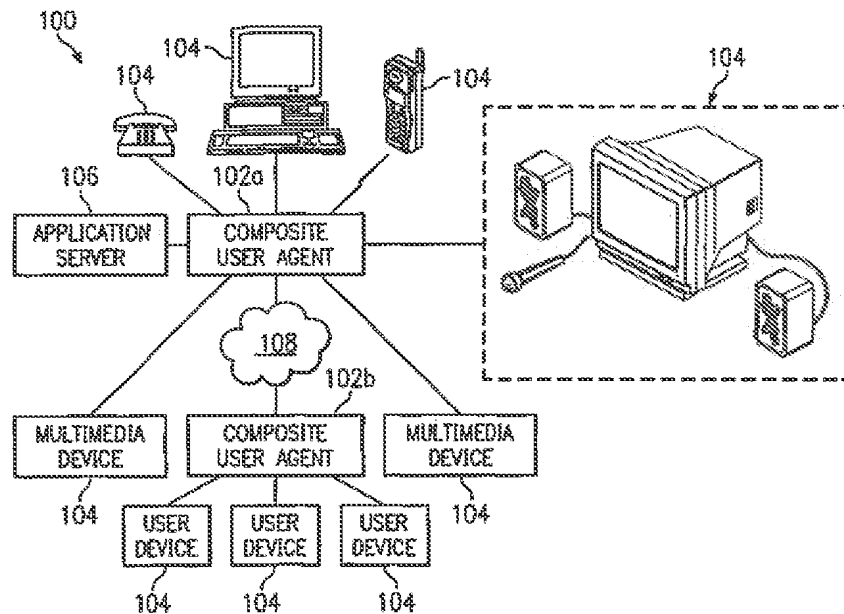
(10) International Publication Number  
WO 2004/062229 A1

- (51) International Patent Classification<sup>7</sup>: H04L 29/06
- (21) International Application Number: PCT/US2003/038183
- (22) International Filing Date: 26 November 2003 (26.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 10/334,546 30 December 2002 (30.12.2002) US
- (71) Applicant: CISCO TECHNOLOGY, INC. [US/US]; 170 West Tasman Drive, San Jose, CA 95134-1706 (US).
- (72) Inventors: LEPORE, Michael, P.; 93 Curtis Avenue, Marlborough, MA 01752 (US). QUATRANO, Stephen, R.; 76 Bloomfield Street, Lexington, MA 02421 (US). KYZIVAT, Paul, H.; 420 Great Road, Unit C6, Acton, MA 01720 (US). SCHAUER, Daniel, L.; 12 Rivermeadow Drive, Chelmsford, MA 01824 (US).
- (74) Agent: SHOWALTER, Barton, E.; Baker Botts L.L.P., 2001 Ross Ave., Dallas, TX 75201-2980 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:  
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations

[Continued on next page]

(54) Title: CONTROLLER FOR MULTIMEDIA SESSIONS



(57) Abstract: A method for managing a multimedia session includes receiving a request to initiate a multimedia session, which includes first media and second media. The method further includes establishing a first delegated session with a first device to communicate the first media, and associating the first delegated session with the multimedia session.

WO 2004/062229 A1



..... as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

**Published:**

..... with international search report

..... before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

## CONTROLLER FOR MULTIMEDIA SESSIONS

TECHNICAL FIELD OF THE INVENTION

This invention relates in general to telecommunication systems, and more particularly to a composite controller for multimedia sessions.

5

BACKGROUND OF THE INVENTION

Decentralized communication protocols, such as Session Initiation Protocol (SIP), allow communication sessions without the need of centralized call control. Such communication protocols allow devices to exchange media with one another directly, rather than through an intermediary, such as a call manager. Each device establishes an independent control and media stream with its peers.

15

SUMMARY OF THE INVENTION

In accordance with the present invention, the disadvantages and problems associated with user agents for decentralized communication protocols have been substantially reduced or eliminated. In particular, certain embodiments of the present invention provide a composite controller that handles a multimedia session that involves delegated media sessions with one or more user devices. This provides a method for allowing multiple media devices to contribute to a single multimedia session.

25

In accordance with one embodiment of the present invention, a method for managing a multimedia session includes receiving a request to initiate a multimedia



session, which includes first media and second media. The method further includes establishing a first delegated session with a first device to communicate the first media, and associating the first delegated session with the multimedia session.

In accordance with another embodiment of the present invention, a composite controller includes a first interface, a second interface, and a processor. The first interface receives a request to initiate a multimedia session having first and second media. The second interface establishes a delegated session with a delegated user agent to exchange the first media with the delegated user agent. The processor associates the first delegated session with the multimedia session.

Important technical advantages of certain embodiments of the present invention include increasing the variety of media and dedicated specialized devices available for distributed communication protocols. The use of composite controllers allows the communicative capabilities of many devices to be incorporated into the same communication session without requiring that each type of device establish a separate communication connection. This increases the overall efficiency and reduces complexity of establishing and controlling multimedia connections.

Other technical advantages of the present invention will be readily apparent to one skilled in the art from the following figures, descriptions, and claims. Moreover, while specific advantages have been enumerated above, various embodiments may include all, some, or none of the enumerated advantages.

BRIEF DESCRIPTION OF THE DRAWINGS

For a more complete understanding of the present invention and its advantages, reference is now made to the following description, taken in conjunction with the accompanying drawings, in which:

FIGURE 1 shows a communication system according to one embodiment of the present invention;

FIGURE 2 shows a composite controller in the system of FIGURE 1;

FIGURE 3 shows an example of a table of session information that may be stored by the composite controller of FIGURE 2;

FIGURE 4 is a flow chart showing one example of a method for initiating a multimedia session at a user agent in response to a request;

FIGURE 5 is a flow chart showing an example of a method for initiating a multimedia session at the composite controller;

FIGURE 6 is a flow chart showing an example of a method for initiating a multimedia session at a device docked to the composite controller;

FIGURE 7 is a call flow diagram for receiving a SIP request for a multimedia session at a composite controller;

FIGURE 8 is a call flow diagram for initiating a multimedia session at a composite controller using SIP; and

FIGURE 9 is a call flow diagram for initiating a multimedia session at a device docked to a composite controller running SIP.

DETAILED DESCRIPTION OF THE INVENTION

FIGURE 1 shows a communication system 100 that includes composite controllers (CCs) 102a and 102b (referred to collectively as "CCs 102") that manage communication sessions with endpoints 104. Composite controller 102 establishes a master multimedia session with one or more other user agents, whether composite or otherwise. CC 102 establishes delegated media sessions between endpoints 104 and associates them with the master multimedia session so that each separate endpoint 104 handles the appropriate type of media while the control of each session is handled by composite controller 102. Composite controller 102 thus allows different media types in a single multimedia session controlled by CC 102 to terminate on different endpoints 104. Endpoints 104 whose media sessions are managed by CC 102 are known as "docked endpoints." Docked endpoints 104 may be docked in a relatively permanent manner, so that all communications for a docked endpoint 104 are managed by CC 102. Alternatively, endpoints 104 may be docked selectively from a collection of endpoints associated with CC 102 as needed, so that a particular endpoint 104 engages in self-managed media sessions unless the endpoint 104 is docked by CC 102. Such endpoints 104 are termed "available endpoints."

The term "multimedia session" refers broadly to any exchange of multiple media types, and includes both the exchange of media and any associated exchange of control or signaling information for managing each media exchange. Media types may include voice, video, data, or any other suitable form of information. Exchanges of information may take place according to any suitable

protocol that permits endpoints 104 to establish independent media sessions with other endpoints 104. Protocols may include session initiation protocol (SIP) as well as any other peer-to-peer, distributed, or other suitable communication protocol. In the multimedia session, CC 102 handles signaling and/or control information for media exchanges between docked endpoints 104 and other devices. Because the media exchanges are controlled by CC 102, they are referred to as delegated media sessions. CC 102 may also handle particular types of media using a local application, which is referred to as a "local media session."

Composite controller (CC) 102 refers to any hardware and/or software that establishes master multimedia sessions. In a master multimedia session, CC 102 manages multiple media sessions and assigns various exchanges of media in the multimedia session to one or more delegated sessions. CC 102 maintains information on available endpoints 104 coupled to CC 102 so that when it receives a multimedia request, CC 102 may determine a variety of available endpoints 104 to which sessions may be delegated. CC 102 may also include suitable hardware, software, or other components or applications that process one or more of the media types in the multimedia session. For example, CC 102 may delegate voice and video to suitable endpoints 104 and directly handle data exchanges, such as instant messaging applications. In managing individual media sessions, CC 102 may exchange signaling and/or control information with individual endpoints 104 or alternatively with a remote CC 102 that manages media sessions for a corresponding collection of endpoints 104.

Endpoints 104 refer to any device, application, hardware, and/or software for exchanging on or more types of media with other endpoints 104. For example, endpoints 104 may include analog, digital, or Internet protocol (IP) telephones, personal computers, video-conferencing equipment, wireless communication devices, personal digital assistants (PDAs), software applications, or any other suitable device or application. In a particular embodiment, endpoints 104 are equipped to negotiate communication sessions with other devices using SIP.

Application server 106 represents any server, processor, computer, or other suitable component for managing CC 102. Application server 106 provides a user interface for CC 102 that allows a user to initiate multimedia sessions, perform any suitable configuration of CC 102, or any other suitable control or management tasks. Application server 106 may include any suitable input or output devices, examples of which include keyboards, mice, graphical user interfaces (GUIs). By providing a control interface for CC 102, certain embodiments of application server 106 allows a user to manage multiple media devices as if they were a single multimedia device.

In operation, CC 102 receives a request for a communication session involving one or more media types. CC 102 identifies the media type in the communication request, and based on the media types, CC 102 identifies available endpoints 104 with the capability of processing each type of media. CC 102 may also handle particular media types directly in a local media session. CC 102 may reply to the sender of the communication request with

an indication that CC 102 is attempting to establish the session while CC 102 attempts to initiate a delegated media session with the selected endpoints 104. To establish a delegated media session, CC 102 establishes a control connection with endpoint 104 allowing CC 102 to control the exchange of media by endpoint 104. Once the delegated media sessions are established with endpoints 104, CC 102 establishes a master multimedia session with the sender of the communication request. Endpoints 104 then exchange media in delegated sessions managed by CC 102, while CC 102 exchanges media in local media sessions.

CC 102 may also initiate multimedia sessions. A user of CC 102 initiates a request for multimedia communications. In response to the request, CC 102 determines what media types are available for delegated or local media sessions by referring to stored information or by querying available endpoints 104 to determine their capabilities. Once the available media types have been ascertained, CC 102 communicates a multimedia session request to a selected destination or destinations that includes requests for each of the selected media types. If the communication request is accepted, CC 102 establishes any delegated sessions and local sessions so that endpoints 104 and/or CC 102 may begin exchanging media with destinations.

During a multimedia session, CC 102 may also add or remove particular types of media. For example, if users of endpoints 104 wish to exchange video, one of the users may communicate a video request. CC 102 receives the request to add a media type, determines whether the media may be handled in a delegated or local media session, and

establishes the appropriate type of session. Similarly, CC 102 may delete a media type from the multimedia session by terminating the delegated session for that media type.

5 CC 102 may also receive requests from an endpoint 104 to initiate multimedia communications or to add media. In the case of a request for a multimedia session, CC 102 receives the request, recognizes that the request comes from an endpoint 104, and relays the  
10 communication request, possibly along with any other suitable media requests. For example, if CC 102 has additional instant messaging capabilities, CC 102 may request an instant message session along with a voice communication request. If the communication request is  
15 accepted, CC 102 establishes a delegated media session with the requesting endpoint 104 as well as any other appropriate local or delegated session, all of which are associated with a master multimedia session.

FIGURE 2 shows a particular embodiment of CC 102 in  
20 greater detail. CC 102 includes a processor 202, a memory 204, and interfaces. Interfaces include a network interface 206, a device interface 208, and an application programming interface 212. Although interfaces are illustrated as separate components, it should be  
25 understood that the functions of interfaces may share the same hardware and/or software.

Processor 202 represents any hardware and/or software for processing information and performing any suitable tasks relating to the functions of CC 202.  
30 Processor 202 may include a microprocessor, microcontroller, digital signal processor (DSP), or any other suitable hardware and/or software. Memory 204

represents any information storage medium, whether volatile or nonvolatile, including magnetic media, optical media, local components, remote components, removable media, CD-ROMs, DVD-ROMs, or any other suitable form of information storage.

Interfaces represent any ports or connections, real or virtual, including any suitable hardware and/or software, that allow CC 102 to exchange information with other components of system 100. Network interface 206 exchanges information, which may include media and/or signaling or control information, with other CCs 102 or endpoints 104 that are not docked to CC 102. Device interface 208 exchanges information with endpoints 104 docked to CC 102. Device interface 208 includes ports 210, each of which corresponds to a real or virtual connection to one of the docked endpoints 104. CC 102 may identify the source of received information by the port 210 from which the information was received. Application programming interface (API) 212 represents a connection allowing application server 106 to control the operation of CC 102.

Memory 204 stores information used by CC 102 to establish and manage master multimedia sessions, delegated media sessions, and local media sessions. Code 214 represents instructions embodied in a computer-readable medium executed by processor 202 to perform various tasks. Media types 216 indicate the various types of media that may be handled by CC 102 and its associated endpoints 104. Device identifiers 218 uniquely identify endpoints 104 available for docking. Media types 216 and device identifiers 218 may be interrelated in a table or map that associates each media



type with one or more devices that handle that media type. Local media interfaces 220 represent instructions for handling particular types of media sessions locally at CC 102. Session information 222 maintains records of active master multimedia sessions, delegated media sessions, and local media sessions, as well as maintaining the association between local and delegated sessions and their respective master sessions.

In operation, CC 102 establishes and manages master multimedia sessions and associated delegated and local media sessions. Upon receiving a request for a multimedia session from network interface 206, CC 102 first identifies the media types requested by comparing the request to media types 216 stored in memory 204. If a particular media type is not found in media types 216, CC 102 may return an error message to the caller using network interface 206. For media types that are found in memory 204, CC 102 establishes media sessions for each media type.

To establish media sessions, CC 102 first consults device identifiers 218 and local media interfaces 220 to determine an available resource for handling each type of media. CC 102 establishes local media sessions for media types supported by local media interfaces 220, and identifies those sessions by storing appropriate information in session information 222. CC 102 contacts endpoints 104 using device interface 208 to request media sessions with endpoints 104 capable of handling the remaining media types. If the request is successful, CC 102 establishes a delegated media session with the selected endpoints 104, and updates session information 222 to reflect the new delegated sessions. Once all of

the media types are allocated to a delegated or local session, CC 102 establishes a master multimedia session with the sender of the multimedia communication request, and updates session information 222 so that the delegated  
5 and local media sessions are associated with the master session. CC 102 may also receive various commands, including requests to initiate multimedia sessions with other CCs 102 or endpoints 104, from API 212.

FIGURE 3 shows a table 300 that CC 102 may use to  
10 organize information about endpoints 104, media types 216, and session information 222. Table 300 associates information organized into four columns. Column 302 lists available devices for handling media sessions, as identified by any suitable identifier. In the depicted  
15 embodiment, devices are identified by an Internet protocol (IP) address. Endpoint IP addresses 310 identify a destination address corresponding to a particular endpoint 310. Local address 302 represents the IP address for CC 102 itself.

Media types 304 indicate the device address with  
20 which each particular media type 304 is associated. For example, if instant message applications are handled by CC 102, the particular media type 304 "instant message" is associated with local address 302. Multiple devices  
25 may be associated with each media type, so that CC 102 may establish media sessions with any or all available media devices as needed or desired. Similarly, a particular device may be able to handle multiple types of media. CC 102 may use the information in media type  
30 column 304 and device address column 302 to determine a particular device to handle each media type in a multimedia communication request.

Active session identifiers 306 may be assigned according to any suitable arrangement, such as the order in which the sessions are initiated. As new sessions are established and existing sessions are terminated, CC 102 updates active session column 306 to reflect the changes. Devices with no active media session may be assigned the value zero or otherwise be listed as inactive.

Master session identifiers 308 represent identifiers for master multimedia session associated with each active media session 306. For example, in a media session that involves both voice and video, both media session identifiers 306 may be associated with the same master session identifier 308. Again, as associated media sessions are initiated or terminated, CC 102 updates column 308 to reflect the new associated media sessions.

Although a particular embodiment of table 300 has been illustrated, it should be understood that CC 102 may use additional or different information to establish and manage media sessions, and such organization may be organized in any suitable format. For example, information may be organized in a relational database or other information format. Rather than keeping a persistent record of device capabilities, CC 102 may discover the available communication resources upon receiving a new communication request from API 212 or a docked endpoint 104, thus allowing the information to be kept current as devices are added to and removed from CC 102. The particular identifiers used for devices and media sessions may vary as well. Such variations do not interfere with the basic operation of CC 102.

FIGURE 4 is a flow chart 400 illustrating one example of a method for initiating a multimedia session

in response to communication request using CC 102. CC 102 receives a request to initiate a multimedia communication session from a sender at step 402. CC 102 identifies the media types for the multimedia request at step 404. CC 102 selects one of the media types at step 406, and determines if that media type is supported at step 408. If the selected media type is not supported, then CC 102 may return an error message to the sender of the communication request at step 410. If the selected media type is supported, CC 102 goes on to establish a media session for that media type.

To establish the media session, CC 102 determines a device supporting the media type at step 412. This device may be an available endpoint 104 or may be a local media handler running on CC 102 itself. CC 102 then requests a delegated session that will be controlled by CC 102 at step 414. In the case of local media sessions, CC 102 may initiate the application at this step 414. CC 102 then determines if the request for the delegated session is accepted at step 416. If the request is accepted, CC 102 establishes the delegated session with the device at step 418. If the request is rejected, either because of error or failure in the communication device or for any other reason, CC 102 attempts to locate another device to support the media type at step 420. If another device is located, CC 102 attempts to establish a media session with that device from step 414. Otherwise, CC 102 determines that the media type is unsupported and sends an error message at step 410.

After the media session for a selected media type is established, CC 102 determines whether there are any remaining media types that are not assigned to a media

session at step 422. If there are remaining media types, CC 102 continues establishing media sessions for the media types from step 406. Otherwise, CC 102 establishes the master multimedia session with the destination.

5 At step 424, CC 102 communicates an acceptance of the multimedia communication request. The acceptance may include error messages or other indications that particular media types are unsupported. CC 102 initiates exchange of control information for the delegated  
10 sessions at step 426, and based on the control information, initiates media exchange between devices at step 428.

FIGURE 5 is a flow chart 500 showing a user-initiated request for CC 102 to establish a multimedia  
15 session with a destination. CC 102 receives a command to initiate a multimedia session at step 502. The request may be user-initiated through API 212 or by an endpoint 104, such as when a caller lifts the handset of a telephone and dials a number. Alternatively, the request  
20 may be initiated automatically by a subroutine of CC 102, an application on application server 106, or any other suitable controller. The user or initiator of the communication request may specify particular media types or may allow the media types to be selected by default,  
25 by the types of media that CC 102 can handle, or by any other suitable method. The request to initiate communications also includes a destination for the communication connection.

In one embodiment, CC 102 determines the available  
30 media types by requesting endpoint 104 capabilities at step 504. CC 102 receives the capabilities of any docked devices at step 506. In alternative embodiments, the

initiator of the request for a multimedia session may specify media types, the media types may be selected by default, or the media types may be ascertained by communicating with the destination to determine supported media types on the other end of the communication. In general, CC 102 may use any appropriate method for selecting media types.

Once CC 102 determines available media types through any of the described methods, CC 102 communicates a request for a multimedia session to the requested destination at step 510. If CC 102 receives an acceptance at step 512, CC 102 establishes delegated or local media sessions controlled by CC 102 at step 516. CC 102 continues to establish media sessions, represented by the flow from decision step 518, until all media types have been associated with a respective media session. Once the media sessions are established, CC 102 acknowledges the multimedia session to the destination at step 520, and acknowledges the individual delegated sessions to their respective devices at step 522. Devices then may begin to exchange media in local and delegated media sessions controlled by CC 102.

FIGURE 6 is a flow chart 600 showing one example of a method for initiating a multimedia session from device docked to CC 102 and for adding new media types to an existing multimedia session. CC 102 receives a request to initiate a communication connection with a destination from docked endpoint 104 at step 602. CC 102 determines what additional media are available for the communication at step 604. Alternatively, the user of docked endpoint 104 may specify certain media types as part of the communication request. Once the media types are

determined, CC 102 communicates a multimedia session request to the selected destination at step 606. CC 102 then receives an acceptance from the destination at step 608.

5 For each requested media type, CC 102 then establishes delegated or local media session. CC 102 selects a media type at step 610. CC 102 establishes the delegated or local media session at step 612. Decision step 614 continues the cycle of establishing media  
10 sessions until all of the media types for the multimedia session are associated with a media session. When all of the media sessions are established, CC 102 establishes the master multimedia session with the destination at step 616.

15 During the multimedia session, CC 102 may add one or more types of media to the multimedia session. An add or drop request for a media type may be received directly from a user, such as via API 212, or from a remote device via network interface 206. The following description  
20 gives an example of receiving a add request from a user of CC 102, but in general, add or drop requests may be received in any suitable manner. CC 102 receives a request to add media from API 212 at step 618. CC 102 identifies a device, whether local or docked, to handle  
25 the media type at step 620. CC 102 then establishes a media session with the device in steps 622-626.

At step 622, CC 102 requests a new delegated session with the selected device. CC 102 receives an acceptance from the selected device at step 624 and establishes a  
30 delegated session with the device at step 626. CC 102 then sends a request to add new media using the communication connection of multimedia session at step

628. CC 102 receives an acceptance from the destination at step 630, and associates the new media session with the master multimedia session at step 632. If the add request from API 212 includes multiple media types, CC 102 may repeat steps 620 through 632 for each additional media type.

In certain cases, a destination device or docked device may refuse a request for a communication connections due to failure, inability to support selected media, or other appropriate reason. In such cases, CC 102 may send an error message to the party attempting to add media to the existing multimedia session, whether that party is the user of CC 102 or the user of a destination CC 102 or endpoint 104.

FIGURES 7-9 are call flow diagrams that illustrate examples of the operation of CC 102 in a SIP environment, and in particular, the SIP messages that CC 102 exchanges with other devices. The SIP term "user agent" refers to an endpoint 104 handling a particular media type. FIGURE 7 shows an example of a call flow 700 for an incoming multimedia call to a particular embodiment of CC 102 that uses SIP. Call flow 700 involves a source user agent (source UA) 702 sending a multimedia request to a composite controller (CC) 704 with two docked devices: a voice delegated user agent (voice delegated UA) 706 and a video delegated user agent (video delegated UA) 708. Source UA 702 represents another endpoint 104 or CC 102 with which CC 704 communicates. "Source" refers to the fact that UA 702 is the originator of the request to initiate the multimedia session; UA 702 may also be referred to as a "destination UA" 704 when receiving a request to initiate a multimedia session from CC 704.



From source UA 702, CC 704 receives an invite message 710 for a multimedia session involving three media types: voice, video, and instant message. CC 704 responds with a provisional "trying" response 711 while  
5 CC 704 attempts to establish the appropriate delegated sessions for voice and video. In the depicted embodiment, CC 102 handles instant message media locally.

To establish the delegated voice session, CC 704 sends an invite message 712 to voice delegated UA 706.  
10 Voice delegated UA 706 responds with an acceptance (OK) 714, and CC 704 returns an acknowledgement (ACK) 716 that OK 714 was received. Once the acceptance is acknowledged, the delegated voice session is considered established. To establish the delegated video session,  
15 CC 704 sends an invite 718 to delegated video UA 708, receives an OK 720 in response, and acknowledges OK 720 with an ACK 722. This establishes the delegated video session.

Once the delegated sessions are established, CC 704  
20 updates its provisional response by sending an OK 724 for the multimedia session to source UA 702. Source UA returns an ACK 726, thus establishing the multimedia session between source UA 702 and CC 704. Source UA 702 then exchanges media with the appropriate destination  
25 UAs. Voice media stream 728 is communicated to voice delegated UA 706, while CC 704 handles associated signaling and/or control information associated with voice media stream 728. Video media stream 730 is similarly communicated to video delegated UA 708.  
30 Instant message media stream 732 is handled locally by CC 704, so instant message media stream 732 terminates on CC 704.

FIGURE 8 shows an example of a call flow 800 for a multimedia call initiated by CC 704 in response to a command received from API 212 or other suitable method of receiving commands. In response to receiving the command to initiate a multimedia session, CC 704 determines availability of devices by communicating "no media offer" messages 802 and 810 requesting verification of capabilities. Voice delegated UA 706 responds with a voice OK 804 indicating that it supports voice media while video delegated UA 708 responds with a video OK 812. CC 102 acknowledges voice OK 804 and video OK 812 with ACK messages 806 and 814 to each device. ACK messages 806 and 814 also include a hold request to indicate that UAs 706 and 708 should wait in standby mode for a media session to be established.

After CC 704 ascertains the capabilities of docked UAs 706 and 708, CC 704 communicates an invite message 816 to destination UA 702 (called "destination UA" because it is receiving a request to initiate a multimedia session). The invite message may include any media types corresponding to the media capabilities previously determined as well as any media types supported by CC 704 such as instant messaging in the depicted embodiment. Destination UA responds to the request with an OK 818 for all of the media types in the request, as described above in conjunction with FIGURE 7. In response to OK 818, CC 704 sends an invite message 820 to voice delegated UA 706 and an invite message 824 to video delegated UA 708 in order to establish media sessions with these devices. Voice delegated UA 706 responds with a voice OK 824, while video delegated UA 708 responds with a video OK 826. CC 704 may check to

make sure that voice OK 824 and video OK 826 match voice OK 804 and video OK 812 from the capabilities check. If they do not match, CC 704 may determine that the actual capabilities of CC 704 do not match the capabilities indicated in invite message 816 to destination UA 702, in which case it may be necessary to fail part or all of the attempted multimedia connection or to take other remedial action.

Assuming the media sessions all match up properly, CC 704 then acknowledges the multimedia session to destination UA by communicating ACK message 828. CC 704 also acknowledges the delegated media sessions to voice delegated UA 706 and video delegated UA 708 by communicating ACK messages 830 and 832. Once all of the appropriate multimedia and delegated sessions are accepted and acknowledged, instant message media stream 834, voice media stream 836, and video media stream 838 are established between destination UA 702 and the respective device handling each media type.

FIGURE 9 is an example of a call flow 900 for a multimedia session initiated by a docked device that includes adding media during the call. In the embodiment depicted, voice delegated user agent 706 sends a voice invite message 902 intended for a destination UA 702 to CC 704. CC 704 identifies the invite message 902 as being intended for destination UA 702, and also determines any additional media that may be desirable for the call. CC 704 may make this determination based on invite message 902 itself or based on an internal determination of its own capabilities and/or capabilities of docked devices. In the embodiment depicted, CC 704 determines that instant messaging, a type of media

supported by CC 704, will be added to voice invite message 902.

5 Once the media for the multimedia request have been determined, CC 704 communicates a multimedia invite 904 to destination UA 702. Destination UA 702 responds with a multimedia OK message 906, which CC 704 then acknowledges with an ACK message 908. CC 704 also accepts the original voice invite message 902 from voice delegated UA 706 with a voice OK 910, thus establishing a delegated voice session with voice delegated UA 706. Voice delegated UA 706 acknowledges the delegated voice session with an ACK message 912. Instant message media stream 916 and voice media stream 918 are then established between the respective devices for those media types.

15 During the multimedia call, CC 704 receives a request 918 to add video from API 212. In response to request 918, CC 704 sends a "no media offer" message 920 to video delegated UA 708 to verify its video capabilities. Video delegated UA responds with a video OK 922, and CC 704 acknowledged video OK 922 with an ACK message 924 that puts video delegated UA 708 on hold while video is added to the multimedia session.

25 Once the video delegated session is established, CC 704 communicates an invite request 926 to destination UA 702 that includes voice and instant message from the original multimedia session as well as video. Destination UA 702 returns a multimedia OK 928 that specifies the media types that will be used in the multimedia session. Sometimes, destination UA 702 may request a different media type in the response, such as when destination UA 702 supports one type of voice media

30

in voice communications and a different type of voice media in videoconferences. As shown in block 930, CC 704 may then re-invite voice delegated UA 902 into a voice session supporting the new type of voice, and if the new type of voice is unsupported, CC 704 may fail the attempt to add video.

Assuming that all media in multimedia OK 928 are supported, CC 704 may add video to the multimedia session. CC 704 sends a video invite message 932 to video delegated UA 708, and video delegated UA 708 response with a video OK 934. If video OK 934 does not match video OK 922, CC 702 may determine that the video type communicated in multimedia invite 926 is unsupported and may fail the attempt to add video as shown in block 936. Otherwise, CC 702 acknowledges the delegated video session to video delegated UA 708 with ACK message 940, and acknowledges the new multimedia session, including video, to destination UA 702 with ACK message 938. Destination UA 702 then exchanges video with video delegated UA 708 using video media stream 942.

Although the present invention has been described with several embodiments, a myriad of changes, variations, alterations, transformations, and modifications may be suggested to one skilled in the art, and it is intended that the present invention encompass such changes, variations, alterations, transformations, and modifications as fall within the scope of the appended claims.

WHAT IS CLAIMED IS:

1. A method for managing a multimedia session, comprising:

5 receiving a request to initiate a multimedia session, the multimedia session having first media and second media;

establishing a first delegated session with a first device to communicate the first media; and

10 associating the first delegated session with the multimedia session.

2. The method of Claim 1, wherein:

the first media is voice; and

the second media is instant messaging.

15

3. The method of Claim 1, further comprising:

establishing a second delegated session with a second device to communicate the second media; and

20 associating the second delegated session with the multimedia session.

4. The method of Claim 3, wherein associating the first delegated session comprises:

25 establishing a multimedia session with a remote device; and

associating the first delegated session with the multimedia session.

30 5. The method of Claim 4, wherein the remote device communicates first media with the first device and second media with a second device.

6. The method of Claim 5, wherein the remote device:

establishes a third delegated session to a third device to communicate first media with the first device; and

establishes a fourth delegated session to a fourth device to communicate second media with the second device.

7. The method of Claim 1, wherein:

the steps of the method are performed by a composite controller; and

the method further comprises outputting the second media to a user by executing an application of the composite controller.

8. The method of Claim 1, wherein the request is received from an application programming interface.

9. A method for managing a multimedia session, comprising:

receiving a first invite command to initiate a multimedia session having first media and second media;

5 communicating a second invite command to establish a first delegated session with a first device to communicate first media; and

associating the first delegated session with the multimedia session.

10

10. The method of Claim 9, wherein:

the first media is voice; and

the second media is data.

15

11. The method of Claim 9, further comprising:

communicating a third invite command to establish a second delegated session with a second device to communicate second media; and

20 associating the second delegated session with the multimedia session.

12. The method of Claim 9, wherein associating the first delegated session comprises:

25 establishing a master session with a remote device; and

associating the first delegated session with the master session.

13. The method of Claim 9, wherein the remote device communicates first media with the first device and second media with a second device.

30



14. The method of Claim 9, wherein the remote device:

establishes a third delegated session to a third device to communicate first media with the first device;  
5 and

establishes a fourth delegated session to a fourth device to communicate second media with the second device.

10 15. The method of Claim 9, wherein the request is received from an application programming interface.

16. The method of Claim 9, wherein:

the invite messages have a format specified by a communication protocol; and  
15

the communication protocol comprises a peer-to-peer protocol allowing one or more communication devices to establish communication sessions with one another.

17. A composite controller, comprising:

a first interface operable to receive a request to initiate a multimedia session having first and second media;

5 a second interface operable to establish a first delegated session with a first delegated user agent to exchange the first media with the first delegated user agent; and

a processor operable to associate the first  
10 delegated session with the multimedia session.

18. The composite controller of Claim 17, wherein:  
the first media is voice; and  
the second media is data

15 19. The composite controller of Claim 18, wherein:  
the second interface is further operable to establish a second delegated session with a second delegated user agent to communicate the second media; and  
20 the processor is further operable to associate the second delegated session with the multimedia session.

20. The composite controller of Claim 17, wherein  
the processor is further operable to establish a master  
25 session with a remote device.

21. The composite controller of Claim 17, further comprising a user interface operable to deliver the second media to a user.

22. The composite controller of Claim 17, wherein:  
the first interface comprises an application  
programming interface; and  
the request is received from an application.

5

23. Logic embodied in a computer readable medium operable to:

receive a request to initiate a multimedia session, the multimedia session having first media and second media;

establish a first delegated session with a first device to communicate the first media; and

associate the first delegated session with the multimedia session.

24. The logic of Claim 23, wherein associating the first delegated session comprises:

establishing a master session with a remote device; and

associating the first delegated session with the master session.

25. The logic of Claim 23, wherein the logic is further operable to:

establish a second delegated session with a second device to communicate the second media; and

associate the second delegated session with the multimedia session.

26. A composite controller, comprising:

means for receiving a request to initiate a master multimedia session, the master multimedia session having first media and second media;

5

means for establishing a first delegated session with a first device to communicate the first media; and

means for associating the first delegated session with the multimedia session.

10

27. The system of Claim 26, further comprising:

means for establishing a second delegated session with a second device to communicate the second media; and

means for associating the second delegated session with the multimedia session.

15

28. A system, comprising:

a first composite controller;

a second composite controller operable to establish  
a master multimedia session comprising at least two media  
types with the first composite controller;

a first communication device coupled to the first  
composite controller operable to exchange media with in a  
first media session corresponding to one of the media  
types, wherein the first media session is associated with  
the master multimedia session and the first media session  
is controlled by the composite controller;

a second communication device coupled to the second  
composite controller operable to exchange media in a  
second media session corresponding to one of the media  
types, wherein the second media session is associated  
with the master multimedia session and the second media  
session is controlled by the second composite controller;  
and

a third communication device operable to exchange  
media in a third media session corresponding to one of  
the media types, wherein the third media session is  
associated with the master multimedia session and the  
third media session is controlled by one of the composite  
controllers.

29. The system of Claim 28, wherein:

the first and second composite controllers each  
comprise a user interface operable to output a first  
media type;

the first and second communication devices are  
operable to output a second media type; and

the at least two media types in the master multimedia session include the first and second media types.

5           30. The system of Claim 28, wherein the third communication device comprises an output device of the first composite controller.

10           31. The system of Claim 28, wherein:  
the third communication device is coupled to the first composite controller; and  
the third communication device exchanges media of a different type than the first communication device.

32. A method for managing a multimedia session, comprising:

5 providing a composite controller running session initiation protocol and a communication device docked to the composite controller;

10 exchanging first session initiation protocol messages between the composite controller and one or more remote devices to establish a master multimedia session comprising at least two media types with the remote devices;

exchanging second session initiation protocol messages with the communication device to establish a delegated media session comprising at least one media type selected from the at least two media types; and

15 associating the delegated media session with the master multimedia session.

33. The method of Claim 32, wherein exchanging the first session initiation protocol messages comprises:

20 communicating a session initiation protocol invite message for the delegated media session to the communication device;

25 receiving from the communication device a session initiation protocol OK message for the delegated media session; and

communicating an acknowledgement of the OK message to the communication device.

34. The method of Claim 32, wherein exchanging the second session initiation protocol messages comprises:

30 communicating a session initiation protocol invite message for the master multimedia session; and



receiving a session initiation protocol OK message for the master multimedia session.

35. The method of Claim 32, wherein:

5 exchanging the first session initiation protocol messages comprises:

receiving a first session initiation protocol invite message for the delegated media session from the communication device; and

10 communicating a first session initiation protocol OK message; and

exchanging the second session initiation protocol messages comprises:

15 in response to receiving the first session initiation protocol invite message, selecting one or more additional media types for the master multimedia session;

communicating a second session initiation protocol invite message for the master multimedia session to the one or more remote devices; and

20 receiving a second session initiation protocol OK message in response to the second session initiation protocol invite message, wherein the first session initiation protocol OK message is communicated in response to receiving the second session initiation  
25 protocol OK message.

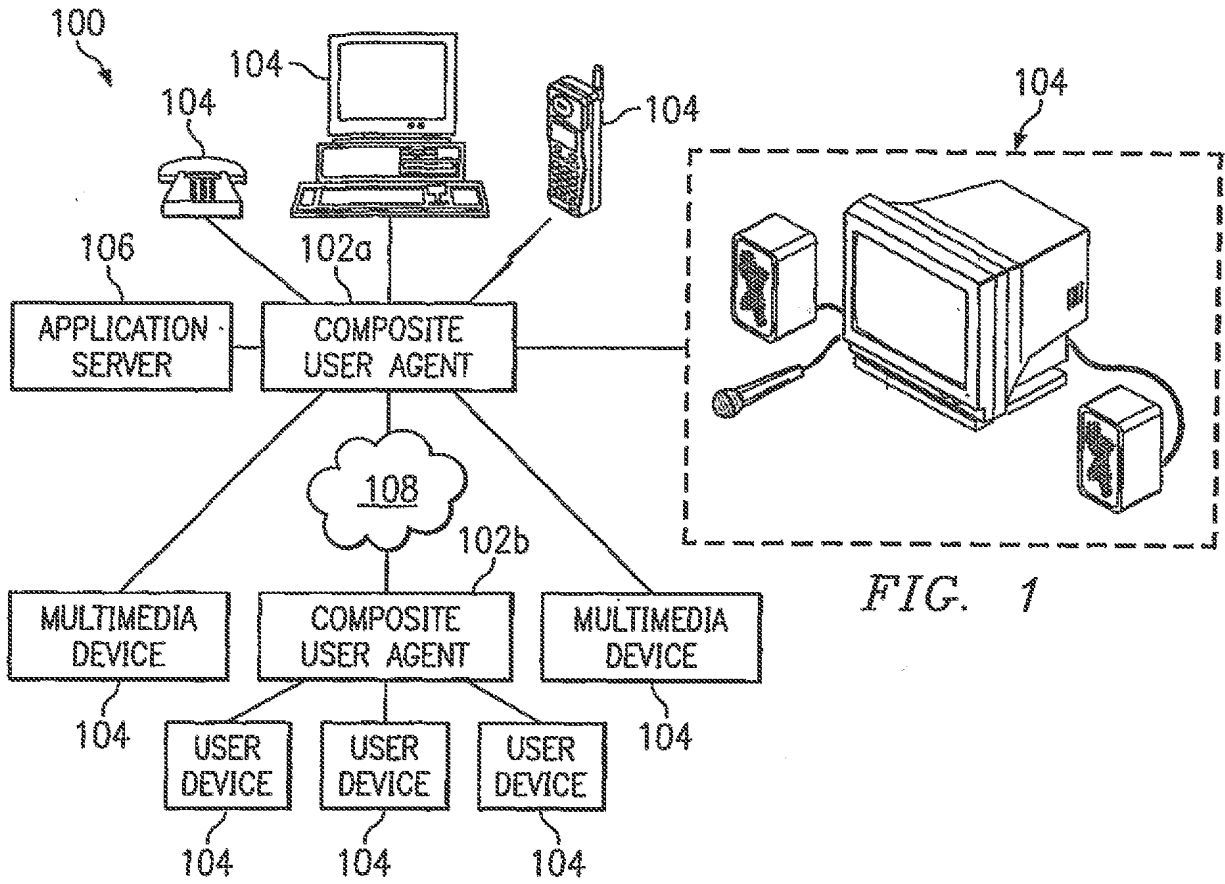


FIG. 1

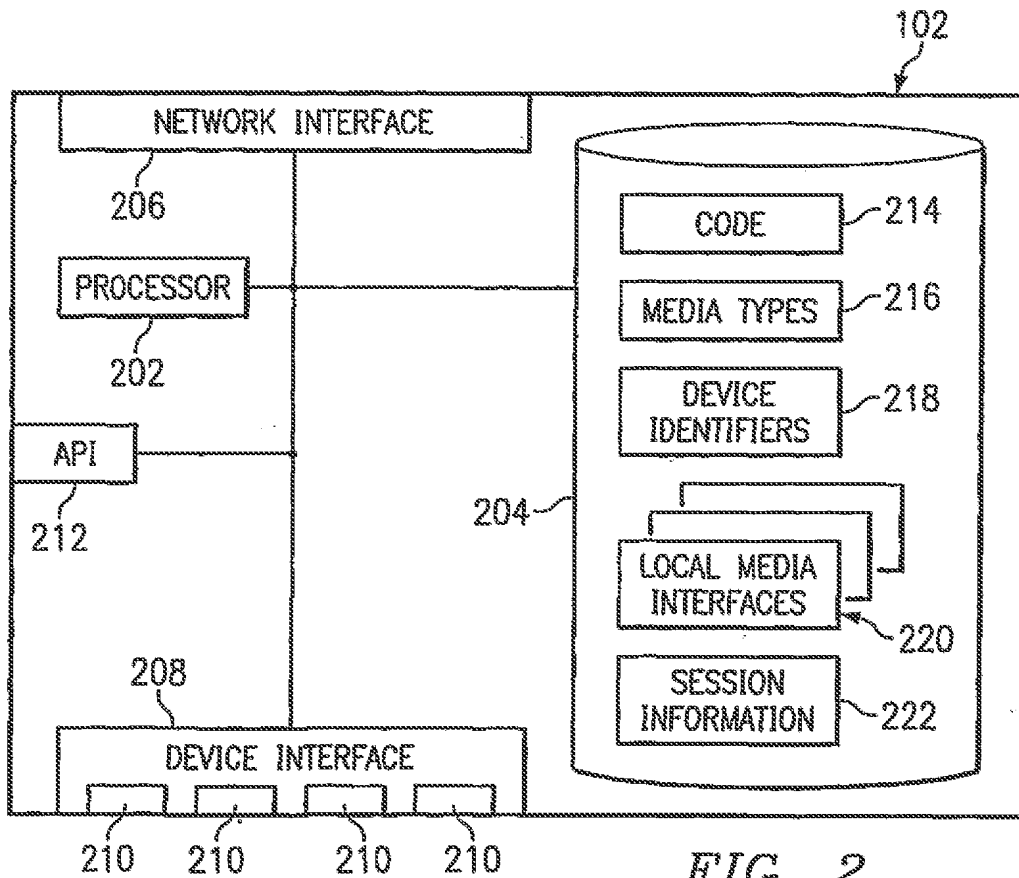


FIG. 2

302 DEVICE ADDRESS	304 MEDIA TYPE	306 ACTIVE SESSION	300 308 ASSOCIATED MASTER SESSION
1.2.3.4	VOICE	1	1
1.2.3.5	VIDEO	2	1
1.2.3.1 (LOCAL)	INSTANT MESSAGE	0	0

FIG. 3

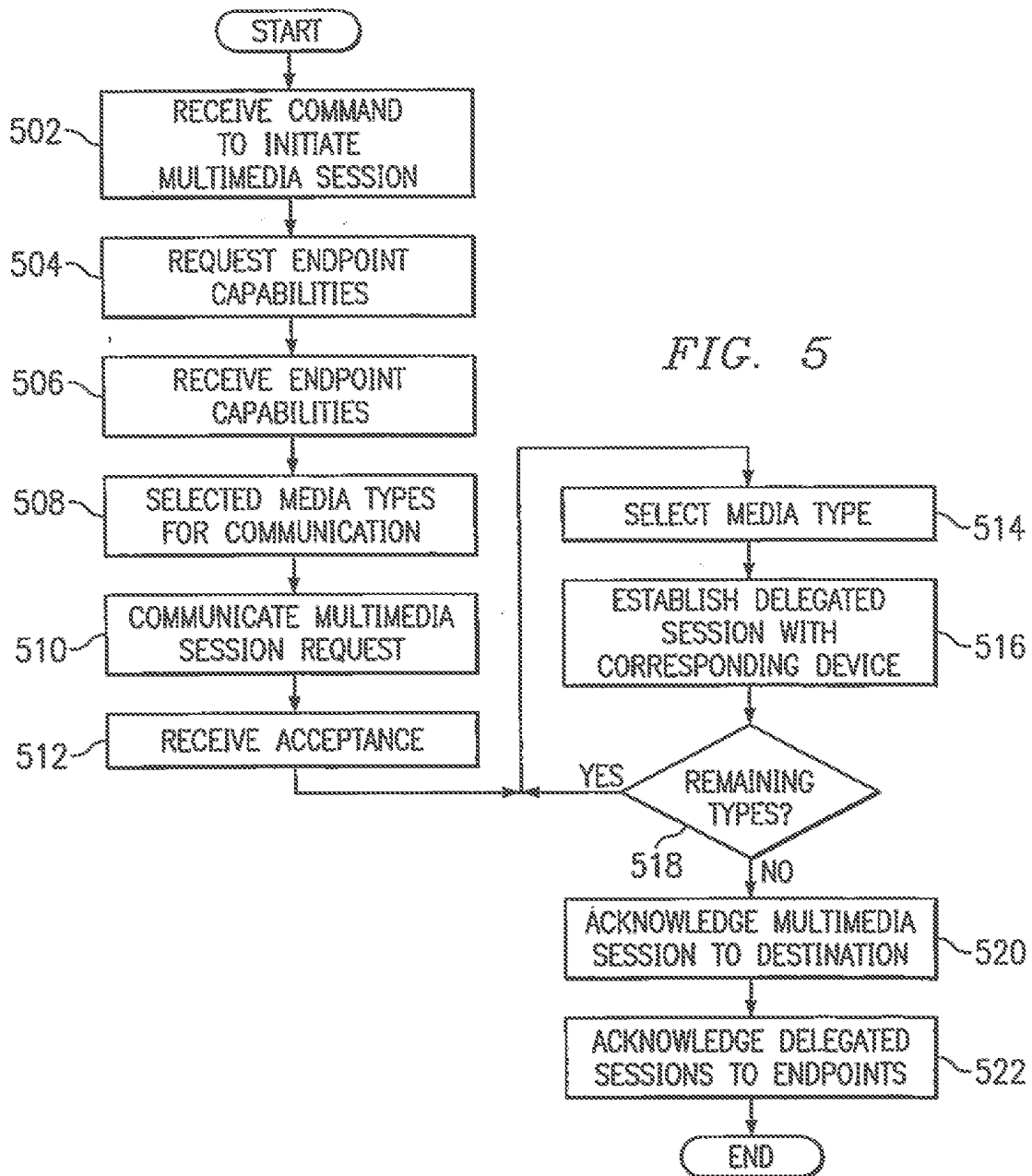
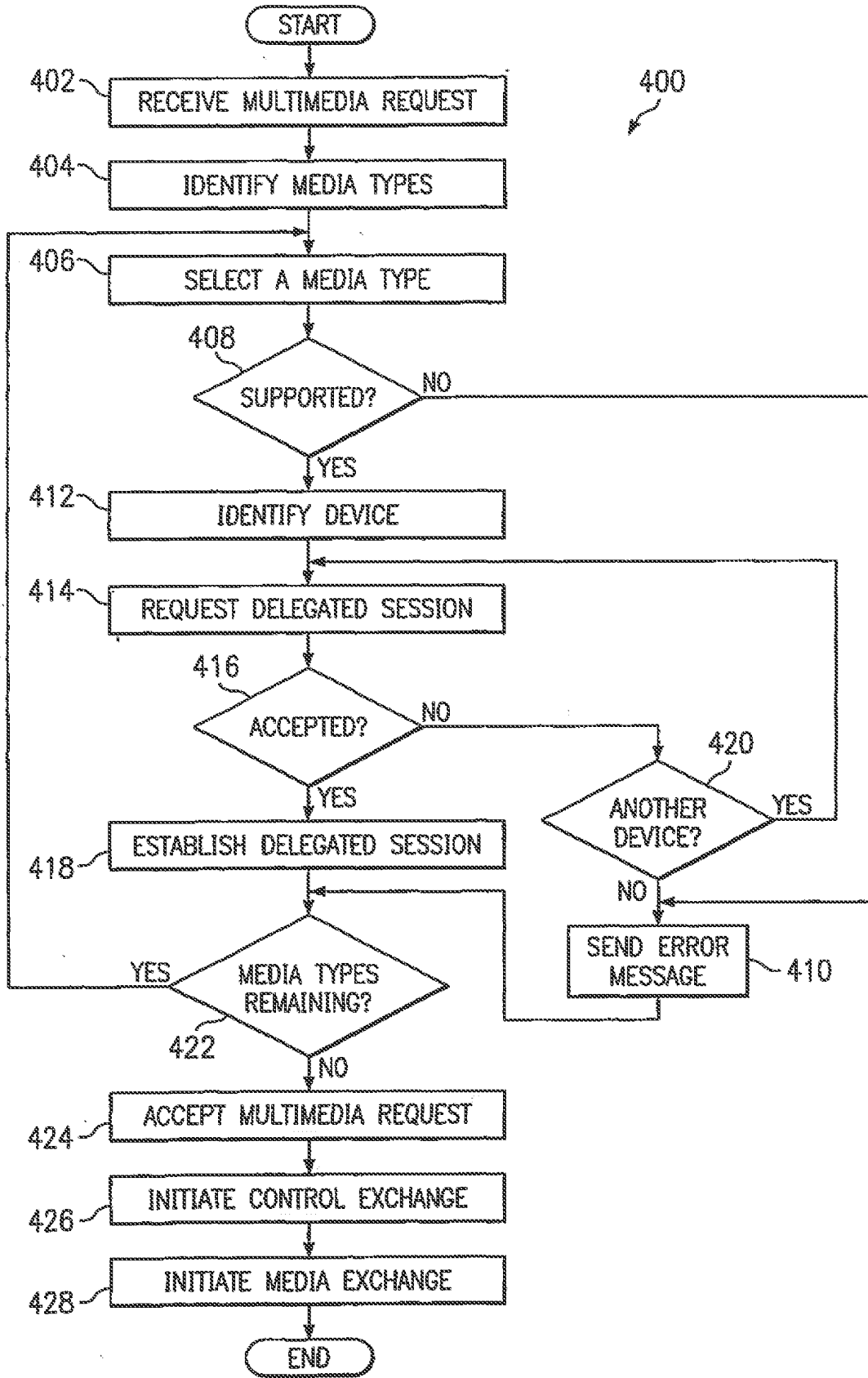


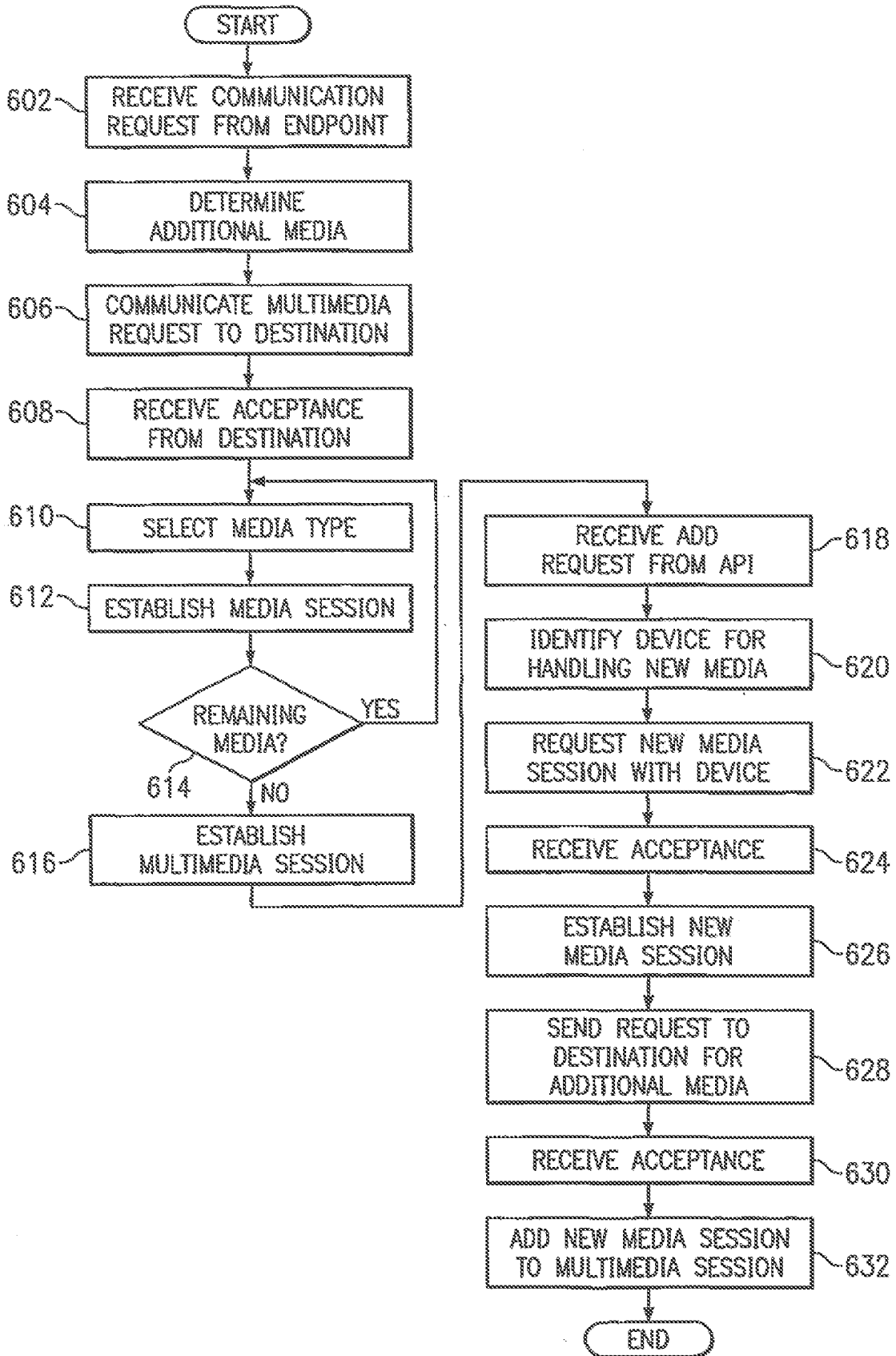
FIG. 5

FIG. 4



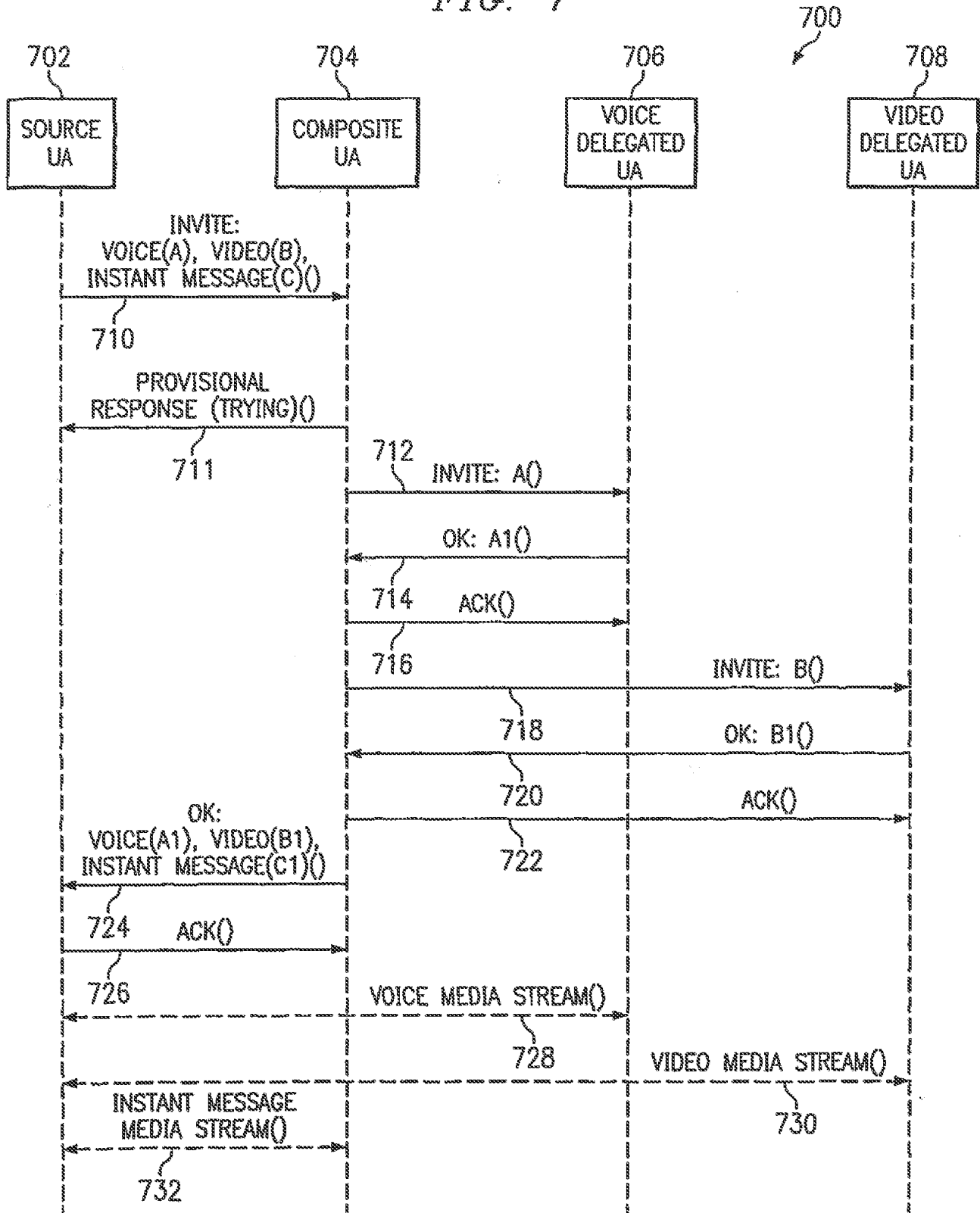
4/7

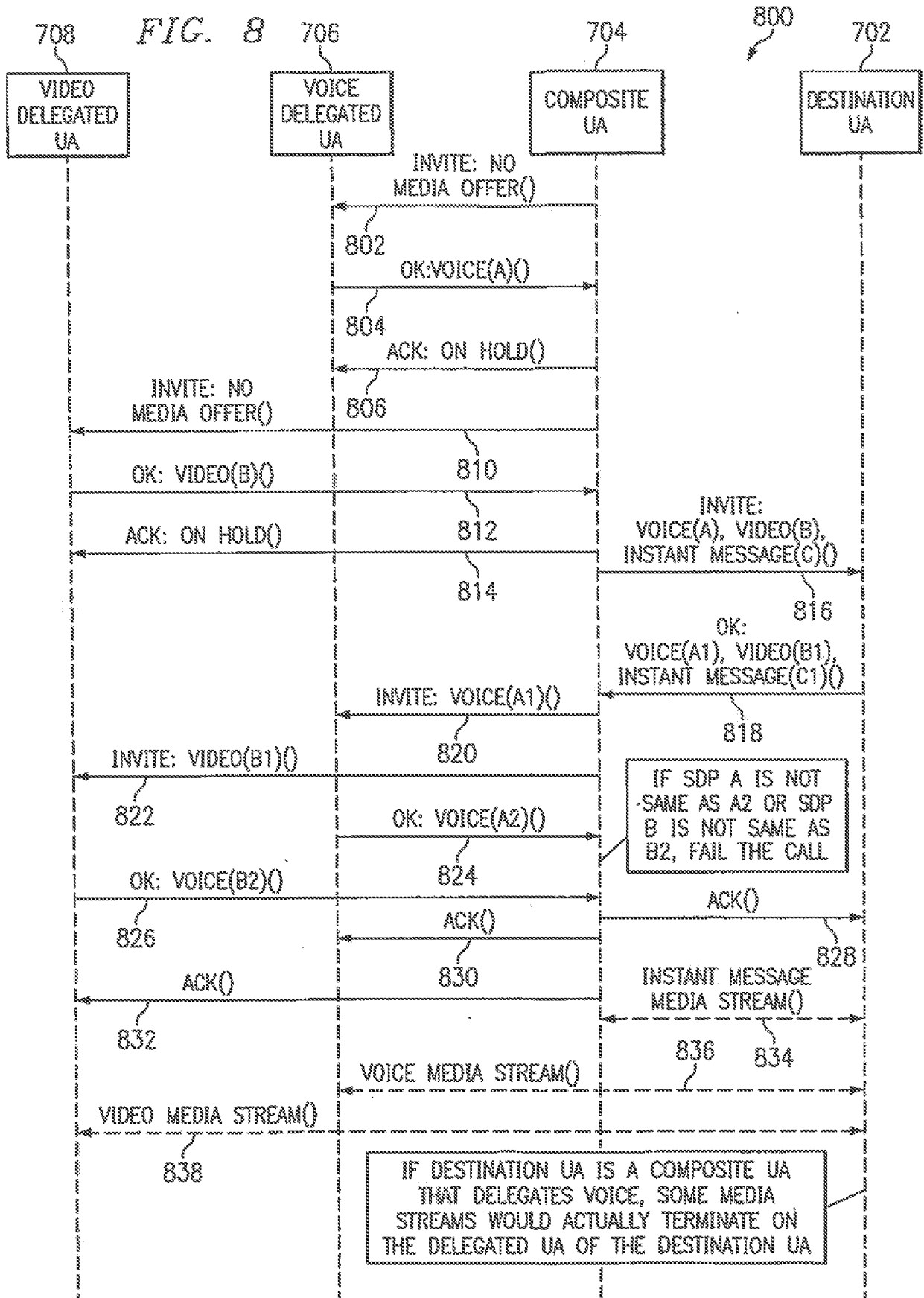
FIG. 6



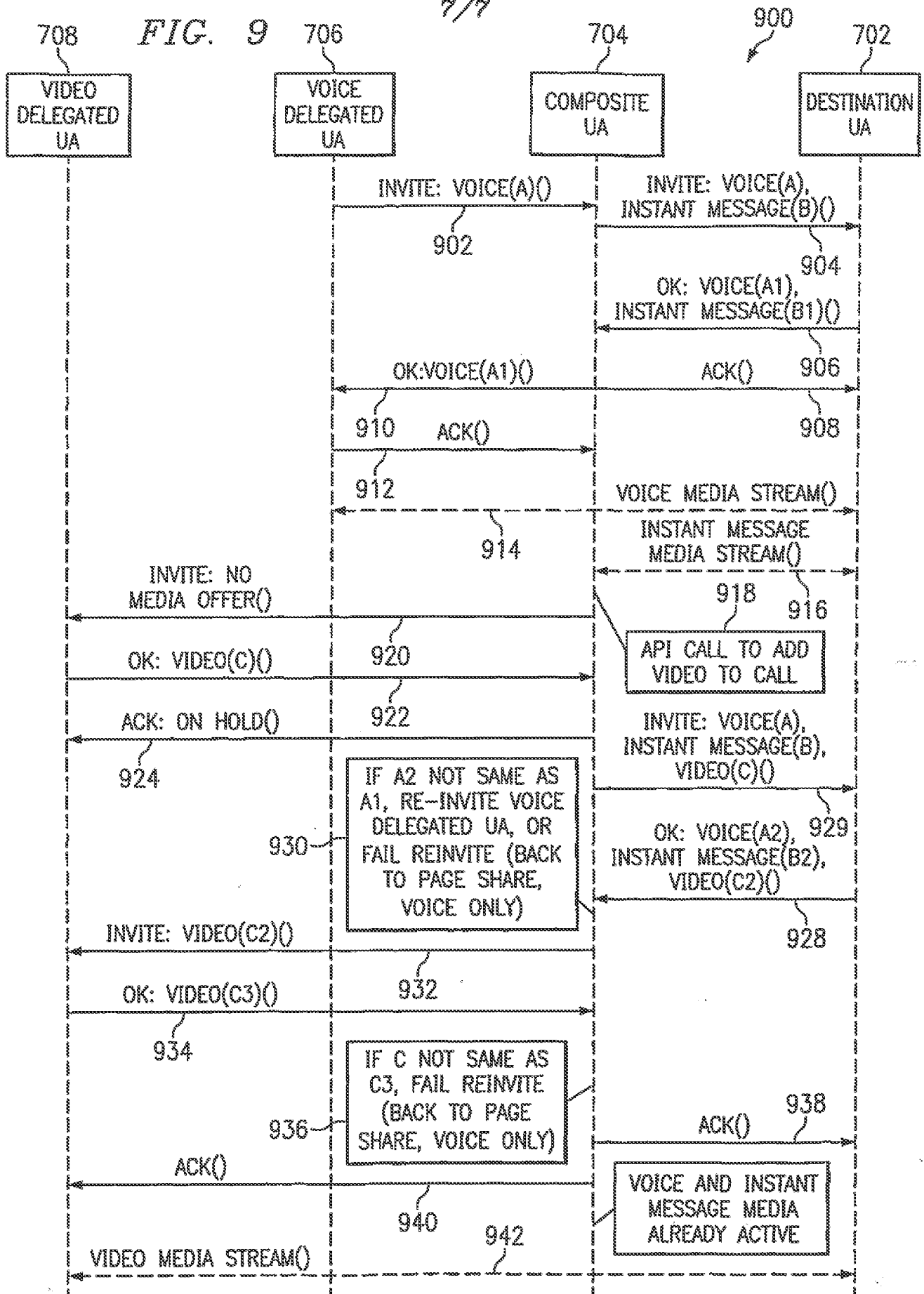
5/7

FIG. 7





7/7





INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 03/38183

<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 H04L29/06</p>		
<p>According to International Patent Classification (IPC) or to both national classification and IPC</p>		
<p><b>B. FIELDS SEARCHED</b></p>		
<p>Minimum documentation searched (classification system followed by classification symbols) IPC 7 H04L H04N</p>		
<p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p>		
<p>Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ</p>		
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></p>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>JIM STROM: "Netmeeting" NETMEETING, 'Online! 17 November 1999 (1999-11-17), pages 1-3, XP002280571 Retrieved from the Internet: &lt;URL:http://www.gap.g-ming.net.uk/NetMeet! ng3.html&gt; 'retrieved on 2004-05-12! paragraph '02.3! paragraph '0004!</p>	1-35
A	<p>JONATHAN DAVIDSON, JAMES PETERS: "Vocle over IP Fundamentals" 2000, CISCO PRESS, INDIANAPOLIS, IN, USA XP002280572 page 229 -page 248</p>	1-35
-/-		
<p><input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.      <input checked="" type="checkbox"/> Patent family members are listed in annex.</p>		
<p>* Special categories of cited documents:</p>		
<p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p>	<p>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>*Z* document member of the same patent family</p>	
<p>Date of the actual completion of the international search  17 May 2004</p>		<p>Date of mailing of the international search report  02/06/2004</p>
<p>Name and mailing address of the ISA European Patent Office, P.B. 5518 Patentlaan 2 NL - 2200 HV Rijswijk Tel: (+31-70) 340-2040, Tlx. 31 851 epo nl, Fax: (+31-70) 340-3010</p>		<p>Authorized officer  Nocentini, I</p>

INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 03/38183

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01/05109 A (GROVES CHRISTIAN NORMAN ;GRAF LESLIE GARY (AU); HOLLIS MARK ALAN ) 18 January 2001 (2001-01-18) abstract -----	1-35
A	WO 01/01660 A (ERICSSON INC) 4 January 2001 (2001-01-04) abstract -----	1-35

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/US 03/38183

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0105109	A	18-01-2001	WO 0105109 A1	18-01-2001
			AU 5665400 A	30-01-2001
			CA 2379159 A1	18-01-2001
			CN 1360780 T	24-07-2002
			EP 1192773 A1	03-04-2002
			JP 2003504965 T	04-02-2003
WO 0101660	A	04-01-2001	AU 5888400 A	31-01-2001
			WO 0101660 A1	04-01-2001

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2005-293065

(43)Date of publication of application : 20.10.2005

(51)Int.Cl.

G06F 13/00  
H04M 3/00

(21)Application number : 2004-105321

(71)Applicant : SHARP CORP

(22)Date of filing : 31.03.2004

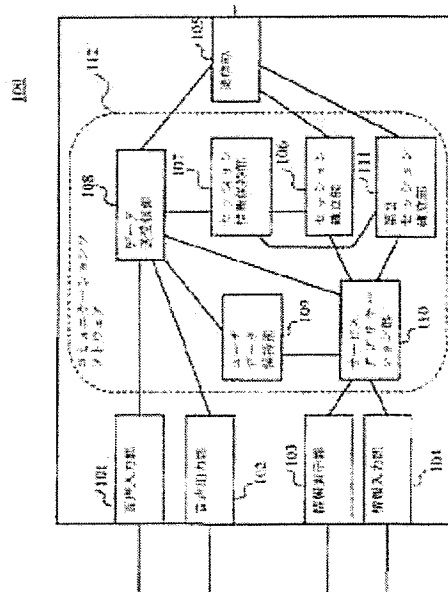
(72)Inventor : ADACHI MAKOTO  
TANABE CHUZO  
TOTANI TOMOYUKI

**(54) INFORMATION COMMUNICATION DEVICE, INFORMATION COMMUNICATION PROGRAM, AND RECORDING MEDIUM FOR RECORDING THIS PROGRAM**

(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide an information communication device that enables data unsupported by a service to be additionally exchanged with a communication partner who is in communication via the service.

**SOLUTION:** When the data which it is desired to send or receive on a previously established session cannot be added, an Internet telephone service system 100 negotiates with the recipient of the data by means of information on the previously established session and establishes a new session to exchange the desired data. Information on the new session is stored in a session information retaining part in association with the original session currently in communication.



(19) 日本国特許庁 (JP)

(12) 公開特許公報(A)

(11) 特許出願公開番号

特開2005-293065

(P2005-293065A)

(43) 公開日 平成17年10月20日 (2005. 10. 20)

(51) Int. Cl.<sup>7</sup>

G06F 13/00  
H04M 3/00

F I

G06F 13/00 3 5 3 C  
H04M 3/00 B

テーマコード (参考)

5B089  
5K051

審査請求 未請求 請求項の数 23 O L (全 29 頁)

(21) 出願番号 特願2004-105321 (P2004-105321)  
(22) 出願日 平成16年3月31日 (2004. 3. 31)

(71) 出願人 000005049  
シャープ株式会社  
大阪府大阪市阿倍野区長池町22番22号  
(74) 代理人 100064746  
弁理士 深見 久郎  
(74) 代理人 100085132  
弁理士 森田 俊雄  
(74) 代理人 100083703  
弁理士 仲村 義平  
(74) 代理人 100096781  
弁理士 堀井 豊  
(74) 代理人 100098316  
弁理士 野田 久登  
(74) 代理人 100109162  
弁理士 酒井 将行

最終頁に続く

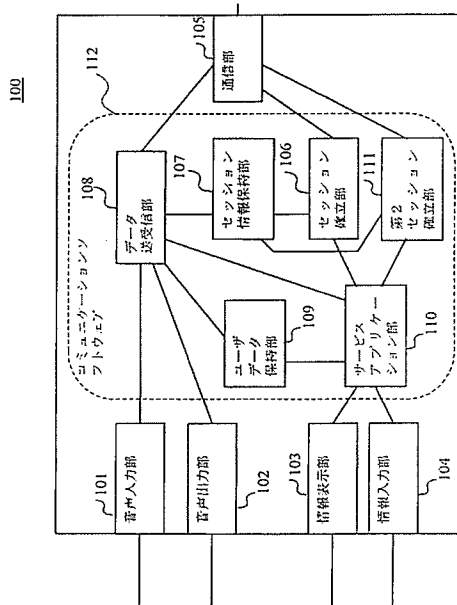
(54) 【発明の名称】 情報コミュニケーション装置、情報コミュニケーションプログラムおよび情報コミュニケーションプログラムを記録した記録媒体

(57) 【要約】

【課題】 サービスを介した通信相手とサービスではサポートされていないデータを追加してやりとりをすることが可能な情報コミュニケーション装置を提供する。

【解決手段】 インターネット電話サービス利用装置100は、先に確立したセッション上で送受信したいデータを追加できないときには、データ送信相手と先に確立したセッションの情報を利用したネゴシエーションを行って、新たなセッションを確立して、所望のデータのやりとりを行なう。また、上記の新たなセッションの情報は、セッション情報保持部において、元になる現在通信中のセッションと関連付けて管理される。

【選択図】 図1



## 【特許請求の範囲】

## 【請求項 1】

通信相手装置とデータ通信を行なうための接続としてのセッションの確立および前記セッションの制御を行なうセッション制御手段と、

前記セッション制御手段が確立した前記セッションに関する情報を保持、管理するセッション情報保持手段と、

前記セッション情報保持手段が保持する情報を用いて、確立済みの前記セッションでデータの送受信を行なうデータ送受信手段とを備え、

前記セッション制御手段は、既に確立されている前記セッションの通信相手に対して該セッション確立時にデータ送信先アドレスとして取得したアドレスに対して、セッション確立を要求する通信を行なって、新たなセッションを確立させることを特徴とする、情報コミュニケーション装置。

10

## 【請求項 2】

通信相手装置とデータ通信を行なうための接続としてのセッションの確立および前記セッションの制御を行なうセッション制御手段と、

前記セッション制御手段が確立した前記セッションに関する情報を保持、管理するセッション情報保持手段と、

前記セッション情報保持手段が保持する情報を用いて確立済みのセッションでデータの送受信を行なうデータ送受信手段とを備え

前記セッション制御手段は、既に確立されている前記セッションのデータ送信先アドレスとして取得したアドレスに対して、セッション識別情報で特定される該セッションを主体となるセッションとして指定した新たなセッション確立を要求する通信を行なって、該セッションに従属する新たなセッションを確立し、さらに前記セッション情報保持手段に該セッションに従属する新たなセッションとして関連付けて管理させることを特徴とする、情報コミュニケーション装置。

20

## 【請求項 3】

通信相手装置とデータ通信を行なうための接続としてのセッションの確立および前記セッションの制御を行なうセッション制御手段と、

前記セッション制御手段が確立した前記セッションに関する情報を保持、管理するセッション情報保持手段と、

前記セッション情報保持手段が保持する情報を用いて確立済みの前記セッションでデータの送受信を行なうデータ送受信手段とを備え、

前記セッション制御手段は、既に確立されているセッションのセッション識別情報で特定される該セッションを主体となるセッションとして指定した新たなセッション確立を要求する通信を受けて、新たなセッションを指定された主体となるセッションに従属するセッションとして関連付けて前記セッション情報保持手段に管理させることを特徴とする、情報コミュニケーション装置。

30

## 【請求項 4】

前記主体となるセッションを指定したセッション確立を要求する通信のデータは、該要求から確立した新たなセッションを前記主体となるセッションに関連付けたときにセッション確立の要求元の装置に返信されるメインセッション確認データを含み、

前記主体となるセッションで前記メインセッション確認データの受信を検出することによって、前記通信相手装置において新たに確立したセッションが指定の前記主体となるセッションと正しく関連付けされたことを確認するサブセッション確認手段を備えることを特徴とする、請求項 2 に記載の情報コミュニケーション装置。

40

## 【請求項 5】

前記セッション制御手段は、前記主体となるセッションを指定したセッション確立要求に該要求から確立した新たなセッションを前記主体となるセッションに関連付けされたときにセッション確立の要求元の装置に返信されることを期待するメインセッション確認データを付加する関連付け確認データ付加手段を含み、前記主体となるセッションで前記メ

50

インセッション確認データの受信を検出することによって、前記通信相手装置において新たに確立したセッションが指定の前記主体となるセッションと正しく関連付けされたことを確認するサブセッション確認手段を備えることを特徴とする、請求項 2 に記載の情報コミュニケーション装置。

【請求項 6】

前記新たなセッション確立を要求する通信のデータは、前記新たなセッション確立を要求する通信のデータをもとに新たに確立したセッションの主体となるセッションを通知するメインセッション確認データを含み、

前記セッション制御手段が前記セッション情報保持手段に新たなセッションを主体となるセッションに関連付けて管理させると、関連付けた前記主体となるセッションで前記メインセッション確認データに基づくデータを前記主体となるセッションで送信するメインセッション確認返信手段をさらに備えることを特徴とする、請求項 3 に記載の情報コミュニケーション装置。

10

【請求項 7】

前記セッション制御手段は、既に確立されているセッションのセッション識別情報で特定される該セッションを主体となるセッションとして指定した新たなセッション確立を要求する通信から新たに確立したセッションを主体となるセッションと関連付けた場合に返信されることが期待されているメインセッション確認データを抽出するメインセッション確認データ抽出手段を含み、

前記セッション制御手段が前記セッション情報保持手段に新たなセッションを主体となるセッションに関連付けて管理させると、関連付けた前記主体となるセッションで前記メインセッション確認データに基づくデータをメインセッションのデータとして送信するメインセッション確認返信手段をさらに備えることを特徴とする、請求項 3 に記載の情報コミュニケーション装置。

20

【請求項 8】

前記主体となるセッションは音データを通信するものであり、前記メインセッション確認データは必要の度に生成される文字列であって、

前記サブセッション確認手段は、指定の前記メインセッション確認データを D T M F 音データとして受信し、該 D T M F 音データを前記主体となるセッションで検出することによって、新たなセッションが正しく関連付けされたことを確認する、請求項 4 または 5 に記載の情報コミュニケーション装置。

30

【請求項 9】

前記主体となるセッションは音データを通信するものであり、前記メインセッション確認データは必要の度に生成される文字列であって、

前記メインセッション確認返信手段は、前記メインセッション確認データの文字列から生成した D T M F 音データを前記主体となるセッションで返信することを特徴とする、請求項 6 または 7 に記載の情報コミュニケーション装置。

【請求項 10】

前記セッション制御手段は、前記セッション情報保持手段において、第 1 のセッションの主体となるセッションとして関連付けられて管理されている第 2 のセッションの切断を要求されると、前記第 1 のセッションを切断したうえで要求された前記第 2 のセッションの切断を行なうことを特徴とする、請求項 2 ～ 9 のいずれか 1 項に記載の情報コミュニケーション装置。

40

【請求項 11】

指定されたデータ間で同期をとってデータの入力、または出力するデータ同期入出力手段を備え、

前記セッション制御手段は、現在確立されている前記セッションに関連付けて管理される前記新たなセッションの確立の要求、もしくははそれに対する応答の通信内に、前記新たに確立するセッションの通信データと同期させる現在確立されている前記セッション中の通信データを指定する情報を付加する同期データ指定情報付加手段を含み、

50

前記データ同期入出力手段は、前記データ同期に関する情報に従って同期をとってセッションの通信データの入出力を行なうことを特徴とする、請求項2～10のいずれか1項に記載の情報コミュニケーション装置。

【請求項12】

前記既に確立されているセッションはインターネット電話の音声通話サービスを用いた音声通話セッションであり、

前記既に確立されているセッションの通信相手に対して前記新たなセッションの確立を要求する通信を行なうことで、前記新たに確立するセッションは前記音声通話セッションを介してはやりとりできない静止画、動画、もしくは他のアプリケーションの利用可能データを通信することを特徴とする、請求項1～11のいずれか1項に記載の情報コミュニケーション装置。

10

【請求項13】

コンピュータに情報コミュニケーション方法を実行させるためのプログラムであって、通信相手装置とデータ通信を行なうための接続としてのセッションの確立および前記セッションの制御をコンピュータに行なわせるセッション制御ステップと、

前記セッション制御機能によって確立されたセッションに関する情報を前記コンピュータに保持、管理させるセッション情報保持ステップと、

前記セッション情報保持機能によって保持される情報を用いて確立済みのセッションでデータの送受信を前記コンピュータに行なわせるデータ送受信ステップとを備え、

前記セッション制御ステップはさらに、前記既に確立されているセッションの通信相手に対して該セッション確立時にデータ送信先アドレスとして取得したアドレスに対してコンピュータにセッション確立を要求する通信を行なわせて新たなセッションを確立させるステップを含むことを特徴とする、情報コミュニケーションプログラム。

20

【請求項14】

コンピュータに情報コミュニケーション方法を実行させるためのプログラムであって、通信相手装置とデータ通信を行なうための接続としてのセッションの確立やその制御を通信によってコンピュータに行なわせるセッション制御ステップと、

前記セッション制御機能によって確立されたセッションに関する情報を前記コンピュータに保持、管理させるセッション情報保持ステップと、

前記セッション情報保持機能によって保持される情報を用いて確立済みのセッションでデータの送受信を前記コンピュータに行なわせるデータ送受信ステップとを備え、

前記セッション制御ステップは、さらに、既に確立されているセッションのデータ送信先アドレスとして取得したアドレスに対して、セッション識別情報で特定される該セッションを主体となるセッションとして指定した新たなセッション確立を要求する通信を前記コンピュータに行なわせて該セッションに従属する新たなセッションを確立し、さらに前記セッション情報保持機能を用いて前記コンピュータに該セッションに従属する新たなセッションとして関連付けて管理させるステップを含むことを特徴とする、情報コミュニケーションプログラム。

30

【請求項15】

コンピュータに情報コミュニケーション方法を実行させるためのプログラムであって、通信相手装置とデータ通信を行なうための接続としてのセッションの確立やその制御を通信によってコンピュータに行なわせるセッション制御ステップと、

前記セッション制御機能によって確立されたセッションに関する情報を前記コンピュータに保持、管理させるセッション情報保持ステップと、

前記セッション情報保持機能によって保持される情報を用いて確立済みのセッションでデータの送受信を前記コンピュータに行なわせるデータ送受信ステップとを備え、

前記セッション制御ステップは、さらに、既に確立されているセッションのセッション識別情報で特定される該セッションを主体となるセッションとして指定した新たなセッション確立を要求する通信を受けて、新たなセッションを指定された前記主体となるセッションに従属するセッションとして関連付けて前記セッション情報保持機能をもちいてコン

40

50



コンピュータに管理させるステップを含むことを特徴とする、情報コミュニケーションプログラム。

【請求項 16】

前記主体となるセッションを指定したセッション確立を要求する通信のデータは、該要求から確立した新たなセッションを前記主体となるセッションに関連付けたときにセッション確立の要求元の装置に返信されるメインセッション確認データを含み、

前記メインセッション確認データを検出することによって、相手装置において新たに確立したセッションが指定の前記主体となるセッションと正しく関連付けられたことをコンピュータに知らせるサブセッション確認ステップをさらに備えることを特徴とする、請求項 14 に記載の情報コミュニケーションプログラム。

10

【請求項 17】

前記新たなセッション確立を要求する通信のデータは、新たに確立したセッションの主体となるセッションを通知するメインセッション確認データを含み、

前記セッション制御ステップは、さらに、前記セッション情報保持機能に新たなセッションを主体となるセッションに関連付けて管理させ、関連付けた主体となるセッションで前記メインセッション確認データ、もしくはそれに相当するデータをコンピュータに送信させるメインセッション確認返信ステップを含むことを特徴とする、請求項 15 に記載の情報コミュニケーションプログラム。

【請求項 18】

前記主体となるセッションは音データを通信するものであり、前記メインセッション確認データは任意の文字列であって、

前記サブセッション確認ステップは、指定の前記メインセッション確認データを D T M F 音データとして受信して、該 D T M F 音データを前記主体となるセッションで前記コンピュータに検出させるステップを含むことを特徴とする、請求項 16 に記載の情報コミュニケーションプログラム。

20

【請求項 19】

前記主体となるセッションは音データを通信するものであり、前記メインセッション確認データは任意の文字列であって、

前記メインセッション確認返信ステップは、前記メインセッション確認データの文字列から生成した D T M F 音データを前記コンピュータに前記主体となるセッションで返信するステップを含むことを特徴とする、請求項 17 に記載の情報コミュニケーションプログラム。

30

【請求項 20】

前記セッション制御ステップは、前記セッション情報保持機能において第 1 のセッションの主体となるセッションとして関連付けられて管理されている第 2 のセッションの切断を要求されると、前記第 1 のセッションを前記コンピュータに切断させたうえで要求されたセッションを切断させるステップを含むことを特徴とする、請求項 14 ～ 19 のいずれか 1 項に記載の情報コミュニケーションプログラム。

【請求項 21】

指定されたデータ間で同期をとってデータの入力、または出力を前記コンピュータにさせるデータ同期入出力ステップをさらに備え、

現在確立されているセッションに関連付けて管理される新たなセッションの確立を要求する通信データは、前記現在確立されているセッションと新たに確立するセッションの間で同期させる通信データを指定する同期データ指定情報を含み、

前記セッション制御ステップは、前記同期データ指定情報によって確立されたセッション間のデータ同期に関する情報をコンピュータ上に保持させるステップを含み、

前記データ同期入出力ステップは、前記データ同期に関する情報に従って同期をとってセッションの通信データの入出力を前記コンピュータに行なわせるステップを含むことを特徴とする、請求項 13 ～ 20 のいずれか 1 項に記載の情報コミュニケーションプログラム。

40

50

## 【請求項 2 2】

既に確立されているセッションはインターネット電話の音声通話サービスを用いた音声通話セッションであり、前記既に確立されているセッションの通信相手に対して新たなセッションの確立を要求する通信をコンピュータに行なわせ、新たに確立するセッションは前記音声通話セッションを介してはやりとりできない静止画、動画、もしくは他のアプリケーションの利用可能データをコンピュータに通信させることを特徴とする、請求項 1 3～2 1 のいずれか 1 項に記載の情報コミュニケーションプログラム。

## 【請求項 2 3】

請求項 1 3～2 2 のいずれか 1 項に記載の情報コミュニケーションプログラムを記録したコンピュータ読み取り可能な記録媒体。

10

## 【発明の詳細な説明】

## 【技術分野】

## 【0 0 0 1】

この発明は、ネットワークを介して通信相手とネゴシエーションを行なって確立したセッションを用いて、音声や画像などのデータや情報の送受信を行なう情報コミュニケーション装置、そのような送受信をコンピュータに制御させるための情報コミュニケーションプログラム、ならびにそのような情報コミュニケーションプログラムを記録した記録媒体に関する。

## 【背景技術】

## 【0 0 0 2】

インターネットプロトコル ( I P : Internet Protocol ) は、ネットワークのことを意識せずに、インターネット上の多様なコンピュータデバイス間での処理についての規定であり、 I P をベースにして規定されたアプリケーションレベルのプロトコルを用いてマルチメディアの双方向な通信が実現されている。

20

## 【0 0 0 3】

具体的には、ネットワークに接続された装置間で、各装置上のプロセス間で音声や映像などの通信を行なうためのセッションを確立するためのプロトコル S I P ( Session Initiation Protocol ) やセッションでやりとりする内容に関する情報をやりとりするための S D P ( Session Description Protocol ) 、音声や文字、映像といったメディアストリームのパケット化に関する R T P ( Real-Time Transport Protocol ) などといったアプリケーションレベルのプロトコルが規定されている。

30

## 【0 0 0 4】

これらのプロトコルに基づいたマルチメディア双方向通信の 1 つの例として、インターネット電話に代表されるリアルタイム音声通話がある。一般に、インターネット電話サービスは、サービス提供者ごとに、インターネット上の装置同士での音声通話のほかに、ゲートウェイを介することによって一般の固定電話網などの音声電話端末との相互通話や、電話番号 - I P アドレス変換を含む接続管理、課金や認証、音声以外に映像を加えた T V 電話など、さまざまな機能を組み合わせたインターネット電話サービスとして、ユーザに提供されている。

## 【0 0 0 5】

インターネット電話サービスで使用するプロトコルについては、標準化が先行した H . 3 2 3 が先に普及したが、上記の S I P がデファクト標準化されつつある。いずれにしても、インターネット上でサービスを提供する装置であるサーバを介して通信を行なう装置間でデータ送受信するためのセッションを確立したうえで、そのセッションに基づいて音声等のマルチメディアデータは直接装置間で通信することが基本である。

40

## 【0 0 0 6】

インターネット電話のほかに、音声通話、電子会議、ビデオ・オン・デマンドなどが提供されはじめられているが、インターネット上のプロトコル、技術をもとにすることにあり、やりとりするデータの種類などを自由に規定して、さまざまなサービスを考案し、ユーザに提供することが可能になってきている。

50

## 【0007】

以下に、複数のメディアデータのやりとりを可能にすることに関する先行技術挙げる。

## 【0008】

特許文献1（特開平9-168063号公報）のように、音声通話に関連する補助データの送受信を可能にする技術がある。これは音声データのほかに補助データの送受信を行なうというものである。

## 【0009】

特許文献2（特開2002-251454号公報）は、文字、音声、画像を用いたコミュニケーションを可能にするシステムである。文字、音声、画像のそれぞれのアプリケーションが相手と通信するものである。

10

## 【0010】

特許文献3（特開2003-8778号公報）は、通話相手の画面のデータを取得して、自分の画面に表示するもので、マルチ通信と呼ぶ音声と画面データの両方を中継するサーバを用いるものである。

## 【0011】

特許文献4（特開2001-298545号公報）は、リアルタイム音声会議とデータ系会議の連動運営を実現するマルチメディア会議サービス提供システム。サービスを提供するサーバを介して会議参加相手と通信することになり、各端末はサービスのサーバと接続して、それを經由してデータを送受信する。

## 【0012】

特許文献5（特開2003-6073号公報）は、音声と画像から成るオーディオビジュアルデータと、webなどの表示データのコミュニケーションをするシステムである。

20

## 【0013】

特許文献6（特開2000-172611号公報）は、TV電話会議システムで、TV電話会議の画面のほかに、会議参加者の端末上webブラウザで表示しているページが変わるとそれに連動して会議参加者が閲覧しているwebブラウザのページが切り替わる。サービス提供者が規定したサービスを利用中に、そのサービスとともにデータ送受信を利用したい場合であっても、一般にはサービスとしてはそうしたデータは送受信することが想定されていないので、サービスで確立したセッションにおいてデータの送受信することはできない。

30

## 【0014】

たとえば、インターネット音声電話のサービスを利用して音声通話を行なっている最中に、音声通話サービスの通信セッションを使って、地図や説明資料などのデータを通話相手に提供したり、逆に相手の持っている資料などのデータを受け取って閲覧したりすることはできない。

## 【0015】

このような事情は、たとえ、端末装置としては、そうしたデータを保持しており、かつアプリケーションとしては音声通話に加えてそうしたデータ送受信する能力を双方がもっている場合であっても、変わらない。

## 【0016】

サービス提供者は、規定したサービスのために想定したデータをやりとるするためのセッション確立のためのネゴシエーションについてはサーバを介して発呼者と被呼者の端末間で中継するものの、サービスとして想定していないようなデータをネゴシエーションするようなセッション設定のシグナルのやりとりは許さない。

40

## 【0017】

先に挙げたいずれの先行特許技術を用いたとしても、あらかじめ端末同士でどのようなデータをどのように送り合うかが決まっていなような場合、追加して通信するデータをどのように端末間でネゴシエーションして通信できるようにするかという点が課題となるが、上記のネゴシエーションやデータの通信がサーバを介して通信されるような場合、サーバがネゴシエーションのための通信や実際に送信するデータを規定しているものが多い

50

。インターネット電話やTV会議システムの多くがそうである、そうしたサーバにおいて規定以外のデータのやりとりを可能にする技術は上記のいずれの技術にも含まれていない。

【特許文献1】特開平9-168063号公報 「通話システムの端末装置」

【特許文献2】特開2002-251454号公報 「インターネットを用いたコミュニケーションシステム及びこのコミュニケーションシステムを利用した応対システム」

【特許文献3】特開2003-8778号公報 「インターネットマルチ通話システム」

【特許文献4】特開2001-298545号公報 「電話利用型マルチメディア会議サービス提供システム」

【特許文献5】特開2003-6073号公報 「ネットワークアクセスシステム及び当該システムを用いたネットワークアクセス方法」 10

【特許文献6】特開2000-172611号公報 「テレビ電話システム」

【発明の開示】

【発明が解決しようとする課題】

【0018】

サービス提供者が許可していないデータの送受信を実現するためには、サービス非提供のデータ送受信のために別のセッションをサービスでコミュニケーションしている相手と確立する必要がある。しかしながら、サービスを介してコミュニケーションしている相手とは、サービスのサーバを介してセッションのシグナリングをおこなっており、コミュニケーション相手と直接シグナリングするための情報、具体的にはシグナルの送信先アドレスなどの情報は分からない。 20

【0019】

また、仮にセッション確立の要求先が分かったとして、セッション確立の要求を受け付ける側は、新たに受信したセッション確立の要求が現在コミュニケーションしているセッションと関連するもので、コミュニケーション中のセッションではデータを送受信できないので補助的なセッションを確立しようとしているものであるということを認識することができない。

【0020】

さらに、セッションの確立要求時に関連するセッションを指定して要求したり、セッション確立後に複数のセッションを関連付ける要求を行ったりして、相手に関連付けを知らせることができたとしても、コミュニケーション中のセッションと関連付けるのが正しいかを双方で確認することは難しい。 30

【0021】

また、コミュニケーション中のセッションと新たに確立したセッションを関連付けたとしても、それらの関連付けて管理する従来技術が存在していない。たとえば、音声コミュニケーション用のセッションと画像送信用のセッションとを関連づけて管理するような場合を考えてみる。単純な関連付けのみを管理している場合には、音声コミュニケーション用のセッションを切断しても、画像送信用のセッションが残ってしまうような場合が考えられる。ところが、セキュリティ面を考慮すると、音声コミュニケーション用のセッションで会話している間だけ画像の送受信を許すといった運用を行なう方が好ましい場合がある。 40

【0022】

以上のような問題を鑑み、本願発明が解決しようとする課題は、サービス提供者が提供するサーバを介して確立したセッションのシグナリング情報を利用して、サービス提供者が提供するサーバを介さずに別のセッションを確立する技術を提供することにある。

【0023】

また、本願発明が解決しようとする別の課題は、相手から新しいセッションの確立が要求された場合に、当該新しいセッションが既存のセッションとの対応付けられていることを知るための技術を提供することにある。

【0024】

50

また、本願発明が解決しようとする別の課題は、相手に新しいセッションの確立が要求して確立された際に、相手において当該新しいセッションが既存のセッションとの対応付けられていることを確認するための技術を提供することにある。

【0025】

また、本願発明が解決しようとする別の課題は、基になるセッションに関連付けられた付加的なセッションが基になるセッションが確立されている間のみ確立することができ、基になるセッションが切断された場合には付加的なセッションも切断され、基になるセッションが確立していない状態では付加的なセッションのみが確立することはない、といった基になるセッションと付加的なセッションとを管理するための技術を提供することにある。

10

【課題を解決するための手段】

【0026】

上記のような課題を解決するために、本発明のある局面では、情報コミュニケーション装置は、通信相手装置とデータ通信を行なうための接続としてのセッションの確立およびセッションの制御を行なうセッション制御手段と、セッション制御手段が確立したセッションに関する情報を保持、管理するセッション情報保持手段と、セッション情報保持手段が保持する情報を用いて、確立済みのセッションでデータの送受信を行なうデータ送受信手段とを備え、セッション制御手段は、既に確立されているセッションの通信相手に対して該セッション確立時にデータ送信先アドレスとして取得したアドレスに対して、セッション確立を要求する通信を行なって、新たなセッションを確立させる。

20

【0027】

したがって、このような情報コミュニケーション装置は、セッションを確立して通信している相手装置に対して、サーバの制限等で確立しているセッションを変更するなどしても通信できない種類のデータをやりとりするためのセッションを確立して、通信できるようにすることができる。

【0028】

また、本発明の他の局面に従うと、情報コミュニケーション装置は、通信相手装置とデータ通信を行なうための接続としてのセッションの確立およびセッションの制御を行なうセッション制御手段と、セッション制御手段が確立したセッションに関する情報を保持、管理するセッション情報保持手段と、セッション情報保持手段が保持する情報を用いて確立済みのセッションでデータの送受信を行なうデータ送受信手段とを備え、セッション制御手段は、既に確立されているセッションのデータ送信先アドレスとして取得したアドレスに対して、セッション識別情報で特定される該セッションを主体となるセッションとして指定した新たなセッション確立を要求する通信を行なって、該セッションに従属する新たなセッションを確立し、さらにセッション情報保持手段に該セッションに従属する新たなセッションとして関連付けて管理させる。

30

【0029】

したがって、これらの装置によって、既存のセッションでの通信に加えて、他のデータをやりとりするためのセッションを新たに確立しても、そのセッションを関連付けて管理できるため、セッションを同一視したり、連動させたりなどすることができる。

40

【0030】

また、本発明のさらに他の局面に従うと、情報コミュニケーション装置は、通信相手装置とデータ通信を行なうための接続としてのセッションの確立およびセッションの制御を行なうセッション制御手段と、セッション制御手段が確立したセッションに関する情報を保持、管理するセッション情報保持手段と、セッション情報保持手段が保持する情報を用いて確立済みのセッションでデータの送受信を行なうデータ送受信手段とを備え、セッション制御手段は、既に確立されているセッションのセッション識別情報で特定される該セッションを主体となるセッションとして指定した新たなセッション確立を要求する通信を受けて、新たなセッションを指定された主体となるセッションに従属するセッションとし

50

て関連付けてセッション情報保持手段に管理させる。

【0031】

また、好ましくは、主体となるセッションを指定したセッション確立を要求する通信のデータは、該要求から確立した新たなセッションを主体となるセッションに関連付けたときにセッション確立の要求元の装置に返信されるメインセッション確認データを含み、主体となるセッションでメインセッション確認データの受信を検出することによって、通信相手装置において新たに確立したセッションが指定の主体となるセッションと正しく関連付けされたことを確認するサブセッション確認手段を備える。

【0032】

また、好ましくは、セッション制御手段は、主体となるセッションを指定したセッション確立要求に該要求から確立した新たなセッションを主体となるセッションに関連付けされたときにセッション確立の要求元の装置に返信されることを期待するメインセッション確認データを付加する関連付け確認データ付加手段を含み、主体となるセッションでメインセッション確認データの受信を検出することによって、通信相手装置において新たに確立したセッションが指定の主体となるセッションと正しく関連付けされたことを確認するサブセッション確認手段を備える。

10

【0033】

また、好ましくは、新たなセッション確立を要求する通信のデータは、新たなセッション確立を要求する通信のデータをもとに新たに確立したセッションの主体となるセッションを通知するメインセッション確認データを含み、セッション制御手段がセッション情報保持手段に新たなセッションを主体となるセッションに関連付けて管理させると、関連付けた主体となるセッションでメインセッション確認データに基づくデータを主体となるセッションで送信するメインセッション確認返信手段をさらに備える。

20

【0034】

また、好ましくは、セッション制御手段は、既に確立されているセッションのセッション識別情報で特定される該セッションを主体となるセッションとして指定した新たなセッション確立を要求する通信から新たに確立したセッションを主体となるセッションと関連付けた場合に返信されることが期待されているメインセッション確認データを抽出するメインセッション確認データ抽出手段を含み、セッション制御手段がセッション情報保持手段に新たなセッションを主体となるセッションに関連付けて管理させると、関連付けた主体となるセッションでメインセッション確認データに基づくデータをメインセッションのデータとして送信するメインセッション確認返信手段をさらに備える。

30

【0035】

したがって、これらの装置を用いると、既存のセッションに対して新たにセッションを関連付けて確立させるような場合に、新たなセッションの確立を要求した装置が所望のセッションを確かに関連付けたかを確認することができる。

【0036】

好ましくは、主体となるセッションは音データを通信するものであり、メインセッション確認データは必要の度に生成される文字列であって、サブセッション確認手段は、指定のメインセッション確認データをDTMF音データとして受信し、該DTMF音データを主体となるセッションで検出することによって、新たなセッションが正しく関連付けされたことを確認する。

40

【0037】

好ましくは、主体となるセッションは音データを通信するものであり、メインセッション確認データは必要の度に生成される文字列であって、メインセッション確認返信手段は、メインセッション確認データの文字列から生成したDTMF音データを主体となるセッションで返信する。

【0038】

したがって、これらの装置を用いると、既存の音声通信のセッションに対し、異なるデータをやりとりする新しいセッションを確立して、新しいセッションは既存の音声通信セ

50

セッションと関連付けるとともに、どのセッションと関連付けたかを確認することができる。

【0039】

さらに、好ましくは、セッション制御手段は、セッション情報保持手段において、第1のセッションの主体となるセッションとして関連付けられて管理されている第2のセッションの切断を要求されると、第1のセッションを切断したうえで要求された第2のセッションの切断を行なう。

【0040】

したがって、これらの装置を用いると、主体となるセッションを補足するためのデータのやりとりのために確立したセッションが主体となるセッションが切断された後も残ってしまうことがないようにすることができる。

10

【0041】

さらに、また、好ましくは、指定されたデータ間で同期をとってデータの入力、または出力するデータ同期入出力手段を備え、セッション制御手段は、現在確立されているセッションに関連付けて管理される新たなセッションの確立の要求、もしくはそれに対する応答の通信内に、新たに確立するセッションの通信データと同期させる現在確立されているセッション中の通信データを指定する情報を付加する同期データ指定情報付加手段を含み、データ同期入出力手段は、データ同期に関する情報に従って同期をとってセッションの通信データの入出力を行なう。

【0042】

したがって、これらの装置を用いると、主体となるセッションで通信しているデータとそれを補助するために確立したセッションで通信しているデータを同期させて入出力することで、異なるセッションで通信しても同期したデータを受けてコミュニケーションを行なうことができる。

20

【0043】

さらに、好ましくは、既に確立されているセッションはインターネット電話の音声通話サービスを用いた音声通話セッションであり、既に確立されているセッションの通信相手に対して新たなセッションの確立を要求する通信を行なうことで、新たに確立するセッションは音声通話セッションを介してはやりとりできない静止画、動画、もしくは他のアプリケーションの利用可能データを通信する。

30

【0044】

したがって、これらの装置を用いると、インターネット上のVoIP技術を用いた音声コミュニケーション（音声通話）のサービスを利用している際に、サービスがサポートしないような通話相手に静止画像や動画、もしくはこれらの装置上で利用可能なあらゆるアプリケーションデータなどをやりとりして、より多くのメディアを利用したコミュニケーションを行なうことが可能になる。

【0045】

同様に、上記の各手段をコンピュータが所有するハードウェアを利用して実現させる各機能を含むプログラムをコンピュータに導入して実行させることによって、上記装置と同様のことが実現される。そのようなプログラムはネットワーク等を用いたダウンロードによって導入される場合もあるし、コンピュータが読み取り可能な記録媒体に記録され、記録媒体によって配布され、コンピュータに導入される場合もある。

40

【発明の効果】

【0046】

本発明では、装置間やプログラム間でセッションを確立してデータ送受信を行なって利用する機能に対して、該セッションには追加して送受信できないデータについても端末装置、もしくはプログラムが本発明を利用することによって、の主たる機能の通信相手に対して、主たる機能で送受信する以外のデータを送受信して、よりリッチな機能として利用することができる。

【0047】

50

例えば、サービス提供者が提供するサーバを介して特定のデータ種のみを送受信するセッションしか確立できないような場合でも、当該特定のデータ種のみを送受信するセッション確立時に入手した情報を基に、サービス提供者が提供するサーバを介さず相手と直接セッションを確立することができる。相手と直接確立したセッションでは、当該特定のデータ種以外の任意のデータを交換できる。

【0048】

また、サービス提供者が提供するサーバを介さず直接セッションの確立要求を受けた場合でも、サービス提供者が提供するサーバを介したセッションとの関連付けが確認できるため、安心して新しいセッションを確立することができる。

また、サービス提供者が提供するサーバを介さず直接セッションの確立要求を送る側にとっても、新しいセッションが確立したことをV o I Pサービス提供者が提供するサーバを介したセッション経由で確認できるため、安心して新しいセッションを使用することができる。

10

【0049】

また、サービス提供者が提供するサーバを介さず直接確立したセッションは、サービス提供者が提供するサーバを介したセッションが存続している間のみ有効であり、知らない間にサービス提供者が提供するサーバを介さないセッションを用いてデータが送受信されてしまうようなことがない。

【発明を実施するための最良の形態】

【0050】

以下に、図面を参照しつつ、本発明の実施の形態について説明する。以下の説明では、同一の部品および構成要素には同一の符号を付してある。それらの名称および機能も同じである。したがってそれらについての詳細な説明は繰返さない。

20

【0051】

(実施の形態1)

図1は、本発明を用いた情報コミュニケーション装置の一例である、インターネット電話サービス利用装置100の機能構成を表すものである。なお、以下に説明するとおり、本発明は、情報コミュニケーション装置をコンピュータ上で動作させるためのプログラム、もしくはそのようなプログラムを記録した記憶媒体によっても実現可能である。

【0052】

音声入力部101は、インターネット電話サービス利用装置100に内蔵された音声入力マイクを含み、ユーザの音声入力を受け付ける。受け付けた音声データは、データ送受信部108に渡され、エンコード処理後データが、通信部105を用いて、通話相手の装置に送られる。

30

【0053】

音声出力部102は、音声を出力するためにインターネット電話サービス利用装置100に内蔵のスピーカーを含み、インターネット電話サービスを介して通話相手の装置から受信したデータをデータ送受信部108がデコードして音声出力する。

【0054】

情報表示部103は、インターネット電話サービス利用装置100内蔵の液晶パネルを含み、サービスアプリケーション部110の制御にしたがって、テキストや画像などの情報をユーザに表示する。

40

【0055】

情報入力部104は、インターネット電話サービス利用装置100内蔵のキーボード、および上記液晶パネルを用いたペンタッチによる入力を含む入力のための構成要素であり、これを用いて、発呼時に電話番号を入力したり、音声通話以外のテキストや画像のデータやりとりに関する操作を行ったりする。

【0056】

通信部105は、ネットワークインタフェイスを含む外部ネットワークとの通信を行うための構成要素であり、インターネット電話サービス利用装置100に内蔵されている。

50



## 【0057】

本インターネット電話サービス利用装置100は、インターネット電話サービスを用いてインターネットを利用した音声通話を行なう機能をもつとともに、サービスアプリケーション部110によって、ユーザデータ保持部109が、ユーザデータ保持部109内の記憶装置（図示せず）上で管理するユーザデータを、通話相手との間でやりとりすることが可能なものである。

## 【0058】

そのような機能を実施するために、セッション確立部106、セッション情報保持部107、データ送受信部108、ユーザデータ保持部109、サービスアプリケーション部110、第2セッション確立部111のすべての機能を含むようなコミュニケーションソフトウェア112が、装置のハードウェアを用いて機能を実現させる。

10

## 【0059】

コミュニケーションソフトウェア112は、インターネット電話サービス利用装置100にあらかじめ組み込まれたソフトウェアであってもよいし、また汎用的なパーソナルコンピュータ装置やPDAなどの携帯端末にインストールして利用可能なアプリケーションプログラムであってもよい。また、ソフトウェアの一部がインターネット電話サービス利用装置100に組み込まれており、インストールしてそのAPI（Application Program Interface）を利用してプログラムとして動作するような場合もある。

## 【0060】

セッション確立部106は、サービスアプリケーション部110からの指示にしたがって、通信部105を用いて、外部ネットワークに対しデータを通信するための接続（以下、しばしば、「セッション」と呼ぶ）の確立、変更、終了などのネゴシエーションを行なう。

20

## 【0061】

セッション確立部106は、後述の第2セッション確立部111とともにセッション制御を行う。本実施の形態においては、IP（インターネットプロトコル）で標準化されているSIP（Session Initiation Protocol）に従ったシグナリングを行なう。セッション確立部106は、ネゴシエーションの結果やそれに関する情報はセッション情報保持部107に通知する。

## 【0062】

また、セッション確立部106は音声電話の着呼を受ける機能を持つ。セッション確立部106は、セッション確立の要求を受け付けると、着呼したことをサービスアプリケーション部100に伝える。サービスアプリケーション部100は、音声通話の着呼があったことを着信音と着信画面表示を行なってユーザに知らせ、ユーザが着呼を受け付けると、セッション確立の応答を返すようにセッション確立部106に答える。後述するサブセッション確立要求を受け付けた場合は、上記の通常のセッション同様、セッション確立部106は、サービスアプリケーション部100にサブセッション確立の着呼があったことを伝え、サービスアプリケーション部100が同様に音やGUI（Graphical User Interface）を用いてユーザに伝え、ユーザがサブセッション確立を受け付ける操作を行なうと、セッション確立部106にそのことを伝える。セッション確立部106は、通信部105を用いて発呼元に対して応答を返信するとともに、セッション情報保持部107に確立したセッション情報を追加する。サブセッション確立要求であった場合にはセッション情報保持部107に確立したセッション情報を追加するとともに、要求中のメインセッション確認データを変換してDTMF（Dial Tone Multi Frequency）音を生成し、要求中で指定のメインセッションを使って送信する。メインセッション確認データについては後で詳細に説明する。

30

40

## 【0063】

セッション情報保持部107は、上記のように、セッション確立部106がSIPシグナリングを行なった結果を受け取って、それにしたがってコミュニケーションソフトウェア112が接続処理を行なうと、通信可能なセッションに関する情報を記憶装置上に記録

50

して管理する。セッションに関する情報にはSIPを用いたシグナリングにより相手から取得したデータ送信先のアドレスやポートが含まれる。また、セッション間の関連性についての情報も含まれ、後述の第2セッション確立部111からセッション間の関連付けを通知されるとそれに関する情報をセッションに関する情報に追加、更新して保持する。

#### 【0064】

データ送受信部108は、サービスアプリケーション部110の制御のもと、セッション確立部106や後述する第2セッション確立部111が確立して、その情報がセッション情報保持部107で保持、管理されているセッション情報にしたがって、音声通話データやそれ以外のコミュニケーションデータの送受信を通信部105を用いて行ない、サービスアプリケーション部110を介して、ユーザの指示に従った通話相手へのユーザデータの提供や通話相手からのデータの表示などを行なう。

10

#### 【0065】

ユーザデータ保持部109は、ユーザデータを記憶装置上に保持、管理するもので、画像や映像、テキストなどのデータから、ワープロや表計算などのアプリケーションデータなどをファイルとして管理する。

#### 【0066】

サービスアプリケーション部110は、音声通話ならびに、その最中に通話相手と情報データをやりとりするためのグラフィックユーザインタフェースを含むアプリケーションプログラムである。インターネット電話サービスを利用して音声通話を行なうための発呼、着呼などの音声電話機能のためのユーザインタフェースとともに、通話中に相手に提示するデータを選択したり、逆に相手から提示されたデータの中から閲覧したり、取得したりするデータを選択したりするインタフェースを持ち、ユーザの入力に従ったセッション確立部106を用いたセッションのネゴシエーションやデータ送受信部108を用いてデータを通話相手に送信したり、受信したデータをユーザに表示したりする。

20

#### 【0067】

なお、最初に張ったセッションで通信するデータ以外のデータを通信する第2のセッションを第1のセッションと関連付けないような場合には、セッション確立部106を用いて通常のセッションを確立すればよい。たとえば、音声電話サービスを用いて音声データを第1のセッションでやりとりしていたが、一方がビデオを紹介して、ビデオデータを提供するようになった場合に、第1の音声セッションと第2のビデオ視聴のセッションがそれぞれ独立して管理可能になる。

30

#### 【0068】

第2セッション確立部111は、音声通話中に通話相手に音声以外のデータを送受信するためのセッションを確立するシグナリングを行なうものであり、本発明のセッション制御のための構成の一部である。

#### 【0069】

本発明では、最初に張った第1のセッションをメインセッション、最初に張ったセッションで通信するデータ以外のデータを通信する第2のセッションをサブセッションと呼ぶこととする。サブセッションは、メインセッションと関連づけられて管理される。すなわち、メインセッションを確立している間のみ、新しいサブセッションを確立することが可能である。メインセッションが切断された場合には、メインセッションに関連するサブセッションは全て切断される。逆に、サブセッションが切断されても、関連付けられたメインセッションは切断されることはない。また、メインセッションが確立していない状態でサブセッションが確立されることはない。

40

#### 【0070】

本実施の形態では、SIPをベースに、メインのセッションである音声通話に対して、音声通話中にそれ以外の情報を送受信するためにメインセッションに関連付けたセッション(サブセッション)の確立を要求する。その際、サブセッション確立の要求は、通常のSIPに従った接続要求メッセージではなく、SIPをベースに規格を拡張したサブセッション確立要求を送信する。

50

## 【0071】

本実施の形態においてセッション管理のために拡張しているポイントは、メインセッション指定情報として主体となるセッションである音声通話セッションの識別子（セッション識別情報）を付加している点と、サブセッションとして管理することを確認するためにサブセッション確認用のメインセッション確認データを付加している点である。また、サブセッション確立要求は、既に確立している音声通話のセッションにおける音声データ送信先のIPアドレスに対して送信する。既に確立されている音声データ送信先のIPアドレスはセッション情報保持部107で保持されているので、そこから取得できる。第2セッション確立部111は、サブセッション確立要求を送信すると、メインセッション指定情報で指定したセッションでの受信データをチェックして、メインセッション確認データに対応するDTMF音が受信されるかをチェックする。該当するDTMF音が検出されれば、セッション情報保持部107にメインセッションとサブセッションの関連付けを行なうよう通知して、関連付けて管理させる。つまり、サブセッションをメインセッションに從属するセッションとして登録するサブセッション確認部としての機能を含む。

10

## 【0072】

なお、簡略な実施例として、DTMF音の検出を確認せずにサブセッションが確立されればそれだけで関連付けて登録する場合もありうる。

## 【0073】

図2は、図1に示したインターネット電話サービス利用装置100を用いて、音声通話とともに、通話に関連するサブデータを送受信するシーンでの各機器間でのシグナリングとセッション送受信について、模式的に示した図である。

20

## 【0074】

セッション確立に関するシグナリングにはSIPに從ったメッセージ送受信で行っているので、セッション確立の要求メッセージは”INVITE”で表している。また、サブセッション確立のシグナリングはSIPを拡張したもので、”SUB-INVITE”と表している。細い矢印はセッション確立処理のシグナリング、太い矢印は確立したセッションを表している。

## 【0075】

図2にしたがって、各処理を説明する。

## 【0076】

i) 発呼側のインターネット電話サービス利用装置202は、インターネット電話サービスサーバ201を介して発呼処理を行なう。ここでは、通話相手の電話番号を指定したSIPのINVITEメッセージがインターネット電話サービスサーバ201に向けて送信される。

30

## 【0077】

ii) インターネット電話サービスサーバ201は、SIPプロキシサーバの機能を含んでおり、INVITEメッセージの電話番号に相当するユーザ端末のIPアドレスをデータベースから検索して、そのアドレスに対してSIPプロキシとしてSIP INVITEメッセージを転送することを行なう。

## 【0078】

iii) 着信側のインターネット電話サービス利用装置203はINVITEを受信すると、ユーザに着信音、着信表示で知らせ、ユーザがGUI上で「通話」ボタンを押すと、セッションを確立の応答”OK”をインターネット電話サービスサーバ201に返す。

40

## 【0079】

iv) インターネット電話サービスサーバ201は、インターネット電話サービス利用装置203に転送したSIP INVITEメッセージに対する応答(“OK”)を発呼元のインターネット電話サービス利用装置202にSIPプロキシサーバとして転送する。

## 【0080】

v) インターネット電話サービス利用装置202はOKを受信すると、音声通話のセッションが確立でき、そのセッションを使ってインターネット電話サービス利用装置2

50

03と音声データを送受信して、音声通話を行なう。

【0081】

v i i ) インターネット電話サービス利用装置 202は、通話の途中で自身が持っているデータを通話相手と共有することを考えた。共有するデータを指定して「データ送信」ボタンを押すと、サブセッションを張る要求(SUB-INVITE)を通話相手の音声データ送信先の装置に直接送信する。なお、この例では、サブセッションの確立もインターネット電話サービス利用装置 202側から行なっているが、もちろん、インターネット電話サービス利用装置 203からも同様にできる。

【0082】

v i i i - 1 ) インターネット電話サービス利用装置 203は、S I Pシグナリング 10  
同様に“OK”を返すとともに、v i i i - 2 ) 音声通話用のメインセッションでサブセッションを張る要求(SUB-INVITE)中のメインセッション確認データを変換して生成したD T M F音をメインセッションで送信する。

【0083】

この結果、サブセッションが確立され、双方でメインセッションを補足するセッションとして管理され、このセッションを使って、双方の装置間で音声以外のデータのやりとり(i x)ができる。

【0084】

図3は、図2で概略を説明した内容をシーケンス図にしたものである。

【0085】

音声通話開始時には、インターネット電話サービスサーバ201に対して、“050-1234-5678”という電話番号を指定して、S I PのINVITEメッセージ(F301)を送信することによって発呼を行なう。 20

【0086】

インターネット電話サービスサーバ201は、電話番号“050-1234-5678”の電話番号に相当するユーザ端末の現在のI Pアドレス(12.34.56.72)を検索して取得し、それを使って受け取ったINVITEメッセージ(F302)をS I Pプロキシとして転送する。インターネット電話サービス利用装置203は受信したINVITE (F302)を受け付けてセッション確立する場合はOK(F303)をS I Pプロキシ経由で返し、インターネット電話サービスサーバ202がOK(F304)を受信する。 30

【0087】

その結果、音声通話用のセッションは確立され、音声データを送受信するための情報(コーデックやデータ送信先のI Pアドレス、ポート番号)はOK(F303、F304)とともに受け渡され、装置間で音声データは直接送受信される(S1)。

【0088】

インターネット電話サービス利用装置203は、確立した音声通話セッションにおける音声データの送信先の情報として、インターネット電話サービス利用装置203のI Pアドレス(12.34.56.72)を知る。

【0089】

その後、音声通話中に相手に写真を見せなくなったときに、写真のデータを指定すると、そのデータをやりとりするための第2のセッションを確立するため、サブセッション確立用の要求を、直接、メインセッションのデータ送信先アドレス(12.34.56.72)に対してサブセッション確立要求(F305)を送信する。その際に、メインセッションのセッション識別子をメインセッション情報として、またリクエストごとに設定するサブセッション関連付けの確認用データ(メインセッション確認データ)が情報として含まれたメッセージとなっている。 40

【0090】

なお、図3においてやり取りされる具体的なメッセージ例は、図8から図13を用いてあとで説明する。

【0091】

50

インターネット電話サービス利用装置 203 は、サブデータのやりとりを受け付けると OK (F306) を返すとともに、確認用データから生成した DTMF 音をメインセッション S1 で送信 (F307) し、確立したサブセッション S2 はそのメインセッションとなる S1 と関連付けて管理する。インターネット電話サービス利用装置 202 は DTMF 音をメインセッション S1 で受け取ると、S2 が確かに通話相手にメインセッション S1 と関連付けたということを確認し、自身でもサブセッション S2 はそのメインセッションとなる S1 と関連付けて管理するように登録する。

【0092】

図 4 は、サブセッションの接続を要求する側 (サブセッション発呼側) の装置での処理フロー図である。図 2 においては、インターネット電話サービス利用装置 202 がそれにあたる。インターネット電話サービス利用装置 202 はインターネット電話サービス利用装置 203 と音声通話中であるときに、ユーザはアプリケーション GUI を用いて、通話相手に送信するデータを選択する (S401)。

10

【0093】

サービスアプリケーション部 110 は、選択されたデータの種別がセッション確立部 106 に現在通信しているセッション、この場合は音声通話のセッションに追加して通信可能かを問い合わせ (S402)、その結果から追加可能か否かを判定する (S403)。

【0094】

セッション確立部 106 は SIP に従ったシグナリングを行なうことで追加可能か判断できる。

20

【0095】

現セッションに追加可能ならば、データ送受信部 108 は SIP に従ったシグナリングを行い、セッションに選択したデータ送受信を追加し、その結果に従ったセッション情報保持部 107 のセッション情報を更新する (S404)。

【0096】

現在のセッションに追加できない場合は、第 2 セッション確立部 111 に選択データを通信するためのサブセッション確立を要求する。第 2 セッション確立部 111 は、セッション情報保持部 107 から現在通信しているセッション情報からデータ送信先のアドレスを取得する (S405)。

【0097】

セッション情報については図 14、図 15 を用いて後で説明する。

30

【0098】

取得したアドレスに対して選択されたデータを通信するためのセッションとしてのサブセッション確立要求のメッセージ (シグナルと呼ぶこともある) を送信する。なお、サブセッション確立要求には現在通信しているセッションのセッション ID (接続要求時のコール ID が接続後はセッション ID として使用する。) を指定し、同時にメインセッション確認データを生成して付ける (S406)。

【0099】

送信後は、要求に対する応答とメインセッションでのサブセッション確認データの受信の監視を開始する (S407)。セッション確立要求、サブセッション確立要求の際に送受信するメッセージ (シグナル) については図 10 から図 13 を用いて後で説明する。

40

【0100】

第 2 セッション確立部 111 は、送信したサブセッション確立要求に対する応答を受信し (S408)、セッションが確立したかを確認する (S409)。確立できた場合は確立したセッション情報をセッション情報保持部 107 に仮登録する (S410)。

【0101】

セッション情報の仮登録については図 15 の説明で行なう。(確認を伴わない実施ではここで関連付けをセッション情報保持部 107 に登録し、セッション情報を更新する。)

第 2 セッション確立部 111 は引き続き、通信部で受信するデータを監視し、所定時間の間、送信したサブセッション接続要求に付けたメインセッション確認データに相当する

50

D T M F 音のデータが届くかを監視し(S 4 1 1)、対応する D T M F 音が届いたか確認し(S 4 1 2)、関連付けをセッション情報保持部 1 0 7 に登録し、セッション情報を更新する(S 4 1 3)。所定の時間がたっても D T M F 音が届かない場合、または受信した D T M F 音を変換して得られたデータがメインセッション確認データに一致しない場合にはセッション情報を削除し、セッションを切断して、サービスアプリケーション部 1 1 0 のユーザインタフェイスを介してユーザに通信できなかったことを伝える(S 4 1 4)。

【0 1 0 2】

メインのセッションでの応答を確認しないでシグナリングのみでサブセッションとして発呼側でのみ関連付けて登録したり、関連付けしないような場合もありうる。

【0 1 0 3】

図 5 は、サブセッション接続を受け付ける側の装置の処理フローである。

【0 1 0 4】

サブセッション接続を受け付ける機能がある装置は、コミュニケーションソフトウェア起動時にサブセッション確立要求受付のプロセスも起動され、通信部 1 0 5 の受信データでサブセッション確立要求の受信監視を開始する(S 5 0 1)。通常は常にこのプロセスが動作しているが、ユーザ入力などでサブセッションの受付を中止イベントがあるかを確認し(S 5 0 2)、合った場合はプロセスを終了する(S 5 0 2)。

【0 1 0 5】

中止イベントがない間は受信したメッセージを抽出し(S 5 0 3)、サブセッション接続要求であるかを確認する(S 5 0 4)。

【0 1 0 6】

サブセッション接続要求でなければ無視して引き続き監視を続ける(S 5 0 4)。

【0 1 0 7】

一方、サブセッション接続要求を受信すると、サービスアプリケーション部 1 1 1 を介して、G U I や着信音でユーザに告知し、受け付けるか否かについてのユーザの判断入力を受け取る(S 5 0 5)。

【0 1 0 8】

ユーザの入力を確認し(S 5 0 6)、接続OKの入力であった場合は接続受諾の応答を返信する(S 5 0 8)。

【0 1 0 9】

接続拒否の入力だった場合は接続拒否の応答を返す(S 5 0 7)。接続受諾の応答を返信した後、サブセッション確立要求からメインセッション確認データを取り出して D T M F 音に変換し、サブセッション確立要求で指定のメインセッションで送信する(S 5 0 9)。そして、確立したセッションをサブセッションとしてセッション情報保持部 1 0 7 に登録する(S 5 1 0)。なお、メインセッション確認データの返信機能は、セッションの関連付けを必要としないような実施の形態をとる場合においては省略することも可能である。

【0 1 1 0】

図 6 は、本実施形態におけるインターネット電話サービス利用装置 1 0 0 の装置外観である。

【0 1 1 1】

インターネット電話サービス利用装置 1 0 0 は、液晶パネル 6 0 1 を備え、液晶パネル上でタッチペン 6 0 2 を使った入力が可能である。また、電話番号などの数字入力のためのハードキー 6 0 3 を装備する。装置本体上にマイク 6 0 4、およびスピーカ 6 0 5、イヤホン接続ジャック 6 0 6 を備え、これらを利用して音声の入出力を行なう。また、内蔵する無線 L A N (Local Area Network) 通信インタフェイスに接続する外部アンテナ 6 0 7 がある。

【0 1 1 2】

図 7 は、インターネット電話サービス利用装置 1 0 0 のハードウェア構成である。

【0 1 1 3】

図 7 において、通信部 7 0 1 は、無線 L A N 機能を含む通信インタフェイスのハードウ

10

20

30

40

50

ウェアであり、含まれる外部アンテナを介して外部と通信を行なう。CPU 702は、ソフトウェアに基づく演算処理を行なうためのものである。

【0114】

フラッシュメモリ 703にはユーザデータやソフトウェア実行のためのメモリとして使用する。ROM (Read Only Memory) 704には組み込みソフトウェアなどのデータを記憶するものである。

【0115】

表示入出力部 705は液晶パネルおよびその周辺ハードウェアであり、データの表示やパネルタッチ入力を受け付ける。音声出力部 706はスピーカー及びその周辺ハードウェアであり、音声出力を行う。音声入力部はマイクを含む音声入力のためのハードウェアである。キー入力部 708は、ハードキーおよびその周辺でキー入力を受け付けるためのものである。

10

【0116】

図8から図11はSIPのメッセージの例であり、インターネット標準のSIPのセッション確立時のメッセージINVITEとセッション確立時の応答("200 OK")を表現したものである。なお、本発明の説明に不要なメッセージ内の一部情報は省略している。これらのメッセージは、図2、および図3で説明した接続の場合を例にしている。

【0117】

図8は、図2でのメインセッションである音声通話セッション確立を要求するときインターネット電話サービス利用装置202からインターネット電話サービスサーバ201に送信するSIPメッセージ(シグナル)である。

20

【0118】

SIPプロキシとしての役割をもつインターネット電話サービスサーバ201は、図8のメッセージから、宛先の電話番号(050-123-4567)に対応する利用者端末であるインターネット電話サービス利用装置203のIPアドレス(12.34.56.72)を解決して、図9のメッセージをインターネット電話サービス利用装置202に送信する。音声(audio)データをRTP/AVP (Realtime Transport Protocol / Audio/Video profile) プロトコルを用いて、サンプリングレート8000HzのGSMコーデックデータを送受信するセッションを要求するもので、インターネット電話サービス利用装置202(12.34.56.71)側では6001番ポートを使用することを宣言している。

30

【0119】

図10の"200 OK"メッセージが要求と同じ経路をたどり、インターネット電話サービスサーバ201のSIPプロキシを介して、図11の"200 OK"メッセージとして接続要求元のインターネット電話サービス利用装置202に届き、ネゴシエーションが完了して、セッションが確立されたことになる。

【0120】

本実施形態においては、SIPをベースにして本発明の接続中のセッションに従属するサブセッション確立用に情報を付加する仕様を規定して本発明を実現している。

【0121】

図12、図13は、サブセッション接続用メッセージの例である。

40

【0122】

本実施形態においては標準的なSIPプロトコルを用いるが、サブセッション接続の機能を追加するためにSIPメッセージで規定されている"Call-Info"ヘッダの機能を拡張する。元来、"Call-Info"ヘッダは、リクエスト送信時に発呼側、レスポンス送信時には着呼側のユーザに関する情報を使用目的を指定して送信するためのものである。たとえば、使用目的として「アイコン」を指定して発呼者を示すURLの情報を送信することによって着信側でアイコンに使用する画像データを通知することに使用できる。使用目的として「サブセッション接続」を追加し、呼の識別子によるメインセッションや関連付けの情報をメッセージを一緒に送信する。フォーマットは以下のように規定する。

【0123】

50

Call-Info:<main:(メインセッションのCall-ID)>purpose=SubSession,  
 <code:(レスポンス送信用コード)>purpose=RequestCode,  
 <sync:(メインセッション中の同期メディア)>purpose=Sync

「purpose=SubSession」はサブセッション接続の要求の際、必須である。

【0124】

「purpose=RequestCode」の情報はサブセッションの関連付けの確認をコード返信によって相手に要求する際につけるオプションの情報である。また、メインセッションで通信するメディアで同期させるものが有る場合につける情報が「purpose=Sync」で指定する情報であり、これもオプションである。

具体的には、図12、図13では、以下のような情報をつけている。

10

【0125】

Call-Info:

<main:123123123123@12.34.56.71>;purpose=SubSession,  
 <code:7777@12.34.56.71>;purpose=RequestCode

図12のメッセージでは、これが既に確立している123123123123@12.34.56.7のCall-IDを持つセッションと関連付けるセッションの確立要求であること、関連付けた場合には7777@12.34.56.71のコードを返信することを要求している。

【0126】

図13のレスポンスのメッセージは、上記の2つの要求を受け付けた返信であることを示すために関連付けたメインセッションのCall-IDと指定のリクエストコードを返信に含めている。リクエストコードはメインセッションで送信可能なデータに変換しても送信される。

20

【0127】

本実施の形態ではSIPに対し上記のような機能拡張を規定した。しかし、本発明はこの機能拡張フォーマットの規定に限定されるものではない。すなわち、セッションの関連付けのためのセッション指定情報や関連付けを確認するための情報、同期必要性の有無など、メインセッションとサブセッションでのデータ送受信に関連して指定する情報を含めてネゴシエーションできるようにする方法であれば他の方法でも構わない。

【0128】

図14、図15は接続中のセッションに関する情報であるセッション情報データの例である。セッション情報データとは装置内でセッションを管理するために保持、管理するデータである。

30

【0129】

図14の方は、セッション確立部を用いて、SIPで普通に音声通話するために確立したセッションの情報を保持するためのデータである。セッション識別子(セッションID)は接続要求時のコール-ID(Call-ID)が使用され、Mediaにはこのセッションでのデータ送受信についての情報が記録されている。図14の例では、オーディオデータについて、サンプリングレート8000HzのGSMコーデックデータで、RTP/AVPを用いて通信する。双方のデータを受信するためのアドレスとポート番号の組に関する情報である。通常、セッションを関連付けるための情報"relation"はmainに設定される。

40

【0130】

図15は、サブセッションとして確立したセッションの情報である。サブセッションの場合は、発呼側は"200 OK"の応答を受けた時点では、"relation"はtmpとして設定されるが、確認データの受信を受けて、サブセッションであることが記録される。

【0131】

図15の場合は、123123123123@12.34.56.71をIDを持つセッションのサブセッションであることを表している。

【0132】

セッション確立部106がシグナルを受信するなどして、セッションを切断するときには、セッション情報保持部107を参照して、切断するセッションのセッション情報を削

50



除要求するとともに、保持しているセッション情報のなかで、“relation”に切断するセッションのIDを指定してサブセッション登録されているものを切断するシグナリングを行なうようセッション確立部106に指示し、セッションが切断されたことが通知されれば、セッション情報を削除する。このような処理を行なうことにより、切断を指示されたセッションがメインセッションである場合には、当該メインセッション、および、関連付けられたすべてのサブセッションが切断される。また、切断を指示されたセッションがサブセッションである場合には、当該サブセッションに対してサブセッション登録されているセッションは存在しないため、当該サブセッションのみが切断されるが、メインセッションは切断されない。

【0133】

10

図16から図18は、アプリケーションのGUIを説明する図である。

【0134】

図16は、本装置において、通話相手とやりとりするデータを選択するためのものであり、「4/12 サッカーの試合の写真」や「4/19 ピアノ発表会の写真」とした静止画データや、「4/19 ピアノ発表会のビデオ」などの動画データ、BGMの音楽データ、「4/20 会議資料」などのオフィスソフトのファイルを選択することができる。これらのデータは、フラッシュメモリ上にファイルシステムとして保持し、それをタイトル付けしてサービスアプリケーション部内で登録しておくことができる。

【0135】

図17は、図16で選択された「4/12 サッカーの試合の写真」に基づいてサブセッションが確立した通話相手の装置で、各写真データに対応するサムネイルデータを取得して表示している。サムネイルを選択すると、実際の写真データを取得して、表示することができる。

20

【0136】

図18はビデオデータを選択したときの表示画面であり、動画再生画面上に送信された動画データをエンコードして再生する。

【0137】

図18のように、音声通話にビデオ映像を追加するように、複数のストリーミングデータをやりとりする場合に、データを同期させるために、サブセッションを確立する際に、メインセッションで通信するデータと同期をとることをリクエストすることを可能にする第2の実施の形態がある。第2の実施形態において、図1に示した第1の実施形態とほぼ同様であり、セッション情報保持部107に保持するセッション情報、およびセッション情報を利用して送受信するデータの出力制御を行なう機能がサービスアプリケーション部110に追加される。接続手順も図3に示したシーケンス図と同様であり、サブセッション接続用のINVITEメッセージの内容が異なる。

30

【0138】

図19は、図12に示したサブセッションのINVITEメッセージに代えて、サブセッションで音声データと同期させて動画データをやりとりするためのサブセッション確立のためのINVITEメッセージの例である。図12のメッセージ例と比較して、Call-Infoヘッダに以下の情報が追加されている。

40

【0139】

<sync:audio 6001 RTP/AVP 4>;purpose=Sync

これは、本セッションで送信されるデータを、メインセッションによって6001番ポートで受信されるオーディオデータと同期させて出力するようリクエストすることを意味する。

【0140】

図19のメッセージに従ってセッションが確立され、同期リクエストも承認されると、メインセッションで6001番ポートに向けて送信する音声データと本セッションで送信するペイロードタイプ31のビデオデータ（クロックレート90000HzのH.261エンコーディングデータ）間で同期をとった出力が行われることが期待される。

50

## 【0141】

図19のリクエストメッセージをもとに確立されるサブセッションについてのセッション情報は図20のようになりセッション情報保持部107に保持される。図20のセッション情報内の"Relation"の情報は、指定のメインセッションに対するサブセッションであることを示す情報(sub(123123123123@12.34.56.71))の他に、指定の音声データと同期する必要があることを示す情報(sync(audio((GSM/8000, RTP/AVP),(12.34.56.71:6001 12.34.56.72:6001)))が含まれている。

## 【0142】

データ送受信部108は、図20のセッション情報から、6002ポートで受信するビデオデータを6001ポートで受信するオーディオデータと同期して出力する。そのために、それぞれのポートで受信したRTPデータパケットをバッファリングし、音声コーデックのデコーダ用バッファにデータを書きこむ時刻と同時刻に送出された映像データを映像コーデックのデコーダ用バッファに書き込む。ただし、それぞれのコーデック、パラメータなどからバッファリングを含むデコード推定所要時間差があらかじめ設定しておいた規定値を超えるような場合はその所要時間の差を考慮して、処理の短い方のデータを遅らせてデコーダ用バッファに書き込むことで調整する。デコードされたそれぞれのデータは、音声出力部101と情報表示部103にデータを受け渡され、それぞれから出力される。

10

## 【0143】

以上のデータの同期の方法は、あくまで一例である。RTPパケットの送出時刻ではなく、メディアデータ自身に時刻情報を含ませ、デコード後、音声出力部101や情報表示部103に受け渡すところで同期をとるなど、複数のデータの同期をとるための他の手法を利用することも可能である。

20

## 【0144】

以上に説明した実施の例からも分かるように本特許を用いることで、主体となる通信である音声通話に加えて他のデータをやりとりすることができ、音声会話に画像や映像などの情報を加えたコミュニケーションが可能になる。

## 【0145】

また、サービスアプリケーション部111を変更することで、GUIやデータを使った処理を多様な装置に作りかえることができ、それはすべて本発明の一部と言える。

## 【0146】

(第2の実施形態)

メインセッションとサブセッションとの関連づけの情報として、サブセッションで交換するメッセージの中にメインセッションのセッション識別情報を付加しなくとも、関連づけすることは可能である。

30

## 【0147】

例えば、メインセッションである音声通話に対して音声通話中に新たなセッションの確立が要求された場合、新たなセッションの確立要求に含まれる情報を参照して、新たなセッションが音声通話のサブセッションであるとみなす方法である。具体的には、新たなセッションの確立要求において、(1)セッション確立要求の送信元アドレスが既に確立しているセッションの相手アドレスと一致する、(2)セッション確立要求の送信先アドレスが既に確立しているセッションの自アドレスと一致する、(3)新たなセッション確立要求で要求されているサービス(例えば画像送受信サービス)はサブセッションにて扱われるべきサービスであると自端末においてあらかじめ設定されている、といった条件が満たされる場合に、新たなセッションが音声通話のサブセッションであるとみなす。

40

## 【0148】

この実施形態では、サブセッションで交換するメッセージの中にメインセッションのセッション識別情報とみなす必要はない。

## 【0149】

(プログラムとしての実施形態)

以上、本発明の装置における実施形態を説明したが、コミュニケーションソフトウェア

50

112に相当する機能をもつプログラムも本発明の一部（情報コミュニケーションプログラム）であり、そのプログラムを記録した記録媒体も発明に含まれる。プログラムを後からインストールすることが可能な装置（たとえば、PCやPDAなどの携帯端末）でも、通信部、音声や表示などの入出力部を装置のものに置き換えて、本発明をプログラムとして実施することができる。

## 【0150】

（本発明の適用例）

本発明を利用できる例としては、以下のような例がある。ただし、本発明の範囲はもっと一般的であるので、これらの例に限定されるものではない。

1) 通話中に先日のサッカーの試合の話題になり、そのとき撮影したデジカメ写真の電子アルバムを通話相手に見せる。相手はそのなかから、見たいもの、欲しいものを選択するとそのデータを取得することができる。

10

2) 社外で販売活動をしている社員から電話で報告があった。現在の販売実績や在庫状況を聞かれたので、社内にある最新の販売データ、在庫データのファイルを選択して、通話相手に提供。双方で同じ資料を見ながら、質問があれば、それは資料のどこに載っているなどとガイドしながらデータを利用することができる。

3) 電話中に、今度新しいビデオカメラを買うつもりだという話題が出た。候補にしている機種の写真を送り、どの色がいいとか意見を聞くことができる。具体的に写真の部分に動的にマークをつけたりして、「この部分が格好いいよね。」などと音声だけではやりとりできないコミュニケーションを行なう。

20

## 【0151】

また、メインの通信をインターネット電話サービスを用いた音声通話で実施しているが、もちろん、それに限定するものではなく、あらゆる通信サービスに対して機能追加する用途に利用可能である。

## 【0152】

図21と図22を用いて、本発明を用いて音声コミュニケーションに映像を追加するビジュアルコミュニケーションを例示する。

## 【0153】

構成としては、一方はADSLやFTTHなどを用いてインターネットに接続したPC2102である。PC2102上にはクライアントソフトウェアがインストールされており、インターネット電話サービス2101を利用した音声インターネット電話が可能である。インスタントメッセージクライアントのインターネット電話機能を利用することも可能である。

30

## 【0154】

一方、接続相手は、ブロードバンドルータ2103を介して宅内LAN上の機器がインターネットに接続している。VoIP電話機2104は、ブロードバンドルータを介して、インターネット電話サービス2101を利用する。ブロードバンドルータ2103はUPnPIGD(Universal Plug and Play Internet Gateway Device)を利用して宅内のローカルアドレスを持った機器が宅外からのアクセスも可能にしている。宅内ネットワーク上のPCのWindows(R) MessengerがUPnP対応ルータを用いると音声チャットが可能になることと同じである。

40

## 【0155】

このような構成において、PC2102とVoIP電話機2014は、インターネット電話サービス(SIPプロキシ機能を含むサーバ)を介して音声通話セッションのためのシグナリングを行ない、その結果、音声データを送受信して、音声通話を実現している。

## 【0156】

図22は、図21のようにして音声通話セッションが確立されて音声通話中に、たとえば、PCの接続されたカメラの映像を通話相手に送信してTV電話として機能させたり、PC内のデジカメ写真データやアプリケーションデータなどを送信したりする。

## 【0157】

50

ネットワークTVはネットワークに接続して、確立されたセッションで受信したストリーミング動画像やデジタル写真画像を表示する通信ソフトウェアが内蔵された通信機能をもったTVである。通信機能は通信アダプタのような形で実現される場合もある。この場合に、PC側のクライアントからカメラ画像やHDD内のデジカメ画像を選択して送信指示すると、ネットワークTV2105に対して音声通話に関するサブセッションとして映像送信用の接続要求シグナリングが行なわれ、その結果、確立したセッションでデータを通信して相手に画像などを見せることを実現する。本発明を用いることによって、図21、図22で示したこのシーンを実現することができる。機器の構成や通信するデータなどはあくまで一例であるので、多くの類似するシーンで同様のことが実現可能である。

【0158】

10

今回開示された実施の形態はすべての点で例示であって制限的なものではないと考えられるべきである。本発明の範囲は上記した説明ではなくて特許請求の範囲によって示され、特許請求の範囲と均等の意味および範囲内でのすべての変更が含まれることが意図される。

【図面の簡単な説明】

【0159】

【図1】本発明の情報コミュニケーション装置の実施例としてのインターネット電話サービス利用装置100の機能構成を表すものである。

【図2】インターネット電話サービス利用装置を用いて、音声とデータの2つの通信をおこなうための接続を確立するためのシグナリングと確立したセッションを図示したものである。

20

【図3】図2の接続を確立するための接続シーケンス図である。

【図4】データ通信用の第2のセッションを確立する処理の発呼側のフローである。

【図5】データ通信用の第2のセッションを確立する処理の着呼側のフローである。

【図6】本発明の実施例における装置の外観である。

【図7】本発明の実施例におけるハード構成図である。

【図8】SIPプロキシに対して送信する音声通話用の発呼シグナルを説明する図である。

【図9】SIPプロキシが転送した発呼シグナルを説明する図である。

【図10】着呼側がセッション確立を受け付けたときにSIPプロキシに返す"200 OK"シグナルを説明する図である。

30

【図11】SIPプロキシが発呼元の装置に転送する"200 OK"シグナルを説明する図である。

【図12】サブセッション確立のための要求シグナルを説明する図である。

【図13】サブセッション確立のための要求に対する応答シグナルを説明する図である。

【図14】セッション情報データを説明する図である。

【図15】サブセッションのセッション情報を説明する図である。

【図16】コミュニケーションで追加するデータを選択する画面の例である。

【図17】サブセッションをデータを受けた側で取得した写真データのサムネイルを表示、選択する画面の例である。

40

【図18】サブセッションでビデオデータを取得して再生している画面の例である。

【図19】メインセッションの音声データとサブセッションの映像データを同期して出力するようネゴシエーションするサブセッション確立要求メッセージの例である。

【図20】図19のメッセージによって確立したサブセッションのセッション情報である。

【図21】映像付加可能な構成で音声通話を行なうシーンを示す図である。

【図22】図21で示した音声通話の状態から映像を送受信するサブセッションを確立して音声コミュニケーションに映像を追加したビジュアルコミュニケーションを行なうシーンを示す図である。

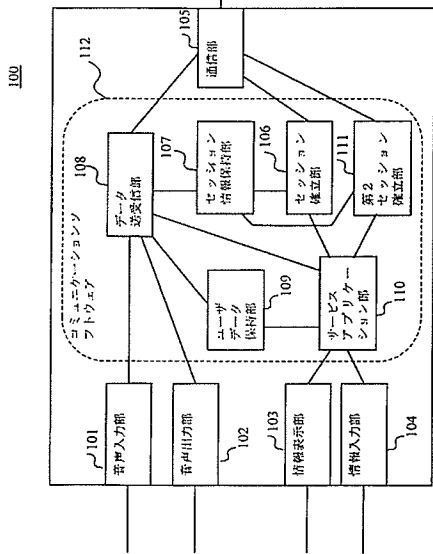
【符号の説明】

50

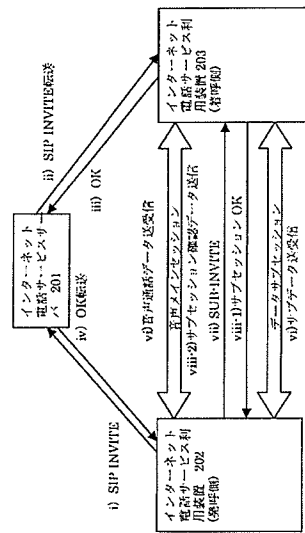
【0160】

100 インターネット電話サービス利用装置、101 音声入力部、102 音声出力部、103 情報表示部、104 情報入力部、105 通信部、106 セッション確立部、107 セッション情報保持部、108 データ送受信部、109 ユーザデータ保持部、110 サービスアプリケーション部、111 第2セッション確立部、112 コミュニケーションソフトウェア。

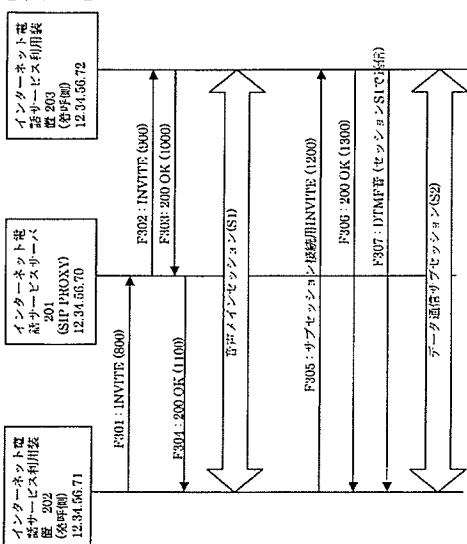
【図1】



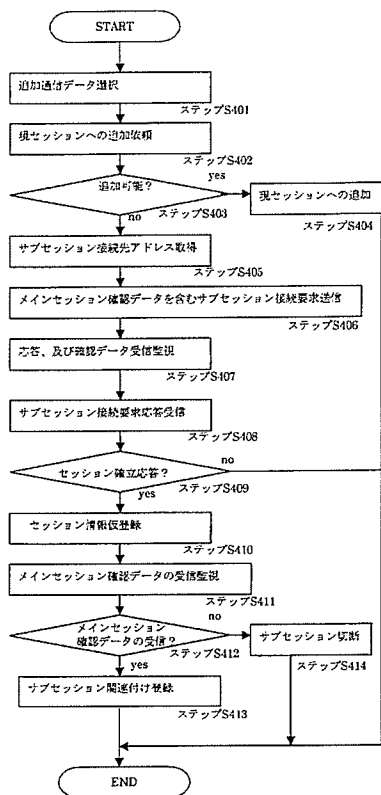
【図2】



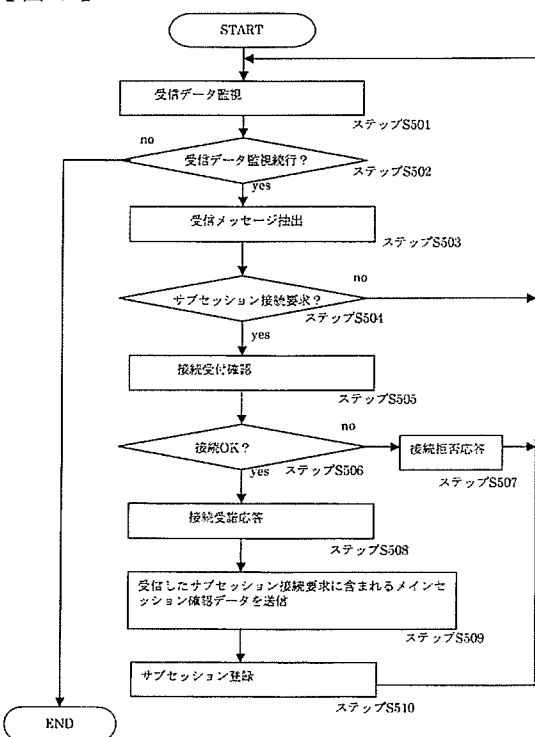
【図 3】



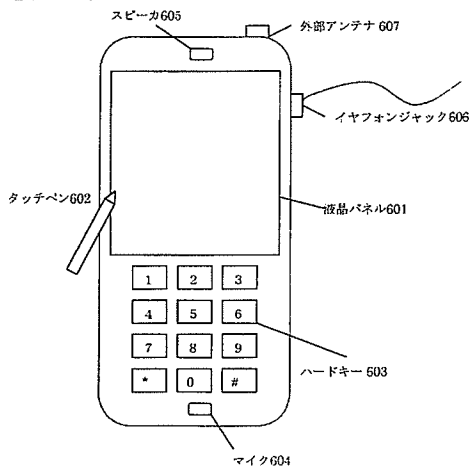
【図 4】



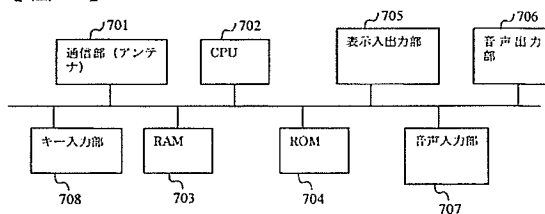
【図 5】



【図 6】



【図 7】



【 図 8 】

```

INVITE sip:050-123-4567@12.34.56.70 SIP/2.0
Via: SIP/2.0/UDP 12.34.56.71:5060;
To: 050-123-4567@12.34.56.70
From: UserA (050-123-5678@12.34.56.71)
Call-ID:123123123123@12.34.56.71
c=IN IP4 12.34.56.71
m=audio 6001 RTP/AVP 4
a=rtpmap:4 GSM/8000

```

SIP INVITEメッセージ 800

【 図 9 】

```

INVITE sip:050-123-4567@12.34.56.71 SIP/2.0
Via: SIP/2.0/UDP 12.34.56.70:5060;
To: 050-123-4567@12.34.56.70
From: UserA (050-123-5678@12.34.56.71)
Call-ID:123123123123@12.34.56.71
c=IN IP4 12.34.56.71
m=audio 6001 RTP/AVP 4
a=rtpmap:4 GSM/8000

```

SIP INVITEメッセージ 900

【 図 1 0 】

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 12.34.56.72:5060;
To: 050-123-4567@12.34.56.70
From: UserA (050-123-5678@12.34.56.71)
Call-ID:123123123123@12.34.56.71
c=IN IP4 12.34.56.72
m=audio 6001 RTP/AVP 4
a=rtpmap:4 GSM/8000

```

SIP OKメッセージ 1000

【 図 1 4 】

```

Session{
ID: 123123123123@12.34.56.71
Media: {
audio((GSM/8000, RTP/AVP),
(12.34.56.71:6001, 12.34.56.72:6001))
}
Relation-main
}

```

セッション情報データ

【 図 1 5 】

```

Session{
ID: 123123123124@12.34.56.71
Media: {
application(http,
(12.34.56.71:6002, 12.34.56.72:6002))
}
Relation:sub(123123123123@12.34.56.71)
}

```

セッション情報データ (サブセッション)

【 図 1 1 】

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 12.34.56.70:5060;
To: 050-123-4567@12.34.56.70
From: UserA (050-123-5678@12.34.56.71)
Call-ID:123123123123@12.34.56.71
c=IN IP4 12.34.56.72
m=audio 6001 RTP/AVP 4
a=rtpmap:4 GSM/8000

```

SIP OKメッセージ 1100

【 図 1 2 】

```

INVITE sip:050-123-4567@12.34.56.72 SIP/2.0
Via: SIP/2.0/UDP 12.34.56.71:5060;
To: 050-123-4567@12.34.56.72
From: UserA (050-123-5678@12.34.56.71)
Call-ID:123123123124@12.34.56.71
Call-Info:
<main:123123123123@12.34.56.71>;purpose=SubSession,
<code:7777@12.34.56.71>;purpose=RequestCode
c=IN IP4 12.34.56.71
m=application 6002 http

```

サブセッション接続用INVITEメッセージ 1200

【 図 1 3 】

```

SIP/2.0 200 OK
Via: SIP/2.0/UDP 12.34.56.72:5060;
To: 050-123-4567@12.34.56.72
From: UserA (050-123-5678@12.34.56.71)
Call-ID:123123123124@12.34.56.71
Call-Info:
<main:123123123123@12.34.56.71>;purpose=SubSession,
<code:7777@12.34.56.71>;purpose=RequestCode
c=IN IP4 12.34.56.72
m=application 6002 http

```

サブセッション接続用OKメッセージ 1300

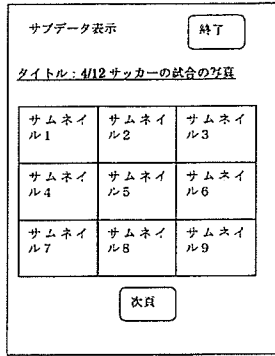
【 図 1 6 】

サブデータ選択

タイトル	共有
4/12 サッカーの試合の写真	<input type="radio"/>
4/19 ビアノ発表会の写真	<input type="checkbox"/>
4/12 サッカー試合のビデオ	<input type="checkbox"/>
4/19 ビアノ発表会のビデオ	<input type="checkbox"/>
BGM: ビバルディ「四季」	<input type="checkbox"/>
4/20会議資料	<input type="checkbox"/>
3月度売り上げデータ	<input type="checkbox"/>

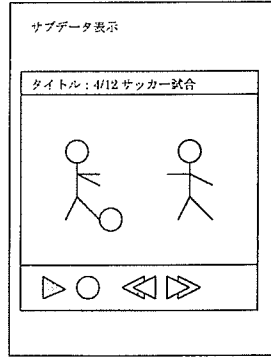
提供データ選択画面

【図 17】



データ表示画面(アルバム共有)

【図 18】



データ表示画面(ビデオ再生)

【図 19】

```
INVITE sip:050-123-4567@12.34.56.72 SIP/2.0
Via: SIP/2.0/UDP 12.34.56.71:5060;
To: 050-123-4567@12.34.56.72
From: UserA (050-123-5678@12.34.56.71)
Call-ID: 123123123124@12.34.56.71
Call-Info:
<main-123123123123@12.34.56.71>;purpose=SubSession,
<code=777@12.34.56.71>;purpose=RequestCode,
<sync=audio/6001 RTP/AVP 4>;purpose=Sync
c=IN IP4 12.34.56.71
m=video/6003 RTP/AVP 31
```

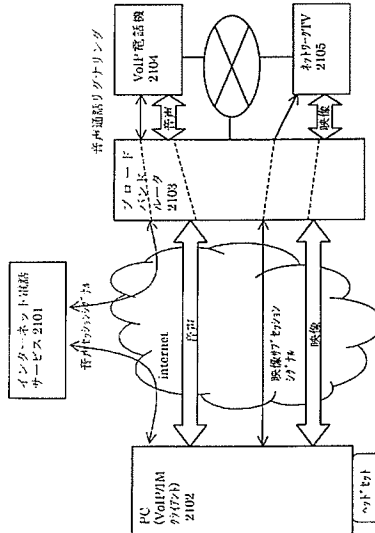
同期通信用サブセッション接続INVITEメッセージ 1900

【図 20】

```
SessionId:
ID: 123123123124@12.34.56.71
Media: {
video(H261/9000Hz, RTP/AVP),
(12.34.56.71:6002, 12.34.56.72:6002)
}
Relation: sub(123123123123@12.34.56.71),
sync(audio((GSM/8000, RTP/AVP),
(12.34.56.71:6001, 12.34.56.72:6001))
```

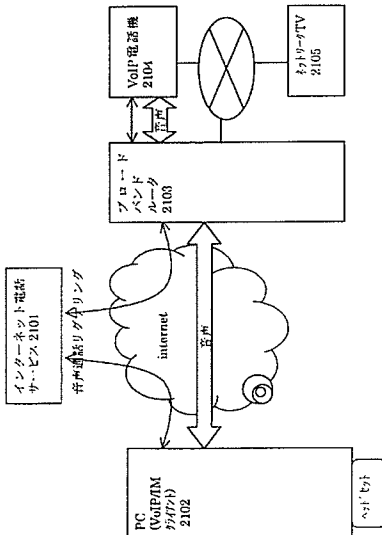
セッション情報データ (サブセッション)

【図 22】



ビデオネットワークセッション (2)

【図 21】



ビデオネットワークセッション (2)



---

フロントページの続き

(72)発明者 足立 誠

大阪府大阪市阿倍野区長池町2番2号 シャープ株式会社内

(72)発明者 田辺 忠三

大阪府大阪市阿倍野区長池町2番2号 シャープ株式会社内

(72)発明者 戸谷 智之

大阪府大阪市阿倍野区長池町2番2号 シャープ株式会社内

Fターム(参考) 5B089 HB18 JB06 KA13 KB04 KB06 KC26 KC47 KC53 KG04 KG10  
5K051 BB02 CC01 CC02 EE01 GG00 HH00 HH27

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	13144385
<b>Filing Date:</b>	13-Jul-2011
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Filer:</b>	Jason S. Kray
<b>Attorney Docket Number:</b>	11-905-WO-US

Filed as Large Entity

### Filing Fees for U.S. National Stage under 35 USC 371

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
Submission- Information Disclosure Stmt	1806	1	180	180
<b>Total in USD (\$)</b>				<b>180</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	21913406
<b>Application Number:</b>	13144385
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	5301
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Customer Number:</b>	20306
<b>Filer:</b>	Jason S. Kray
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	11-905-WO-US
<b>Receipt Date:</b>	30-MAR-2015
<b>Filing Date:</b>	13-JUL-2011
<b>Time Stamp:</b>	14:46:39
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$180
RAM confirmation Number	1106
Deposit Account	132490
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. 1.492 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	11-905-WO-US_SupplementalIDS-SB08.pdf	612338 ec8fcc328b7b5232805ea77f4178840b84bd89c2	no	4
<b>Warnings:</b>					
<b>Information:</b>					
A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.					
2	Foreign Reference	CN1732665A.pdf	1467791 bc96239401519a3e3329d2ef20e00a9db8674ce5	no	27
<b>Warnings:</b>					
<b>Information:</b>					
3	Foreign Reference	WO2004062229.pdf	1030301 fbc64336a1d6ee54f7128143254d3a1824b2a10c	no	46
<b>Warnings:</b>					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
<b>Information:</b>					
4	Foreign Reference	JP-2005-293065-WithEnglishAbstract.pdf	1880819 6514767cd864d2d76ac56c13d9843b18b5f231ec	no	30
<b>Warnings:</b>					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
<b>Information:</b>					
5	Fee Worksheet (SB06)	fee-info.pdf	30454 abf9c4696d7d0cd2fbcf52439761148223e6e251	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			5021703		

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Attorney Docket No. 11-905-WO-US)**

<b>In re Application of:</b>	)	
	)	
<b>Hans Maarten Stokking et al.</b>	)	
	)	<b>Conf. No.: 5301</b>
<b>Serial No.: 13/144,385</b>	)	
	)	<b>Art Unit: 2441</b>
<b>Filed: July 13, 2011</b>	)	
	)	<b>Examiner: Oanh Duong</b>
<b>Title: Managing Associated Sessions</b>	)	
<b>In A Network</b>	)	

**REPLY TO NON-FINAL OFFICE ACTION DATED NOVEMBER 19, 2014**

Mail Stop Amendment – via EFS  
Commissioner for Patents  
Alexandria, Virginia 22313-1450

Dear Commissioner:

This is in response to the Office Action dated November 19, 2014. The shortened statutory period for response is three months from the mailing date, i.e., by February 19, 2015 and this response is being filed within that time period. Please enter the following amendments and remarks into the record for this application.

**Amendments to the claims** are reflected in the **Listing of Claims** which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 8 of this paper.

## LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Previously Presented) A method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier for associating sessions in the network;

exchanging the composition session identifier between a user equipment and the network element a first time;

associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with either the user equipment or a second user equipment different from the user equipment; and

initiating a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.

2. (Canceled)

3. (Previously Presented) The method according to claim 1, wherein the method further comprises:

the user equipment generating the composition session identifier; and

sending a request for initiating the composition session from the user equipment to the network element, the request comprising the composition session identifier.

4. (Previously Presented) The method according to claim 1, wherein the method further comprises:



sending a request for initiating the composition session from the user equipment to the network element;

the network element generating the composition session identifier in response to the receipt of the request for initiating the composition session; and

the network element sending the composition session identifier to the user equipment.

5. (Currently Amended) The method according to claim 1, wherein the method further comprises:

the user equipment initiating the two or more associated sessions by sending two or more session initiation requests for a session to the network element, each request comprising the composition session identifier, the two or more session initiation requests being different from the composition session.

6. (Currently Amended) The method according to claim 1, wherein the method further comprises:

the network element initiating the two or more associated sessions by sending two or more requests for a session to the user equipment, each request comprising the composition session identifier, the two or more requests being different from the composition session.

7. (Previously Presented) The method according to claim 3, wherein the request for initiating the composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers.

8. (Previously Presented) The method according to claim 5, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (CoD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a

Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier.

9. (Previously Presented) The method according to claim 1, wherein combined streams of the two or more associated sessions are presented to the user equipment as a personalized composed multimedia stream.

10. (Previously Presented) The method according to claim 1, wherein the network further comprises storage, the method further comprising:

the network element storing the composition session identifier and two or more associated session identifiers in the storage.

11. (Previously Presented) The method according to claim 1, the method further comprising:

modifying the composition session, wherein modifying the composition session comprises at least one of (i) terminating or modifying one or more sessions in the composition session, or (ii) transferring one or more sessions from the composition session to a further composition session or outside the composition session.

12. (Previously presented) The method according to claim 1, wherein the network is an IP Multimedia Subsystem (IMS) network comprising an IMS core connected to a Service Control Function (SCF), wherein the SCF is configured for managing associated sessions between the network and the User Equipment.

13. (Previously Presented) A system for managing associated sessions in a network, the system comprising:

a network element; and

a user equipment,

wherein the network element is configured to (i) manage sessions between the network element and the user equipment, (ii) exchange a composition session identifier with the user equipment a first time, and (iii) associate two or more sessions with the composition session

identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with either the user equipment or a second user equipment different from the user equipment,

wherein the user equipment is configured to (i) provide the composition session identifier and (ii) exchange the composition session identifier with the network element, and

at least one of the network element or the user equipment is configured to initiate a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.

14. (Previously Presented) The user equipment of claim 13, wherein the user equipment comprises:

an ID generator for generating the composition session identifier; and

a multimedia client configured to (i) receive the composition session identifier from the ID generator, (ii) exchange the composition session identifier with the network element, (iii) initiate one or more multimedia sessions with the network element, and (iv) exchange the composition session identifier with the network element during set up of the multimedia sessions.

15. (Previously Presented) The user equipment according to claim 14, wherein the user equipment is configured to initiate the composition session.

16. (Previously Presented) The network element of claim 13, wherein the network element comprises:

a session manager configured to exchange the composition session identifier with the user equipment and to set up and modify multimedia sessions; and

storage configured to store composition session information, the composition session information comprising information regarding composition session identifiers and the two or more associated sessions.

17. (Previously Presented) The network element according to claim 16, further configured for at least one of initiating, terminating or modifying a composition session.

18. (Previously Presented) The network element according to claim 16, the network element further comprising:

an ID generator configured to generate the composition session identifier.

19. (Previously Presented) A non-transitory computer readable medium having stored thereon software instructions that, if executed by a user equipment or a network element, cause the user equipment or the network element to perform operations comprising the method according to claim 1.

20. (Previously presented) The method according to claim 4, wherein the request for initiating a composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers.

21. (Previously Presented) The method according to claim 6, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (CoD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier.

22. (Canceled)

23. (New) The method according to claim 1, wherein the method further comprises modifying the composition session, wherein modifying the composition session comprises at least one of (i) modifying at least one of the two or more sessions based on a determined change in bandwidth availability or (ii) selectively pausing data streams of the two or more sessions in response to a detection of an incoming call destined for the user equipment.

## REMARKS/ARGUMENTS

Claims 1 and 3-22 are presently pending. By this amendment, claim 22 is canceled, claims 5-6 are amended, and claim 23 is added. Support for new claim 23 is found throughout the present application including, for example, at paragraphs [0013], [0023], [0062], and [0079]-[0081] of the published specification for the present application (U.S. Publ. No. 2011/0276705). Claims 1, 3-21, and 23 will be pending in the present application after entry of this amendment.

Applicants reserve the right to pursue in a continuation application the subject matter of any of the claims without the present amendments, and any other subject matter disclosed by this application.

### **I. Election/Restrictions**

The Office Action alleges that claim 22 is directed to a different species. Office Action, pages 2-3. To expedite prosecution, Applicants have canceled claim 22. Applicants maintain the right to file one or more divisional applications directed to the non-elected species.

### **II. Claim Rejections – 35 U.S.C. §§ 102(b), 103(a)**

Claims 1, 3-8, and 10-22 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Publ. No. 2008/0089344 (“Jansen”). Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jansen in view U.S. Publ. No. 2010/0121956 (“Hoffpauir”). Reconsideration and withdrawal of these rejections is respectfully requested for at least the following reasons.

#### **A. Independent Claim 1**

Independent claim 1 recites, *inter alia*, “initiating a composition session, the composition session being a ***signaling session for facilitating management*** of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.” (Emphasis Added).

The present application explains that “[t]he composition session may be used for the management of associated sessions and various kinds of signaling between the user equipment and a network element associated with to this task. Such signaling may include agreeing on the

duration of all sessions or negotiations regarding to bandwidth requirements (for all associated sessions together).” Specification, para. [0017]. The present application further explains that “[i]n addition, initiating such a composition session may provide for more effective use of resources in the network and on the user equipment. For example using a composition session network initiated teardown of associated sessions may require less signaling to the user equipment. Further, continuous screening of all signaling messages for the presence of a composition session identifier, and subsequently probing the service logic (whether in the user equipment or in the network element) for a next course of action may be avoided. Messages only related to individual sessions (within a group of associated sessions) may not require such probing.” Specification, para. [0018].

Jansson fails to disclose or suggest at least the above-recited feature of claim 1. With respect to this feature, the Office Action alleges that Jansson discloses:

initiating a composition session (i.e., session 36), the composition session being a signaling session for facilitating management of the two or more sessions (i.e., sessions 38 and 39) and exchanging the composition session identifier between the user equipment and the network element, the composition session . . . being different from the two or more associated sessions (i.e., create and exchange between parties globally unique correlation identifier during SIP session setup, page 1 paragraph [0008] and page 2 paragraphs [0058]-[0059], and figures 1 and 4).

Office Action, pages 4-5. Applicants respectfully disagree.

Jansson discloses that the alleged composition session 36 is a “chat session 36” and the alleged two or more sessions are a “VoIP session 38” and a “data session 39.” Jansson, para. [0084]. Notably, the chat session 36 of Jansson is not a separate signaling session for facilitating management of the VoIP session 38 and the data session 39. Rather, Jansson discloses that the chat session 36, the VoIP session 38, and the data session 39 are all “media streams” that can be correlated with one another. Jansson, paras. [0004]-[0006]; [0084]. That is, the role played by the chat session 36 in the Jansson system is the same as the role played by the VoIP session 38 and the data session 39 – they are all communications sessions providing media content.

Significantly, none of these media sessions 36, 38, 39 facilitate management of any other session. In Jansson, the media sessions 36, 38, 39 are correlated by storing information in a table so that the system can apply “some special charging scheme to a multi-service session comprised

of two or more individual sessions.” Jansson, paras. [0005], [0059]-[0060]. Otherwise, the media sessions 36, 38, 39 do not interact with each other in Jansson. Accordingly, Jansson is silent as to how any of the media sessions such as, for example, the chat session 36 can be used to manage or otherwise provide signaling for any other session.

Applicants further note that the SIP messaging utilized to setup the media sessions 36, 38, 39 also is not a “signaling session for facilitating the management of the two or more sessions” as recited in claim 1. For example, Jansson is silent as to the SIP messaging for setting up the chat session 36 being utilized to manage either the VoIP session 38 or the data session 39. Rather, the VoIP session 38 and the data session 39 utilize their own separate SIP messaging to setup those sessions.

Because Jansson fails to disclose a composition session as recited in claim 1, the systems and methods of the present disclosure provide a number of example advantages over the system and method disclosed in Jansson. In particular, for example, the present application explains that, by employing the composition session of claim 1, “continuous screening of all signaling messages for the presence of a composition session identifier, and subsequently probing the service logic (whether in the user equipment or in the network element) for a next course of action may be avoided. Messages only related to individual sessions (within a group of associated sessions) may not require such probing.” Specification, para. [0018]. The Jansson system and method does not achieve this efficiency. Rather, because Jansson does not disclose a separate signaling session for facilitating the management of the media sessions 36-39, the media sessions 36-39 must be continuously screened and individually probed to manage the sessions 36-39.

For at least these reasons, independent claim 1 is not anticipated by Jansson.

*B. Independent Claim 13*

Independent claim 13 recites, *inter alia*, “at least one of the network element or the user equipment is configured to initiate a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.” As explained



above with respect to independent claim 1, Jansson fails to disclose or suggest at least these features. Rather, Jansson is silent as to any separate signaling session for managing the associated sessions. Accordingly, independent claim 13 is also patentable over Jansson.

C. Dependent Claims 3-12, 14-21, and 23

Claims 3-12, 14-21, and 23 depend directly or indirectly from independent claims 1 and 13. Hoffpauir does not address the deficiencies of Jansson explained above. Accordingly, for at least the reasons explained above with respect to claims 1 and 13, claims 3-12, 14-21, and 23 are also patentable over Jansson, Hoffpauir, or the combination thereof.

**CONCLUSION**

It is the Applicants' belief that the claims are in condition for allowance and action towards that effect is respectfully requested. If there are any matters which may be resolved or clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at the number indicated. It is believed that no fees are presently due. However, should any fees be required, the Commissioner is authorized to deduct the fees from MBHB Deposit Account No. 13-2490, Order No. 11-905-WO-US.

Respectfully submitted,

Date: February 17, 2015

By: /Jason S. Kray, Reg. No. 66,926/  
Jason S. Kray  
Reg. No. 66,926  
**McDonnell, Boehnen, Hulbert & Berghoff**  
300 S. Wacker Drive, Suite 3100  
Chicago, Illinois 60606  
(312) 913-2125 – phone

Attorney for Applicants

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	21512464
<b>Application Number:</b>	13144385
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	5301
<b>Title of Invention:</b>	Managing Associated Sessions in a Network
<b>First Named Inventor/Applicant Name:</b>	Hans Maarten Stokking
<b>Customer Number:</b>	20306
<b>Filer:</b>	Jason S. Kray
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	11-905-WO-US
<b>Receipt Date:</b>	17-FEB-2015
<b>Filing Date:</b>	13-JUL-2011
<b>Time Stamp:</b>	15:03:07
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

### Payment information:

Submitted with Payment	no
------------------------	----

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		11-905-WO- US_ResponseOfficeActionDate d11-19-14.pdf	163926  <small>227423a3498d86e9eb885525109eb4f29fe333e2</small>	yes	11

<b>Multipart Description/PDF files in .zip description</b>			
<b>Document Description</b>		<b>Start</b>	<b>End</b>
Amendment/Req. Reconsideration-After Non-Final Reject		1	1
Claims		2	7
Applicant Arguments/Remarks Made in an Amendment		8	11

**Warnings:**

**Information:**

<b>Total Files Size (in bytes):</b>	163926
-------------------------------------	--------

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875	Application or Docket Number <b>13/144,385</b>	Filing Date <b>07/13/2011</b>	<input type="checkbox"/> To be Mailed
---	---	----------------------------------	---------------------------------------

ENTITY:  LARGE  SMALL  MICRO

**APPLICATION AS FILED – PART I**

FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

**APPLICATION AS AMENDED – PART II**

	(Column 1)	(Column 2)	(Column 3)	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
<b>AMENDMENT</b>	<b>02/17/2015</b>	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		
	Total (37 CFR 1.16(i))	* 21	Minus	** 21	= 0	X \$80 = 0
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X \$420 = 0
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	<b>0</b>

	(Column 1)	(Column 2)	(Column 3)	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
<b>AMENDMENT</b>		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.  
 \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".  
 \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".  
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE  
/AMANDA FORD/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
13/144,385 07/13/2011 Hans Maarten Stokking 11-905-WO-US 5301

20306 7590 11/19/2014
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER

DUONG, OANH

ART UNIT PAPER NUMBER

2441

MAIL DATE DELIVERY MODE

11/19/2014

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



### **DETAILED ACTION**

The present application is being examined under the pre-AIA first to invent provisions.

1. Claims 1 and 3-22 are presented for examination.

Claim 2 has been cancelled.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17€, was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17€ has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/20/2014 has been entered.

#### ***Election/Restrictions***

3. Newly submitted claim 22 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claim 22 is directed to a different species that requires the mutually exclusive characteristics: transmitting the first request, including the first media session identifier, to one or more media sources; receiving a first response from the one or more media sources providing the first one of the plurality of sessions, the first response including

Art Unit: 2441

the composition session identifier and the first media session identifier; transmitting the first response, including the composition session identifier and the first media session identifier, to the at least one user equipment ;; transmitting the second request, including the second media session identifier, to the one or more media sources; receiving a second response from the one or more media sources providing the second one of the plurality of sessions, the second response including the composition session identifier and the second media session identifier; and transmitting the second response, including the composition session identifier and the second media session identifier, to the at least one user equipment.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 22 has been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-8 and 10-22 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Jansson et al (hereafter, “Jansson”), US 2008/0089344 A1.



Regarding claims 1 and 13, Jansson teaches a method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier (i.e., *a globally unique correlation identifier*) for associating sessions in the network (i.e., *creating a globally unique correlation identifier, page 1 paragraph [0009]*);

exchanging the composition session identifier between a user equipment and the network element a first time (i.e., *exchange between parties, the globally unique correlation identifier, page 1 paragraph [0008]*);

associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time (i.e., *the exchange of the globally unique correlation ID provides the ability to associate and correlate independent sessions, page 2 paragraph [0018]*), wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with either the user equipment or a second user equipment different from the user equipment (i.e., page 2 paragraphs [0018]-[0033])  
,and

initiating a composition session (i.e., session 36), the composition session being a signaling session for facilitating management of the two or more sessions (i.e., sessions 38 and 39) and exchanging the composition session identifier between the user equipment and the network element, the composition session (i.e., being different

Art Unit: 2441

from the two or more associated sessions (i.e., *create and exchange between parties globally unique correlation identifier during SIP session setup, page 1 paragraph [0008] and page 2 paragraphs [0058]-[0059], and figs 1 and 4*)

Regarding claims 3 and 14, Jansson teaches the method according to claim 1, wherein the method further comprises:

the user equipment generating the composition session identifier (i.e., page 1 paragraph [0016]-[page 2 paragraph [0033]); and

sending a request for initiating the composition session from the user equipment to the network element, the request comprising the composition session identifier (i.e., page 1 paragraph [0016]-[page 2 paragraph [0033]).

Regarding claim 4, Jansson teaches the method according to claim 1, wherein the method further comprises:

sending a request for initiating the composition session from the user equipment to the network element (i.e., page 2 paragraph [0059]); the network element generating the composition session identifier in response to the receipt of the request for initiating the composition session (i.e., page 2 paragraph [0059]); and the network element sending the composition session identifier to the user equipment (i.e., Fig. 1 paragraph [0059]).

Art Unit: 2441

Regarding claim 5, Jansson teaches the method according to claim 1, wherein the method further comprises:

the user equipment initiating the two or more associated sessions by sending two or more session initiation requests for a session to the network element, each request comprising the composition session identifier (i.e., page 4 paragraphs [0083]-[0084]).

Regarding claim 6, Jansson teaches the method according to claim 1, wherein the method further comprises:

the network element initiating the two or more associated sessions by sending two or more requests for a session to the user equipment, each request comprising the composition session identifier (i.e., page 4 paragraph [0091]).

Regarding claim 7, Jansson teaches the method according to claim 3, wherein the request for initiating the composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers (i.e., page 2 paragraph [0059]).

Regarding claim 8, Jansson teaches the method according to claim 5, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (COD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI)

Art Unit: 2441

session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier (i.e., page 2 paragraph [0018]).

Regarding claim 10, Jansson teaches the method according to claim 1, wherein the network further comprises storage, the method further comprising: the network element storing the composition session identifier and two or more associated session identifiers in the storage (i.e., page 2 paragraph [0059]).

Regarding claim 11, Jansson teaches the method according to claim 1, the method further comprising: modifying the composition session, wherein modifying the composition session comprises at least one of (i) terminating or modifying one or more sessions in the composition session, or ii) transferring one or more sessions from the composition session to a further composition session or outside the composition session (i.e., page 4 paragraph [0085]).

Regarding claim 12, Jansson teaches the method according to claim 1, wherein the network is an IP Multimedia Subsystem (IMS) network comprising an IMS core connected to a Service Control Function (SCF), wherein the SCF is configured for

Art Unit: 2441

managing associated sessions between the network and the User Equipment (i.e., Fig. 1).

Regarding claim 15, Jansson teaches the user equipment according to claim 14, wherein the user equipment is configured to initiate the composition session (i.e., Fig. 1).

Regarding claims 16-17, those claims recite limitations that are similar to claims 10-11, same rationale of rejection is applicable.

Regarding claim 18, Jansson teaches the network element according to claim 16, the network element further comprising: an ID generator configured to generate the composition session identifier (i.e., page 1 paragraph [0016]).

Regarding claim 19, this claim recite a computer program product comprising software code portions configured for, when run in the memory of a user equipment or a network element, executing the method steps according to claim 1; same rationale of rejection is applicable.

Regarding claim 20, Jansson teaches the method according to claim 4, wherein the request for initiating a composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation

Art Unit: 2441

information associated with the one or more sessions identified by the session identifiers (i.e., page 2 paragraph [0059]).

Regarding claim 21, Jansson teaches the method according to claim 6, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (COD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier (i.e., page 2 paragraph [0018]).

5. Claim 9 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Jansson in view of Hoffpauir, US 2010/0121956 A1.

Regarding claim 9, Jansson teaches the method according to claim 1.

Jansson does not teach wherein combined streams of the two or more associated sessions are presented to the user as a personalized composed multimedia stream.

Art Unit: 2441

Hoffpauir teaches system wherein at least one session may be created at a server (seen in abstract). Hoffpauir teaches wherein combined streams of the two or more associated sessions are presented to the user as a personalized composed multimedia stream (i.e., page 4 paragraph [0037]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Jansson to present combined streams of the associated sessions to the user as a personalized composed multimedia stream as taught by Hoffpauir. One would be motivated to do so allow single stream to be presented to the user regardless of how many physical endpoints are used in the multimedia service processing (i.e., Hoffpauir, page 4 paragraph [0038]).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1 and 2-21 have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OANH DUONG whose telephone number is (571)272-3983. The examiner can normally be reached on Monday- Friday, 9:30PM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2441

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OANH DUONG/  
Primary Examiner, Art Unit 2441



<b>Notice of References Cited</b>	Application/Control No. 13/144,385	Applicant(s)/Patent Under Reexamination STOKKING ET AL.	
	Examiner OANH DUONG	Art Unit 2441	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A US-2008/0089344	04-2008	Jansson et al.	370/395.2
*	B US-2011/0238845	09-2011	Keller et al.	709/227
	C US-			
	D US-			
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			


**FOREIGN PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

**NON-PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)				
	U				
	V				
	W				
	X				

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b>Search Notes</b>  	<b>Application/Control No.</b>  13144385	<b>Applicant(s)/Patent Under Reexamination</b>  STOKING ET AL.
	<b>Examiner</b>  OANH DUONG	<b>Art Unit</b>  2441

CPC- SEARCHED		
Symbol	Date	Examiner
H04L65/1016 OR H04L65/1069 OR H04L67/14 OR H04L65/1083 OR H04M15/57 OR H04M15/8228 OR H04M2215/208 OR H04M2215/7833	5/17/2014	O.D


CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	203, 223, 227-227, 246	5/17/2014	O.D

SEARCH NOTES		
Search Notes	Date	Examiner
EAST text search of USPAT, JPO, EPO, DERWENT, IBM_TDB, US-PGPUB	11/17/2014	O.D

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

--	--

<b>Index of Claims</b> 	<b>Application/Control No.</b> 13144385	<b>Applicant(s)/Patent Under Reexamination</b> STOKING ET AL.
	<b>Examiner</b> OANH DUONG	<b>Art Unit</b> 2441

✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	11/17/2014							
	1	✓							
	2	-							
	3	✓							
	4	✓							
	5	✓							
	6	✓							
	7	✓							
	8	✓							
	9	✓							
	10	✓							
	11	✓							
	12	✓							
	13	✓							
	14	✓							
	15	✓							
	16	✓							
	17	✓							
	18	✓							
	19	✓							
	20	✓							
	21	✓							
	22	N							

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S64	183	S63 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 18:37
S63	326	S62 same SIP	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 18:36
S62	8234	(correlat\$3 associat\$3) near15 (multiple number plurality) near2 "sessions"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 18:36
S60	23	S59 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 18:25
S59	35	S58 same3 SIP adj message	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 18:25
S58	218	(track\$3 control\$4) near10 associat\$3 near15 multimedia near2 sessions	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 18:24
S57	20	S56 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 15:12
S56	38	S55 same (composit\$3 combin\$3 aggregat\$3) near5 session	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 15:12
S55	2424	(id identifier identification) near20 associat\$3 near10 (variety number plurality different multiple) near2 sessions	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 15:11
S54	4	S53 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 14:54

S53	5	(user client player viewer (end adj user)) near20 compos\$3 near20 associat\$3 near15 ((multimedia media) adj session)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 14:53
S52	2	composition adj session near20 set adj up	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 14:46
S51	244	S50 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 13:36
S50	360	(compos\$5 aggregat\$3 combin\$3) near3 session near3 (id identifier identification)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 13:36
S49	0	S48 and @ad<"20090119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 13:32
S48	10	composition adj session adj (id identifier identification)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/16 13:31

11/17/2014 1:58:28 PM

C:\Users\oduong\Documents\EAST\Workspaces\13144385.wsp

**REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL  
(Submitted Only via EFS-Web)**

Application Number	13/144,385	Filing Date	2011-07-13	Docket Number (if applicable)	11-905-WO-US	Art Unit	2441
First Named Inventor	Hans Maarten Stokking			Examiner Name	Oanh Duong		

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**  
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

**SUBMISSION REQUIRED UNDER 37 CFR 1.114**

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_

Other \_\_\_\_\_

Enclosed

Amendment/Reply

Information Disclosure Statement (IDS)

Affidavit(s)/ Declaration(s)

Other  
Petition for Extension of Time

**MISCELLANEOUS**

Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months \_\_\_\_\_  
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

Other \_\_\_\_\_

**FEES**

**The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**

The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 132490

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

Patent Practitioner Signature

Applicant Signature

Signature of Registered U.S. Patent Practitioner			
Signature	/Jason S. Kray/	Date (YYYY-MM-DD)	2014-10-20
Name	Jason S. Kray	Registration Number	66926

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b>		Docket Number (Optional) <b>11-905-WO-US</b>
Application Number <b>13/144,385</b>	Filed <b>July 13, 2011</b>	
For <b>Managing Associated Sessions in a Network</b>		
Art Unit <b>2441</b>	Examiner <b>Oanh Duong</b>	

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee		
<input type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$	
<input checked="" type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$	<b>600.00</b>
<input type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$	
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$	
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$	

- Applicant asserts small entity status. See 37 CFR 1.27.
- Applicant certifies micro entity status. See 37 CFR 1.29.  
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.
- A check in the amount of the fee is enclosed.
- Payment by credit card. Form PTO-2038 is attached.
- The Director has already been authorized to charge fees in this application to a Deposit Account.
- The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to  
Deposit Account Number 13-2490
- Payment made via EFS-Web.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

I am the

- applicant.
- attorney or agent of record. Registration number 66,926
- attorney or agent acting under 37 CFR 1.34. Registration number \_\_\_\_\_.

/Jason S. Kray/  
Signature

October 20, 2014  
Date

Jason S. Kray  
Typed or printed name

66,926  
Telephone Number

**NOTE:** This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below\*.

\* Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No. : 13/144,385  
Confirmation No. : 5301  
Applicants : *Hans Maarten Stokking et al.*  
Filed : July 13, 2011  
Title : Managing Associated Sessions In A Network  
TC/A.U. : 2441  
Examiner : Oanh Duong  
Docket No. : *11-905-WO-US*  
Customer No. : 20306

**AMENDMENT UNDER 37. C.F.R. §1.114 AND  
REPLY TO FINAL OFFICE ACTION DATED MAY 19, 2014**

Mail Stop After Final – via EFS  
Commissioner for Patents  
Alexandria, Virginia 22313-1450

Dear Commissioner:

This paper is a submission along with a Request for Continued Examination (RCE) in compliance with 37 C.F.R § 1.114 and in reply to the Final Office Action dated May 19, 2014. The Applicant hereby requests a two-month extension, extending the time to respond to October 19, 2014. Applicant notes that October 19, 2014 was a Sunday and, thus, this response is being timely filed on the next business day. The Commissioner is authorized to deduct the extension fees from MBHB Deposit Account No. 13-2490, Order No. 11-905-WO-US. Please enter the following amendments and remarks into the record for this application.

**Amendments to the claims** are reflected in the **Listing of Claims** which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 8 of this paper.

## LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently Amended) A method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

providing a composition session identifier for associating sessions in the network;

exchanging the composition session identifier between a user equipment and the network element a first time; [[and]]

associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with either the user equipment or a second user equipment different from the user equipment; and

initiating a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.

2. (Canceled)

3. (Currently Amended) The method according to claim [[2]] 1, wherein the method further comprises:

the user equipment generating the composition session identifier; and

sending a request for initiating the composition session from the user equipment to the network element, the request comprising the composition session identifier.

4. (Currently Amended) The method according to claim [[2]] 1, wherein the method further comprises:

sending a request for initiating the composition session from the user equipment to the network element;

the network element generating the composition session identifier in response to the receipt of the request for initiating the composition session; and

the network element sending the composition session identifier to the user equipment.

5. (Previously Presented) The method according to claim 1, wherein the method further comprises:

the user equipment initiating the two or more associated sessions by sending two or more session initiation requests for a session to the network element, each request comprising the composition session identifier.

6. (Previously Presented) The method according to claim 1, wherein the method further comprises:

the network element initiating the two or more associated sessions by sending two or more requests for a session to the user equipment, each request comprising the composition session identifier.

7. (Previously Presented) The method according to claim 3, wherein the request for initiating the composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers.

8. (Previously Presented) The method according to claim 5, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (CoD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a

Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier.

9. (Previously Presented) The method according to claim 1, wherein combined streams of the two or more associated sessions are presented to the user equipment as a personalized composed multimedia stream.

10. (Previously Presented) The method according to claim 1, wherein the network further comprises storage, the method further comprising:

the network element storing the composition session identifier and two or more associated session identifiers in the storage.

11. (Currently Amended) The method according to claim ~~[[2]]~~ 1, the method further comprising:

modifying the composition session, wherein modifying the composition session comprises at least one of ~~(i) adding one or more sessions to the composition session,~~ (i) terminating or modifying one or more sessions in the composition session, or ~~[[iii]]~~ (ii) transferring one or more sessions from the composition session to a further composition session or outside the composition session.

12. (Previously presented) The method according to claim 1, wherein the network is an IP Multimedia Subsystem (IMS) network comprising an IMS core connected to a Service Control Function (SCF), wherein the SCF is configured for managing associated sessions between the network and the User Equipment.

13. (Currently Amended) A system for managing associated sessions in a network, the system comprising:

a network element; and

a user equipment,

wherein the network element is configured to (i) manage sessions between the network element and the user equipment, (ii) exchange a composition session identifier with the user equipment a first time, and (iii) associate two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with either the user equipment or a second user equipment different from the user equipment, [[and]]

wherein the user equipment is configured to (i) provide the composition session identifier and (ii) exchange the composition session identifier with the network element, and

at least one of the network element or the user equipment is configured to initiate a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.

14. (Previously Presented) The user equipment of claim 13, wherein the user equipment comprises:

an ID generator for generating the composition session identifier; and

a multimedia client configured to (i) receive the composition session identifier from the ID generator, (ii) exchange the composition session identifier with the network element, (iii) initiate one or more multimedia sessions with the network element, and (iv) exchange the composition session identifier with the network element during set up of the multimedia sessions.

15. (Currently Amended) The user equipment according to claim 14, wherein the user equipment is ~~further~~ configured to initiate [[a]] the composition session.

16. (Previously Presented) The network element of claim 13, wherein the network element comprises:

a session manager configured to exchange the composition session identifier with the user equipment and to set up and modify multimedia sessions; and

storage configured to store composition session information, the composition session information comprising information regarding composition session identifiers and the two or more associated sessions.

17. (Previously Presented) The network element according to claim 16, further configured for at least one of initiating, terminating or modifying a composition session.

18. (Previously Presented) The network element according to claim 16, the network element further comprising:

an ID generator configured to generate the composition session identifier.

19. (Currently Amended) A non-transitory computer readable medium having stored thereon software instructions that, if executed by a user equipment or a network element, cause the user equipment or the network element to perform operations comprising the method [[steps]] according to claim 1.

20. (Previously presented) The method according to claim 4, wherein the request for initiating a composition session further comprises one or more session identifiers and, optionally, resource reservation information and/or resource allocation information associated with the one or more sessions identified by the session identifiers.

21. (Previously Presented) The method according to claim 6, wherein the two or more associated sessions comprise at least one of a broadcast (BC) session associated with a BC identifier (BCServiceID), a content-on-demand (CoD) session associated with a CoD identifier (CoDID), a Targeted Advertisement Insertion (TAI) session associated with a TAI identifier, network personal video content (NPVC) session associated with a NPVR identifier (NPVRContentID), a user generated content (UGC) session associated with a UGC identifier, a



Public Switched Telecommunications Network (PSTN) emulation session associated with a PSTN emulation identifier, or a shared content (SC) session associated with a SC identifier.

22. (New) A method for managing associated sessions in a network, the network having a network element configured for managing associated sessions between the network and at least one user equipment, the method comprising:

exchanging a composition session identifier between the network element and at least one user equipment;

after exchanging the composition session, receiving a first request for a first one of the plurality of sessions from at least one user equipment, the first request including the composition session identifier and a first media session identifier, the first media session identifier being associated with the first one of the plurality of sessions;

transmitting the first request, including the composition session identifier and the first media session identifier, to one or more media sources;

receiving a first response from the one or more media sources providing the first one of the plurality of sessions, the first response including the composition session identifier and the first media session identifier;

transmitting the first response, including the composition session identifier and the first media session identifier, to the at least one user equipment;

receiving a second request for a second one of the plurality of sessions from the at least one user equipment, the second request including the composition session identifier and a second media session identifier, the second media session identifier being associated with the second one of the plurality of sessions;

transmitting the second request, including the composition session identifier and the second media session identifier, to the one or more media sources;

receiving a second response from the one or more media sources providing the second one of the plurality of sessions, the second response including the composition session identifier and the second media session identifier; and

transmitting the second response, including the composition session identifier and the second media session identifier, to the at least one user equipment.

## REMARKS/ARGUMENTS

Claims 1-21 are presently pending. Claim 2 has been canceled. Claims 1, 3-4, 11, 13, 15, and 19 have been amended. Claim 22 has been added. Support for new claim 22 is found throughout the present application including, for example, at Figure 2 and corresponding paragraphs of the specification. No new matter has been added. Thus, claims 1, and 3-22 will be pending in the present application after entry of this amendment.

Applicant reserves the right to pursue in a continuation application the subject matter of any of the claims without the present amendments, and any other subject matter disclosed by this application.

### **I. Claim Objections**

Claims 1, 13, and 19 are objected to because of alleged informalities. Final Office Action, page 2. In particular, claims 1, 13, and 19 are objected to because it is alleged that the recited “a second time” should be “the second time.” *Id.* Applicant respectfully disagrees as the suggested amendment may be less clear with respect to the antecedent basis of the recited phrase. In an attempt to address the Examiner’s concerns, claims 1, 13, and 19 have been amended to further clarify that the composition session identifier is exchanged “a first time” and “at least a second time.” In view of these amendments, Applicant respectfully submits that claim 1, 13, and 19 are even more clear. Reconsideration and withdrawal of this objection is respectfully requested.

The Final Office Action also objects to claim 19 by stating that “the limitations of claim 1 should be incorporated into claim 19; otherwise, it is not clear what steps are ‘the method steps’ as recited in claim 19.” *Id.* Applicant respectfully disagrees. Claim 19 depends from method claim 1, which recites steps for a method. Accordingly, it is clear that the operations performed by the user equipment or network element in claim 19 are the operations specified in claim 1. Nonetheless, claim 19 has been amended to delete the term “steps” to make claim 19 even more clear.

The objection to claim 19 further states that “claim 19 cannot depend on claim 1 because they fall within two different statutory categories.” *Id.* The Applicant respectfully disagrees.

The MPEP specifically provides, “The fact that the independent and dependent claims are in different statutory classes does not, in itself, render the latter improper.” MPEP § 608.01(n)(II). A dependent claim is proper if it complies with 35 U.S.C. § 112, fourth paragraph. *Id.* In this case, claim 19 is a proper dependent claim in compliance with 35 U.S.C. § 112, fourth paragraph, as it contains “a reference to a previous claim” (i.e., claim 1), specifies “a further limitation of the subject matter claimed” (e.g., a non-transitory computer readable medium, etc.), and includes “all limitations of the previous claim.” *Id.*

Reconsideration and withdrawal of the objection of claim 19 is respectfully requested.

## **II. Claim Rejections – 35 U.S.C. §§ 102(b), 103(a)**

Claims 1-5, 7, 10-11, and 13-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publ. No. 2009/0177778 (“Turk”) in view of U.S. Publ. No. 2008/0288644 (“Gilfix”). Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Turk in view of Gilfix and U.S. Pat. No. 7,769,809 (“Samdadiya”). Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Turk in view of Gilfix and U.S. Publ. No. 2010/0121956 (“Hoffpauir”). Claims 8, 12, and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Turk in view of Gilfix and U.S. Publ. No. 2008/0268824 (“Allen”). Reconsideration and withdrawal of these rejections is respectfully requested for at least the following reasons.

### **A. Amended Independent Claim 1**

Applicant respectfully submits that amended independent claim 1 is patentable over Turk, Gilfix, or the combination thereof for at least the following reasons.

#### ***i. The Applied References Fail to Disclose or Suggest the Recited Composition Session***

Amended independent claim 1 recites, *inter alia*, “initiating a composition session, the composition session being a signaling session for facilitating management of the two or more sessions and exchanging the composition session identifier between the user equipment and the network element, the composition session being different from the two or more associated sessions.”

The present application explains that “there may be advantages to initiating a separate signaling session (composition session).” Specification, para. [0016]. For example, “[t]he composition session may be used for the management of associated sessions and various kinds of signaling between the user equipment and a network element associated with to this task. Such signaling may include agreeing on the duration of all sessions or negotiations regarding to bandwidth requirements (for all associated sessions together).” Specification, para. [0017]. “In addition, initiating such a composition session may provide for more effective use of resources in the network and on the user equipment. For example using a composition session network initiated teardown of associated sessions may require less signaling to the user equipment. Further, continuous screening of all signaling messages for the presence of a composition session identifier, and subsequently probing the service logic (whether in the user equipment or in the network element) for a next course of action may be avoided. Messages only related to individual sessions (within a group of associated sessions) may not require such probing.” Specification, para. [0018].

Turk and Gilfix fail to disclose or suggest at least the above-recited features of amended independent claim 1. Rather, Turk and Gilfix discloses systems and methods in which the alleged composition identifier is only included in the associated sessions providing the requested data/media from resource nodes in the network to the client. That is, neither Turk nor Gilfix disclose a *separate signaling session* for managing associated data sessions and exchanging the composition session identifier.

In Turk, a client computer requests data (e.g., a webpage or parts thereof) that is made available by a group of resource nodes. Turk, para. [0002]. The requests from the client computer are handled by a web server, which obtains the requested data from the resource nodes controlled by a load balancer. Turk, para. [0003]. The load balancer determines which of the resource nodes will provide the requested data. Turk, para. [0004]. Once a resource node is determined, the load balancer prepares a response to the data request and sets up a session between the client and the resource node to provide the requested data. *Id.* Turk discloses that if multiple resource nodes are utilized to provide the requested data, the resource nodes do not coordinate to assign unique values to a session identifier, which can cause conflicts and errors. Turk, para. [0025]. Turk attempts to address this problem with a method and system for

handling sessions using a load balancer such that different resource node session identifiers can be employed without causing session exceptions. Turk, para. [0017]. In particular, Turk discloses:

A session affinity manager with the load balancer utilizes a common session identifier to represent multiple sessions to a client. The session affinity manager generates a common session identifier for a set of related resource node sessions. The relationship between the resource node session identifiers and common session identifier is maintained in the session affinity cache by the session affinity manager. The session affinity manager translates client requests using the common session identifier into requests using the resource node session identifier retrieved from the session affinity cache. The session affinity manager rewrites resource node responses to use common session identifier in place of resource node session identifiers.

*Id.*

Turk is alleged to disclose associating two more sessions with the composition session identifier based on Turk's disclosure that a "common session identifier is used to identify/associate all sessions in communication between the web server and the client." Office Action mailed September 20, 2013 at page 5; Final Office Action, page 3. That is, the alleged two or more associated sessions are the sessions providing the requested data from the resource nodes to the clients. Significantly, however, these are the only sessions disclosed by Turk to exchange the common session identifier with the client. Accordingly, Turk does not disclose a **signaling session** that is **separate** from the associated sessions (providing the requested data) for facilitating management of the associated sessions and exchanging the composition session identifier between the user equipment and the network element, as recited in amended independent claim 1.

Gilfix does not address the deficiencies of Turk. Gilfix discloses a method and system for creating global sessions across converged protocol applications. Gilfix, para. [0008]. In the Gilfix system, clients 110, 112, 114 connected to an external network 102 request data from application servers 122, 124 on an internal network 120. Gilfix, para. [0041]. The Gilfix system includes an edge server 104 as a proxy device to "correlate client interactions over different protocols and associate them with a global session." Gilfix, para. [0009]. To that end, the edge server 104 associates the sessions with a logical name and a global token. The logical name is

utilized for communications over the external network between the client and the edge server. Gilfix, para. [0010]. By contrast, the global token is utilized for communications within the internal network. Gilfix, paras. [0011]-[0012].

Notably, the communications exchanging either the logical name or the global token between the client and edge server are not a separate signaling session for managing the associated sessions in Gilfix, as recited by amended claim 1. Rather, Gilfix discloses that edge server receives requests for application sessions from the client including the logical name, employs a lookup to identify the global token associated with the logical name, “inserts” the global token into the requests, and then passes the modified requests on to the application servers. *See, e.g.*, Gilfix, paras. [0084]-[0086]; Fig. 4. The application servers respond by providing the requested application sessions to the client via the edge server, which may remove the global token. Gilfix, para. [0087]-[0089]; Fig. 5. Accordingly, the logical name and the global token are incorporated into the alleged associated sessions of Gilfix (i.e., applications sessions providing the requested data from the application servers to the clients). Neither the logical name nor the global token is disclosed to be exchanged between the client and the edge server in a signaling session separate from the associated application sessions.

Because Turk and Gilfix fail to disclose or suggest initiating a composition session as a signaling session different from the associated session, the Turk and Gilfix systems cannot achieve the above-mentioned advantages explained in the present application. For example, in Gilfix, when the last application session that belongs to a global session is torn down, a new session request from the client using the originally assigned logical name is no longer recognized by the edge server, leading to potential conflicts. This is because when the last application session is terminated, the global session is also terminated and resources reclaimed. *See, e.g.*, Gilfix, para. [0028]. As a result, the logical name is no longer assigned by the edge server to a particular global token. Accordingly, a new session request message coming from the client using the originally assigned logical name will no longer be recognized by the edge server as belonging to a particular global session. By contrast, the recited composition session that is a separate signaling session can exist independently of the associated sessions. Thus, if the associated sessions are torn down, the composition can continue to exist such that a subsequent session request can still be recognized as belonging to a particular composition session.

For at least these reasons, amended independent claim 1 is patentable over Turk, Gilfix, or the combination thereof.

ii. *It Would Not Have Been Obvious to Combine/Modify the Teachings of Turk and Gilfix*

In addition to the reasons explained above, amended claim 1 is also patentable over the alleged combination of Turk and Gilfix because (a) there is no reason having a “rational underpinning” for the combination of teachings by these two references and/or (b) modifying the Turk common session identifier/resource node session identifier feature in view of the Gilfix logical name/global session token feature would render Turk unsatisfactory for its intended purpose and change the principle of operation of Turk.

a. *The Alleged Reason for Combining the Teachings of Turk and Gilfix Lacks a “Rational Underpinning”*

The Supreme Court has clarified that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) (emphasis added). In light of this fact, piecemeal identification in the prior art of each individual element claimed “is insufficient to defeat patentability of the whole claimed invention.” *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000); *see, also, In re Dance*, 160 F.3d 1339, 1343 (Fed. Cir. 1998). Rather, there must be “a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR Int’l*, 127 S. Ct. at 1741; *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (“Rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”).

The Final Office Action acknowledges that Turk fails to disclose “associating two or more sessions with the composition session identifier by exchanging the composition session identifier at least a second time, wherein exchanging the composition session identifier at least a second time comprises the network element exchanging the composition session identifier with either the user equipment or a second user equipment different from the user equipment.” Final

Office Action, page 3. In an attempt to address this deficiency of Turk, the Final Office Action applies Gilfix as allegedly disclosing the above features at “page 2 paragraphs [0015], page 6 paragraph [0066] and page 10 claim 10” as teaching the recited claim language. Final Office Action, page 4. The Final Office Action alleges that it would have been obvious to one of ordinary skill in the art to modify Turk in view of Gilfix because it would allow “multiple converged application sessions to be associated [into] a single global session (i.e., Gilfix, page 1 paragraph [0007].” *Id.* Applicant respectfully disagrees.

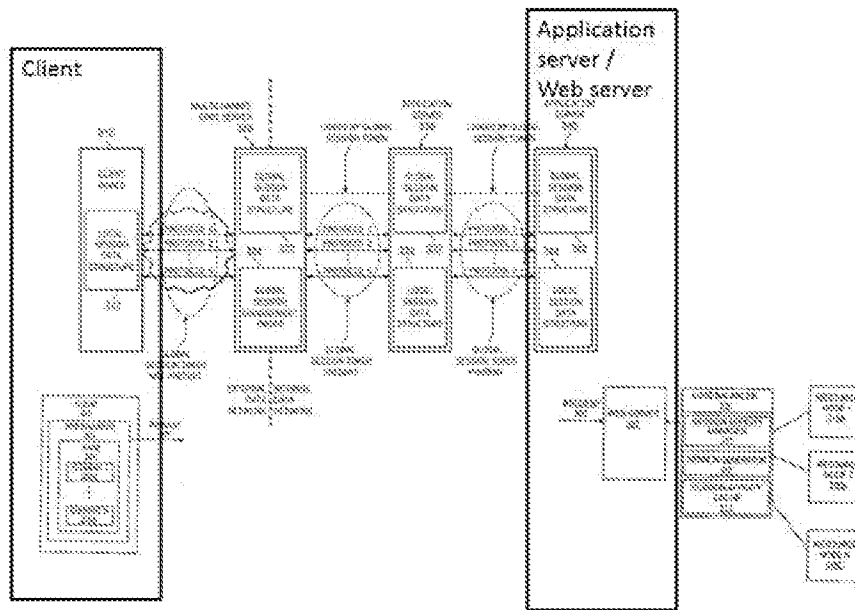
Turk is directed to a system for managing sessions with a load balancer using a single communications protocol (e.g., HTTP). *See, e.g.*, Turk, Abstract and paras. [0031]-[0032]. By contrast, Gilfix is directed to a system for “creating global sessions across different protocols and multiple converged protocols.” Gilfix, Abstract; para. [0072]. Gilfix defines a converged application session as “an application or service that spans multiple protocols and interacts with different data network entities using different communication protocols.” Gilfix, para. [0004]. If the only modification to Turk was to exchange the common session identifier of Turk a second time, how would this achieve the objective of allowing multiple converged application sessions? The Final Office Action does not provide any explanation. Applicant respectfully submits that such a modification would not achieve the reason for such a modification alleged in the Final Office Action. For at least this reason, the alleged reason for modifying Turk in view of Gilfix lacks the required “rational underpinning.”

Moreover, if the Turk system were modified in an attempt to achieve the stated reason, the combination of Turk and Gilfix would not include the modification alleged in the Final Office Action. Indeed, to modify the Turk system to be able to allow “multiple converged application sessions to be associated into a single global session,” the Turk system would have to be modified to include various aspects of the Gilfix system. Significantly, however, when one considers how Turk would have to be modified to include aspects of the Gilfix system to achieve the stated reason for modifying Turk, it becomes apparent that it would not have been obvious to make such a modification.

The following annotated figure shows how a Turk-Gilfix combination may exist to attempt to achieve the stated objective of modifying Turk to allow multiple converted application sessions to be associated into a single global session based on the teachings of Gilfix:



## Combining Turk and Gilfix



As shown in the above annotated figure, the teachings of both Turk and Gilfix co-exist by extending the web-server of Turk with the capabilities of the application server (web server) according to Gilfix (e.g. capabilities associated with global session data structure and the ability to add and interpret received global session tokens). The client of Turk would be extended with the capability of setting a logical name according to Gilfix as the outgoing proxy in the browser for making HTTP requests. In the hypothetical combination, the Turk-Gilfix client device would be able to run a converged application with multiple protocol sessions according to Gilfix, whereby one of the protocol sessions would be a HTTP protocol session with a Turk-Gilfix webserver. An initial HTTP protocol session request, according to Turk, would be assigned a logical name by the Gilfix edge server and be provided with a global session token, before it is sent to the Turk-Gilfix webserver.

The Turk-Gilfix webserver would be, according to the Turk teachings, able to deploy/address multiple different Turk resource nodes in the back-end without the Turk-Gilfix client device being aware of it, since the resource node session identifiers would be replaced by a common session identifier by the Turk load balancer in a response (to a HTTP request) destined for the client device. Turk, paras. [0025], [0035]-[0036], [0041], [0046]. The Turk-Gilfix

webserver would then, according to the Gilfix teachings, add a global session token to the response to the client device, which is recognized by the Gilfix edge server and may be subsequently removed. Gilfix, para. [0075] and Fig. 5. The response is then progressed by the edge server to the client device. *Id.* The common session identifier is used by the Turk-Gilfix client device in the local session data structure and perceived as one local session. The Turk-Gilfix converged application is able to set-up more than one local session to for instance a different application server according to Gilfix and by using the same logical name in the initial session request, will be added to the global session by the Gilfix edge server. Gilfix, paras. [0065]-[0066] and Fig. 4.

As can be seen, in the above Turk-Gilfix combination, there is no intermingling of the Turk “common session identifier/resource node session identifier” pair on one hand and the Gilfix “logical name/global session token.” Rather, each pair co-exists, serving different purposes. In other words, if Turk and Gilfix were combined so that the Turk system could “allow converged application sessions” as taught by Gilfix, the combination would not include the modification to the handling of the Turk common session identifier alleged in the Final Office Action. For at least this additional reason, the alleged reason for modifying Turk in view of Gilfix lacks a “rational underpinning.”

b. Modifying Turk In View of Gilfix Would Render Turk Unsatisfactory For Its Intended Purpose And Change the Principle of Operation of Turk.

Additionally, it would not have been obvious to modify Turk in view of Gilfix because modifying the Turk common session identifier/resource node session identifier feature in view of the Gilfix logical name/global session token feature would render Turk unsatisfactory for its intended purpose and change the principle of operation of Turk.

First, it is noted that Turk teaches to use a common session identifier in the communication between a client and a load balancer, whereby the common session identifier inside a request from a client device is **replaced** by the load balancer by a specific resource node session identifier, before the request is passed on to the specific resource node (e.g. an application server). Turk, paras. [0025], [0035]-[0036], [0041], [0046]. For a response in the reverse direction, the resource node identifier inside the response is again replaced by the

common session identifier, before the response is returned to the client device. *Id.* The explicit purpose that Turk aims to achieve is to enable **different** resource node session identifiers with the same session name to be handled without causing session exceptions. Turk, para. [0017].

By contrast, Gilfix teaches to use, for different sessions, the same logical name in the communication from a client device to an edge server/proxy, whereby a global session token is **inserted** by the edge server proxy into a session request from the client device, before such request is passed on to the specific resource node (e.g. an application server). For a response in the reverse direction, the global session token is removed from the response, before the response is returned to the client device. Gilfix, para. [0075] and Fig. 5<sup>1</sup>. The explicit purpose that Gilfix aims to achieve is to associate multiple converged application sessions into a single global session without requiring explicit work on the part of the requester. Gilfix, paras. [0007]-[0008]. This is amongst other achieved by making the client device set the outgoing proxy for each protocol to be the edge server/proxy. Gilfix, para. [0066].

The following additional points would be understood by the skilled artisan:

- that a logical name of Gilfix is not the same as a common session identifier of Turk. Turk clearly teaches the common session identifier to be different from and as a separate parameter to an URL (the latter being used to identify the selected service). *See, e.g.,* Turk, paras. [0045]-[0046]. Gilfix, on the other hand, teaches that the logical name may be an URL or another form of addressing (e.g. a virtual hostname or IP address). *See, e.g.,* Gilfix at paras. [0010], [0022], [0059], [0065]-[0066].
- In Gilfix, the logical name may be used to ‘set a proxy’ in the application. *See* Gilfix para. [0066]. This is understood to mean as to set the address for the client device request to be sent to. In Turk, the common session identifier is not used as an address. Instead the URL of the webserver or resource node is used as the address. *See, e.g.,* Turk, paras. [0029], [0044].

As explained above, it appears the Final Office Action suggests that the logical name of Gilfix could be used as the common session identifier of Turk, and according to Gilfix the logical name is exchanged between client device and network element (edge server/proxy) twice