

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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NETFLIX, INC.,  
Petitioner,

v.

VL COLLECTIVE IP LLC,<sup>1</sup>  
Patent Owner.

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IPR2023-00630  
Patent 7,440,559 B2

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Before JEFFREY S. SMITH, STACEY G. WHITE, and  
STEPHEN E. BELISLE, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

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

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<sup>1</sup> Although the Petition states that the Patent Owner is VideoLabs, Inc., Patent Owner states that VL Collective IP LLC is the Patent Owner, and that VideoLabs, Inc. is a real party-in-interest. Paper 4, 2.

## I. INTRODUCTION

### A. Background and Summary

Petitioner, Netflix, Inc., filed a Petition (Paper 2, “Pet.”) requesting *inter partes* review of claims 1–24 of U.S. Patent No. 7,440,559 B2 (Ex. 1001, “the ’559 patent”) pursuant to 35 U.S.C. § 311(a). Patent Owner, VL Collective IP LLC, did not file a Preliminary Response. Pursuant to 35 U.S.C. § 314(a), the Director may not authorize an *inter partes* review unless the information in the petition and preliminary response “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

For the reasons that follow, we institute an *inter partes* review as to claims 1–24 of the ’559 patent on the grounds of unpatentability asserted in the Petition.

### B. Real-Parties-In-Interest

Petitioner identifies itself (Netflix, Inc.) and Netflix Streaming Services, Inc. as real parties-in-interest. Pet. 58. Patent Owner identifies itself (VL Collective IP LLC) as well as VL IP Holdings LLC and VideoLabs, Inc. as real parties-in-interest. Paper 4, 2.

### C. Related Matters

The Petition states that the ’559 patent is the subject of the following proceedings:

*VideoLabs, Inc. v. Netflix Inc.*, No. 1-22-cv-00229, D. Del., filed Feb. 23, 2022;

*Starz Entertainment, LLC v. VL Collective IP, LLC*, No. 1-21-cv-01448, D. Del., filed Oct. 13, 2021.

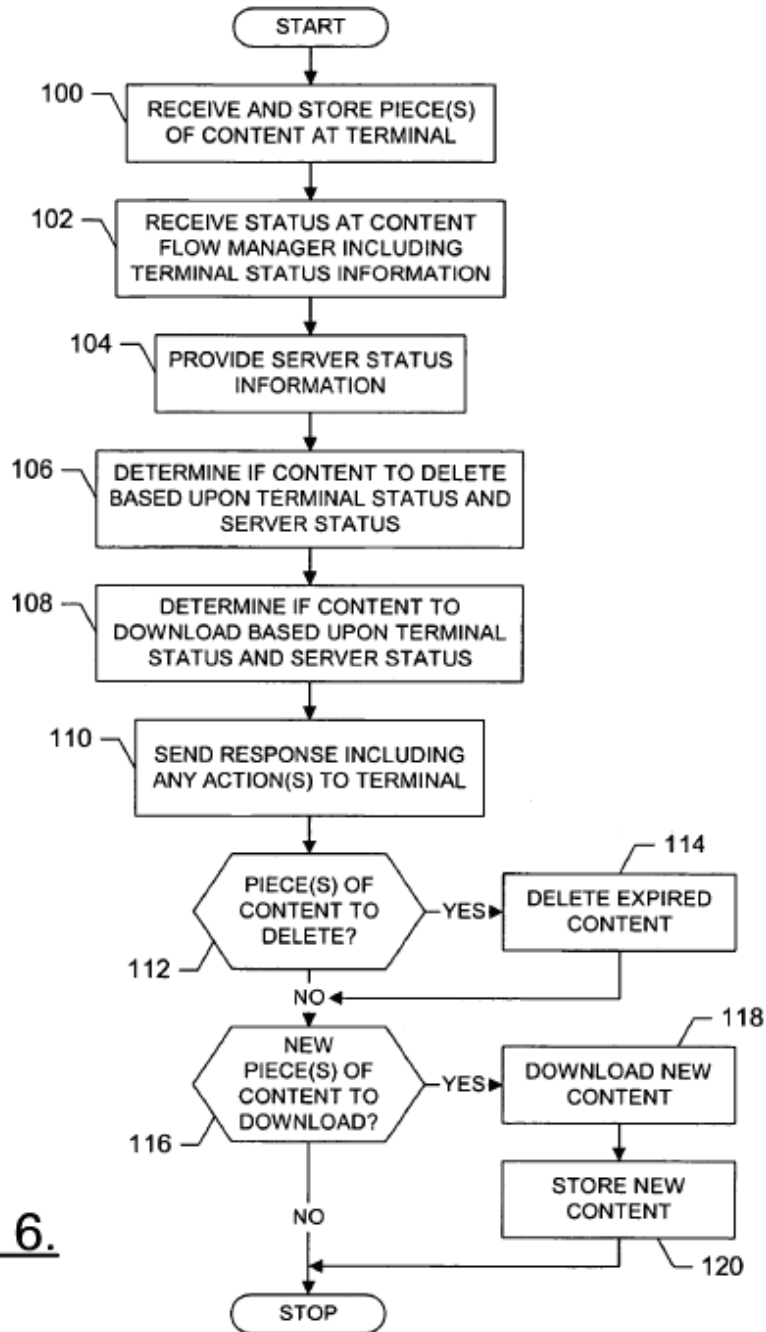
Pet. 58. Patent Owner identifies the following proceeding which was dismissed on December 27, 2022 and “previously asserted the ’559 patent.” Paper 4, 2–3.

*VideoLabs, Inc. et al. v. Amazon.com, Inc. et al.*, Nos. 6-22-cv-00079, 6-22-cv-01167, W.D. Tex., filed Jan. 21, 2022.

## II. THE ’559 PATENT

The ’559 patent generally relates to “controlling the flow of content in terminals operable with mobile telecommunication and digital broadcast networks.” Ex. 1001, 1:11–13. The ’559 patent discloses that “[d]igital broadband data broadcast networks are known.” *Id.* at 1:58. The ’559 patent discloses that the “use of mobile telecommunications with a broadband delivery technique . . . has been proposed in the past in order to achieve efficient delivery of digital services to users on the move.” *Id.* at 2:8–11. The ’559 patent discloses that “current techniques for downloading content can suffer from inefficient control of content received and thereafter stored by mobile terminals, as well as inefficient control of content stored by mobile terminals.” *Id.* at 2:49–53. The ’559 patent discloses that to facilitate control of the flow of content in one embodiment, a terminal sends a content request that includes terminal status information. *Id.* at 2:62–65.

Fig. 6 of the '559 patent is shown below.



**FIG. 6.**

Figure 6 above illustrates a flowchart of a method of controlling the flow of content between a terminal and network entity. Ex. 1001, 4:28–30. The terminal is capable of sending a content status, which includes terminal status information, to a content flow manager. *Id.* at 3:10–15. The terminal

status information can include “information regarding the terminal that accounts for user preferences, capabilities of the terminal and/or previous contents stored by the terminal.” *Id.* at 3:1–4, 12:18–30. In addition to terminal status information, the content flow manager can be provided with server status information regarding a source of content to the terminal. *Id.* at 12:32–37.

Based upon the terminal status information and/or the server status information, the “control flow manager can control the flow of content to the terminal” including by “controlling the terminal to delete at least one piece of content from a memory of the terminal, and/or download at least one piece of content from a source of content.” *Id.* at 3:18–24. The content may include multimedia data. *Id.* at 2:3–7.

### III. ILLUSTRATIVE CLAIM

Challenged claim 1 of the '559 patent recites:

1. An apparatus comprising:

a processor configured to receive, from a terminal located remote from the apparatus, a content status including terminal status information, and configured to receive server status information regarding a source of content, wherein the server status information comprises a listing of at least one piece of content available from the source, wherein the processor is configured to send, to the terminal, a response to the content status that instructs the terminal to perform one or more actions to thereby control the flow of content to the terminal based upon the terminal status information and the server status information, and

wherein the at least one piece of content available from the source, and the content for which the processor is configured to control the flow, comprise multimedia content.

### IV. ASSERTED GROUNDS

Petitioner asserts that claims 1–24 of the '559 patent are unpatentable on the following grounds.

<b>Claim(s) Challenged</b>	<b>35 U.S.C. §<sup>2</sup></b>	<b>Reference(s)/Basis</b>
1, 2, 4, 7, 8, 10, 13, 14, 16, 19, 20, 22	102(a), (e)	Cassin <sup>3</sup>
1–24	103(a)	Cassin, Huston <sup>4</sup>
1–24	103(a)	Huston

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<sup>2</sup> The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102, 103. Because the '559 patent has an effective filing date prior to the effective date of the applicable AIA amendment, we refer to the pre-AIA version of §§ 102, 103.

<sup>3</sup> U.S. Publication No. 2003/0023427 A1; pub. Jan. 30, 2003 (Ex. 1004).

<sup>4</sup> U.S. Patent No. 7,243,136 B2; issued July 10, 2007 (Ex. 1005).

## V. LEVEL OF ORDINARY SKILL

Petitioner identifies a person of ordinary skill as someone with “a bachelor’s degree in electrical or computer engineering, or a closely related scientific field such as computer science, and two years of work experience with multimedia content transmission and management.”

Pet. 10. “Alternatively, any lack of experience could be remedied with additional education (*e.g.*, a master’s degree), and likewise, a lack of education can be remedied with additional work experience (*e.g.*, 4–5 years).” *Id.* Patent Owner does not address the level of ordinary skill.

The level of ordinary skill in the art usually is evidenced by the references themselves. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978). As Petitioner’s description of a person of ordinary skill appears commensurate with the subject matter before us, we apply Petitioner’s definition for purposes of this Decision.

## VI. CLAIM CONSTRUCTION

We interpret claim terms using “the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b) (2019). In this context, claim terms “are generally given their ordinary and customary meaning” as understood by a person of ordinary skill in the art in question at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (citations omitted) (en banc). “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at

1312–17). Extrinsic evidence is “less significant than the intrinsic record in determining ‘the legally operative meaning of claim language.’” *Phillips*, 415 F.3d at 1317 (citations omitted).

We construe only those claim terms that require analysis to determine whether to institute *inter partes* review. See *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (holding that “only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy”). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Petitioner contends that “no claim terms require specific construction to resolve the unpatentability issues presented” in the Petition. Pet. 15–16. For purposes of this decision, we do not construe any claim terms.

## VII. ANALYSIS

### A. Legal Standards

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)); see also 37 C.F.R. § 42.104(b) (requiring a petition for *inter partes* review to identify how the challenged claim is to be construed and where each element of the claim is found in the prior art patents or printed publications relied upon).

To establish anticipation, each and every element in a claim, arranged as recited in the claim, must be found in a single prior art reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008).



Although the elements must be arranged or combined in the same way as in the claim, “the reference need not satisfy an *ipsissimis verbis* test,” i.e., identity of terminology is not required. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009) (citing *In re Bond*, 910 F.2d 831, 832–33 (Fed. Cir. 1990)).

A claim is unpatentable under 35 U.S.C. § 103(a) if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective evidence of obviousness or nonobviousness, i.e., secondary considerations.<sup>5</sup> See *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). An obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418.

Additionally, the obviousness inquiry typically requires an analysis of “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2016) (requiring “articulated reasoning with some rational underpinning to support the legal conclusion of

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<sup>5</sup> The parties do not direct us to any objective evidence of non-obviousness at this stage of the proceeding.

obviousness’’)). Furthermore, Petitioner does not satisfy its burden of proving obviousness by employing “mere conclusory statements,” but “must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

*B. Claims 1, 2, 4, 7, 8, 10, 13, 14, 16, 19, 20, and 22 As Anticipated By Cassin*

*1. Cassin – Exhibit 1004*

Cassin is directed toward the implementing a media content delivery and playback scheme. Ex. 1004 ¶ 3. Cassin’s system “includes a server computer system” and “a client computer system” that are coupled to each other by a network, which “may be implemented as a local area network, wide area network, a public access network (e.g., the Internet), or a combination of networks.” *Id.* ¶ 140; Fig. 6. The client computer “may be implemented as a portable device.” *Id.* ¶ 141.

Figure 6 of Cassin is shown below.

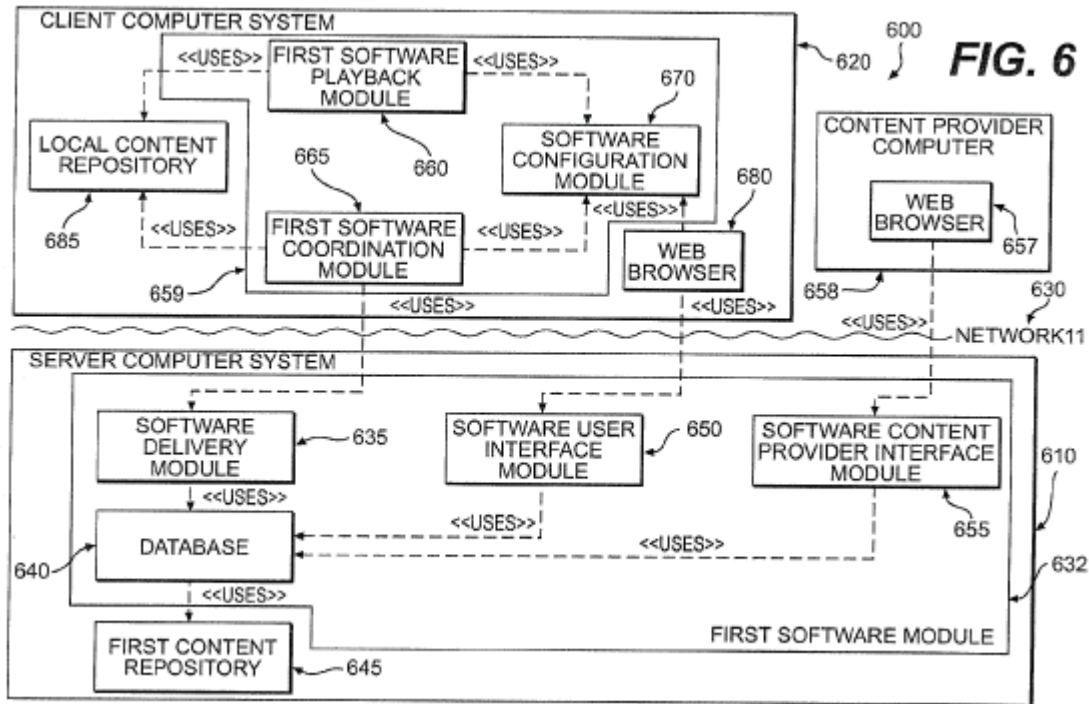


Figure 6 above illustrates a system for implementing a media content delivery and playback scheme. Ex. 1004 ¶ 140. The server may contain a database that stores metadata. *Id.* ¶ 146. The metadata is information “about the media content available to the system.” *Id.* Media files may be contained in a content repository accessible via the database. *Id.* Cassin explains that the “client and server computers may interact in accordance with one of two protocols.” *Id.* ¶ 164.

According to the first protocol, the client computer sends user information to the server after a connection is established. *Id.* The server computer uses the user information to query the database and then responds with a list of all content to which that user is entitled. *Id.* The server attempts to send a media content item to the client computer; however, if the client computer already has the media content item, then the client provides an indication to the server that it currently has the media content item. *Id.*

The server computer then offers the next media item content item on the list.  
*Id.*

According to the second protocol, the client sends user information to the server computer. *Id.* ¶ 166. The server computer uses the user information to query the database and then responds with a list of all content to which that user is entitled. *Id.* The client then identifies media content items that it does not already have in its local content repository, and returns a second list including only those items to the server. *Id.* The server then delivers those media content items included in the second list to the client.  
*Id.*

## 2. *Independent Claims 1, 7, 13, and 19*

Petitioner groups independent claims 1, 7, 13, and 19 together in its unpatentability analysis. Pet. 18–27. The preamble of claim 1 recites an “apparatus comprising.” Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Cassin discloses the features recited in the preamble of claim 1.<sup>6</sup>

Claim 1 recites “a processor configured to receive, from a terminal located remote from the apparatus, a content status including terminal status information.” Petitioner contends Cassin discloses this limitation in describing a server that receives from a client computer user information, a request for a list of content, an indication that the client computer currently has a media item, and a list of media items that the client computer does not have. Pet. 20–23 (citing Ex. 1004, ¶¶ 10, 12, 133–137, 142, 146, 151, 156, 164–168, Figs. 6, 8, 9, claims 130–133). Patent Owner does not contend

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<sup>6</sup> Because Petitioner has shown that the features in the preamble are satisfied by the prior art, we need not determine whether the preamble are limiting at this time. *See Vivid Techs.*, 200 F.3d at 803.

otherwise at this stage of the proceeding.<sup>7</sup> Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Cassin discloses this limitation of claim 1.

Claim 1 recites “configured to receive server status information regarding a source of content, wherein the server status information comprises a listing of at least one piece of content available from the source.” Petitioner contends Cassin discloses this limitation in describing a server with a multimedia content repository and describing the server receiving from a database a list of all content to which the user is entitled, which is “server status information regarding a source of content” as claimed. Pet. 23–24 (citing Ex. 1004, ¶¶ 146, 164, 166, Figs. 8, 9). Petitioner contends that the list identifies at least one piece of media content available from the repository, which is “comprising a listing of at least one piece of content available from the source” as claimed. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Cassin discloses this limitation of claim 1.

Claim 1 recites “wherein the processor is configured to send, to the terminal, a response to the content status that instructs the terminal to perform one or more actions to thereby control the flow of content to the terminal based upon the terminal status information and the server status information.” Petitioner contends Cassin discloses this limitation in

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<sup>7</sup> Patent Owner does not challenge any of the proposed grounds at this stage of the proceeding.

describing a client computer receiving from the server a content listing to which the computer is entitled, identifying those content items in the listing that the client does not have, and sending to the server a list of the content items that the client does not have, resulting in the server then delivering the content items from the list to the client computer. Pet. 24–26 (citing Ex. 1004, ¶¶ 12, 85, 133–137, 146, 164–166, claims 130–132). Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Cassin discloses this limitation of claim 1.

Claim 1 recites “wherein the at least one piece of content available from the source, and the content for which the processor is configured to control the flow, comprise multimedia content.” Petitioner contends Cassin discloses this limitation in describing a server computer’s database and a client computer’s local content repository each configured to store multimedia content including music, videos, and multimedia programming. Pet. 27 (citing Ex. 1004, ¶¶ 146, 151, 152, 156). Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Cassin discloses this limitation of claim 1.

Independent claims 7, 13, and 19 recite limitations similar to those recited in claim 1. For independent claims 7, 13, and 19, Petitioner relies on its contentions presented for claim 1, which we find persuasive at this stage. Pet. 18–27. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that Cassin anticipates claims 1, 7, 13, and 19.

### *3. Claims 2, 8, 14, and 20*

Claim 2 depends from claim 1 and recites “wherein the terminal comprises a memory, and wherein the processor is configured to send, to the

terminal, a response to the content status that instructs the terminal to at least one of delete at least one piece of content from the memory of the terminal, or download at least one piece of content from the source.” Petitioner contends Cassin describes that the local content repository of the client computer is a memory. Pet. 28 (citing Ex. 1004 ¶ 156, Fig. 6. Petitioner contends that Cassin describes that the server uses information in the indication received from the client computer to instruct the client computer to download a media file from the server. *Id.* at 28–29 (citing Ex. 1004 ¶¶ 164, 166).

Claims 8, 14, and 20 recite limitations similar to those recited in claim 2. For claims 8, 14, and 20, Petitioner relies on its contentions presented for claim 2. Pet. 28–29. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that Cassin anticipates claims 2, 8, 14, and 20.

#### 4. *Claims 4, 10, 16, and 22*

Claim 4 depends from claim 2 and recites “wherein the server status information comprises a listing of at least one piece of available content from the source, and wherein the processor is configured to send, to the terminal, a response to the content status that instructs the terminal to download at least one piece of content from the source based upon the listing of at least one available piece of content from the source.” Petitioner contends that Cassin discloses “the server status information comprises a listing of at least one piece of available content from the source” in describing a listing of all content from the first content repository to which the user is entitled. Pet. 30 (citing Ex. 1004 ¶¶ 146, 164, 166, Figs. 8 and 9. Petitioner contends that Cassin discloses that the server, based on the

indication from the client computer, is configured to deliver content to the client computer by instructing the client to download at least one media file from the content repository that was identified in the listing. *Id.*

Claims 10, 16, and 22 recite limitations similar to those recited in claim 4. For claims 10, 16, and 22, Petitioner relies on its contentions presented for claim 4. Pet. 29–31. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that Cassin anticipates claims 4, 10, 16, and 22.

*C. Claims 1–24 As Obvious Over Cassin and Huston*

*1. Huston – Exhibit 1005*

Huston relates to an approach for managing and providing content to users. Ex. 1005, 1:13–15. Figure 2A of Huston is shown below.

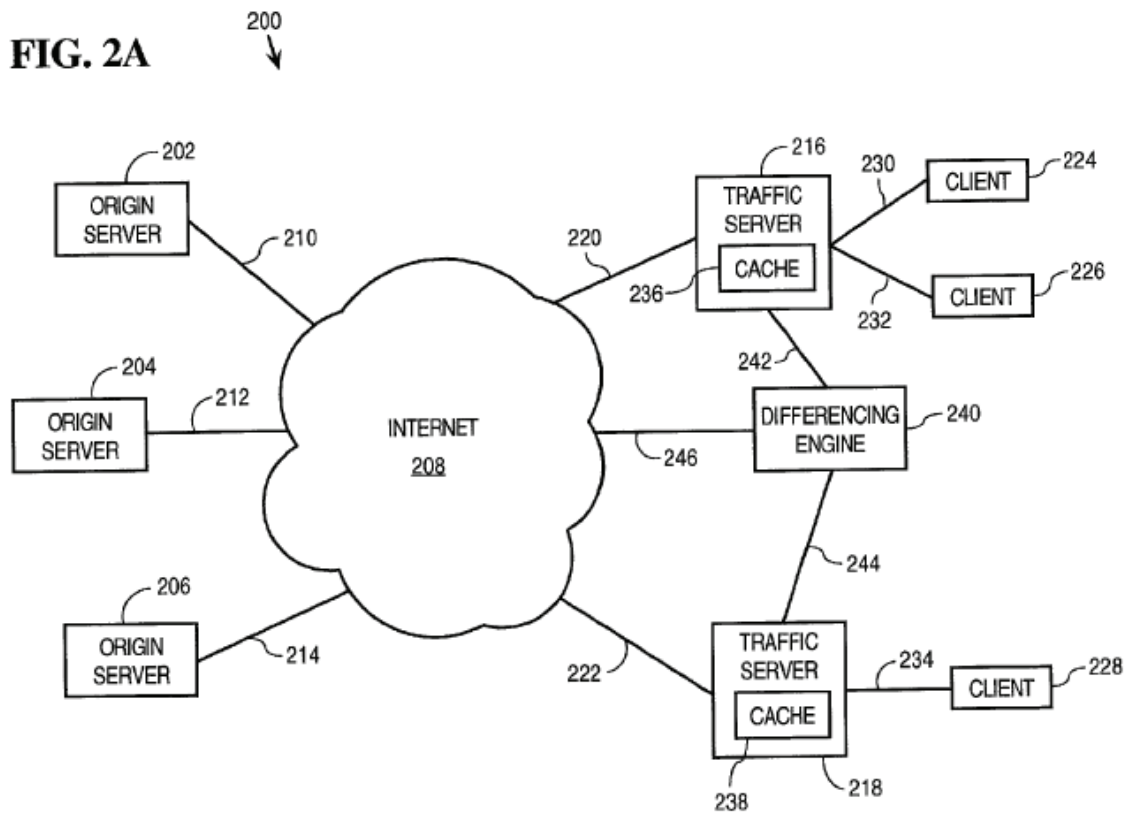




Figure 2A above illustrates a block diagram of an arrangement for managing and providing content to users over a communications link. *Id.* at 5:42–44. Huston’s system includes a differencing engine that is coupled to traffic servers and to the Internet. *Id.* at 6:15–18, Fig. 2A. The system also includes a set of origin servers that “host content from one or more content providers.” *Id.* at 5:44–46.

The traffic servers are configured with caches that provide local storage for content. *Id.* at 6:1–5. The “differencing engine **240** is configured to selectively cause content to be deleted from the traffic servers **216, 218** and/or replaced with newer versions of the deleted content from origin servers.” *Id.* at 6:18–25. The differencing engine may select “content to be deleted by comparing versions of content stored on caches **236, 238** to versions of the corresponding content stored on origin servers.” *Id.* at 6:44–48. The differencing engine may request information about versions of data stored on the origin servers that are also stored on the traffic servers in order to determine differences between the content. *Id.* at 6:66–7:5.

## 2. *Reasons to Combine the Teachings of Cassin and Huston*

Petitioner contends a person of ordinary skill would have had reason to combine the teachings of Cassin and Huston because both references concern controlling delivery of content to a remote device over a network, and the combination provides the benefit of Cassin’s media content delivery system with a differencing engine to determine whether this is content to delete from the remote client and sending a command to delete such content as taught by Huston. Pet. 32–35 (citing Ex. 1003, Wechselberger Decl. ¶¶ 202–204). Petitioner also contends that a person of ordinary skill would have had a reasonable expectation of success in combining the teachings of Cassin and Huston because adding a delete command to a server was a

known technique and would have been straightforward to a person of ordinary skill in the art. Pet. 35–36 (citing Ex. 1003 ¶ 205).

Huston discloses a differencing engine to detect whether a more recent version of a data item stored in cache is available, and if so, to delete the current version and store the more recent version in order to increase the accuracy and coherence of the cache. Ex. 1005, Abstract, 3:37–44. On this record, we are persuaded by Petitioner, that a person of ordinary skill would have updated data items stored by the remote client of Cassin by deleting old versions in order to yield the benefits of increasing accuracy and coherency as taught by Huston. For purposes of this Decision, we are sufficiently persuaded that Petitioner cites sufficient evidence to support its contention that a person of ordinary skill would have had reason to combine the teachings of Cassin and Huston.

### 3. *Claims 1, 7, 13, and 19*

Petitioner contends that Cassin discloses the limitations of claims 1, 7, 13, and 19 for the reasons given in its analysis of ground 1. Pet. 36–42. Petitioner further contends that the combination of Cassin and Huston teaches “a processor configured to receive, from a terminal located remote from the apparatus, a content status including terminal status information.” *Id.* at 38–40. Petitioner contends that a person of ordinary skill would have understood that the differencing engine of Huston, in order to compare different versions of content, would receive an identification of the versions stored on the caches, or “content status including terminal status information” as claimed, from the traffic servers, which are remote to the differencing engine. *Id.* at 39–40 (citing Ex. 1005, Fig. 2A, 6:1–5, 6:42–51, 7:38–49, 16:12–29).

Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that the combination of Cassin and Huston renders obvious claims 1, 7, 13, and 19.

*4. Claims 2, 8, 14, and 20*

Petitioner contends that Cassin discloses the limitations of claims 2, 8, 14, and 20 for the reasons given in its analysis of ground 1. Pet. 42–43.

Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that the combination of Cassin and Huston renders obvious claims 2, 8, 14, and 20.

*5. Claims 3, 9, 15, and 21*

Claim 3 depends from claim 2 and recites “wherein the terminal status information comprises a listing of at least one piece of content stored in the memory of the terminal, and wherein the processor is configured to send, to the terminal, a response to the content status that instructs the terminal to delete at least one piece of content from the memory of the terminal based upon the listing of at least one piece of content stored in the memory of the terminal.” Petitioner contends that Cassin discloses a user manually deleting media content from the remote client device. Pet. 44 (citing Ex. 1004, Figs. 12–14, ¶¶ 169, 171). Petitioner contends that Cassin teaches that a user may have access to a particular media content item for a predetermined period of time, such as a single day. *See id.* at 45 (citing Ex. 1004 ¶ 182). Petitioner contends that a person of ordinary skill in the art would have used Huston’s technique of automatically deleting content to yield the benefits of deleting expired or stale content from the client computer, and doing so automatically

instead of manually. *Id.* at 45–46 (citing Ex. 1004 ¶ 169; Ex. 1005, 6:33–51).

Claims 9, 15, and 21 recite limitations similar to those recited in claim 3. For claims 9, 15, and 21, Petitioner relies on its contentions presented for claim 3. Pet. 43–46. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that the combination of Cassin and Huston renders obvious claims 3, 9, 15, and 21.

*6. Claims 4, 10, 16, and 22*

Petitioner contends that Cassin discloses the limitations of claims 4, 10, 16, and 22 for the reasons given in its analysis of ground 1.

Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that the combination of Cassin and Huston renders obvious claims 4, 10, 16, and 22.

*7. Claims 5, 11, 17, and 23*

Claim 5 depends from claim 2 and recites “wherein the processor is configured to determine if the memory of the terminal includes at least one piece of content to delete, and wherein the processor is configured to send, to the terminal, a response to the content status that instructs the terminal to delete at least one piece of content when the processor determines that the memory of the terminal includes at least one piece of content to delete.” Petitioner contends that a person of ordinary skill in the art would have implemented the automatic delete feature of Huston to delete content from the client computer. Pet. 48–49 (citing Ex. 1003 ¶¶ 49–153, 169, 187, 197).

Claims 11, 17, and 23 recite limitations similar to those recited in claim 5. For claims 11, 17, and 23, Petitioner relies on its contentions presented for claim 5. Pet. 46–49. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that the combination of Cassin and Huston renders obvious claims 5, 11, 17, and 23.

*8. Claims 6, 12, 18, and 24*

Claim 6 depends from claim 5 and recites “wherein the processor is further configured to determine if source includes at least one available piece of content for the terminal to download, and wherein the processor is configured to send, to the terminal, a response to the content status that instructs the terminal to download at least one available piece of content when the processor determines that the source includes at least one available piece of content for the terminal to download.” Petitioner contends that Cassin discloses this limitation in describing the server determining a media content item available for download, offering the media content item to the client computer, and the client downloading the media content item if the client does not have the item. Pet. 49–51 (citing Ex. 1003 ¶¶ 154–55, 170–72, 188–89, 198–200).

Claims 12, 18, and 24 recite limitations similar to those recited in claim 6. For claims 12, 18, and 24, Petitioner relies on its contentions presented for claim 6. Pet. 49–51. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that the combination of Cassin and Huston renders obvious claims 6, 12, 18, and 24.

*D. Claims 1–24 As Obvious Over Huston*

*1. Claims 1, 7, 13, and 19*

Petitioner contends that Huston teaches the limitations of claim 1 in disclosing a differencing engine that receives content available on origin servers and controls the flow of content to the caches on traffic servers by comparing the versions of content stored on the caches of the traffic servers with the versions stored on the origin servers, and deleting content from the traffic servers based on the comparison. Pet. 51–54 (citing Ex. 1003 ¶¶ 207–13). Petitioner contends that a person of ordinary skill would have understood that the information sent from the origin servers to the differencing engine teaches the claimed “listing of at least one piece of content available from the source.” Pet. 53. Petitioner contends that the communication identifying versions of content stored on the caches received by the differencing engine from the traffic servers teaches the claimed “content status including terminal status information comprising a listing of at least one piece of content stored in memory.” *Id.*

Petitioner contends that Huston teaches the limitations of claims 7, 13, and 19 for the reasons given in its analysis of claim 1. Pet. 51–54. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that Huston renders obvious claims 1, 7, 13, and 19.

*2. Claims 2, 8, 14, and 20*

Petitioner contends that Huston teaches the limitations of claim 2 in disclosing a differencing engine that causes content to be deleted from the traffic servers by issuing a delete command, and that retrieves new content

from the origin servers and stores the new content on the traffic servers. Pet. 54–55 (citing Ex. 1003 ¶¶ 214–216).

Petitioner contends that Huston teaches the limitations of claims 8, 14, and 20 for the reasons given in Petitioner’s analysis of claim 2. Pet. 54–55. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that Huston renders obvious claims 2, 8, 14, and 20.

### *3. Claims 3, 9, 15, and 21*

Petitioner contends that Huston teaches the limitations of claim 3 in disclosing a differencing engine that causes content to be deleted from traffic servers by comparing versions of content stored in cache of the traffic servers with versions of content stored in the origin servers and issuing a delete command based on the comparison to the traffic servers. Pet. 55–56 (citing Ex. 1003 ¶¶ 217–218).

Petitioner contends that Huston teaches the limitations of claims 9, 15, and 21 for the reasons given in Petitioner’s analysis of claim 3. Pet. 55–56. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that Huston renders obvious claims 3, 9, 15, and 21.

### *4. Claims 4, 10, 16, and 22*

Petitioner contends that Huston teaches the limitations of claim 4 in disclosing that the differencing engine receives new information on new content from the origin servers, and instructs the traffic servers to download the new content based on the new content information. Pet. 56 (citing Ex. 1003 ¶¶ 219–20).

Petitioner contends that Huston teaches the limitations of claims 10, 16, and 22 for the reasons given in Petitioner's analysis of claim 4. Pet. 56. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that Huston renders obvious claims 4, 10, 16, and 22.

*5. Claims 5, 11, 17, and 23*

Petitioner contends that Huston teaches the limitations of claim 5 in disclosing that the differencing engine selects content to be deleted by comparing the versions of content stored in the caches of the traffic servers with the versions stored in the origin servers, and causes older content to be deleted from the caches by issuing a delete command to the traffic servers. Pet. 56–57 (citing Ex. 1003 ¶¶ 221–22).

Petitioner contends that Huston teaches the limitations of claims 11, 17, and 23 for the reasons given in Petitioner's analysis of claim 5. Pet. 56–57. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that Huston renders obvious claims 5, 11, 17, and 23.

*6. Claims 6, 12, 18, and 24*

Petitioner contends that Huston teaches the limitations of claim 6 in disclosing that the differencing engine receives information on new content from the origin servers and instructs the traffic servers to download new content from the origin servers based on the new content information. Pet. 57–58 (citing Ex. 1003 ¶¶ 223–24).

Petitioner contends that Huston teaches the limitations of claims 12, 18, and 24 for the reasons given in Petitioner's analysis of claim 6. Pet. 57–



58. Based on the evidence and arguments currently of record, for purposes of institution, we are sufficiently persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that Huston renders obvious claims 6, 12, 18, and 24.

#### VIII. CONCLUSION

Based on the arguments presented in the Petition, we conclude that Petitioner has demonstrated a reasonable likelihood of prevailing with respect to claims 1–24 of the '559 patent challenged in the Petition. Accordingly, we institute a trial on all claims and all grounds asserted in the Petition. The Board has not made a final determination under 35 U.S.C. § 318(a) with respect to the patentability of any challenged claim. Any final determination will be based on the record developed during trial. We place Patent Owner on express notice that any argument not asserted in a timely-filed Response to the Petition, or in another manner permitted during trial, may be deemed waived.

IX. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–24 of the '559 patent is instituted with respect to the grounds set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '559 patent shall commence on the entry date of this Decision, and notice is hereby given of the institution of a trial.

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