UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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ROKU INC.,
Petitioner,

v.

VIDEOLABS, INC.,
Patent Owner.

_____

Case No. IPR2025-00072
Patent No. 7,233,790

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PETITION FOR *INTER PARTES* REVIEW
UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.1 *et seq.*

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES

TABLE OF EXHIBITS

Exhibit	Description
1001	U.S. Patent No. 7,233,790 ("'790")
1002	File History of U.S. Patent Application No. 10/600,746 ("'790FH")
1003	Declaration of James Olivier, Ph.D. ("Olivier")
1004	CV of James Olivier, Ph.D.
1005	U.S. Patent No. 7,363,384 ("Chatani")
1006	U.S. Patent Application Publication No. 2003/0084177 ("Mulligan")
1007	*Starz Entm't, LLC v. VL Collective IP, LLC*, 1:21-cv-01448, Dkt. 88, pages 1-4 (Claim Construction Order) (D. Del. Jan. 10, 2023)
1008	*Netflix, Inc. v. VideoLabs, Inc*, IPR2023-00628, Paper 1 (Petition) (P.T.A.B. Feb. 23, 2023)
1009	*Netflix, Inc. v. VideoLabs, Inc*, IPR2023-00628, Paper 17 (Institution Decision) (P.T.A.B. Oct. 3, 2023)
1010	Federal Judicial Caseload Statistics (June 2024)
1011	*VideoLabs, Inc. v. Roku, Inc.*, 1:23-cv-01136, Dkt. 36 (Defendant Roku Inc.'s Motion to Stay) (D. Del. July 18, 2024)
1012	*VideoLabs, Inc. v. Roku, Inc.*, 1:23-cv-01136, Dkt. 37 (Defendant Roku, Inc.'s Opening Brief in Support of Its Motion to Stay Pending Inter Partes Review) (D. Del. July 18, 2024)
1013	*VideoLabs, Inc. v. Roku, Inc.*, 1:23-cv-01136, Dkt. 41 (Order) (D. Del. July 26, 2024)
1014	File History of *Ex Parte* Reexamination Control No. 90/015,063 ("'790EPR")
1015	*Netflix, Inc. v. VideoLabs, Inc*, IPR2023-00628, Paper 42 (Final Written Decision) (P.T.A.B. Oct. 2, 2024)
1016	*VideoLabs, Inc. v. Roku, Inc.*, 1:23-cv-01136, Dkt. 6 (Summons) (D. Del. Dec. 22, 2023)
1017	*AviaGames, Inc. v. Skillz Platform, Inc.*, IPR2022-00530, Paper 14 (Decision on Director Review) (P.T.A.B. Mar. 2, 2023)

TABLE OF CHALLENGED CLAIMS

	U.S. 7,233,790	
#	**Sub-part**	**Text**
1	**[pre]**	A method of providing access to digital content for use on wireless communication devices, the method comprising:
	[a.i]	receiving and storing in a server system a plurality of items of digital content to be made available for use in wireless communication devices used by a plurality of wireless services subscribers,
	[a.ii]	including receiving and storing a plurality of different implementations of at least one of the items of digital content, where each implementation of any given item of digital content corresponds to a different set of device capabilities;
	[b]	operating the server system to maintain a product catalog containing a description of the items of digital content, wherein the product catalog includes, in association with each item of digital content, a reference to each implementation of said item of digital content;
	[c]	receiving a request from one of the wireless communication devices;
	[d]	in response to the request, selecting a portion of the product catalog to be presented on the one wireless communication device, based in part on device capabilities of the one wireless communication device; and
	[e]	presenting the selected portion of the product catalog to the one wireless communication device, such that the selected portion, as presented, provides a single description of each item of digital content in said portion, regardless of a number of implementations that are available for each said item.
2	**[pre]**	A method of providing access to digital content for use on wireless communication devices, the method comprising:
	[a.i]	receiving and storing in a server system a plurality of items of digital content to be made available for use in wireless

		communication devices used by a plurality of wireless services subscribers,
	[a.ii]	including receiving and storing a plurality of different implementations of at least one of the items of digital content, where each implementation of any given item of digital content corresponds to a different set of device capabilities;
	[b]	operating the server system to maintain a product catalog containing a description of the items of digital content, wherein the product catalog includes, in association with each item of digital content, a reference to each implementation of said item of digital content;
	[c]	receiving a request from a wireless device used by one of the subscribers;
	[d]	in response to the request, selecting a portion of the product catalog to be presented to the subscriber, based on device capabilities of the wireless device used by the subscriber; and
	[e]	presenting the selected portion of the product catalog to the subscriber via a wireless network, such that the selected portion, as presented to the subscriber, provides only a single description of each item of digital content in said portion, regardless of the number of implementations of each said item.
3	[pre]	A method as recited in claim 2, wherein said selecting a portion of the product catalog comprises:
	[a.i]	in response to the request, determining the identity of the wireless device used by the subscriber,
	[a.ii]	wherein each implementation of the plurality of items of digital content has been previously associated in the server system with at least one device identity, according to corresponding device capabilities supported by the implementation; and
	[b]	selecting the portion of the product catalog to be presented to the subscriber based on the identity of the wireless device used by the subscriber.
4	[pre]	A method as recited in claim 2, further comprising:

	[a]	receiving from the subscriber a request for one of the items of digital content in said portion of the product catalog;
	[b]	selecting an implementation of the requested item of digital content, based on device capabilities of the wireless device used by the subscriber; and
	[c]	downloading the selected implementation of the item of digital content to the wireless device used by the subscriber.
5	**[pre]**	A method as recited in claim 4, further comprising
	[a.i]	associating each of the items of digital content in the server system with a plurality of different provisioning models, each of the provisioning models corresponding to a different set of device capabilities,
	[a.ii]	each provisioning model including a provisioning protocol and a corresponding set of provisioning attributes and descriptors for provisioning digital content in wireless devices.
6	**[pre]**	A method as recited in claim 5, further comprising:
	[a]	receiving from the subscriber a request for one of the items of digital content in said portion of the product catalog;
	[b]	identifying device capabilities of the wireless device used by the subscriber;
	[c]	selecting one of a plurality of provisioning models associated with the requested item in the server system, based on the device capabilities of the wireless device used by the subscriber;
	[d]	packaging the requested item according to the selected provisioning model; and
	[e]	provisioning the requested item in the wireless device used by the subscriber according to the selected provisioning model.
7	**[pre]**	A method as recited in claim 6, wherein:
	[a]	said packaging the requested item comprises creating a provisioning descriptor for the requested item according to the selected provisioning model, and associating the provisioning descriptor with the requested item; and

	[b]	said provisioning the requested item in the wireless device comprises sending the packaged requested item to the wireless device used by the subscriber according to a provisioning protocol associated with the selected provisioning model.
8	**[pre]**	A system that provides access to digital content for use on wireless communication devices, said system comprising:
	[a]	a network interface through which to communicate over a communication network; and
	[b.i]	a download manager to
	[b.ii]	receive and store a plurality of items of digital content to be made available for use in wireless communication devices used by a plurality of wireless telecommunications subscribers, including receiving and storing a plurality of different implementations of at least one of the items of digital content, where each implementation of any given item of digital content corresponds to a different set of device capabilities;
	[b.iii]	maintain a product catalog containing a description of the items of digital content, wherein the product catalog includes, in association with each item of digital content, a reference to each implementation of said item of digital content;
	[c]	receive a request from one of the wireless communication devices;
	[d]	in response to the request, select a portion of the product catalog to be presented on the one wireless communication device, based in part on device capabilities of the one wireless communication device; and
	[e]	presenting the selected portion of the product catalog to the one wireless communication device, such that the selected portion, as presented, provides a single description of each item of digital content in said

		portion, regardless of a number of implementations that are available for each said item.
9	**[pre]**	A system comprising:
	[a]	a processor; and
	[b]	a storage facility accessible to the processor and containing code which, when executed by the processor, causes the processing system to
	[b.i]	receive and store a plurality of items of digital content to be made available for use in wireless communication devices used by a plurality of wireless telecommunications subscribers, including receiving and storing a plurality of different implementations of at least one of the items of digital content, where each implementation of any given item of digital content corresponds to a different set of device capabilities;
	[b.ii]	maintain a product catalog containing a description of the items of digital content, wherein the product catalog includes, in association with each item of digital content, a reference to each implementation of said item of digital content;
	[b.iii]	receive a request from a wireless device used by one of the subscribers;
	[b.iv]	in response to the request, select a portion of the product catalog to be presented to the subscriber, based on device capabilities of the wireless device used by the subscriber; and
	[b.v]	cause the selected portion of the product catalog to be presented to the subscriber via a wireless telecommunications network, such that the selected portion, as presented to the subscriber, provides only a single description of each item of digital content in said portion, regardless of the number of implementations of each said item.
10	**[pre]**	A system as recited in claim 9, wherein selection of said portion of the product catalog comprises:

	[a.i]	in response to the request, determining the identity of the wireless device used by the subscriber, wherein each implementation of the plurality of items of digital content has been previously associated in the server system with at least one device identity, according to corresponding device capabilities supported by the implementation; and
	[a.ii]	wherein each implementation of the plurality of items of digital content has been previously associated in the server system with at least one device identity, according to corresponding device capabilities supported by the implementation; and
	[b]	selecting the portion of the product catalog to be presented to the subscriber based on the identity of the wireless device used by the subscriber.
11	[pre]	A system as recited in claim 10, wherein said storage facility further contains code which, when executed by the processor, causes the processing system to:
	[a]	receive from the subscriber a request for one of the items of digital content in said portion of the product catalog;
	[b]	select an implementation of the requested item of digital content, based on device capabilities of the wireless device used by the subscriber; and
	[c]	download the selected implementation of the item of digital content to the wireless device used by the subscriber.
12	[pre]	A system as recited in claim 11, wherein said storage facility further contains code which, when executed by the processor, causes the processing system to:
	[a.i]	associate each of the items of digital content in the server system with a plurality of different provisioning models,
	[a.ii]	each of the provisioning models corresponding to a different set of device capabilities, each of the provisioning models including a provisioning protocol and a corresponding set of provisioning attributes and descriptors for provisioning digital content in wireless devices.

13	[pre]	A system as recited in claim 12, wherein said storage facility further contains code which, when executed by the processor, causes the processing system to:
	[a]	receive from the subscriber a request for one of the items of digital content in said portion of the product catalog;
	[b]	identify device capabilities of the wireless device used by the subscriber;
	[c]	select one of a plurality of provisioning models associated with the requested item in the server system, based on the device capabilities of the wireless device used by the subscriber;
	[d]	package the requested item according to the selected provisioning model; and
	[e]	provision the requested item in the wireless device used by the subscriber according to the selected provisioning model.
14	[pre]	A system as recited in claim 13,
	[a]	wherein packaging the requested item comprises creating a provisioning descriptor for the requested item according to the selected provisioning model, and associating the provisioning descriptor with the requested item; and
	[b]	wherein provisioning the requested item in the wireless device comprises sending the packaged requested item to the wireless device used by the subscriber according to a provisioning protocol associated with the selected provisioning model.

I.   INTRODUCTION

Petitioner Roku, Inc. ("Petitioner") respectfully requests *inter partes* review

("IPR") of claims 1-14 ("Claims") of U.S. Patent No. 7,233,790 (EX1001; "'790")

assigned to VideoLabs, Inc. ("PO") in accordance with §§311-319 and §42.100 et

seq. There is a reasonable likelihood that at least one challenged claim is

unpatentable as explained herein. Petitioner requests review of the Claims and

judgment finding them unpatentable under 35 U.S.C. §103.

The '790 explains that technological advancements allowed wireless devices

to be used for a variety of functions, for example allowing users to play games,

access the World Wide Web, and send/receive videos, which resulted in efforts to

make new content available for use on those devices. '790, 1:22-45. So, while

devices would have generally been pre-provisioned with certain products, it was also

desirable to acquire additional products as they became available. '790, 1:45-50. The

'790 thus purports to provide a convenient way for users of various devices (which

may require use of different formats and protocols) to acquire various different items

from different suppliers through a centralized store. '790, 1:50-2:46.

In particular, the '790 describes a server system with a plurality of content,

where items of content have different implementations corresponding to different

sets of device capabilities, and maintaining a product catalog of items of content and

their implementations. '790, 2:50-67. Examples of capabilities include display sizes

and SMS support. '790, 8:41-45. Fig. 5 of the '790 shows an example of a catalog 54 including a product 56 having two implementations 58A and 58B, "each of which may be designed for a different specific client device or set of client devices." '790, 9:37-48.
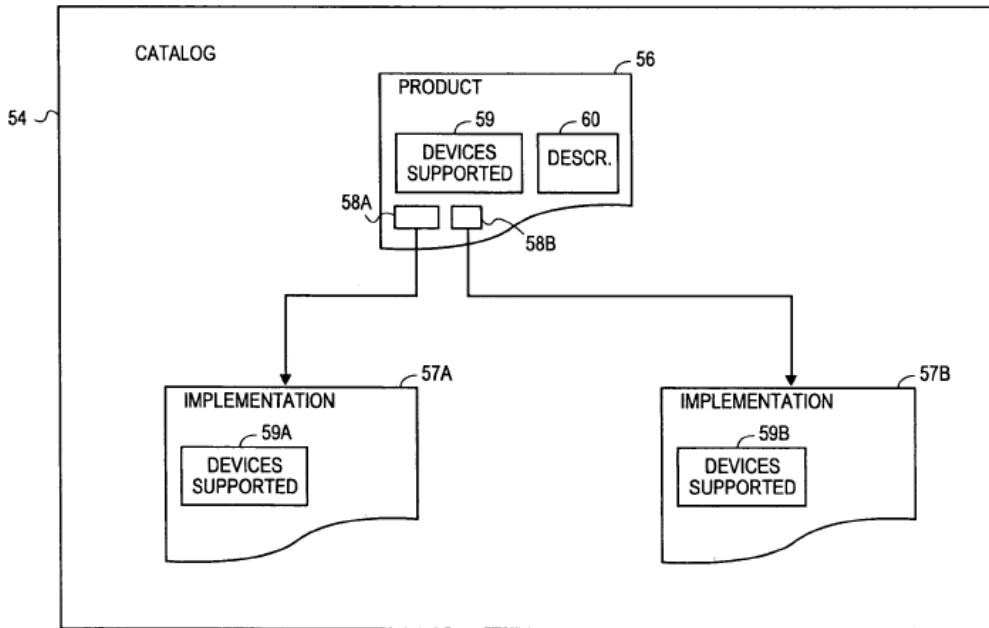

FIG. 5

But maintaining and serving different implementations of a product according to user device capabilities was well-known in the art. For example, Chatani (EX1005) illustrates in Table 1 below that, for a particular item of content, different service levels are made available to a user device based on its capabilities. Chatani, 10:15-52.

TABLE 1

Required User Device Capabilities	Characteristics of Service Level
Analog modem (bit rate of 56 kbps or less), no hard disk, latency greater than 1 ms.	Only text files available.
Analog modem (bit rate of 56 kbps or less), hard disk present, latency less than 1 ms.	Text files available. Video game software applications available.
Cable modem or DSL line (bit rate of at least 2 Mbps), no hard disk, latency of less than 1 ms.	Text files available. Video game software applications available. Video streaming available. CD quality sound files available.
Cable modem (bit rate of at least 2 Mbps), hard disk present, latency of less than 1 ms.	Text files available. Video game software applications available. Video streaming available. CD quality sound files available. Higher resolution video streaming made available.

Chatani's server system therefore provides content to a plurality of devices based on device capabilities, like the '790, and renders obvious the independent claims of the '790.

Additional features claimed in dependent claims include, *e.g.*, provisioning steps that take place after a user selects content to download. This, too, was known functionality in the prior art. For example, Mulligan (EX1006) teaches to identify the "type" of a terminal that is requesting content and then select an appropriate version of provisioning data to transfer based on that terminal type. Mulligan, [0041], [0047], [0052].

The USPTO did not consider Chatani, alone or in combination with Mulligan, during the '790's prosecution or in any subsequent proceeding.

Accordingly, Petitioner respectfully requests that the Board institute trial and cancel the Claims.

II.   MANDATORY NOTICES UNDER 37 C.F.R. §42.8

A.   Real Party-In-Interest

Petitioner identifies Roku, Inc. as real party-in-interest. No other party had access to or control over the present Petition, and no other party funded or participated in preparation of the present Petition.

B.   Related Matters

The '790 is currently asserted in the following district court proceedings:

Title	No.	Court	Filing Date
VideoLabs, Inc. v. Roku, Inc.	1:23-cv-01136	D. Del.	2023-10-11
VideoLabs, Inc. v. Netflix Inc.	1:22-cv-00229	D. Del.	2022-02-23
Starz Entertainment, LLC v. VL Collective IP, LLC	1:21-cv-01448	D. Del.	2021-10-13

The '790 is also the subject of *Netflix, Inc. v. VideoLabs, Inc.*, IPR2023-00628, in which a final written decision issued 2024-10-02 finding all challenged claims 1-14 unpatentable. *See* §VIII.B below. PO in that case filed a notice of appeal on 2024-10-25.

C. Lead and Back-up Counsel, and Service Information

Lead Counsel	Scott A. McKeown, Reg. No. 42,866	
Backup Counsel	Libbie A. DiMarco (*pro hac vice* forthcoming) Victor Cheung, Reg. No. 66,229 Daniel D. Smith, Reg. No. 71,278	
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	Telephone	(617) 646-8000
	Facsimile	(617) 646-8646

Petitioner consents to electronic service of documents to the email addresses of the counsel identified above.

III. REQUIREMENTS FOR IPR

A. Grounds for Standing (37 C.F.R. §42.104(a))

Petitioner certifies the '790 is available for IPR and Petitioner is not barred or estopped from requesting IPR on the following grounds. *See* EX1016 (complaint in the related litigation was served on 2023-12-22, less than one year prior to filing this Petition).

B. Identification of Challenge (37 C.F.R. §42.104(b))

Petitioner requests IPR of the Claims and that the Board cancel the same as unpatentable.

1. Specific Art on Which the Challenge is Based

Petitioner relies upon the following prior art:

Name	Ex.	Patent / Publication	Filed	Published	Prior Art Under at Least Pre-AIA 35 U.S.C. §102[1]
Chatani	1005	U.S. 7,363,384	2001-07-11	2008-04-22	(e)
Mulligan	1006	U.S. 2003/0084177	2001-10-26	2003-05-01	(e)

2. Statutory Grounds on Which the Challenge is Based

Petitioner respectfully requests cancellation of the Claims on the following grounds:

Ground	Basis	Claims	Reference(s)
1	§103	1-4, 8-11	Chatani
2	§103	5-7, 12-14	Chatani in view of Mulligan

IV. BACKGROUND

A. '790 Patent

The '790 describes a server system for providing access to content, *e.g.*, software and images, to wireless communication devices, *e.g.*, cell phones and PDAs. '790, 2:50-55, 3:45-60. In one aspect, the '790 seeks to maintain a catalog of

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[1] The '790 claims priority to several provisional applications filed 2002-06-28. *See* '790, Related U.S. Application Data. Petitioner takes no position on, but reserves the right to challenge, the propriety of the priority claims since the art presented herein pre-dates the earliest filing.

products that "facilitates device-tailored product discovery and provisioning." '790, 11:44-47.

As shown in Fig. 9 (below), a client device connected to a download manager (step 901) may submit a request to view available products (step 905 (unlabeled)). Based on the capabilities of the device (determined in step 904), supported products are determined (step 906) and displayed on the client device (step 907 (mislabeled)). '790, 11:64-12:18. Capabilities may, *e.g.*, relate to display sizes or supported communication methods, and products may have different implementations to support those capabilities. '790, 8:44-45, 9:37-56.
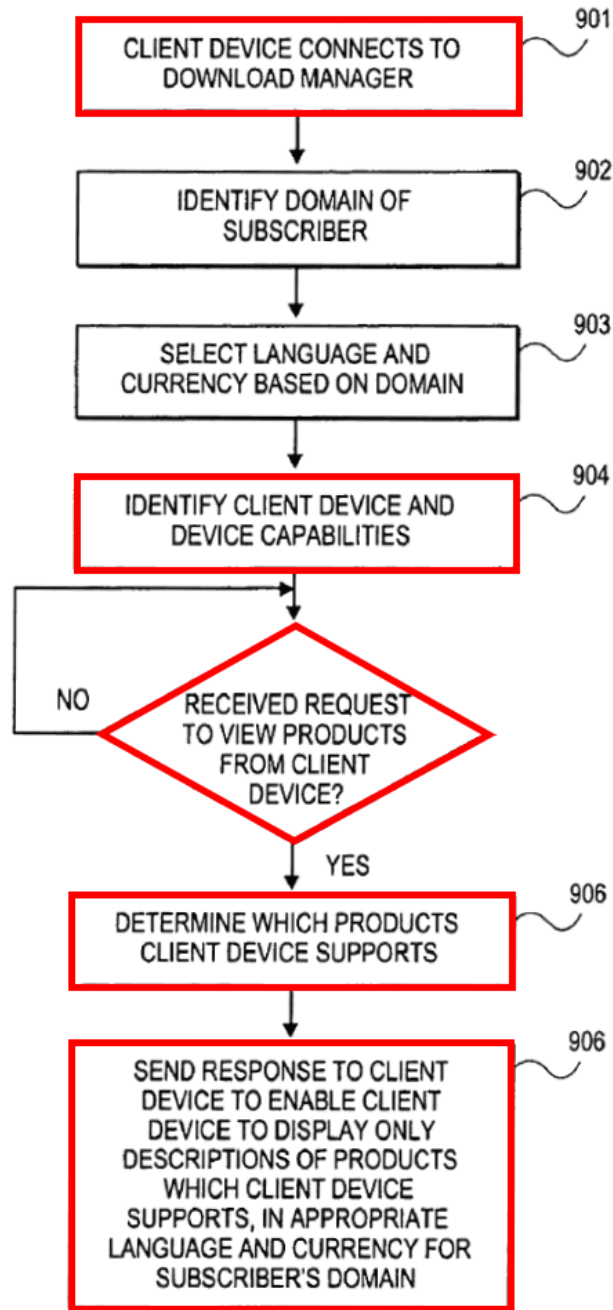
FIG. 9

The system maintains a catalog from which a user may choose desired products that are available to their device. '790, 9:37-48, 11:64-66, 12:19-23. As

shown in Fig. 5 below, a catalog 54 may thus include a product 56 having two implementations 57A and 57B supporting different devices. '790, 9:44-51.
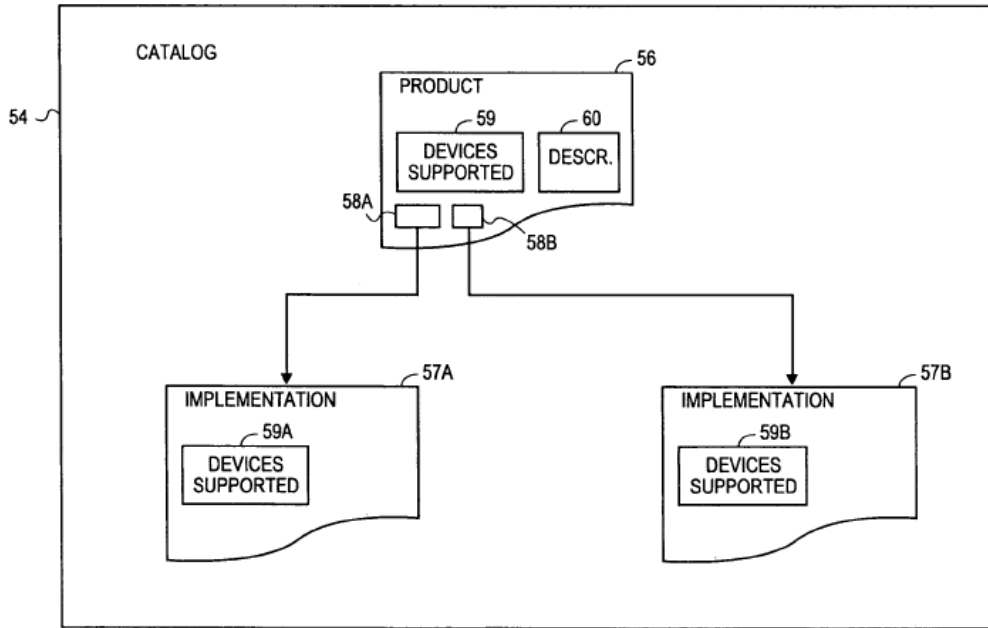

FIG. 5

The '790 further explains that different devices may require different content provisioning protocols and packaging formats. '790, 12:40-41. It was known that "Nokia-COD phones" and "Sprint-GCD OTA phones" supported different provisioning models. '790, 1:63-2:4. Instead of storing product images for delivery to every possible type of phone or provisioning model in existence, the '790 describes selecting a provisioning model and creating content descriptors for the selected provisioning model (*e.g.*, identifying the location of desired content) only after a user selects desired content and user device capabilities are determined. '790, 2:1-10, 13:16-44. EX1003 ("Olivier"), ¶¶26-35.

B. Prosecution

The '790 issued from U.S. Application No. 10/600,746 (filed 2003-06-19). EX1002 ("'790FH"), 1-57.

In a first office action, the Examiner rejected some claims as being anticipated by "Namba" (U.S. 6,912,385) or "Gidron" (U.S. 2003/0060188). Several claims were also indicated to contain allowable subject matter. '790FH, 88-92.

In response, Applicant accepted the allowable subject matter by, *e.g.*, cancelling some independent and dependent claims, amending some dependent claims to depend from allowable independent claims, and adding new claims containing substantially similar limitations to those in the allowed independent claims. '790FH, 104-115.

The Examiner issued a Notice of Allowance, identifying as reasons for allowance "receiving and storing a plurality of different implementations of the items of content." '790FH, 122-123. Olivier, ¶¶40-44.

C. Reexamination

Another party, Unified Patents, LLC, requested *ex parte* reexamination of the '790, under Control No. 90/015,063 (filed 2023-06-23), alleging substantial new questions of patentability of claims 1-2, 4, and 8-9 based on "Senoh" (U.S. 2002/0078178), "Agaharam" (U.S. 6,035,339), "Kenner" (U.S. 6,421,726), and "Li" (U.S. 6,345,279). EX1014 ("'790EPR"), 649-863.

In a first office action, the Examiner confirmed the patentability of independent claims 2 and 9 over sole primary reference Senoh, but rejected independent claims 1 and 8 as being unpatentable over Senoh in view of Agaharam. '790EPR, 897-907.

In response, Patent Owner amended claims 1 and 8 to "very closely track the limitations of claim 2." '790EPR, 931-932, 917-934 generally.

Following reverting amendments ('790EPR, 1087-1100) made in response to a "broadening" rejection ('790EPR, 939-947), a reexamination certificate issued 2023-08-11. '790EPR, 1155-1157. Olivier, ¶¶45-47.

D.   *Inter Partes* Review

Another party, Netflix, Inc., filed a petition for *inter partes* review of claims 1-14 of the '790 on 2023-02-22, asserting unpatentability in view of "Mehta" (U.S. 2002/0131404) and "Schlapfer" (a paper titled *Mobile Applications with J2ME*). IPR2024-00628; *see* EX1008 (Petition), EX1009 (Institution Decision).

On 2024-10-02, a final written decision issued, determining that claims 1-14 were shown to be unpatentable. EX1015. A notice of appeal was filed 2024-10-25. Olivier, ¶¶48-49.

V.   LEVEL OF ORDINARY SKILL IN THE ART

On or before 2002-06-28, a person of ordinary skill in the art ("POSITA") would have had a bachelor's degree in computer science, computer or electrical

engineering, or a related field, and approximately two or more years of experience with digital multi-media content distribution and management and associated system infrastructures. Additional education could substitute for professional experience, and vice versa. Olivier, ¶¶22-23.

VI.   CLAIM INTERPRETATION

Claim terms subject to IPR are to be construed in accordance with their ordinary and customary meaning as understood by a POSITA in light of the specification and prosecution history. 37 C.F.R. §42.100(b). Only terms necessary to resolve the controversy need to be construed. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013 (Fed. Cir. 2017).

No constructions are necessary in this proceeding at this time, as the prior art discloses the claimed limitations under any interpretation. Olivier, ¶¶50-52.

Petitioner notes that a claim construction order involving the '790 issued in litigation not involving Petitioner. *See* EX1007. The order construed the following:

Term	Court's Construction
"wireless communication devices" / "wireless device" [Claims 1-2, 4-9]	No construction necessary (not restricted to "personal mobile devices")
"content" / "digital content" / "product" / "digital product" [Claims 1-2, 4-6, 8-9]	"software and/or data embodying a file for delivery or purchase"
"implementation" [Claims 1-2, 4, 8-9]	"one or more binary files (or "binaries"), software files, software applications, and/or executable files representing a product"

VII. GROUNDS OF UNPATENTABILITY

This Petition is supported by the Declaration of James Olivier, Ph.D., which describes the prior art's scope and content at the time of the '790. Olivier, ¶¶1-250. The prior art renders the Claims unpatentable for reasons discussed below.

A. Ground 1: Claims 1-4, 8-11 are Rendered Obvious by Chatani

1. Overview: Chatani

Chatani describes a system and method for "Selection of Content in Response to Communication Environment," in which transfers of content are based on the characteristics of the user node downloading the content, including downloading and processing capabilities. EX1005 ("Chatani"), Title, Abstract. Chatani, like the '790, explains that with the emergence of the worldwide web, available content and services had grown, and so too had delivery and access methods, resulting in a landscape "filled with diversity, from the types of available content to the types of

hardware and communication technologies that can be used to access the Internet." Chatani, 1:12-2:23. Chatani thus seeks to optimize content to hardware and communications abilities without requiring user intervention. Chatani, 2:53-58.

In particular, Chatani discloses determining the capabilities of a user device "based upon the communication environment data and hardware configuration data," which relate to the device's downloading and processing abilities, ability to output graphics, video, and sound, whether the device can utilize certain protocols, etc. Chatani, 6:27-7:5, 9:25-44. Based on the information, user devices would be determined to be capable of accessing different content in different "service levels" of a single content item, as shown by example in Table 1 below (annotated to delineate the service levels).

TABLE 1

Required User Device Capabilities	Characteristics of Service Level
Analog modem (bit rate of 56 kbps or less), no hard disk, latency greater than 1 ms.	Only text files available.
Analog modem (bit rate of 56 kbps or less), hard disk present, latency less than 1 ms.	Text files available. Video game software applications available.
Cable modem or DSL line (bit rate of at least 2 Mbps), no hard disk, latency of less than 1 ms.	Text files available. Video game software applications available. Video streaming available. CD quality sound files available.
Cable modem (bit rate of at least 2 Mbps), hard disk present, latency of less than 1 ms.	Text files available. Video game software applications available. Video streaming available. CD quality sound files available. Higher resolution video streaming made available.

Chatani, 10:15-59. Thus, in the configuration shown, a user device with a hard disk and capable of interfacing a high-bandwidth network may have higher-resolution video streaming made available to it, while the absence of a hard disk could limit it to non-higher-resolution video streaming.

Device capabilities are used to filter which content are shown to users for selection. For example, Chatani discloses selectable links on a "Web page that displays a list of available content," where "content [is made] available to the user device 110 after the user device capabilities are determined." Chatani, 7:8-11, 9:11-12, 11:1-14, 12:42-61. Preferably, the system "automatically selects the service level for the content transfer based upon ... the user device capabilities." Chatani, 10:60-11:1; *see also* 7:12-22. In this way, the user device does not display all the available levels for the user to select. Chatani, 11:1-6.

After available content is selected for download, transfer commences. Chatani, 7:6-11, 7:25-29, 11:15-25, 13:18-23. Content from content providers may be stored locally at, and transferred to user devices from, a service manager device. Chatani, 7:29-35, 11:25-28. Olivier, ¶¶54-60.

Because Chatani discloses a system and method for receiving and storing a plurality of different content items, each with a plurality of service levels that provide different implementations of the content items to different devices having different capabilities, and further discloses presenting and serving those content

items to user devices based on the capabilities of the user devices, Chatani discloses the systems and methods for providing access to digital content claimed in the '790. To the extent PO would argue that Chatani's disclosure does not explicitly describe certain aspects of its system in an anticipatory manner, such variations would have been obvious to POSITAs, as discussed in detail below. *See, e.g.*, the discussions of claim limitations 2[a.i] and 2[e] below.

And, to the extent PO argues that various relied-on features of Chatani are from distinct and unrelated embodiments—and would allegedly preclude a finding of anticipation—Chatani teaches that its disclosed features are combinable, and a POSITA would have thus found the claims obvious as well.

For example, Chatani explains, with respect to disclosed features, that "it should be understood that the present invention has wide applicability with respect to search query systems generally" and many configurations are to be considered. Chatani, 16:9-21. Indeed, the flow diagrams of Figs. 3, 5, and 7 generally referenced herein are directly related to each and each describe and cross-reference functions and configurations of the same network system 100, user device 110, service manager device 115, and content provider device 120. Chatani, 6:13-26, 7:22-24, 9:4-13, 12:21-41. A POSITA would have therefore exercised routine experimentation in implementing a system based on Chatani's disclosure and combined features from related "examples" or "embodiments" to result in a desired

system or functionality. *Boston Scientific Scimed, Inc. v. Cordis Corp.*, 554 F.3d 982, 991 (Fed. Cir. 2009) ("Combining two embodiments disclosed adjacent to each other in a prior art patent does not require a leap of inventiveness.") Olivier, ¶61.

Accordingly, claims 1-4 and 8-11 are obvious over Chatani. Olivier, ¶¶53-185.

2.   Claim Charts

'790	Chatani (EX1005)
1[pre²]. *See* identical language in claim 2[pre].	*See* 2[pre]. Olivier, ¶62.
1[a.i]. *See* identical language in claim 2[a.i].	*See* 2[a.i]. Olivier, ¶63.
1[a.ii]. *See* identical language in claim 2[a.ii].	*See* 2[a.ii]. Olivier, ¶64.
1[b]. *See* identical language in claim 2[b].	*See* 2[b]. Olivier, ¶65.
1[c]. receiving a request from one of the	*See* 2[c]-2[e].

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[2] Regardless of whether the preambles (1[pre], 2[pre], 8[pre], 9[pre]) are limiting, the prior discloses it.

'790	Chatani (EX1005)
wireless communication devices;	Claims 1[c]-1[e] are substantially similar to claims 2[c]-2[e], discussed below, except for minor variations.
1[d]. in response to the request, selecting a portion of the product catalog to be presented on the one wireless communication device, based in part on device capabilities of the one wireless communication device; and	For example, 1[c]-1[e] describe functions in relation to "one of the wireless communication devices" rather than "a wireless communication device used by one of the subscribers." Chatani's disclosure with respect to a wireless communication device also discloses one of the wireless communication devices. Additionally, where Chatani discloses a "single description… regardless of" a more inclusive "number of implementations" for claim 2[e], Chatani also discloses the same for the subset "implementations that are available" for claim 1[e]. Olivier, ¶¶66-68.
1[e]. presenting the selected portion of the product catalog to the one wireless communication device, such that the selected portion, as presented, provides a single description of each item of digital content in said portion, regardless of a number of implementations that are available for each said item.	
2[pre]. A method of providing access to	**Chatani discloses a method of providing access** (*e.g.*, service manager device 115 administers a Web site including Web pages of accessible content) **to digital**

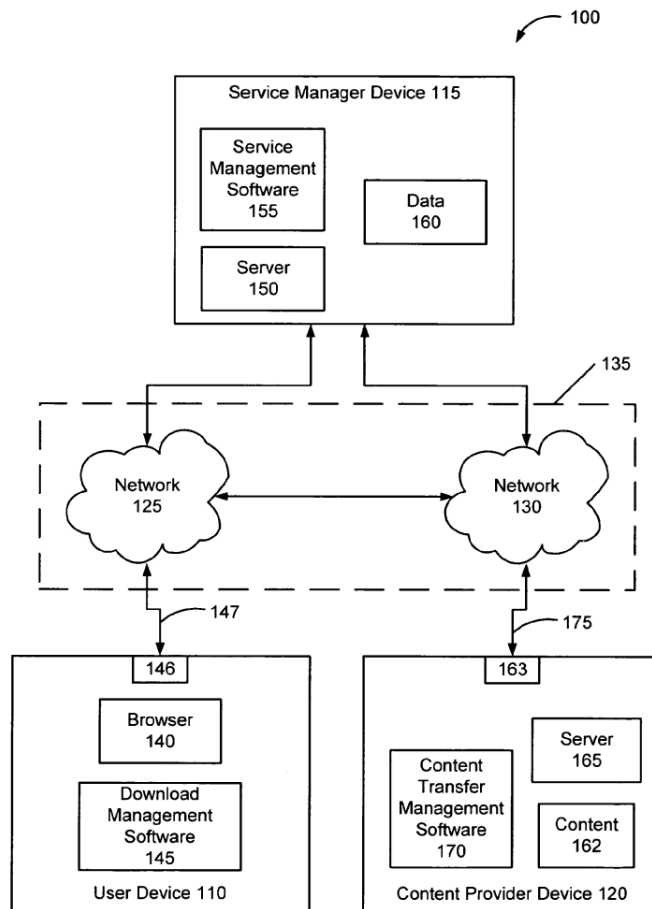| '790	Chatani (EX1005)
digital content for use on wireless communication devices, the method comprising:	**content for use on wireless communication devices** (*e.g.*, content including software executable files, computer games, text, audio, video, and Web pages are transmitted to user devices such as mobile phones).
	Chatani discloses that a service manager device 115 administers a Website and serves one or more Web pages, accessible to user devices 110, that list available content for download. Chatani, 5:12-29. Content includes digital content such as software, computer games, Web pages, and video files. Chatani, 4:21-25. User devices include wireless communication devices such as mobile phones. Chatani, 4:44-55. Olivier, ¶¶69-74.
	• Fig. 1 (including service manager device 115 and user device 110)

Figure 1

'790	Chatani (EX1005)
	• 4:21-25 ("'content' refers to… electronic data that may be transferred over a computer network, including… software executable files (such as computer games) and other… files, such as Web pages, text files, audio files, and video files.")
	• 4:44-55 ("user device 110… is configured to interact with and download content from the network 135. For example, the user device 110 may comprise … a mobile phone…. The user device 110 includes a network interface 146 that enables communication over a communication link 147…. The link 147 could be … wireless.")
	• 5:12-29 ("the service manager device 115 preferably administers a Web site through which a user can access and download content…. The service manager device 115 includes a server 150 that maintains and serves one or more Web pages that can be accessed via the user device 110. The server 150 may comprise a server application that executes in memory of the service manager device 115…. FIG. 2 shows an exemplary content download Web page 210…. The Web page 210… presents a listing of content that the user may access, such as by clicking on an appropriate hyperlink or selecting from a menu. For example… computer game applications… music files or video files….")
	See also:
	• 1:65-66
2[a.i]. receiving and storing in a server system a plurality of items of digital content to be made available for use in wireless communication	**Chatani discloses receiving** (*e.g.*, service manager device 115 receives content 162 from content provider device 120, which serves content in network 135) **and storing in a server system** (*e.g.*, service manager device 115 locally stores content) **a plurality of items of digital content to be made available for use in wireless communication devices** (*e.g.*, content items served to mobile phones, as discussed for claim 2[pre]) **used by a plurality of**

'790	Chatani (EX1005)
devices used by a plurality of wireless services subscribers,	**wireless services subscribers** (*e.g.*, used by registered users accessing the Internet using mobile phones)**.**
	As discussed for claim 2[pre], Chatani discloses that service manager device 115 provides access to digital content, for example via server 150, for use in wireless communication devices. Chatani further discloses that the users are subscribers that have associated usernames and passwords registered in the system. Chatani, 9:22-24. Olivier, ¶¶84-91.
	Chatani discloses that service manager device 115 stores content for serving to user device 110. Chatani, 7:26-31, 11:25-28. The content is sourced from a content provider device 120 having access to content 162 locally or from an accessible data store. Chatani, 5:53-63. The service manager device 115 and content provider device 120 are connected via network 135 or combined into a computer or system of computers. Chatani, Fig. 1, 5:63-65.
	From the above disclosure, a POSITA would have recognized that Chatani discloses service manager device 115 receives the plurality of items of digital content from Internet content providers, which it stores locally as discussed above. That is, Chatani discloses that content provider device 120 includes content 162 and server 165 to serve content 162, and that service manager device 115 locally stores content for serving to user device 110, and so content stored on service manager device 115 would have been first "received" from a source such as content provider device 120. Olivier, ¶¶75-80.
	Alternatively, where service manager device 115 and content provider device 120 are combined, Chatani discloses that service manager device 115 receives content from a data store. Chatani, 5:53-65. Olivier, ¶¶79-80.
	Additionally, to the extent argued that service manager device 115 does not explicitly disclose how it receives the content for distribution, it would have been obvious to a POSITA to receive the content and benefit from a variety of content that can be obtained from known and available

'790	Chatani (EX1005)
	sources, further obviating the need to expend local resources creating every item of content locally at service manager device 115. *See*, *e.g.*, Chatani, 1:29-33 (the "Web is a collection of millions of linked documents that reside on computers throughout the world…"). Olivier, ¶¶81-83

Regarding storing content to be made available to devices:

- 7:26-31 ("the <u>service manager device 115 causes the requested content to be transmitted to the user device 110</u> over the network 135 according to the previously-selected service level. If <u>the content is stored locally to the service manager device 115</u>, then the server 150 simply serves the content to the user device 110.")

Regarding receiving the content for storing:

- 5:53-65 ("the content provider device 120 comprises any source of content 162 available to the user device 110 via the network 135. <u>The content provider device 120 has access to content 162 that is stored in a local data store or in a data store that is available to the content provider device 120…. [N]etwork interface 163… enables communication… between the network 135 and the content provider device 120.</u> The content provider device 120 further includes a server 165 that serves the content 162. It is appreciated that <u>the content provider device 120 and the service manager device 115 could be combined into a single computer or system of computers.</u>")

Regarding the content being made available for use by subscribers:

- 4:21-25 (*see* 2[pre])
- 4:44-55 (*see* 2[pre])
- 9:14-24 (*see* 3[a.i])

See also:

- Fig. 1, 1:65-66, 11:25-28

'790	Chatani (EX1005)
2[a.ii]. including receiving and storing a plurality of different implementations of at least one of the items of digital content, where each implementation of any given item of digital content corresponds to a different set of device capabilities;	**Chatani discloses receiving and storing** (*e.g.*, service manager device 115 receives and stores content, as discussed for claim 2[a.i]) **a plurality of different implementations of at least one of the items of digital content** (*e.g.*, each item of content has a plurality of service levels with implementations such as video streaming and high-resolution video streaming)**, where each implementation of any given item of digital content corresponds to a different set of device capabilities** (*e.g.*, different service levels and the implementations made available therein correspond to different user device capabilities)**.**
	As discussed for claim 2[a.i], Chatani discloses that service manager device 115 receives and stores a plurality of digital content.
	Chatani further discloses that each item of content has associated with it a plurality of "service levels" that relate to the type of content transferred and manner of transferring the content. Chatani, 7:17-22, 10:15-27. For example, a particular item of content may have four service levels that provide different implementations of the item of content, thus making available text files, software, streaming video, high-resolution streaming video, etc. Chatani, 10:28-52. Olivier, ¶¶92-97.
	The service levels and corresponding implementations of items of content correspond to different user device capabilities based on its communication environment and hardware configuration, such as the user device's downloading and processing abilities, ability to output graphics, video, and sound, whether the device can utilize certain protocols, and the like. Chatani, 6:27-7:5, 9:29-44. For example, a content may be provided as including streaming video to devices without hard disks, or including high-resolution streaming video for devices with hard disks. Chatani, 10:28-52. Olivier, ¶¶98-103.
	Regarding different implementations:

'790	Chatani (EX1005)
	• 7:17-22 ("The service level relates to the type of content that is transferred, as well as the manner in which the content is transferred. The service management software 155 preferably optimizes the service level for… the user device 110.")
	• 10:15-27 ("The service manager device 115 preferably <u>offers various service levels that may be selected for downloading content</u> from the content provider device 120. The operator of the content provider device 120 preferably determines the characteristics of each level and specifies to the service manager device 115 the characteristics of the service levels, as well as the <u>minimum user device capabilities that are required in order to make a service level available to the user device 110</u>. <u>The service manager device 115 maintains a record of service levels that are available for a particular content provider and the associated minimum capabilities that are required.</u> <u>The available service levels may vary for each item of content.</u>")
	• 10:28-52 ("Table 1 shows that <u>the service manager device 115 may maintain four service levels for a particular item of content</u> that is available…:

'790	Chatani (EX1005)

TABLE 1

Required User Device Capabilities	Characteristics of Service Level
Analog modem (bit rate of 56 kbps or less), no hard disk, latency greater than 1 ms.	Only text files available.
Analog modem (bit rate of 56 kbps or less), hard disk present, latency less than 1 ms.	Text files available. Video game software applications available.
Cable modem or DSL line (bit rate of at least 2 Mbps), no hard disk, latency of less than 1 ms.	Text files available. Video game software applications available. Video streaming available. CD quality sound files available.
Cable modem (bit rate of at least 2 Mbps), hard disk present, latency of less than 1 ms.	Text files available. Video game software applications available. Video streaming available. CD quality sound files available. Higher resolution video streaming made available.

")

Regarding different implementations corresponding to device capabilities:

- 9:29-44 ("The capabilities of the user device relate to the rate at which the user device can download data, the speed and processing capabilities of the processor…, the amount of accessible and storable memory…, and the access speed of any hard disks…. The capabilities could also include… factors that affect the… ability to download content…, as well as the… ability to process and output content, such as the processing of graphic, video, and sound information.
Furthermore, the user device capabilities could include other factors, such as whether the user device 110 can securely transmit and receive content according to a security protocol, such as the Secure Socket Layer (SSL) protocol or secure HTTP (S-HTTP).")

- 9:45-56 (describing determining capabilities including download bitrates and support for streaming transmissions")
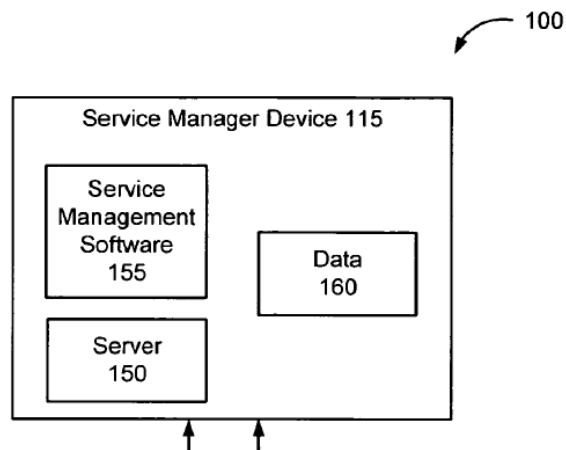
- 25 -

'790	Chatani (EX1005)
	• 10:15-27 (*see* above)
	• 10:53-59 ("listing of <u>user device capabilities and corresponding available service levels</u> are exemplary…. As the capabilities of the user device 110 increase, then the service manager device 115 preferably increases the service level that is made available….")
	• 12:38-39 ("available <u>service levels are determined based upon the capabilities of the user device</u>…")
	See also:
	• 6:27-7:5
2[b]. operating the server system to maintain a product catalog containing a description of the items of digital content, wherein the product catalog includes, in association with each item of digital content, a reference to each implementation of said item of digital content;	**Chatani discloses operating the server system** (*e.g.*, service management software 155 operates the service manager device 115) **to maintain a product catalog containing a description of the items of digital content** (*e.g.*, service manager device 115 maintains, in a data store, lists of available content and information related to the content such as identities, locations, and descriptions)**, wherein the product catalog includes, in association with each item of digital content, a reference to each implementation of said item of digital content** (*e.g.*, each maintained item of content includes a plurality of service levels with different implementations of content, such as a video and a high resolution video, that are individually referenced for a particular user device to download and that have individual network location references)**.**
	Chatani discloses that service manager device 115, under operation of service management software 155, maintains information about content, including a list of content, locations of the content, and descriptions of the content. Chatani, Fig. 1, 5:41-52, 6:6-12, 12:31-66, 13:4-7. Olivier, ¶¶104-109.
	As discussed for claim 2[a.ii], each item of content has a plurality of service levels that make available different implementations of the item of content. For example, for a

'790	**Chatani (EX1005)**
	particular item of content, service manager device 115 maintains four service levels, as shown in Chatani Table 1, providing the same item of content with a video or high resolution video, among others. Chatani, 10:28-52. Each implementation is accessible via a network location reference maintained by service manager device 115. Chatani, 5:41-46, 6:6-12. When a user selects an item of content for download, the user is not shown individual service levels for selection, and the service manager device 115 automatically selects a service level to transfer content according to user device capabilities. Chatani, 10:60-11:1, 11:15-18. In order to select a content implementation and then transfer content according to the selected implementation, references to each implementation would have been maintained, which Chatani discloses in the form of URLs, for example. Chatani, 5:41-46, 6:6-12. Olivier, ¶¶110-114. Regarding a product catalog and descriptions of content: • Fig. 1 (partial) • 5:12-29 (*see* 2[pre]) • 5:30-34 ("<u>service manager device 115 includes… service management software application 155 that causes the service manager device 115 to manage content transfers</u>….")

'790	Chatani (EX1005)
	• 5:41-46 ("<u>The service management software 155 preferably maintains in a data store 160 a list of content that is available over the network 135 via the service manager device 115. The service management software 155 also maintains the network location of each item of content, such as a [URL] for content.</u> ") • 6:6-12 ("The service management software 155 preferably <u>provides information regarding the URL of the content, the type of content, such as whether the content comprises a Web page, a video file, or an audio file, the size of the content, and the transfer modes available for the content,</u> such as whether the content can be transmitted in a streaming fashion.") • 12:31-58 ("The operation can also occur when the user device 110 establishes a connection with the network 135 or in response to the user device 110 initiating a download of content via the network 135. …<u>the service manager device 115 determines the service level(s) that are available to the user device for downloading of content. The available service levels are determined based upon the capabilities of the user device</u>…. …the user is presented with a list of content that is available for a download request. <u>The service manager device 115 preferably identifies a list of content that can actually be downloaded given the current capabilities of the user device 110.</u> In this regard, the service manager device 115 can <u>consult a table that maps downloadable content with the minimum service level necessary to download the content, such as Table 1</u>, above. <u>Based upon the available service levels, the service manager device 115 determines the corresponding content that is actually available to the user device 110 for download….</u> The user can be presented with a list of

'790	Chatani (EX1005)
	downloadable content as well as nondownloadable content.")
	• 13:4-7 ("The lists 807, 809 of content preferably include <u>a brief description regarding the characteristics of the content…</u>")
	• *See also* 14:40-45.
	Regarding references to implementations:
	• 5:41-52, 6:6-12 (*see* above)
	• 10:28-52 (*see* 2[a.ii])
	• 10:60-11:1 ("Preferably, <u>the service manager device 115 automatically selects the service level for the content transfer based upon whether the user device capabilities meet the minimum requirements for a service level</u>. The service manager device 115 <u>compares the user device capabilities with the requirements for each service level</u> and <u>selects the highest service level</u> that is available. This advantageously provides a seamless transfer of content without requiring a user to manually select a service level.")
	• 11:15-18 ("…the service manager device 115 causes the content to be transferred to the user device 110 according to the selected level…")
	• *See also* 10:23-27, 12:31-66.
2[c]. receiving a request from a wireless device used by one of the subscribers;	**Chatani discloses receiving a request from a wireless device used by one of the subscribers** (*e.g.*, user device accesses a listing of content by selecting from a menu; content and Web page requests are received at the service manager device)**.**
	Chatani discloses that service manager device 115 receives requests from user devices 110. For example, service manager device 115 administers a Web site including Web pages that the user device accesses by establishing a connection with the service manager device

'790	**Chatani (EX1005)**
	115 and by selecting menus and hyperlinks. Chatani, 5:12-29, 12:21-24. The Web pages are content items. Chatani, 4:21-25. Service manager device 115 receives requests for content (*i.e.*, the Web pages) from user device 110. Chatani, 4:44-55, 7:6-11, 9:6-13. Olivier, ¶¶115-120.

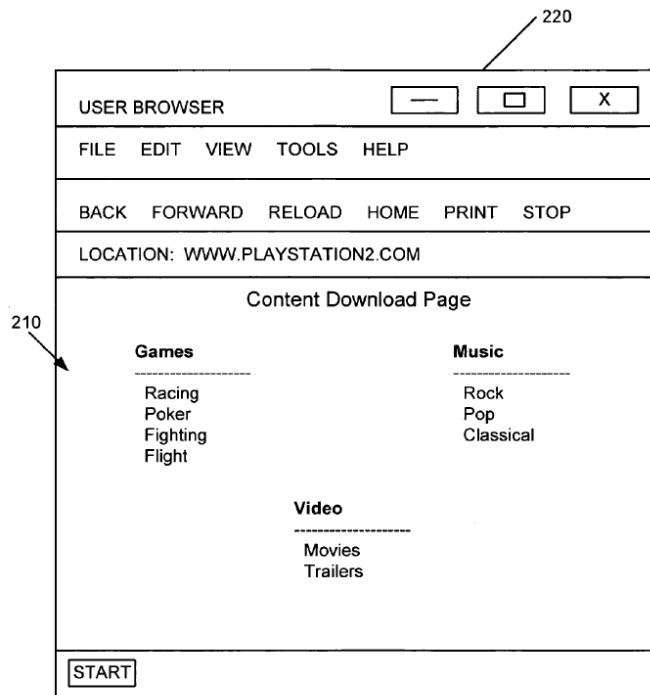Regarding receiving a request for Web page content:

- Fig. 2

Figure 2

- 4:21-25 (*see* 2[pre])

- 4:44-55 (*see* 2[pre])

- 5:12-29 (*see* 2[pre])

- 7:6-11 ("<u>the user device 110 submits a request for content to the service manager device 115</u>…. user device 110 could submit the request by a user selecting a hyperlink on the Web page 210 (FIG. 2) that is served by the service manager device 115.")

'790	Chatani (EX1005)
	• 12:21-24 ("…user device 110 establishes a connection with the service manager device 115. The operation can also occur when the user device 110 establishes a connection with the network 135…") *See also*: • 9:6-13
2[d]. in response to the request, selecting a portion of the product catalog to be presented to the subscriber, based on device capabilities of the wireless device used by the subscriber; and	**Chatani discloses in response to the request** (*e.g.*, in response to the request for a Web page)**, selecting a portion of the product catalog to be presented to the subscriber, based on device capabilities of the wireless device used by the subscriber** (*e.g.*, determining "available" content to be presented based on user device capabilities)**. As discussed for claim 2[c], Chatani discloses service manager device 115 receiving the request, *e.g.*, for a Web page, as discussed for claim 2[b]. Chatani discloses that before content is made available to the user for selection and download, service manager device 115 determines the service levels available to the user device. Chatani, 11:7-14, 12:35-41. The Web page presented to the user for downloading content includes content that is determined and selected as "available content" or "that can actually be downloaded given the current capabilities of the user device 110." Chatani, 9:11-12, 11:7-14, 12:38-39, 12:43-58. The content selected as having available service levels for the user device's capabilities is thus a selected portion of the product catalog of all content items. Olivier, ¶¶121-127. • 9:11-12 ("…a user could click on a link on such [as] a <u>Web page that displays a list of available content</u>.") • 11:7-14 ("It is appreciated that the <u>service manager device 115 can make content available to the user device 110 after the user device capabilities are determined</u> so that the user device does not actually select and request content until the service manager device determines the available service levels. In

'790	Chatani (EX1005)
	such a case, the operation shown in the flow diagram box 510 would occur after the operation shown in the flow diagram box 540")
	• 12:31-58 (*see* 2[b])
2[e]. presenting the selected portion of the product catalog to the subscriber via a wireless network, such that the selected portion, as presented to the subscriber, provides only a single description of each item of digital content in said portion, regardless of the number of implementations of each said item.	**Chatani discloses presenting the selected portion of the product catalog to the subscriber** (*e.g.*, presenting the Web page with available content) **via a wireless network** (*e.g.*, the device is a mobile device communicating wirelessly with the network)**, such that the selected portion, as presented to the subscriber, provides only a single description** (*e.g.*, descriptions including names of the available content) **of each item of digital content in said portion, regardless of the number of implementations of each said item** (*e.g.*, for each particular item of available content, individual service levels and implementations are not presented; in this way, a user does not have to peruse and manually select among varied service levels and implementations of content offered for a particular item of content (even if several are available from the server system))**.
	As discussed for claim 2[d], the selected portion is presented to the user in Web pages. And, as discussed for 2[pre] and 2[a.i], the user device 110 is, *e.g.*, a mobile phone accessing the Web pages wirelessly. Chatani further discloses that user device 110 includes a network interface 146 for wirelessly communicating over network 135. Chatani, 4:44-55.
	Chatani illustrates a Web page showing available product catalog content in Fig. 2, which includes descriptions of content as names in menus or listings (*e.g.*, "Racing," "Poker," "News"). Chatani, 5:12-29, 12:59-61, 13:4-7. Olivier, ¶128.
	Chatani further discloses that each item of content is only presented with a single description (*e.g.*, a single listing) regardless of the number of service levels available for devices with varied capabilities. In particular, Chatani explains that when a user selects a listed item for transfer,

| ’790	Chatani (EX1005)
	service manager device 115 automatically selects an associated service level based on the user device capabilities. Chatani, 10:60-11:1. Automatic selection is performed *instead of* prompting the user device to display available service levels (which the user must then peruse to identify a desired selection among available implementations). Chatani, 11:1-11:6. From this disclosure, a POSITA would have recognized that, regardless of the number of implementations of each item of content (*i.e.*, regardless of the available service levels and corresponding content), each item of content is presented with only a single description. Olivier, ¶¶129-132.
	Moreover, to the extent Chatani is argued as failing to explicitly disclose that only a "single description" is provided of an item, a POSITA would find such as obvious where alternative service levels are not shown (*i.e.*, no reason to describe them), and redundant descriptions would serve no purpose and would clutter the display. Olivier, ¶133.
	Regarding the wireless network:
	• 4:44-55 (*see* 2[a.i])
	Regarding presenting the portion of the product catalog with descriptions:
	• Fig. 2

'790	Chatani (EX1005)
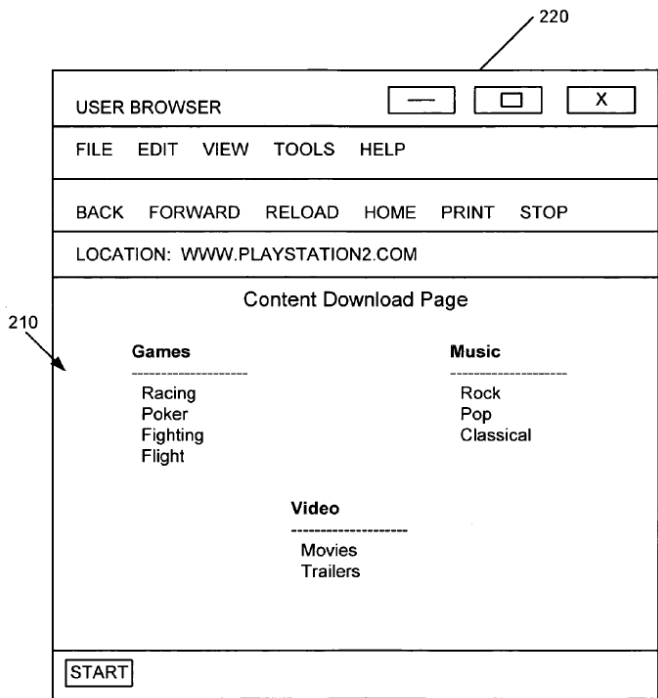
Figure 2

- 5:12-29 (*see* 2[pre])
- 13:4-7 (*see* 2[b])
- See also 12:59-61.

Regarding providing a single description of each item:

- 10:60-11:1 (*see* 2[b])

'790	Chatani (EX1005)
3[pre]. A method as recited in claim 2, wherein said selecting a portion of the product catalog comprises:	*See* claim 2. Olivier, ¶134.
3[a.i]. in response to the request, determining the identity of the	**Chatani discloses in response to the request** (*e.g.*, in response to the request to display a Web page)**, determining the identity of the wireless device used by the subscriber** (*e.g.*, service manager device 115

'790	Chatani (EX1005)
wireless device used by the subscriber,	determines the hardware configuration or classification of the user device).
	As discussed for claim 2[d], Chatani discloses in response to the request, selecting a portion of the product catalog to be presented based on device capabilities of the user device.
	Chatani discloses that service manager device 115 stores configuration information about user devices in a data store. Chatani, 8:46-52, 9:14-24. When service manager device 115 seeks to determine the capabilities of a user device 110, it accesses the configuration information to determine the identity of the user device via the classification of the user device's configuration. Chatani, 9:14-24 (identifying a user device by using username/password to determine its configuration), 10:60-11:1 (determining the classification of the device based on its capabilities), 12:21-34. Likewise, as explained in the '790, devices are identifiable by "actual" device information or "generic" device information (such as a capability or set of capabilities). '790, 8:30-51; *see also* 8:60-8:67 ("Generic devices… have static capabilities," and the "ability… to discover content based on the static (well-known) capabilities… is valuable"). Olivier, ¶¶135-138.
	• 8:46-52 ("download management software 145 causes the user device 110 to <u>transmit the configuration information, including the hardware configuration data and communication environment data, to the service manager device 115. The service manager device 115 preferably stores the data relating to the user device 110 in the data store 160.</u>")
	• 9:14-24 ("represented by the flow diagram box numbered 520, <u>the service manager device 115 accesses the configuration information…</u> relating to the user device 110. <u>The service manager device 115 preferably maintains a record of communication environment data and hardware configuration data</u>

'790	Chatani (EX1005)
	for each user device…. The service manager device 115 may associate the user device 110 with the data by using a username and password…")
	- 10:60-11:1 (*see* 2[b])
	See also:
	- 12:21-34 (accessing configuration information in response to a connection or initiation of a download)
3[a.ii]. wherein each implementation of the plurality of items of digital content has been previously associated in the server system with at least one device identity, according to corresponding device capabilities supported by the implementation; and	**Chatani discloses wherein each implementation of the plurality of items of digital content has been previously associated in the server system with at least one device identity** (*e.g.*, service levels, and their associated implementations and device requirements, are previously determined by the content provider; *see* Table 1)**, according to corresponding device capabilities supported by the implementation** (*e.g.*, the high-resolution video streaming implementation is associated with the identified class of devices because of the combined capabilities including bitrate and latency)**.**
	Chatani discloses each implementation of the items of content are associated with at least one device identity. For example, Table 1 of Chatani (below, annotated to separate the four service levels and device classifications), shows that high-resolution video streaming had been associated with the device identity representing a class of devices with capabilities "Cable modem (bit rate of at least 2 Mbps), hard disk present, latency of less than 1 ms," while video streaming had been associated with the device identity representing a class of devices with capabilities "Cable modem or DSL line (bit rate of at least 2 Mbps), no hard disk, latency of less than 1 ms," Chatani, 10:28-52.

'790	Chatani (EX1005)
	TABLE 1 Required User Device Capabilities — Characteristics of Service Level Analog modem (bit rate of 56 kbps or less), no hard disk, latency greater than 1 ms. — Only text files available. Analog modem (bit rate of 56 kbps or less), hard disk present, latency less than 1 ms. — Text files available. Video game software applications available. Cable modem or DSL line (bit rate of at least 2 Mbps), no hard disk, latency of less than 1 ms. — Text files available. Video game software applications available. Video streaming available. CD quality sound files available. Cable modem (bit rate of at least 2 Mbps), hard disk present, latency of less than 1 ms. — Text files available. Video game software applications available. Video streaming available. CD quality sound files available. Higher resolution video streaming made available. The associations, *e.g.*, as in Table 1, are previously determined and then stored and maintained in service manager device 115. Chatani, 10:15-27. And, as shown, the associations correspond to device capabilities supported by the implementations. For example, the implementation including video streaming is associated with "DSL line" and "no hard disk" capabilities that are not supported by the implementation including high-resolution video streaming. Olivier, ¶¶139-142. • 10:15-27, 10:28-52 (*see* 2[a.ii]) • 10:53-59 (*see* 2[a.ii])
3[b]. selecting the portion of the product catalog to be presented to the subscriber based on the identity of the wireless device used by the subscriber.	**Chatani discloses selecting the portion of the product catalog to be presented to the subscriber** (*e.g.*, selecting available content to display on a Web page) **based on the identity of the wireless device used by the subscriber** (*e.g.*, the available content is based on user device capabilities determined from the user device identity). As discussed for claim 2[d], Chatani discloses "selecting a portion of the product catalog to be presented to the subscriber, based on device capabilities of the wireless

'790	Chatani (EX1005)
	device used by the subscriber." *See also* Chatani, 9:11-12, 10:28-52, 12:38-39, 12:43-58.
	Chatani discloses that device capabilities (*e.g.*, whether the user device is capable of 2 Mbps bit rate communication, with a hard disk, and <1ms latency, thereby being capable of high-resolution video streaming) are based on the identity of the user device (*e.g.*, the user device, identified by username and password, has associated configuration information, including the hardware configuration data and communication environment data, used to determine the device's classification and available items of content). Chatani, 9:14-24, 10:28-52, 12:38-39, 12:43-58.
	Therefore, because the portion to be presented is based on the capabilities of the user device and the capabilities are based on the identity of the user device, the selected portion presented to the user on the user device is based on the identity of the user device. Olivier, ¶¶143-145.
	Regarding selecting a portion of the product catalog:
	• 9:11-12 (*see* 2[d])
	• 10:28-52 (including Table 1) (*see* 3[a])
	• 12:38-39 (*see* 2[d])
	• 12:43-58 (*see* 2[d])
	Regarding the capabilities, and thus the portion, being based on the identity of the device:
	• 9:14-24 (*see* 3[a.i])
4[pre]. A method as recited in claim 2, further comprising:	*See* claim 2. Olivier, ¶146.
4[a]. receiving from the subscriber a request for one of	**Chatani discloses receiving from the subscriber a request for one of the items of digital content in said portion of the product catalog** (*e.g.*, service manager

'790	Chatani (EX1005)
the items of digital content in said portion of the product catalog;	device 115 receives a user's request for content, among presented available content, from user device 110).
	Chatani discloses the user clicking a link on a Web page of available content to generate a request that is submitted from user device 110 to service manager device 115. Chatani, 7:6-11, 9:8-13. Olivier, ¶¶147-149.
	• 7:6-11 (*see* 2[c])
	• 9:8-13 ("the user device 110 submits a request for content.... For example, a user could click on a link on such a Web page that displays a list of available content. The service manager device 115 receives the request from the user device 110.")
4[b]. selecting an implementation of the requested item of digital content, based on device capabilities of the wireless device used by the subscriber; and	**Chatani discloses selecting an implementation of the requested item of digital content, based on device capabilities of the wireless device used by the subscriber** (*e.g.*, service manager 115 selects content based on the highest service level available based on the user device capabilities).
	Chatani discloses that service manager device 115 automatically determines which service level implementation of the content item to transfer to the user device 110, based on the user device capabilities. Chatani, 10:60-11:1. Olivier, ¶¶150-151.
	• 10:60-11:1 (*see* 2[b])
4[c]. downloading the selected implementation of the item of digital content to the wireless device used by the subscriber.	**Chatani discloses downloading the selected implementation of the item of digital content to the wireless device used by the subscriber** (*e.g.*, service manager 115 transfers the item of content to the user device 110 according to the automatically selected service level).
	Olivier, ¶¶152-153.
	• 11:15-17 ("After the service level has been selected, the service manager device 115 causes the content to be transferred to the user device 110 according to the selected level...")

'790	Chatani (EX1005)
	• 11:25-28 ("The content could… reside at the service manager device 115… the service manager device 115 would simply transfer the content to the user device 110.")
8[pre]. A system that provides access to digital content for use on wireless communication devices, said system comprising:	**Chatani discloses a system** (*e.g.*, system including service manager device 115) **that provides access to digital content for use on wireless communication devices, said system** (*e.g.*, providing access to content via Web pages to mobile phones)**.** As discussed for claim 2[pre], Chatani discloses providing access to digital content for use on wireless communication devices. Chatani further discloses service manager device 115 is a system that manages the transfer of content. Chatani, 4:3-16. *See also* the discussions of claim 8 below. Olivier, ¶¶154-157. • Fig. 1 (including service manager device 115)

'790	Chatani (EX1005)
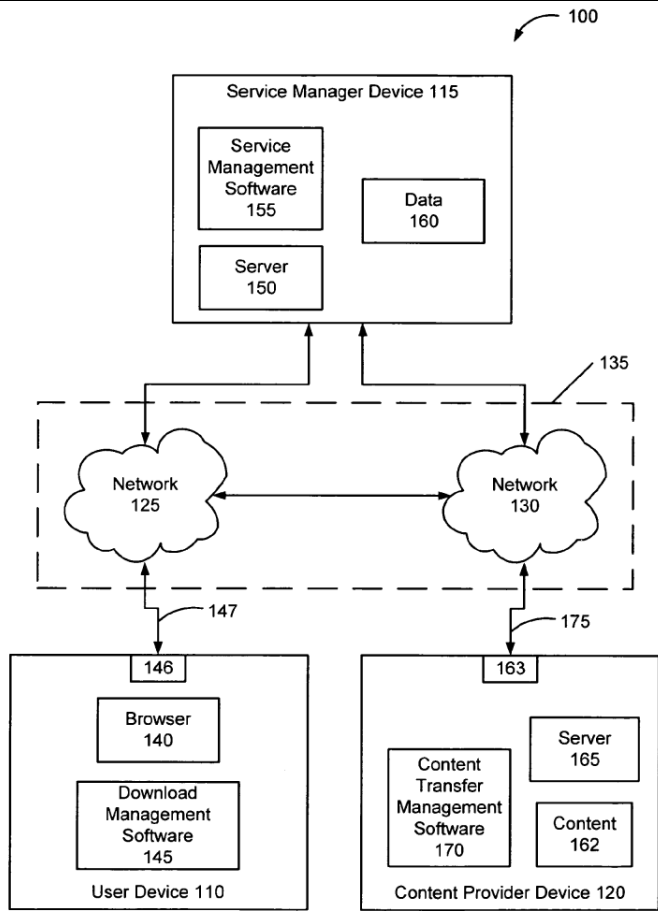
Figure 1

- 4:3-16 ("FIG. 1 illustrates… network system 100…. <u>The service manager device 115 preferably interfaces with both the user device 110 and the content provider device 120 and manages a content transfer between them that is particularly suited for the capabilities of each device.</u>")

'790	Chatani (EX1005)
8[a]. a network interface through which to communicate over a communication network; and	**Chatani discloses a network interface** (*e.g.*, a network interface card) **through which to communicate over a communication network** (*e.g.*, to communicate over the Internet)**.** Olivier, ¶¶158-159. - 4:26-31 ("computer network 125… links the user device 110 to the service manager device 115. A computer network 130… links the content provider

'790	Chatani (EX1005)
	device 120 to the service manager device 115. <u>Both… networks… may comprise a single computer network 135, such as the Internet….</u> ") • 14:11-39 ("<u>FIG. 10 shows… computer 1000 such as might comprise any of the devices 110, 115, or 120…. Each computer 1000 can communicate with the others… through a network interface 1018….</u>, for example, a Network Interface Card (NIC) or a modem….") *See also*: • 15:4-12
8[b.i]. a download manager to	**Chatani discloses a download manager** (*e.g.*, service manager device 115 "manages a content transfer" of content to user device 110)**.** Olivier, ¶¶160-162. • 4:3-16 (*see* 8[pre]) • 5:12-29 (*see* 2[pre])
8[b.ii]. *See* identical language in claim 9[b.i].	*See* 9[b.i]. Olivier, ¶163.
8[b.iii]. *See* identical language in claim 9[b.ii].	*See* 2[b]. Olivier, ¶164.
8[c]. receive a request from one of the wireless communication devices; **8[d].** in response to the request, select a	*See* 2[c]-2[e], 1[c]-1[e], and the discussion therein regarding claim language differences that equally apply to claims 8[c]-8[e]. Olivier, ¶¶165-167.

'790	Chatani (EX1005)
portion of the product catalog to be presented on the one wireless communication device, based in part on device capabilities of the one wireless communication device; and	
8[e]. presenting the selected portion of the product catalog to the one wireless communication device, such that the selected portion, as presented, provides a single description of each item of digital content in said portion, regardless of a number of implementations that are available for each said item.	
9[pre]. A system comprising:	*See* 8[pre]. Olivier, ¶168.
9[a]. a processor; and	**Chatani discloses a processor** (*e.g.*, CPU, microprocessor)**.** Olivier, ¶¶169-170. • 14:12-17 ("Each computer 1000 operates under control of [CPU] 1002, such as a "Pentium"

'790	Chatani (EX1005)
	microprocessor and associated integrated circuit chips…") *See also*: • 15:4-12
9[b]. a storage facility accessible to the processor and containing code which, when executed by the processor, causes the processing system to	**Chatani discloses a storage facility accessible to the processor** (*e.g.*, hard disk, memory, and program product reader) **and containing code which, when executed by the processor, causes the processing system to** carry out functions (*e.g.*, storing programming steps that are executed by the CPU to implement functionality)**.** Olivier, ¶¶171-172. • 14:21-32 ("computer 1000 also includes… (DASD) 1008, such as a hard disk drive. The memory 1010 typically comprises… [RAM]. Each computer preferably includes a program product reader 1012 that accepts a program product storage device 1014, from which the program product reader can read data…. The program product reader can comprise… a disk drive, and the program product storage device can comprise… a magnetic floppy disk….") • 14:40-59 ("The CPU 1002 operates under control of programming steps that are temporarily stored in the memory 1010…. Thus, the programming steps implement the functionality of any of the management software… illustrated in FIG. 1. The programming steps can be received from the DASD 1008, through the program product storage device 1014, or through the network connection 1022. The program product storage drive 1012 can receive a program product 1014, read programming steps recorded thereon, and transfer the programming steps into the memory 1010 for execution by the CPU 1002…. In this way, the processing steps necessary for operation in accordance with the invention can be embodied on a program product.")

'790	Chatani (EX1005)
9[b.i]. receive and store a plurality of items of digital content to be made available for use in wireless communication devices used by a plurality of wireless telecommunications subscribers, including receiving and storing a plurality of different implementations of at least one of the items of digital content, where each implementation of any given item of digital content corresponds to a different set of device capabilities;	*See* 2[a.i]-2[a.ii]. As discussed for claim 2[a.i], Chatani discloses that the users are telecommunications subscribers using mobile phones. *See, e.g.*, Chatani, 4:44-55. Olivier, ¶173.
9[b.ii]. maintain a product catalog containing a description of the items of digital content, wherein the product catalog includes, in association with each item of digital content, a	*See* 2[b]. Olivier, ¶174.

'790	Chatani (EX1005)
reference to each implementation of said item of digital content;	
9[b.iii]. receive a request from a wireless device used by one of the subscribers;	*See* 2[c]. Olivier, ¶175.
9[b.iv]. in response to the request, select a portion of the product catalog to be presented to the subscriber, based on device capabilities of the wireless device used by the subscriber; and	*See* 2[d]. Olivier, ¶176.
9[b.v]. cause the selected portion of the product catalog to be presented to the subscriber via a wireless telecommunications network, such that the selected portion, as presented to the subscriber, provides only a single description of each item of digital content in said portion,	*See* 2[e]. Olivier, ¶177.

'790	Chatani (EX1005)
regardless of the number of implementations of each said item.	
10[pre]. A system as recited in claim 9, wherein selection of said portion of the product catalog comprises:	*See* claim 9. Olivier, ¶178.
10[a.i]. in response to the request, determining the identity of the wireless device used by the subscriber,	*See* 3[a.i]. Olivier, ¶179.
10[a.ii]. wherein each implementation of the plurality of items of digital content has been previously associated in the server system with at least one device identity, according to corresponding device capabilities supported by the implementation; and	*See* 3[a.ii]. Olivier, ¶180.
10[b]. selecting the portion of the product catalog to	*See* 3[b]. Olivier, ¶181.

'790	Chatani (EX1005)
be presented to the subscriber based on the identity of the wireless device used by the subscriber.	
11[pre]. A system as recited in claim 10, wherein said storage facility further contains code which, when executed by the processor, causes the processing system to:	*See* claims 10, 9[b]. Olivier, ¶182.
11[a]. receive from the subscriber a request for one of the items of digital content in said portion of the product catalog;	*See* 4[a]. Olivier, ¶183.
11[b]. select an implementation of the requested item of digital content, based on device capabilities of the wireless device used by the subscriber; and	*See* 4[b]. Olivier, ¶184.
11[c]. download the selected implementation of	*See* 4[c]. Olivier, ¶185.

'790	Chatani (EX1005)
the item of digital content to the wireless device used by the subscriber.	

B. Ground 2: Claims 5-7 and 12-14 are Obvious Over Chatani in view of Mulligan

1. Overview: Mulligan

Mulligan describes a mobile client provisioning web service that simplifies provisioning procedures for network service providing applications. EX1006 ("Mulligan"), [0001], [0009]. Mulligan explains that with the ever-expanding list of services and technologies being made available to mobile terminals, devices must be kept up-to-date with configuration settings via "provisioning." Mulligan, [0002]-[0006]. However, conventional provisioning processes required visits to retail establishments or were limited to certain existing standards. Mulligan, [0007]. Mulligan thus provides, in part, a single point of interface for provisioning mobile terminals for applications offered by a plurality of network services. Mulligan, [0011]-[0012]. As shown in Fig. 2 (below), Mulligan illustrates a mobile client provisioning web service that serves as an interface for applications 204 to provision terminals 202. Mulligan, [0035]-[0038].
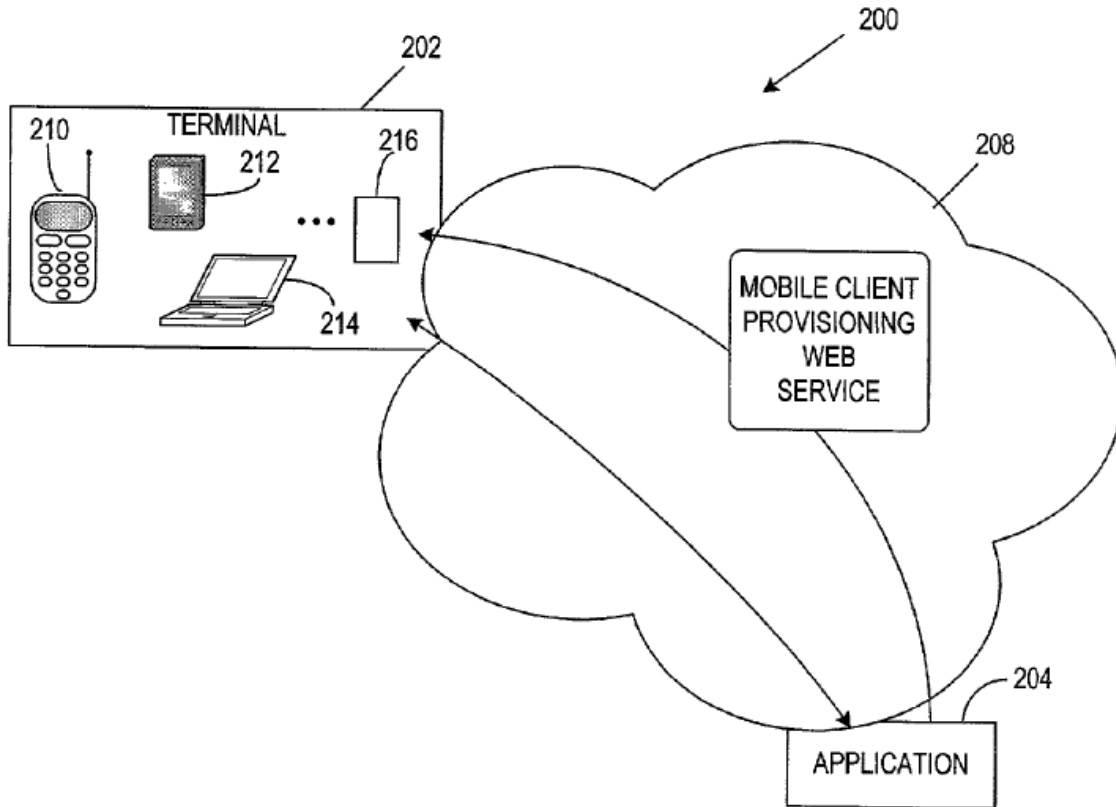
FIG. 2

An example of mobile client provisioning web service 300, as shown in Fig. 3 (below), includes logic including service logic 302 that provides functionality to the web service 300, delivery service 304 that works in conjunction with notification service 308 to ensure delivery of the correct objects to the terminal using proper delivery methods (based, *e.g.*, on the terminal type), terminal management service 306 that configures parameters in the terminal, and presence service 310 that determines information about the terminal, such as its type. Mulligan, [0039]-[0044].
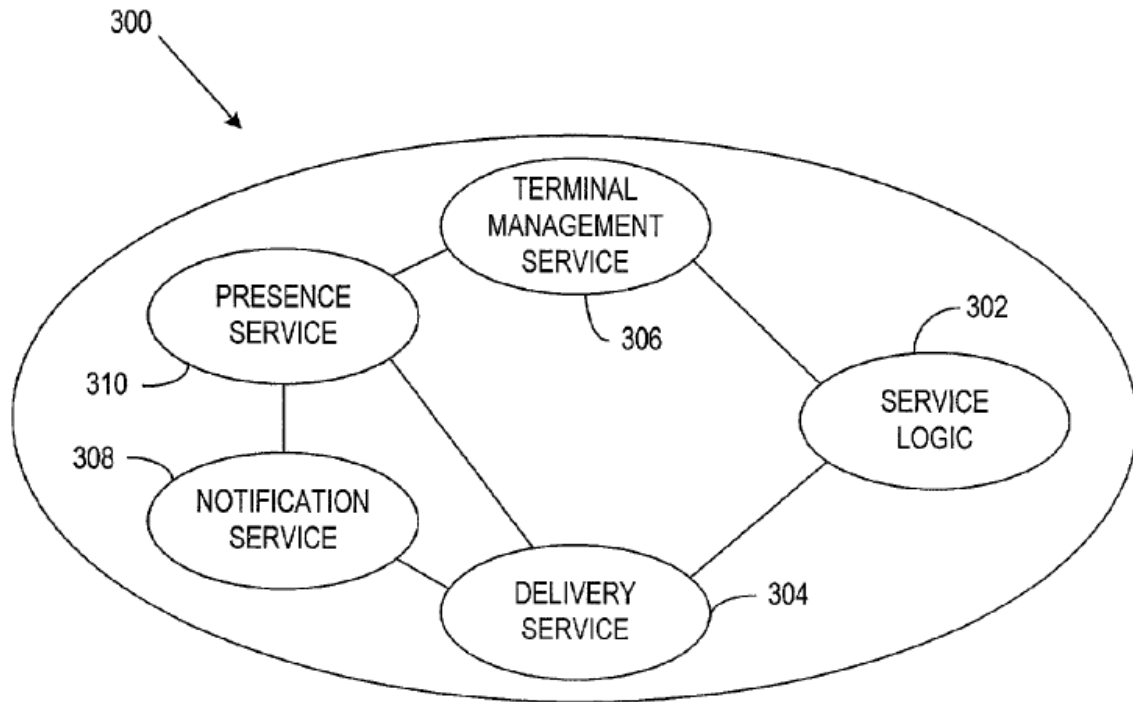
FIG. 3

When a terminal is to be provisioned with access to a service or application, a provisioning request is created and includes an identification of the terminal, an IP address, addresses of provisioning data objects for provisioning the terminal, settings, and other items depending on relevant protocols, formats, networking environments, and other relevant conditions. Mulligan, [0046]-[0049]. The data objects used are those appropriate for the specific terminal. For example, a mobile game service accessed via MIDIet for one terminal would have different variants, stored in different locations, to accommodate different terminal types. Mulligan, [0047]; *see also* [0037] (describing, as one example, MIDIets applications conforming to one standard or framework, with other application types known in the

art applicable). Identifying information about terminals may include their type, storage capacity, and other information. Mulligan, [0052], [0057], [0060]-[0061]. Upon determining the correct data objects to deliver, the data objects and other information needed for the provisioning are packaged delivered to the terminal with methodology appropriate for the terminal type. Mulligan, [0053], [0062]-[0063]. Olivier, ¶¶187-192.

2. Motivation: Chatani in view of Mulligan

Chatani and Mulligan are in the same field as the '790—*e.g.*, digital multimedia content distribution and management and associated system infrastructures—and reasonably pertinent to the problem alleged therein—*e.g.*, distributing different types of content to different mobile devices). '790, 1:13-18, 2:12-16. *See* Chatani, 1:7-10 (selecting and downloading content according to the capabilities of a downloading device), 2:20-58 (describing prior art difficulties related to diversity of content and types of hardware and communication technologies); Mulligan, [0001] (provisioning mobile clients on a network), [0014] (identifying data objects for delivery and delivery methodologies according to mobile terminal type). Olivier, ¶193.

As explained in §VII.A, Chatani discloses a system in which a service manager device 115 serves different implementations of desired items of content to user devices based on the capabilities of a user device requesting content—*e.g.*,

based on a hardware configuration, network environment, and/or ability to adhere to protocols. *See, e.g.*, Chatani, 9:25-56, 10:15-11:1. Chatani discloses transferring a variety of content, including software, games, Web pages, text, audio, video, and any other type of electronic data, to a variety of devices, including desktop computers, laptops, mobile phones, PDAs, and entertainment systems. Chatani, 4:21-25, 4:44-55. To the extent Chatani generally discloses to "transfer" or "transmit" content (*see, e.g.*, Chatani, 11:15-28, claims 2, 15, 29, 41, 55, 67) but leaves to the POSITA implementation details for ensuring that the user device successfully has access to the desired content, such as through provisioning (as claimed in claims 5-7 and 12-14 of the '790), a POSITA would have been motivated to modify Chatani to include those implementation details, taught by Mulligan, for the reasons below. Olivier, ¶¶194-197.

In particular, Mulligan describes that "mobile terminals are by nature limited devices" and may not "include all of the components required to access new or upgraded services that may be available on the network." Mulligan, [0006]. In such cases, "provisioning" is performed to upgrade services and applications at the device. Mulligan, [0006]. And, like Chatani, Mulligan teaches that different terminal types are to be accommodated in different ways. For example, Mulligan teaches to identify the type of the mobile terminal requesting content (*e.g.*, identified by an International Mobile Equipment Identity (IMEI) number) and using that type

information to select provisioning data objects to transfer according to the terminal type (*e.g.*, stored are variants of data objects to accommodate different terminal types), package provisioning information for provisioning the mobile terminal (*e.g.*, packaging information appropriately for the terminal to be provisioned), and transmit provisioning information to the mobile terminal according to its type (*e.g.*, if the terminal is capable of receiving data via a pull service, transmitting provisioning address information to the terminal to download the data objects). Mulligan, [0038]-[0049], [0051]-[0053], [0057], [0059]. Olivier, ¶198.

A POSITA would have been motivated to modify Chatani to include the provisioning functionality taught by Mulligan in order to accommodate different types of terminals and terminal capabilities. That is, where Chatani discloses to store different implementations of content to accommodate the different hardware, network, and protocol handling capabilities of different user devices, a POSITA would have additionally recognized that different user devices would have had different provisioning needs to properly utilize digital content. Thus, it would have been obvious to store different provisioning data objects and to provision user devices according to device information, such as a device's type, ability to utilize particular service protocols, ability to communicate and transmit information, and the like, to ensure access to desired digital content. Moreover, a POSITA would have been motivated to implement the provisioning functionality at the server (*i.e.*, at the

service manager device) such that the proper files and transmission protocols are determined automatically without requiring users to have intimate knowledge of device hardware and communication abilities, as incorrect manual selections would have resulted in poor experiences for users. Chatani, 2:39-52, 10:66-11:1. Olivier, ¶¶198-199.

Furthermore, the implementation of provisioning above would have been, at least, the application of known techniques (*e.g.*, Mulligan's teachings of using type and capability information to provision terminals for access to content) to a known system ready for improvement (*e.g.*, Chatani's disclosure of user devices and of a service manager device that uses user device capabilities to provide content appropriate to the user device) to yield predictable results (*e.g.*, seamlessly provisioning user devices to access desired digital content). *See* MPEP §2143 (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 415-421 (2007)). Olivier, ¶200.

A POSITA would have had a reasonable expectation of success implementing Mulligan's provisioning functionality. Indeed, Mulligan's teachings use known technologies and protocols (*see*, *e.g.*, Mulligan, [0033], [0037], [0046]) in conjunction with processes that identify devices and their capabilities, which is described by both Chatani and Mulligan as discussed above. The addition of known provisioning steps, or described variations thereof, based on identified devices and capabilities would have been well within the skill of a POSITA. Olivier, ¶201.

Accordingly, claims 5-7 and 12-14 are obvious over Chatani in view of Mulligan. Olivier, ¶¶186-248.

3. Claim Charts

'790	Chatani (EX1005) + Mulligan (EX1006)
5[pre]. A method as recited in claim 4, further comprising	*See* claim 4 in §VII.A. Olivier, ¶202.
5[a.i]. associating each of the items of digital content in the server system with a plurality of different provisioning models, each of the provisioning models corresponding to a different set of device capabilities,	**Mulligan discloses associating each of the items of digital content in the server system with a plurality of different provisioning models** (*e.g.*, applications are associated with different data objects and methods used for provisioning)**, each of the provisioning models corresponding to a different set of device capabilities** (*e.g.*, provisioning models accommodate "different terminal types"). As discussed in at least §VII.B.2, a POSITA would have been motivated to modify Chatani to include provisioning functionality based on the type of the user device, as taught by Mulligan. Mulligan discloses a "mobile client provisioning Web service" that serves as an interface for applications to provision terminals and that manages the configuration of, and transfer of applications to, the terminals. Mulligan, [0038]. In order to correctly provision terminals, certain data objects and settings are delivered to terminals, packaged and delivered with appropriate methods so that they may be configured correctly to use desired applications. Mulligan, [0040]-[0042], claims 1, 9. *See also, e.g.,* discussions of Mulligan's protocols, packaging, and transmission for provisioning in claims 5[a.ii], 6, and 7 below. Olivier, ¶205. To accommodate different terminal types, different variant data objects associated with a desired application are available for selection. Mulligan, [0041], [0047], [0052]. In one example, a particular MIDIet data object is selected because it is appropriate for provisioning with a terminal's Wireless

'790	Chatani (EX1005) + Mulligan (EX1006)
	Application Protocol ("WAP") capabilities. Mulligan, [0060]. Olivier, ¶¶206-207.

The terminal type may, *e.g.*, be indicative of communication, processing, and storage capabilities. Mulligan, [0014], [0057], [0060]-[0061]. The different data object variants associated with the applications are thus a plurality of different provisioning models corresponding to different device capabilities. Olivier, ¶¶208-210.

See also the discussion of claim 5[a.ii] immediately below regarding details of provisioning models.

Regarding provisioning Web service functionality:

- [0038] ("The mobile client provisioning Web service 206 serves as an interface for the application(s) 204 to provision the terminal(s) 202. The provisioning Web service 206 provides a single point of interface to the application(s) 204, and manages automatic configuration of the terminals 202, including providing the appropriate configurations to the terminal as well as providing the appropriate applications to the terminal…. ")

- [0040] ("Another function of the service logic 302 is to provide the logic… to ultimately provide the Web service 300. This includes making use of the component services, in the appropriate sequence, to ensure that the mobile terminal is correctly provisioned.")

- [0041] ("The delivery service 304 is responsible for ensuring the correct delivery of objects required by the mobile terminal to access the application for which the provisioning is taking place….")

- *See also* claims 1, 9.

Regarding different provisioning models corresponding to different terminal types:

- [0041] ("A first function includes determining the correct variant of the data object to deliver, based on the type of the mobile terminal. Another function includes delivering the data object to the terminal, and provides for various

'790	Chatani (EX1005) + Mulligan (EX1006)
	delivery options including push delivery, pull delivery, etc….") • [0047] ("<u>Other items included in the provisioning requests include addresses 416 of data objects that are to be delivered in order to provision the terminal.</u> For example a mobile games service could be accessed via a MIDIet on the terminal. <u>This data object address field would contain the address where the MIDIet is located on the network. In one embodiment, this address may be provided via a URL. In addition, there may be different addresses provided to account for variants in the data objects to accommodate different terminal types.</u>") • [0052] ("A first function of the delivery service 500 is to <u>determine the correct variant of the data object to deliver, based on the type of the mobile terminal</u>…. For example, <u>different data objects may need to be delivered to different types of mobile terminals, and the data object variant determination module 502 performs this analysis.</u> In one embodiment, a comparing module 508 associated with the data object variant determination module 502 determines the correct object to deliver by comparing the data object variant offered by the application 510 with the terminal that is being provisioned. <u>The delivery service 502 determines the appropriate terminal type from a presence service 512</u>, which corresponds to the presence service 310 described in connection with FIG. 3.") • [0060] ("…The delivery service 612 queries the presence service 604… for <u>the terminal type</u> that was previously provided by the terminal 602. <u>In this example, it is assumed for purposes of discussion that the terminal 602 has only WAP and Java capabilities. This information is provided to the delivery service 612, which in response retrieves the appropriate MIDIet from the bank application as shown by connection F.</u> The delivery service 612 then temporarily stores the retrieved MIDIet, and prepares for further delivery of the MIDIet to the requesting terminal 602.")

'790	Chatani (EX1005) + Mulligan (EX1006)
	• *See also* [0042], claim 9.
	Regarding terminal type being indicative of capabilities:
	• [0014] ("A presence Web Service connected via the network to the mobile terminal receives <u>a terminal type of the mobile terminal</u>. <u>A delivery Web service is coupled to the presence Web service to receive the terminal type from the presence Web service, and to identify a data object for delivery corresponding to the terminal type</u> upon successful configuration of the application use settings on the mobile terminal. A notification Web service is coupled to the delivery Web service to deliver the data object to the mobile terminal if the <u>terminal type indicates that the mobile terminal is capable of receiving the data object via a push operation</u>….")
	• [0057] ("…presence service 604 provides information to the other services…. <u>By contacting the presence service 604, the terminal 602 notifies the presence service 604 that the terminal 602 is connected to the network, and also relays information about the terminal. Such information may include, for example, the terminal type, storage capacity, and other information characteristic of the terminal 602.</u>")
	• [0060] (see above)
	• [0061] ("<u>From the terminal type information previously provided by the presence service 604…, the delivery service determines, for example, that the terminal 602 is not capable of direct delivery of the MIDIet.</u> This can be a due to the <u>terminals inability to support direct delivery messaging</u>, such as MMS. In this case, the delivery service 612 contacts the notification service 614, as illustrated by connection G. <u>The delivery service 612 instructs the notification service 614 to deliver a notification that the bank MIDIet is available at the delivery service address.</u>")
5[a.ii]. each provisioning	**Mulligan discloses each provisioning model** (*e.g.*, the objects and packaging and delivery methods for provisioning) **including a provisioning protocol** (*e.g.*, including

'790	Chatani (EX1005) + Mulligan (EX1006)
model including a provisioning protocol and a corresponding set of provisioning attributes and descriptors for provisioning digital content in wireless devices.	provisioning via Wireless Application Protocol (WAP)) **and a corresponding set of provisioning attributes and descriptors for provisioning digital content in wireless devices** (*e.g.*, URLs and other data types)**.** Mulligan discloses that each provisioning model—*i.e.*, the data objects and packaging and delivery methods that are used to provision particular terminals—include the provisioning protocol by which the provisioning is carried out. For example, a provisioning model uses WAP data objects and delivery methods for terminals with WAP capabilities. Mulligan, [0007], [0060], [0062], [0063]. Olivier, ¶¶211-212. Provisioning models further include attributes and descriptors for provisioning the content. For example, Mulligan discloses determining relevant information for the provisioning, including URLs, address information, data types, and other settings for provisioning. Mulligan, [0047]-[0049], [0062], [0064]. Olivier, ¶¶213-216. Regarding provisioning protocols: • [0007] ("For example, two <u>existing standards for remote configuration of terminals are the WAP provisioning protocol and the SyncML device management protocol</u>.") • [0060] ("In this example, it is assumed for purposes of discussion that the terminal 602 has only <u>WAP</u> and Java capabilities. This information is provided to the delivery service 612, which in response retrieves the appropriate MIDlet….") • [0062] ("The notification service 614 queries the presence service 604… and determines that the terminal 602 is <u>capable of a WAP push</u>. Push technology is the active transmission or "pushing" of data to registered receivers within a network. A push message may contain different data types, such as Service Initiator (SI) and Service Loading (SL), both of which are XML-applications like WML. <u>SI sends an alert that data in the form of a WML-document is available for downloading, and is generally in the form of a short message and a Uniform Resource</u>

'790	Chatani (EX1005) + Mulligan (EX1006)
	Identifier (URI) indicating a service. SL may interrupt other activities and force a message to be fetched automatically from the assigned server and then displayed by the browser.")

- [0063] ("Based on the knowledge that the terminal 602 is capable of a WAP push, the notification service 614 constructs a WAP SI with the delivery service 612 address, in accordance with one embodiment of the invention. This SI includes instructions to the terminal 602 to download the MIDlet from the delivery service 612 using the delivery service address. The notification service 614 sends this notification to the terminal 602 as illustrated by connection I.")

- *See also* [0037] (describing a variety of applications and Web service technologies)

Regarding attributes and descriptors for provisioning:

- [0047] (see 5[a.i])

- [0048] ("other items that may be included in the provisioning requests include data parameters 418 for the terminal to access the application. This may include… the address of the application. In a Wireless Application Protocol (WAP) context, these data parameters may include the WAP settings required to provide connectivity to the application.")

- [0049] ("Any number of other items 420 may also be included in the provisioning request, depending on the particular protocols, data formats, networking environments, or other conditions relevant to the particular setting.")

- [0062] (see above)

- [0064] ("…As illustrated by connection L, the service logic module 610 then instructs the terminal management service 616 to modify the terminals 602 WAP settings to allow it to use the settings required by the bank application. For example, the terminal's WAP settings may

'790	Chatani (EX1005) + Mulligan (EX1006)
	be modified to use the bank's WAP gateway. As previously described, the terminal management service 616 can remotely configure parameters in the terminal in order to allow it to access the application.) • *See also* [0059].
6[pre]. A method as recited in claim 5, further comprising:	*See* claim 5. Olivier, ¶217.
6[a]. receiving from the subscriber a request for one of the items of digital content in said portion of the product catalog;	*See* 4[a] in §VII.A.2 above. Olivier, ¶218.
6[b]. identifying device capabilities of the wireless device used by the subscriber;	*See* 4[b] in §VII.A.2, 5[a.i] above. Olivier, ¶219.
6[c]. selecting one of a plurality of provisioning models associated with the requested item in the server system, based on the device	**Mulligan discloses selecting one of a plurality of provisioning models associated with the requested item in the server system, based on the device capabilities of the wireless device used by the subscriber** (*e.g.*, selecting provisioning model data objects and packaging and delivery methods based on terminal type)**.** As discussed for at least claim 5[a.i], Mulligan provisioning models related to applications are selected based on the type of the terminal, the type being indicative of terminal

'790	Chatani (EX1005) + Mulligan (EX1006)
capabilities of the wireless device used by the subscriber;	communication, processing, and storage capabilities. Mulligan, [0014], [0041], [0047], [0052], [0057], [0060]-[0061]. Mulligan discloses selecting one of the provisioning models based on the device capabilities. Mulligan, [0041], [0047], [0052], [0057]. Olivier, ¶¶220-225. • [0041] (*see* 5[a.i]) • [0047] (*see* 5[a.i]) • [0052] (*see* 5[a.i]) • [0057] (*see* 5[a.i])
6[d]. packaging the requested item according to the selected provisioning model; and	**Mulligan discloses packaging the requested item** (*e.g.*, creating a package to make the selected content usable or accessible) **according to the selected provisioning model** (*e.g.*, creating a provisioning descriptor, such as a notification or alert including a delivery service address or URI of the capability-based selected MIDIet, and associating the descriptor with the request for the content)**.** Dependent claim 7[a] of the '790 states that claim 6[d]'s packaging "comprises creating a provisioning descriptor for the requested item according to the selected provisioning model, and associating the provisioning descriptor with the requested item." Mulligan discloses that once the provisioning model is selected, *e.g.*, a particular MIDIet and packaging and delivery method for use in provisioning the terminal, the MIDIet is prepared for delivery. Mulligan, [0060]. For example, notification service 614 "constructs a WAP SI with the delivery service 612 address" indicating the download location to the terminal. Mulligan, [0061]-[0063]. A delivery service address is, for example, a URL of a MIDIet associated with the requested application. Mulligan, [0047]. Olivier, ¶¶226, 230-232. • [0047] (*see* 5[a.i]) • [0060]-[0061] (*see* 5[a.i]) • [0062]-[0063] (*see* 5[a.ii])

'790	Chatani (EX1005) + Mulligan (EX1006)
6[e]. provisioning the requested item in the wireless device used by the subscriber according to the selected provisioning model.	**Mulligan discloses provisioning the requested item in the wireless device used by the subscriber according to the selected provisioning model** (*e.g.*, sending the download notification and settings instructions, according to the provisioning model, to the terminal so that the terminal is provisioned to download and access the content)**.**
	Dependent claim 7[b] of the '790 states that claim 6[e]'s provisioning "comprises sending the packaged requested item to the wireless device used by the subscriber according to a provisioning protocol associated with the selected provisioning model." The '790 describes, *e.g.*, a client device downloading a content descriptor, parsing the descriptor, requesting the content, and downloading the content according to a provisioning model. '790, 13:36-44.
	Mulligan similarly discloses that the terminal downloads the notification or alert from the provisioning web service, interprets the notification to download the MIDIet, and has its settings modified in order to be provisioned to access the requested content. Olivier, ¶¶227-228, 233-236.
	• [0063] (*see* 5[a.ii])
	• [0064] ("<u>After receiving the notification from the notification service 614, the terminal 602 downloads the MIDIet from the delivery service 612 as shown by connection J.</u> As indicated by connection K, the delivery service 612 informs the service logic module 610 that the MIDIet has been successfully delivered to the terminal 602. As illustrated by connection L, the service logic module 610 then <u>instructs the terminal management service 616 to modify the terminal's 602 WAP settings</u> to allow it to use the settings required by the bank application. For example, the terminal's <u>WAP settings may be modified</u> to use the bank's WAP gateway. As previously described, the terminal management service 616 can <u>remotely configure parameters in the terminal</u> in order to allow it to access the application.")

'790	Chatani (EX1005) + Mulligan (EX1006)
	• *See also* [0058] (once provisioned, terminal has access to and can use the application), claim 17
7[pre]. A method as recited in claim 6, wherein:	*See* claim 6. Olivier, ¶229.
7[a]. said packaging the requested item comprises creating a provisioning descriptor for the requested item according to the selected provisioning model, and associating the provisioning descriptor with the requested item; and	*See* 6[d]. Olivier, ¶¶226, 230-232.
7[b]. said provisioning the requested item in the wireless device comprises sending the packaged requested item to the wireless device used by the subscriber according to a provisioning	*See* 6[e]. Olivier, ¶¶227-228, 233-236.

'790	Chatani (EX1005) + Mulligan (EX1006)
protocol associated with the selected provisioning model.	
12[pre]. A system as recited in claim 11, wherein said storage facility further contains code which, when executed by the processor, causes the processing system to:	*See* claims 11, 9[b] in §VII.A.2. Olivier, ¶237.
12[a.i]. associate each of the items of digital content in the server system with a plurality of different provisioning models, each of the provisioning models corresponding to a different set of device capabilities,	*See* 5[a.i]. Olivier, ¶238.
12[a.ii]. each of the provisioning models	*See* 5[a.ii]. Olivier, ¶239.

'790	Chatani (EX1005) + Mulligan (EX1006)
including a provisioning protocol and a corresponding set of provisioning attributes and descriptors for provisioning digital content in wireless devices.	
13[pre]. A system as recited in claim 12, wherein said storage facility further contains code which, when executed by the processor, causes the processing system to:	*See* claims 12, 9[b] in §VII.A.2. Olivier, ¶240.
13[a]. receive from the subscriber a request for one of the items of digital content in said portion of the product catalog;	*See* 6[a]. Olivier, ¶241.
13[b]. identify device capabilities of the wireless	*See* 6[b]. Olivier, ¶242.

'790	Chatani (EX1005) + Mulligan (EX1006)
device used by the subscriber;	
13[c]. select one of a plurality of provisioning models associated with the requested item in the server system, based on the device capabilities of the wireless device used by the subscriber;	*See* 6[c]. Olivier, ¶243.
13[d]. package the requested item according to the selected provisioning model; and	*See* 6[d]. Olivier, ¶244.
13[e]. provision the requested item in the wireless device used by the subscriber according to the selected provisioning model.	*See* 6[e]. Olivier, ¶245.
14[pre]. A system as recited in claim 13,	*See* 13. Olivier, ¶246.

'790	Chatani (EX1005) + Mulligan (EX1006)
14[a]. wherein packaging the requested item comprises creating a provisioning descriptor for the requested item according to the selected provisioning model, and associating the provisioning descriptor with the requested item; and	*See* 7[a]. Olivier, ¶247.
14[b]. wherein provisioning the requested item in the wireless device comprises sending the packaged requested item to the wireless device used by the subscriber according to a provisioning protocol associated with the selected provisioning model.	*See* 7[b]. Olivier, ¶248.

VIII. NO BASIS FOR DISCRETIONARY DENIAL

A.   *Fintiv*

Under the Director's Interim Procedure for Discretionary Denials, the Board will not deny institution based on *Fintiv*[3] if there is compelling evidence of unpatentability, which this Petition provides, thereby concluding the *Fintiv* analysis. *Nokia of Am. Corp. v. TQ Delta, LLC*, IPR2022-00471, Paper 11 at 19-21 (Aug. 18, 2022). Regardless, the *Fintiv* factors also weigh against discretionary denial.

1: The district court case, *VideoLabs, Inc. v. Roku, Inc.* (*see* §II.B above), is currently stayed until 2024-01-12 in light of pending proceedings on seven other patents at the PTAB (including IPRs that have not had institution decisions; IPRs 2024-01023 through -01026) and at the Court of Appeals for the Federal Circuit. *See* EX1011, EX1012 §II.D, EX1013. Petitioner will also seek a stay pending resolution of this IPR.

2: D. Del.'s 33-month median time-to-trial statistic (EX1010, 14) would estimate trial for approximately July 2026, but with the case stayed, this is entirely uncertain. Trial could possibly take place in 2027, more than a year after a final written decision would be expected in this IPR.

3: To date, the court has not issued any substantive orders.

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[3] *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (Mar. 20, 2020) (precedential).

4: After the final written decision, the same grounds and arguments could not be presented in the litigation.

5: The parties are the same.

6: Petitioner is highly likely to prevail with respect to the Claims as shown herein.

B.   §325(d)

1.   '790 Prosecution and Reexamination

The Examiner during prosecution did not consider Chatani or Mulligan or art with substantially the same disclosures (or the same or substantially the same arguments) as those herein. A continuation of Chatani and Mulligan were cited by Patent Owner in an after-Final IDS during reexamination of the '790, but neither were considered with any particularity or applied in any SNQ or in combination with any applied art. '790EPR, 954-956, 1129. To the extent the Examiner considered references that purportedly teach receiving and storing a plurality of different implementations of content (*see* §IV.B above), the Examiner erred in failing to reject the Claims over a combination of any of those references and art teaching content distribution systems.

2.   Netflix IPR

As discussed in §IV.D, a petition for IPR filed by Netflix, Inc. resulted in a determination of unpatentability for claims 1-14 of the '790. This determination is

not final and should not bar institution of the instant Petition. *See* EX1017 (Decision on Director Review in IPR2022-00530, vacating a discretionary denial that was based on district court finding of invalidity under §101), 3 ("the challenged claims have not yet been cancelled and remain in force until the opportunity to appeal has been exhausted. By the time an appeal will have concluded, Petitioner will be barred under 35 U.S.C. § 315(b) from bringing a new challenge in an IPR petition.")

Moreover, the Netflix IPR prior art, Mehta and Schlapfer, are unrelated to Chatani and Mulligan, applied herein, and disclose or render obvious the '790 claims in different ways and are therefore based on different arguments. For example, Mehta discloses the claimed "implementations" of content, in part, with "functionally equivalent programs having the same name that are capable of running on multiple kinds of devices that even may be written using different languages" (*see* EX1008, pp. 28-29 (discussing limitation "1[a][2]")), while Chatani discloses the claimed implementations, in part, with different "available service levels… for each item of content" based on "user device capabilities" (*see* Chatani, 10:15-59).

Moreover, Netflix is a different party, and no significant relationship exists between the parties. Petitioner and Netflix are accused of infringing the '790 patent with different products in different court proceedings and have not coordinated regarding the '790 patent, the separately accused products, or the filing of petitions for IPR. Petitioner and Netflix may have further independent interests in pursuing

IPR of the '790. Unique claim construction and infringement theories may arise from these different positions. There is no basis for denial under §325(d). *See Ford Motor Company v. Neo Wireless LLC*, IPR2023-00763, Paper 28 (Mar. 22, 2024) and *American Honda Motor Co., Inc. v. Neo Wireless LLC*, IPR2023-00797, Paper 27 (Mar. 22, 2024) (vacating denials of institution based on General Plastic[4] factors, finding no significant relationship between parties having different accused products that merely engage in court-ordered pretrial coordination).

Discretionary denial under §325(d) is not warranted.

IX. CONCLUSION

The Board should institute IPR and cancel the Claims of the '790.

Dated: November 8, 2024   Respectfully submitted,

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[4] *General Plastic Industrial Co., Ltd. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 16 (Sep. 6, 2017) (precedential as to §II.B.4.i).

CERTIFICATE OF SERVICE UNDER 37 C.F.R. § 42.6 (E)(4)

I certify that on November 8, 2024, I will cause a copy of the foregoing document, including any exhibits or appendices filed therewith, to be served via Overnight FedEx at the following correspondence address of record for the patent:

Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

Courtesy copies of the same documents were also served at the following email addresses of record for Patent Owner's litigation counsel:

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Date: November 8, 2024

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24, the undersigned certifies that the foregoing Petition for *Inter Partes* Review petition contains 13,516 words excluding a table of contents, a table of authorities, Mandatory Notices under §42.8, a certificate of service or word count, or appendix of exhibits or claim listing. Petitioner has relied on the word count feature of the word processing system used to create this paper in making this certification.

Date: November 8, 2024

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