

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ROKU, INC.,
Petitioner

v.

MEDIA CHAIN, LLC,
Patent Owner

Case IPR2022-00391
U.S. Patent 10,489,560

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 10,489,560**

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Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

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PETITIONER'S EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 10,489,560 (“’560 patent”)
1002	Declaration of John Tinsman in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent No. 10,489,560
1003	U.S. Patent Publication No. 2004/0010417 to Peled (“Peled”)
1004	U.S. Patent Publication No. 2011/0191246 to Brandstetter <i>et al.</i> (“Brandstetter”)
1005	U.S. Patent Publication No. 2005/0004873 to Pou <i>et al.</i> (“Pou”)
1006	U.S. Patent Publication No. 2008/0140433 to Levy <i>et al.</i> (“Levy”)
1007	U.S. Patent No. 7,818,261 to Weiskopf <i>et al.</i> (“Weiskopf”)
1008	<i>Intentionally Left Blank</i>
1009	Prosecution History of U.S. Patent No. 9,715,581 (“’581 Prosecution History”)
1010	Prosecution History of U.S. Patent No. 9,898,590 (“’590 Prosecution History”)
1011	Prosecution History of U.S. Patent No. 10,489,560 (“’560 Prosecution History”)
1012	Prosecution History of U.S. Patent No. 10,515,191 (“’191 Prosecution History”)
1013	Prosecution History of U.S. Patent No. 10,860,691 (“’691 Prosecution History”)
1014	Prosecution History of U.S. Patent No. 10,885,154 (“’154 Prosecution History”)
1015	<i>Curriculum Vitae</i> of John Tinsman
1016	U.S. Patent No. 7,043,473 to Rassool <i>et al.</i> (“Rassool”)

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Exhibit No.	Description
1017	Mary Madden, The State of Music Online: Ten Years After Napster, Pew Research Center (June 15, 2009) (https://www.pewresearch.org/internet/2009/06/15/the-state-of-music-online-ten-years-after-napster/)
1018	U.S. Patent No. 8,185,475 to Hug (“Hug”)
1019	U.S. Patent No. 8,051,130 to Logan (“Logan”)
1020	“Digital Rights Management,” FTC.org (March 25, 2009) (https://www.ftc.gov/news-events/events-calendar/2009/03/digital-rights-management)
1021	U.S. Patent No. 8,776,216 to Boccon-Gibod <i>et al.</i> (“Boccon-Gibod”)
1022	Urs Gasser <i>et al.</i> , “Case Study: DRM-protected Music Interoperability and e-Innovation,” Harvard.edu (November 2007) (https://dash.harvard.edu/bitstream/handle/1/2794938/DRM-protected+Music+Interoperability+and+eInnovation.pdf;jsessionid=FEC1E2A0F87ABB7EB30E41EA93AC1CAC?sequence=2)
1023	<i>Intentionally Left Blank</i>
1024	<i>Intentionally Left Blank</i>
1025	<i>Intentionally Left Blank</i>
1026	<i>Intentionally Left Blank</i>
1027	U.S. Patent Publication No. 2011/0314378 A1 to Nijim <i>et al.</i> (“Nijim”)
1028	“Apple TV Coming to Your Living Room,” Apple.com (January 9, 2007) (https://www.apple.com/newsroom/2007/01/09Apple-TV-Coming-to-Your-Living-Room/)

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Exhibit No.	Description
1029	Jaap Haitsma, <i>et al.</i> , “A Highly Robust Audio Fingerprinting System,” 3rd International Conference on Music Information Retrieval, Paris, France, October 13-17, 2002 (“Haitsma”)
1030	U.S. Patent No. 9,554,176 to Gharaat <i>et al.</i> (“Gharaat”)
1031	Alex Pappademas, “Mood music for the cyber set,” CNN.com, archived December 7, 2004 (https://web.archive.org/web/20041207191754/http://archives.cnn.com/2000/TECH/computing/09/08/mood.music.idg/index.html)
1032	U.S. Patent No. 8,306,976 to Handman <i>et al.</i> (“Handman”)
1033	U.S. Patent Publication No. 2006/0206478 to Glaser <i>et al.</i> (“Glaser”)
1034	U.S. Patent No. 7,081,579 to Alcade <i>et al.</i> (“Alcade”)
1035	Avery Li-Chun Wang, “An Industrial-Strength Audio Search Algorithm,” 4th International Conference on Music Information Retrieval, Baltimore, Maryland, USA, October 27-30, 2003.
1036	Bryan Jacobs, “How Shazam Works To Identify (Nearly) Every Song You Throw At It,” Gizmodo.com (September 24, 2010) https://gizmodo.com/how-shazam-works-to-identify-nearly-every-song-you-th-5647458
1037	European Patent Application Publication No. 1,558,032 to Widevine Technologies, Inc.
1038	U.S. Patent Publication No. 2013/0051772 to Ramaswamy <i>et al.</i> (“Ramaswamy”)
1039	U.S. Patent No. 5,223,924 to Strubbe <i>et al.</i> (“Strubbe924”)
1040	U.S. Patent Publication No. 2001/0056405 to Muyres <i>et al.</i> (“Muyres”)
1041	U.S. Patent No. 7,603,382 to Halt, Jr. (“Halt”)

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Exhibit No.	Description
1042	U.S. Patent No. 10,447,564 to Abraham <i>et al.</i> (“Abraham”)
1043	U.S. Patent No. 8,583,089 to Ramer <i>et al.</i> (“Ramer”)
1044	Laurie J. Flynn, “Like This? You’ll Hate That. (Not All Web Recommendations Are Welcome.),” NYTIMES.com (January 23, 2006) (https://www.nytimes.com/2006/01/23/technology/like-this-youll-hate-that-not-all-web-recommendations-are.html)
1045	U.S. Patent No. 8,375,131 To Rogers <i>et al.</i> (“Rogers”)
1046	U.S. Patent Publication No. 2012/0233701 to Kidron (“Kidron”)
1047	U.S. Patent No. 6,317,722 to Jacobi <i>et al.</i> (“Jacobi”)
1048	U.S. Patent No. 8,352,331 to Dunning <i>et al.</i> (“Dunning”)
1049	U.S. Patent Publication No. 2003/0086341 to Wells <i>et al.</i> (“Wells”)
1050	U.S. Patent No. 7,178,720 to Strubbe <i>et al.</i> (“Strubbe”)
1051	“Technological Protection Systems for Digitized Copyrighted Works: A Report to Congress,” United States Patent and Trademark Office, 2002
1052	Richard Leeming, “DRM – ‘digital rights’ or ‘digital restrictions’ management?”, EBU Technical Review, January 2007 (https://tech.ebu.ch/docs/techreview/trev_309-digital_rights.pdf)
1053	Jordi Ribas-Corbera, “Windows Media 9 Series – a platform to deliver compressed audio and video for Internet and broadcast applications,” EBU Technical Review, January 2003 (https://tech.ebu.ch/docs/techreview/trev_293-ribas.pdf)
1054	<i>Intentionally Left Blank</i>
1055	Adrian Slywotzky, <i>et al.</i> , “The Future of Commerce,” Harvard Business Review, January-February 2000 (https://hbr.org/2000/01/the-future-of-commerce)

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Exhibit No.	Description
1056	Benno Stein, <i>et al.</i> , “Near Similarity Search and Plagiarism Analysis,” 29 th Annual Conference of the German Classification Society (GfKI), Magdeburg, Germany, 2006
1057	Chow Kok Kent, <i>et al.</i> , “Features Based Text Similarity Detection,” Journal of Computing, Vol. 2, Issue 1, January 2010
1058	Benjamin Cohen, “How can publishers limit e-book piracy?”, Channel 4 News, October 18, 2009 (https://www.channel4.com/news/articles/arts_entertainment/books/how%2Bcan%2Bpublishers%2Blimit%2Bebook%2Bpiracy/3391502.html)
1059	John Timmer, “Publishers cut book sharing deal with Scribd,” Ars Technica, March 18, 2009 (https://arstechnica.com/information-technology/2009/03/publishers-cut-book-sharing-deal-with-scribd/)
1060	Eric A. Robinson, “Digital Rights Management, Fair Use, and Privacy: Problems for Copyright Enforcement through Technology,” University of St. Augustine, December 2009 (https://orcid.org/0000-0001-9554-8754)
1061	U.S. Patent Publication No. 2012/0020647 to Vogel (“Vogel”)
1062	<i>Intentionally Left Blank</i>
1063	U.S. Patent Application Publication No. 2003/0028796 to Roberts et al. (“Roberts”)
1064	Complaint, <i>Media Chain LLC v. Roku, Inc.</i> , WDTX-1-21-cv-00027 (“Complaint”)
1065	Order on Motion to Transfer, <i>Media Chain LLC v. Roku, Inc.</i> , WDTX-1-21-cv-00027 (“Motion to Transfer Order”)
1066	Scheduling Order, <i>Media Chain LLC v. Roku, Inc.</i> , WDTX-1-21-cv-00027 (“Scheduling Order”)
1067	<i>Intentionally Left Blank</i>

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Exhibit No.	Description
1068	<i>Intentionally Left Blank</i>
1069	Affidavit of Service, <i>Media Chain, LLC v. Roku, Inc.</i> , Case No. 1:21-cv-00027-LY (W.D. Tex.), filed January 26, 2021.
1070	Plaintiff's Response, <i>Media Chain LLC v. Roku, Inc.</i> , WDTX-1-21-cv-00027
1071	Case Management Conference Order in Reassigned Case, <i>Media Chain, LLC v. Roku, Inc.</i> , Case No. 1:21-cv-00027-EMC (N.D. Cal.), filed December 22, 2021.
1072	U.S. Patent No. 9,715,581 to Estes (“’581 Patent”)
1073	U.S. Patent No. 9,898,590 to Estes (“’590 Patent”)
1074	<i>Intentionally Left Blank</i>
1075	U.S. Patent No. 10,515,191 to Estes (“’191 Patent”)
1076	U.S. Patent No. 10,860,691 to Estes (“’691 Patent”)
1077	U.S. Patent No. 10,885,154 to Estes (“’154 Patent”)
1078	<i>Intentionally Left Blank</i>
1079	<i>Intentionally Left Blank</i>
1080	California Northern District Time to Milestones, Docket Navigator, accessed January 4, 2022.

Roku, Inc. petitions for *inter partes* review of claims 1-19 of U.S. Patent No. 10,489,560 (the “’560 patent”) to Estes, “Digital Media Reproduction and Licensing.” EX1001, ’560 patent, Title.

I. INTRODUCTION

The ’560 patent purportedly improves the tracking of user demographic data when a user acquires or declines a license to stream digital media content. EX1001, 11:63-12:25; EX1009, 371-77. Specifically, the ’560 patent claims a licensing system that determines whether a user has acquired a license to stream content. EX1001, 9:33-46. When the user acquires or declines the license, the licensing system records demographic data corresponding to the user. *Id.*, 5:30-39, 7:61-8:7, 11:63-12:26. The licensing system then provides a summary of these statistics to content providers or third party online retailers, so that the retailers can gauge user demographics and target marketing accordingly. *Id.*, 11:63-12:26.

Unfortunately for Patent Owner (“PO”), tracking demographic data in response to accepting and declining a license to stream was already disclosed by several prior art references, including U.S. Patent Publication Nos. 2004/0010417 (EX1003, “Peled”), 2011/0191246 (EX1004, “Brandstetter”), 2005/0004873 (EX1005, “Pou”), and 2008/0140433 (EX1006, “Levy”). These references illustrate that offering media licenses and tracking user responses and demographic data were well-known techniques, and would have been obvious to a person of

ordinary skill in the art. This Petition demonstrates the unpatentability of all claims of the '560 patent.

II. IDENTIFICATION OF UNPATENTABILITY GROUNDS

Ground	Prior Art	Basis	Claims Challenged
1	Peled (EX1003) and Pou (EX1005)	35 U.S.C. § 103	1-14 and 16-19
2	Peled, Pou, and Brandstetter (EX1004)	35 U.S.C. § 103	15
3	Brandstetter and Levy (EX1006)	35 U.S.C. § 103	1-19

The alleged earliest priority date of the '560 patent is November 4, 2011.

The references qualify as prior art as follows:

- Peled (EX1003) is prior art under pre-AIA 35 U.S.C. § 102(b) because it was published on January 15, 2004.
- Brandstetter (EX1004) is prior art under pre-AIA 35 U.S.C. § 102(a) because it was published on August 4, 2011.
- Pou (EX1005) is prior art under pre-AIA 35 U.S.C. § 102(b) because it was published on January 6, 2005.
- Levy (EX1006) is prior art under pre-AIA 35 U.S.C. § 102(b) because it was published on June 12, 2008.

III. LEVEL OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art (“POSA”) at the time the '560 patent was filed would have a bachelor’s degree in electrical engineering, computer engineering, computer science, or equivalent degree with at least two years of

relevant industry experience, including in digital media content delivery, digital media content protection, and statistical analysis of digital media consumption.

EX1002, ¶¶39-41; *id.*, ¶¶1-48, 500-01.

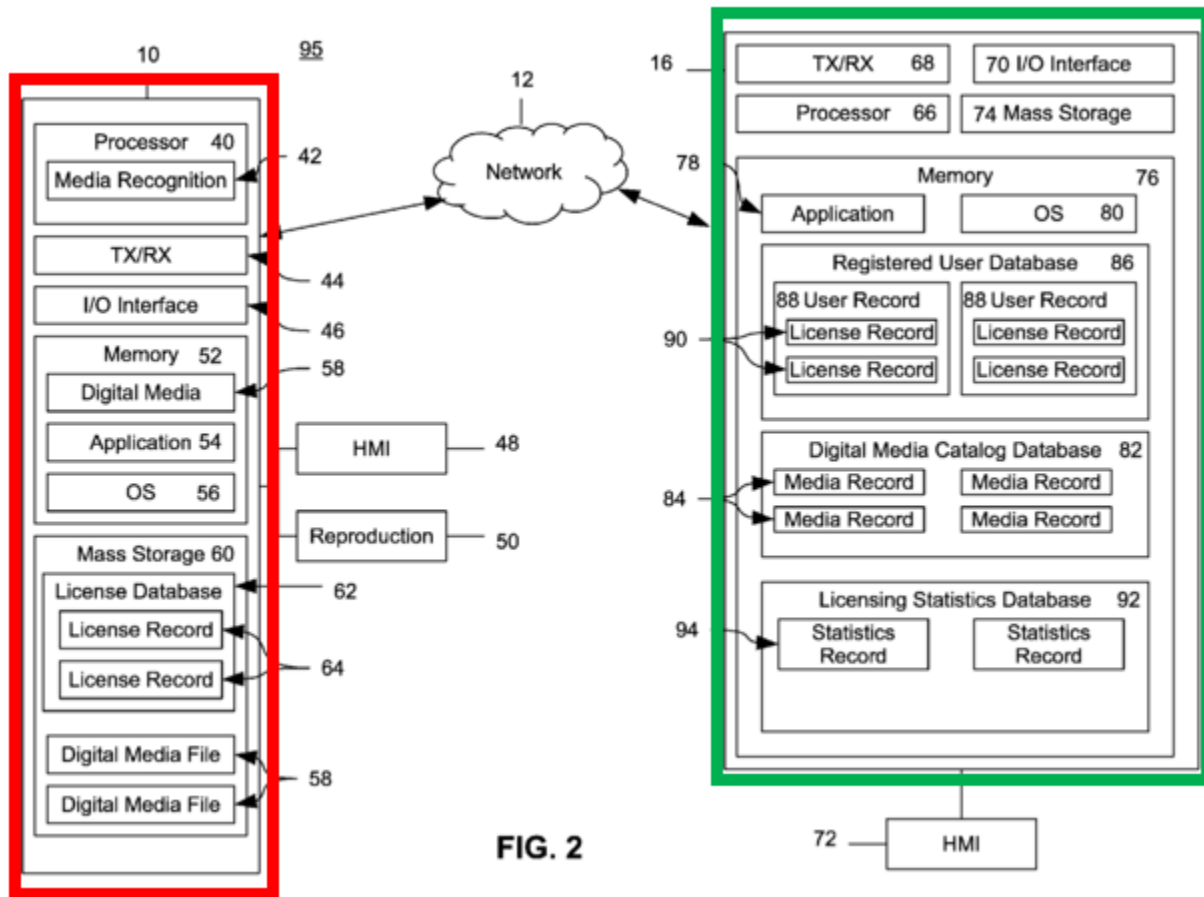
IV. OVERVIEW OF THE '560 PATENT

The claims of the '560 patent generally are directed to two concepts: (1) licensing and distributing digital media content, and (2) targeted marketing: gathering and summarizing user demographic data when a user accepts or declines a license—the alleged point of novelty being found in the second concept (i.e., “*storing demographic data about users that decline a media license*” to inform a marketing analysis. EX1009, 376. However the second concept and the other claimed conventional concepts were well-known in the art. EX1002, ¶¶49-77.

A. Summary of Disclosure

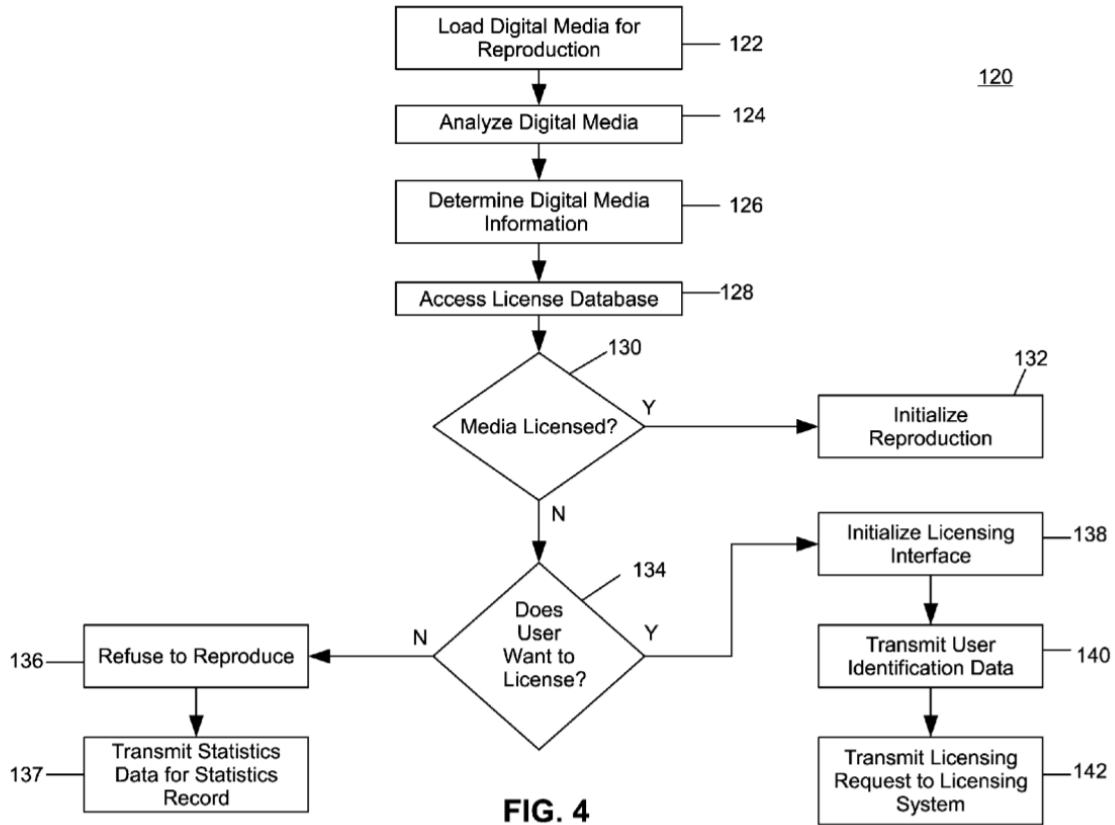
1. Licensing and Distributing Digital Media Content

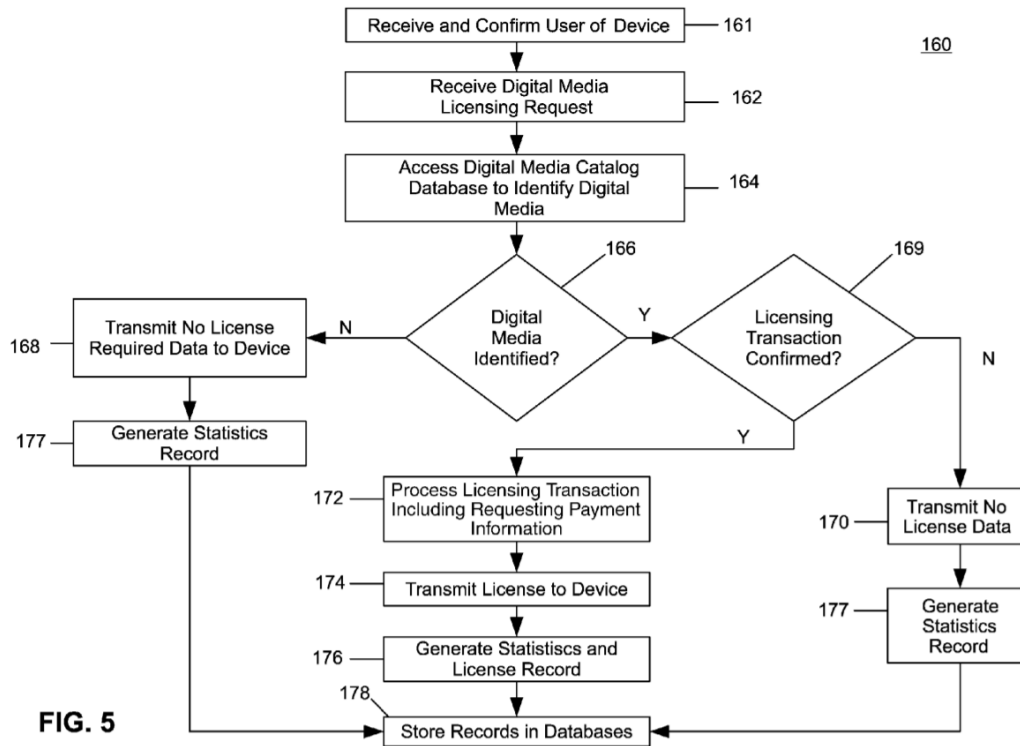
The '560 patent describes a platform for distributing, licensing, and marketing digital media content. EX1001, Abstract, 1:17-20, 1:61-63, 3:35-42, FIG. 2.



EX1001, FIG. 2 (annotated).

The platform includes a “licensing system 16” (green) and user “device 10” (red). EX1001, 3:26-33, 3:65-4:7. The ’560 patent broadly describes its functionality as capable of being implemented at any of these devices. *Id.*, 8:8-19, 10:16-21, 11:37-41; EX1002, ¶¶78-82. Figures 4-5 depict this functionality. EX1002, ¶¶83-88.





EX1001, FIGs. 4-5.

“Licensing system 16” is loaded with a “catalog of media content items.” See EX1001, FIG. 3, 7:39-43, 8:21-56, 13:27-31. The content items are analyzed to determine “identifying characteristics” that are “inherently present.” *Id.*, 4:13-31, 6:57-67, 8:27-50, 9:3-10, 9:17-21. This may be a “fingerprint” or “digital watermarking.” *Id.*, 4:31-37, 13:27-30.

A user device then provides a license request. EX1002, ¶¶83-88. The request may occur when the user has loaded a digital media file on user’s device 10. EX1001, 4:13-22. A license database is accessed to determine whether the user has licensed the content. *Id.*, 4:41-44, 9:33-37. If so, the device “initializes

reproduction of the digital media file.” *Id.*, 9:37-40. If not, the user receives a “query” asking whether the user would like to purchase a license. *Id.*, 9:41-46; *see also id.*, 4:44-57. If the user declines, the device denies access to the content. *Id.*, 4:48-62, 9:47-49, 10:8-11:12. If the user accepts, the licensing system permits the user to play or stream the content. *Id.*, 4:48-6, 9:47-49, 10:8-11:12.

2. Targeted Marketing

User demographic data is collected when a user accepts or declines a license and is provided as reports so that content providers can gauge interest and perform targeted marketing. EX1001, 5:35-43, 7:61-8:7, 9:49-57, 11:12-36, 11:61-12:26; EX1002, ¶¶89-91. Figure 7 depicts this process:

200

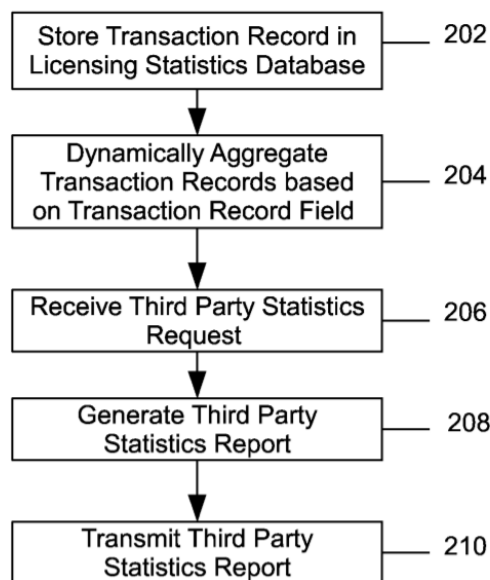


FIG. 7

EX1001, FIG. 7.

B. Prosecution History and Alleged Novelty

The '560 patent purports to claim priority to the '581 patent. During examination of the '581 patent, the applicant amended the '581 patent claims to recite user data being extracted when the user acquires “**or**” declines a license. EX1009, 196. The Examiner found that the prior art taught this limitation, which led the applicant to once again amend the claims, this time to require user data to be collected **both** when the user acquires “**and**” declines a license. *Id.*, 224-25, 227, 305, 307, 345. In allowing these amended claims, the Examiner highlighted this limitation, finding that the prior art does not disclose “**storing demographic data about users that decline a media license** in order to inform a marketing analysis.”¹ *Id.*, 376. The '560 patent was filed years later and quickly issued after amendments further defining the term “user data” and adding similar features to the '581 patent. EX1011, 113. The Examiner determined that the “record as a whole” supported allowance. *Id.*, 136. The Examiner was unaware, however, that these features are explicitly disclosed in Peled and Brandstetter as further explained below. EX1002, ¶101.

¹ All emphasis added unless otherwise noted.

C. The '560 Patent Claims

The '560 patent contains nineteen claims, four of which (claims 1, 6, 11, and 16) are independent. A Claim Appendix has been included with this Petition identifying the claims and claim elements.

Claim 1 recites a method for offering a content license and identifying user demographic data when the user accepts or declines. EX1002, ¶¶92-97. Elements [1A]-[1B] are directed to licensing and distributing digital media content, while elements [1C]-[1F] are directed to targeted marketing (*i.e.*, gathering and summarizing user demographic data when a user accepts or declines a license). The claimed gathering of user demographic data and managing licenses was well known in the art. Grounds 1-2 (Peled-Pou grounds) and Ground 3 (Brandstetter-Levy grounds) demonstrate that this was obvious, not inventive. Sections VI-VIII; EX1002, ¶¶150-501.

Importantly, claim 1 does not explicitly require a single device or system to perform all of its steps. *Id.*, ¶¶93. Indeed, when PO intended to claim a single device, it did so expressly. EX1077, Claim 1 (reciting a “multimedia hardware device” performing certain functions). Rather, the context of claim 1 suggests that at least some of its limitations would be practiced by the licensing system on a server, such as “aggregating the user data into a statistics record,” “storing” the

record in a license database, and “analyzing a plurality of statistics records.”

EX1002, ¶¶92-93; EX1001, FIG. 5, 7:51-64, 10:43-58, 11:9-25.

Under any interpretation, however, the grounds of unpatentability presented below render claim 1 obvious when occurring at either a user device or a licensing system. EX1002, ¶¶94-97, 150-501.

D. Other Challenged Patents

Petitioner has filed IPR petitions challenging other patents in the same family as the '560 patent: U.S. Patent Nos. 9,715,581; 9,898,590; 10,515,191; 10,860,691; 10,885,154. Claim features unique to the individual patents can be found, for example, at ¶¶98-100 of the Declaration of John Tinsman (EX1002).

Each of these patents recite identifying whether the user has accepted or declined an offer, recording user demographic data, and providing a summary of the user demographic data. EX1002, ¶98. The '560 patent likewise claims these concepts except that it refers specifically to streaming a media content item and marketing based on user stream history. The prior art here discloses all of these features.

V. CLAIM CONSTRUCTION

In IPRs, claims are “construed 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). Claims must be given their ordinary and customary

meaning as understood by one of ordinary skill in the art at the time of the invention in light of the specification and the prosecution history pertaining to the patent. *Id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-1313 (Fed. Cir. 2005) (en banc); 83 Fed. Reg. 51,340 (Oct. 11, 2018).

In the parallel litigation, PO represented to the court that the “decline” limitation (e.g., [1C]) “does *not* require an affirmative act by a user,” and that “a user’s passive interaction with a device, such as navigating or scrolling past an offer to license or stream media content” was sufficient. EX1070, 3. Petitioner disagrees with that broad interpretation, as it would unreasonably cover *any* action by the user that is not an affirmative acceptance of a licensing offer—rendering the word “decline” superfluous in the claims. Further, PO’s interpretation is inconsistent with narrowing amendments made during prosecution. As described above, to obtain allowance of the patent claims, PO narrowed their scope to require extracting user data when the user declines a license, and that was the very limitation that the Examiner found was not disclosed in the prior art. *See* Section IV.B. PO cannot now disavow the narrowing amendment that allowed the patent to issue in the first place.

Regardless, under any reasonable interpretation of a user “decline,” the prior art presented here discloses it. EX1002, ¶¶200-26, 369-96. Thus, while PO’s

interpretation of “decline” in the parallel litigation is wrong, the construction of that term is immaterial to the outcome of this proceeding.

Likewise, no other claim term requires construction—all terms should receive their ordinary and customary meaning in view of the ’560 patent specification. EX1002, ¶¶46-48, 148-49.

VI. GROUND 1: CLAIMS 1-14 AND 16-19 OF THE ’560 PATENT ARE OBVIOUS OVER PELED-POU.

Peled-Pou discloses every element of independent claims 1, 6, 11, and 16, which are materially identical. Peled and Pou both describe facilitating content distribution to aid content creators with monetizing content. EX1002, ¶¶150-309. Peled discloses the alleged point of novelty (i.e., gathering demographic data when users both accept or decline content license offers), while Pou discloses many of the claimed conventional license distribution and content identification techniques.)

A. Overview of Peled

Peled discloses a system for marketing and distributing digital content. EX1003, Abstract, ¶¶1-2, 3, 7, 155; EX1002, ¶¶102-16. Peled also “provides the ability to study online requests for content”—and most importantly, “**online requests that do not result in a sale.**” See EX1003, ¶¶155, 168-69, 175-78, 186, 196-97. Peled provides content providers with user data and “statistical

information,” so that they can understand the reason for refusal. *Id.*, ¶¶176-77.

Peled also tracks demographic data related to the user and groups of users.

EX1003, ¶169. Peled compiles this demographic data and generates “reports to individual content providers” or distributors. *Id.*, ¶¶168, 183, 199. These reports may be used to focus marketing efforts. *Id.*, ¶200; *see also id.*, ¶¶9, 157, 196.

Therefore, just like the ’560 patent, Peled describes gathering user demographic data when an offer for content has been accepted or declined. EX1002, ¶¶103-15.

B. Overview of Pou

Pou describes “digital rights management” and “facilitating authorized licensing and distribution of digital media,” such as music, movies, and e-books. EX1005, Abstract, ¶¶2, 8, 42; EX1002, ¶¶129-35.

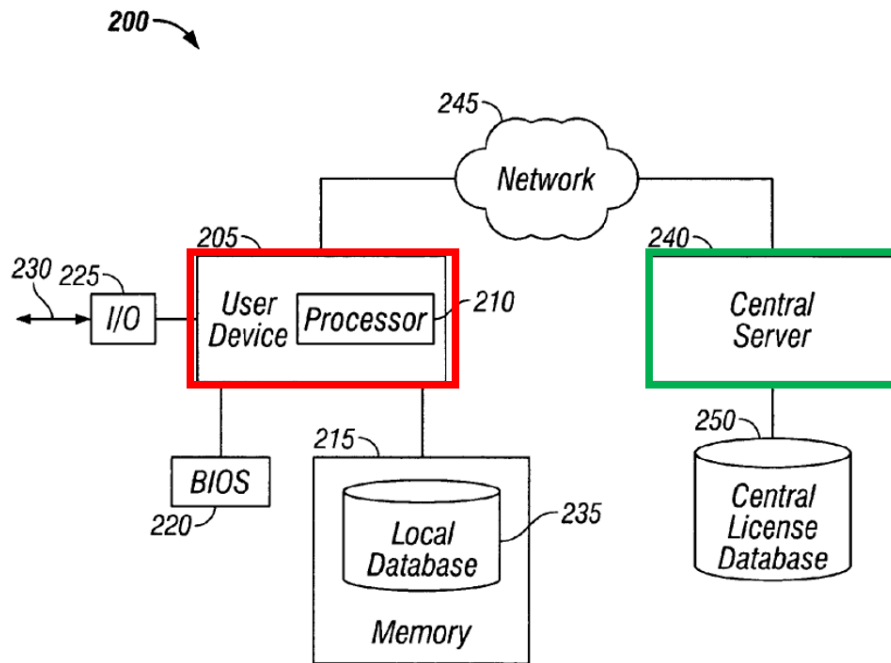


FIG. 2

EX1005, FIG. 2 (annotated).

Pou's system (Figure 2 above) includes a "central server" 240 (green), as well as a plurality of "user devices" 205 (red). EX1005, ¶¶31, 43, 57. FIG. 1 (below) depicts Pou's licensing and digital rights management process. *Id.*, ¶¶31, 50-56.

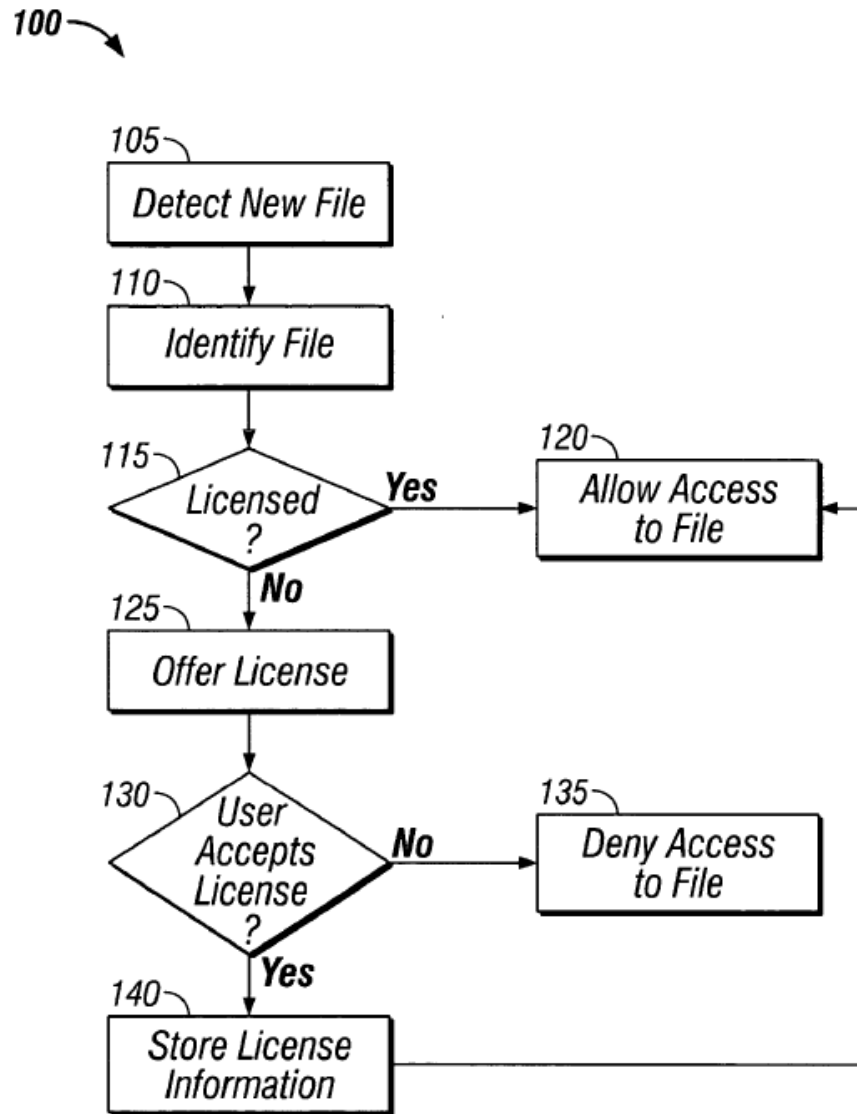


FIG. 1

EX1005, FIG. 1.

At step 105, a loaded media file is detected and “examined using file identification software in an attempt to identify the file” (step 110). EX1005, ¶¶13, 51, 64, 82. This may be a digital file loaded at a user device. *Id.*, ¶¶46, 48, 50-51.

Pou, like the '560 patent, uses “watermarking and fingerprinting techniques” to identify the content. *Id.*, ¶¶13, 51, 53-54.

Pou then determines whether a user loading the digital file has already licensed the content by checking a local or remote license database using the unique file ID or fingerprint (step 115). EX1005, ¶¶55, 59, 77, 83. If the file is licensed, access is granted (step 120). *Id.*, ¶¶55, 60, 84. If not, a license may be offered for purchase via a “pop-up window” (step 125). *Id.*, ¶¶56, 85. The user may accept or decline the offered license by clicking “on an accept button or a decline button in the pop-up window.” *Id.* “If the user does not accept the license, access to the file may be denied (step 135).” *Id.* If accepted, licensing information is stored in the license database (step 140). *Id.*, ¶¶56, 79-80, 85.

C. A POSA Would Have Combined Peled and Pou.

1. A POSA would have been motivated to improve Peled’s distribution of content by including Pou’s licensing management framework.

A POSA would have been motivated to combine Peled and Pou to provide a comprehensive license management framework. Pou would improve the efficiency and accuracy of Peled’s identification and distribution of content. EX1002, ¶¶151-58. For example, a POSA would have recognized that Pou’s content licensing, tracking of previously obtained media licenses, and offering of new media licenses to consumers would improve Peled’s management of content purchases and

gathering of user data related to media transactions. *Id.* As another example, Pou's license management and fingerprint checking techniques improve Peled's ability to track user purchases and generate reports that identify reasons a user refused to purchase a license (i.e., because the user has already obtained the media content).

Id.

Further, Peled describes tracking user purchases and purchase history to perform market analyses. EX1003, ¶¶1-2, 7, 177. A POSA would have understood that a well-known way to track purchased media content would be to use unique content identifiers. EX1002, ¶¶60-67, 154. Pou describes one technique that uses a "fingerprint" or "'Unique File ID' (UFID)" to identify media files. EX1005, ¶¶51-55, 65, 83, 111. A POSA would have combined Pou's fingerprint and UFID techniques with Peled to track user purchases including licenses and identify media content that a user has already obtained. *Id.*, ¶¶55-56, 59; EX1002, ¶¶152-58. Pou's checking of whether a user has already obtained a license with Peled would also improve the efficiency and accuracy of Peled's content distribution system to direct licensed content to a consumer. EX1005, ¶¶55-56, 59; EX1003, ¶¶159-60; EX1002, ¶¶154-55. For example, a fingerprint is a compact, "reduce-bit representation of content" and therefore provides fast and computationally efficient comparisons. EX1006, ¶142; EX1002, ¶154.

The combination of Peled-Pou would also help combat and prevent “illegal content distribution.” EX1003, ¶184; EX1005, ¶3; EX1001, 1:26-47. For example, through the use of Pou’s license management and fingerprint or UFID techniques, content providers or distributors would be able to identify and thus better address illegal content distribution. EX1003, ¶¶2-9, 200; EX1002, ¶¶156-58; *see also* EX1003, ¶¶196, 198.

2. A POSA would have known how to combine Peled and Pou and would have had a reasonable expectation of success.

A POSA would have known how to combine Peled and Pou and would have had a reasonable expectation of success. EX1002, ¶¶159-61. A POSA would have implemented Pou’s purchase and license tracking, and fingerprinting and UFID techniques with Peled to distribute licensed content. EX1005, ¶¶51-56, 59, 65, 83, 111. The combined system would determine whether a user has already obtained a licensed and potentially identify reasons for refusal. *See* Section VI.C.1; EX1002, ¶¶159-61.

Both Peled and Pou describe conventional server systems for managing digital media files. EX1003, ¶¶164-66; EX1005, ¶¶55, 59. A POSA would have therefore combined them using well-known computer programming techniques. EX1002, ¶160; EX1003, ¶¶168-69. Combining Peled and Pou would have thus amounted to nothing more than combining known prior art elements according to

known methods to yield predictable results, and applying a known technique to a known device ready for improvement to yield predictable results. EX1002, ¶161.

D. Peled-Pou Discloses Claim 1.

Peled-Pou discloses claim 1. The Petition includes a claim appendix that identifies a shorthand for each element of claim 1. Appendix A.

1. [1P].

To the extent the preamble is limiting, Peled facilitates the distribution and streaming of media content items (digital media files) to content consumers. EX1003, ¶¶166, 173, 197. Content consumers 14 use “a general purpose computer” (i.e., the claimed “multimedia hardware device”) to consume the content distributed by “apparatus 20.” *Id.*, ¶¶121, 159; *see also id.*, ¶¶166-68, FIG. 6. Consumers purchase “video files/streams over the Internet.” EX1005, ¶197

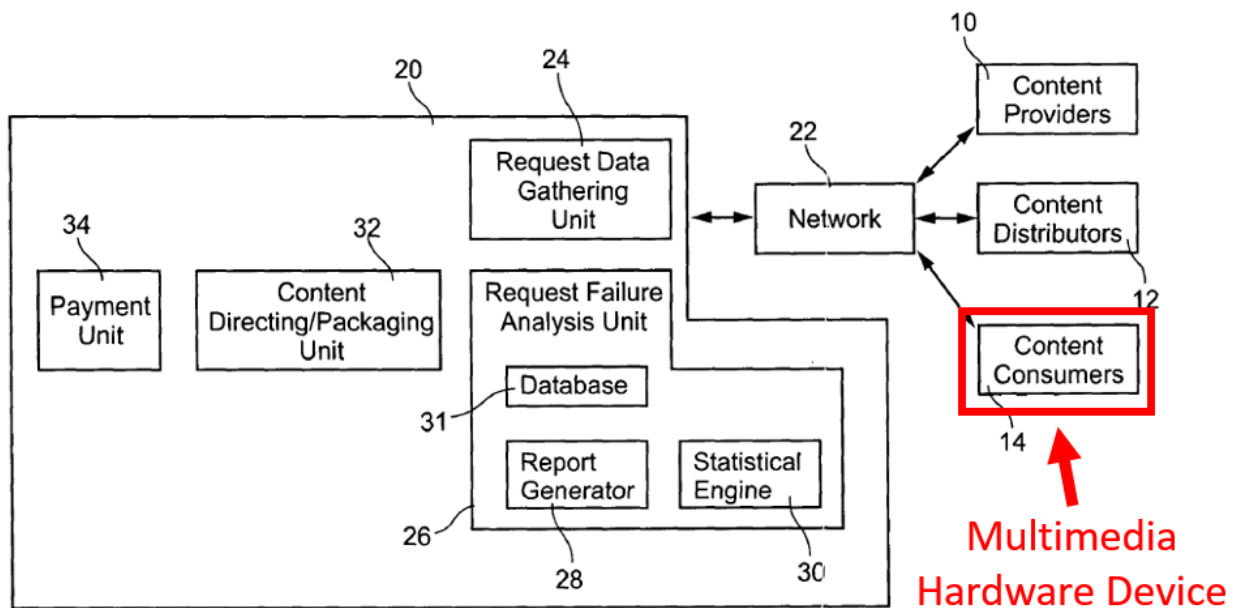


Fig. 6

EX1003, FIG. 6 (annotated)

Content directing/packaging unit 32 directs “video files/streams” to consumers and therefore generates an authorized stream. EX1003, ¶¶166, 176-77, 197. Pou also describes “streaming the file to the user device” when authorized. EX1005, ¶55; *see also id.*, ¶¶50, 64, 108-10. Peled-Pou thus discloses the preamble. EX1002, ¶¶162-70.

Although the preamble refers to a client’s “multimedia hardware device,” it is directed more generally to a “computer implemented method for providing” the device to reproduce a media content item. Thus, to the extent the preamble is limiting, it merely requires that the performance of the claim body’s steps result in a device that generates an authorized reproduction of a media content item. The

preamble does not require all claim steps to be performed only on the multimedia hardware device. Section IV.C. The context of claim 1 suggests that at least some of its limitations would be performed by the licensing system on a server. *Id.*

Regardless, a POSA would have found it obvious that each of the claim steps may be performed either on Peled's or Pou's server or consumer devices. Peled explains that its system "is not limited in its application to the details of construction and the arrangement of the components set forth" in its disclosure and figures, and that "other embodiments" are possible and the system can be "carried out in various ways." EX1003, ¶¶156, 201; EX1002, ¶¶171-76.

2. [1A] "receiving a request from a user to stream the media content item."

Peled discloses that consumers can make "online *requests for content*" using their computing devices by interacting with a website to browse and "order content." EX1003, ¶¶61, 155, 159; EX1002, EX1002, ¶¶177-83. "*[R]equests may be ... for purchases of video files/streams over the Internet,*" which may include "streaming video" or a "particular movie." EX1003, ¶¶178, 197 (emphasis added); *see also id.*, ¶¶158, 175-177. Those requests are received by Peled's server. *Id.*, ¶¶28, 159, 167, Claims 12, 112; EX1002, ¶¶177-83. Pou also discloses receiving license requests at a central server from a user requesting to engage in a license

transaction to stream media content items and “allows streaming of licensed digital files.” EX1005, ¶¶55, 59, 83, 100; EX1002, ¶¶184-85.

3. [1B] “evaluating the request to stream to determine whether the user has acquired a license ...and offering the license ... when the user does not have the license to stream the media content item.”

Pou’s steps 115, 120, and 125 in Figure 1 show examples of the claimed “evaluating.” This evaluation occurs at a central server or a user device.

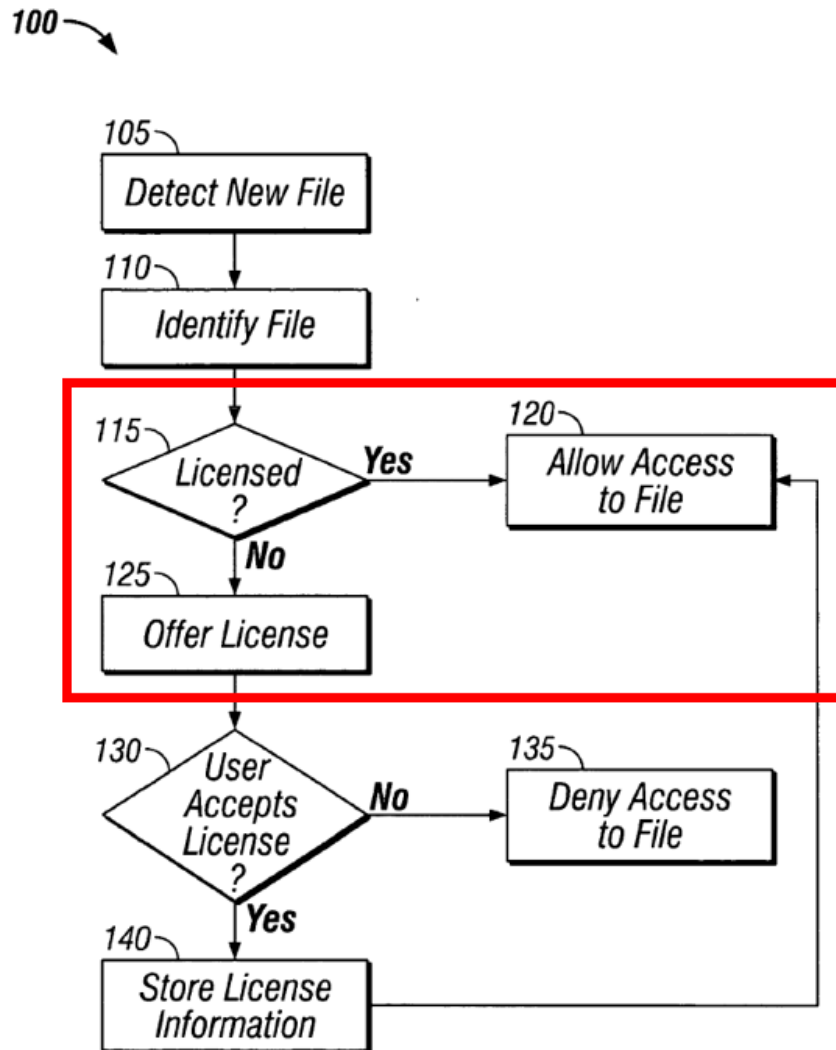


FIG. 1

EX1005, FIG. 1 (annotated).

Pou's central server receives a license transaction request and evaluates the request to determine if a user has already obtained a license (step 115). EX1005, ¶¶55-56, 59; Section VI.B. This evaluation also occurs at the user device by

checking a “locally (e.g., on the user device)” stored license database. EX1005, ¶¶55; *see also id.*, ¶¶52, 57-58, 100; EX1002, ¶¶186-96.

Pou’s steps 125 and 130 in FIG. 1 disclose offering the license to stream the media content item to the user when the user does not have the license. Pou states: ***“a license may be offered to the user for purchase (step 125).”*** EX1005, ¶56. Pou displays “accept” and “decline” buttons in a “pop-up window... asking whether the user wishes to purchase a license to the file.” *Id.*

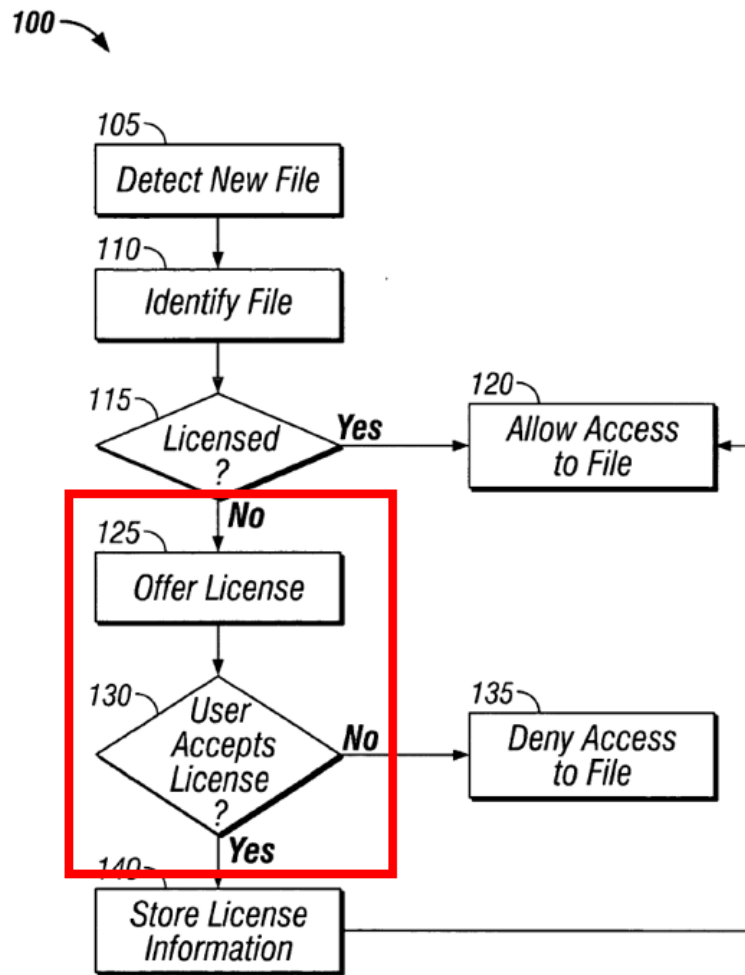


FIG. 1

EX1005, FIG. 1 (annotated).

Peled also discloses offering a license to stream the media content item to the user when the user does not have the license. EX1002, ¶¶196-99. Peled describes a “website for browsing [] through which consumers are able to order content.” EX1003, ¶159; *see also id.*, ¶28. Peled also describes several scenarios where consumers may refuse to purchase content, such as scenarios where a

consumer “declines to complete the transaction” because subtitles are unavailable or due to a difference in a current and historical price for a movie. *See id.*, ¶¶155, 168-69, 172, 176-77, 186. In response, Peled describes offering “alternative content item[s],” which also discloses the claimed licensing offer. *Id.*, ¶¶32, 162.

A POSA would have been motivated to combine Peled and Pou and had a reasonable expectation of success for all the reasons discussed above. *See* Section VI.C.

4. **[1C] “extracting user data that is specific to the user” when the user streams and declines to stream the media content item, “wherein the user data includes demographic data” that enables a third party online retailer to gauge a demographic that streamed the media content item and a demographic that declined to stream that “enables the third party online retailer to target marketing of different media content items” based on a user’s “trend of interest.”**

(a) [1C.1] “extracting user data”

Peled extracts user demographic data when users stream content. EX1003, ¶¶1-2, 169, 172, 175-77, 186. Peled analyzes personal data for “approved purchase requests” and content “actually sold.” *Id.*, ¶¶2, 177, 199. The user data “may include profiles of *individual* consumers or groups of consumers,” including “geographical factors” or “personal data.” *Id.*, ¶169; *see also id.*, ¶¶56-57, 74, 169-77, Claims 31-32, 45-46, 128-29, 142-43.

Peled also extracts such data when a user ***declines*** to stream media content. *Id.*, ¶¶155, 169, 175-177, 186. Peled explains that its “system further provides the ability to study online requests for content or for products and services in general, ***in particular for online requests that do not result in a sale***, for the purpose of providing content providers with information about potential new markets that are currently being excluded and also to provide consumers with acceptable alternatives.” *Id.*, ¶155; EX1002, ¶¶200-06. Peled describes several examples of extracting user data based on a user declining to stream content. In one example, an Italian-speaking consumer requests a movie that does not have Italian subtitles. The consumer thus “declines to complete the transaction.” *Id.*, ¶176. Peled’s system notes the refusal and extracts from the consumer’s profile his or her “location in Italy.” *Id.*; *see also id.*, ¶177; EX1002, ¶¶200-06.

**(b) [1C.2] “user data includes demographic data”
enabling a third party online retailer to gauge a
demographic**

Peled’s user data includes demographic data such as a user’s “age,” “geographical location,” or other “personal data.” EX1003, ¶¶56-57, 74, 169-70, 176-77, 186; EX1002, ¶¶201-07. Peled provides such data in the form of reports to “content distributors” (i.e., the claimed “third party online retailer”), so that they can gauge consumer streaming demographics. EX1002, ¶¶207-16.

At the outset, Peled's "content distributors 12" discloses the claimed "third party online retailer," while "content providers 10" disclose the claimed "copyright owner." EX1002, ¶¶207-13.

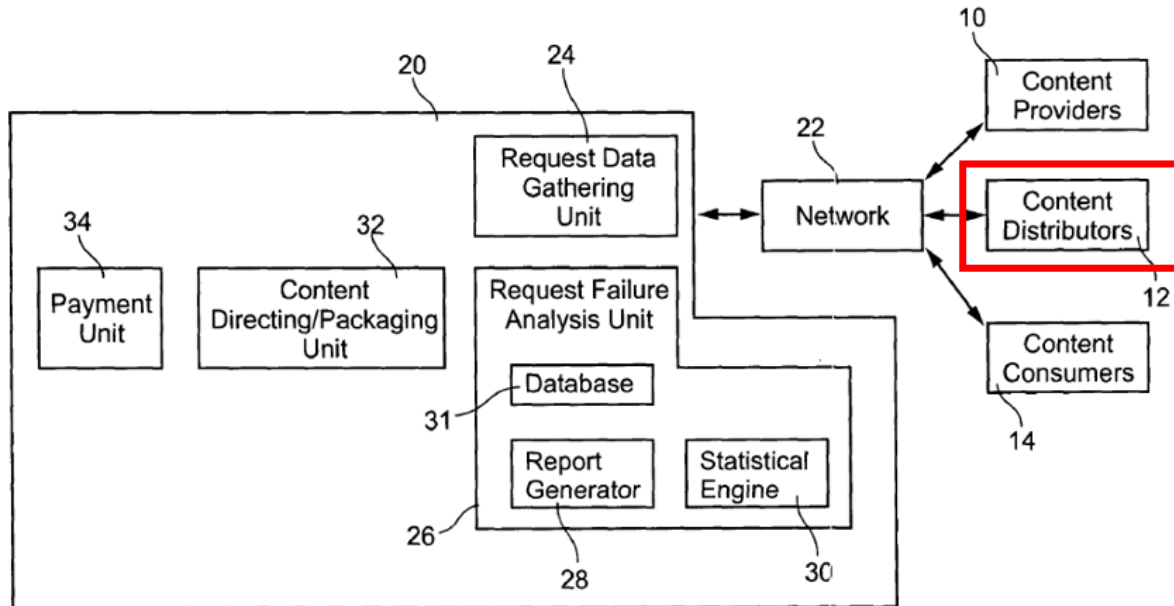


Fig. 6

EX1003, FIG. 6 (annotated).

Using the same identifier "12," Peled refers to "content distributors" as retailers as depicted in Figure 2. EX1003, ¶¶157-58, 166; EX1002, ¶¶207-13.

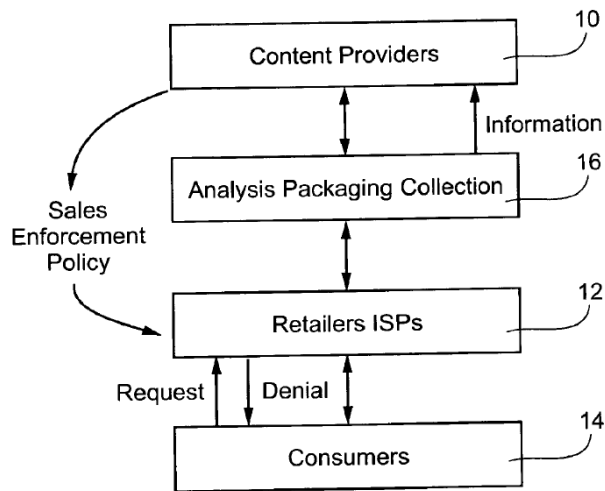


Fig. 2

EX1003, FIG. 2.

Peled provides reports to retailers “on a per distributor basis” or to parties requesting the report. EX1003, ¶183; EX1002, ¶212. Peled therefore provides reports to the claimed “third party online media retailer.” EX1002, ¶¶212-13; EX1003, ¶168; *see also id.*, ¶¶54, 69-70, 155, 172, 180. The reports include a “statistical analysis of data of non-completed requests taken together to determine why requests are not being completed.” *Id.*, ¶183. The reports further include demographic information such as “age” or geographical location.” *Id.*, ¶¶168-69, 183, 186-87. As further explained with reference to claim element [1D]-[1F], this user demographic information allows content distributors to gauge demographics and review “information about potential new markets that are currently being excluded.” EX1003, ¶155; EX1002, ¶¶214-16.

(c) [1C.3] user data includes a “history of media content items” that the user has streamed to allow for targeted marketing

Peled also discloses extracting user data that identifies media content items that a user has purchased or declined to purchase. For example, Peled describes storing a history of “approved purchase requests” and “analyzing personal, organizational and market behavior regarding those requests.” EX1003, ¶2. Peled tracks a user purchase history, such as when a consumer “has a history of requesting movies at a given price” and has “shown a willingness to purchase at a given lower price.” *Id.*, ¶177. Peled also identifies when a user declines a purchase based on price. *Id.* This data enables content providers to market different media to the user based on the user’s demographic. EX1002, ¶¶217-23. For example, Peled then “repackages the movie with commercial advertising and offers it at a lower price.” EX1003, ¶177. Peled also tracks “fulfillment failures” and refusals to license content, which also contribute to the user’s history. *Id.*, ¶¶167-69.

(d) [1C.4] marketing media content items based on a determined trend of interest for the user

With the user demographic and history information, Peled allows content providers to determine a trend of interest for the user and target the marketing of different media content items. Specifically, Peled’s reports enable content providers to “focus marketing efforts on potential market segments (*both for the*

relevant content and for similar content items)." EX1003, ¶200; EX1002, ¶¶224-

26. This marketing may be performed based on Peled's tracking of "profiles of individual consumers or groups of consumers." EX1003, ¶169. Peled additionally describes "analyzing user profiles of users who are refused content [to] reveal user groups who are interested in accessing the content." *Id.*, ¶172. Additionally, "[i]ndividual requests may be analyzed in the light of other requests and in the light of *a personal profile of an individual consumer* if available." *Id.*, ¶180.

Therefore, Peled markets content to individual users as well as groups.

5. [1D] "aggregating the user data into a statistics record."

Peled discloses aggregating user data into a statistics record that summarizes user streaming behavior. EX1003, ¶¶1-2, 169, 172, 175-77, 186; Section VI.D.4. Peled aggregates gathered user demographic information, such as "personal data," geographic location, and age. EX1003, ¶¶169, 199. Peled combines the aggregated information into "profiles," which correspond to the claimed "statistics records." *Id.*, ¶¶169, 172, 175-77, 180. The user profiles are tracked along with acceptance and refusal information. *Id.*, ¶¶1-2, 169, 172, 176-77, 180; EX1002, ¶¶227-30. The profiles may also correspond to "individual consumers or groups of consumers." EX1003, ¶169.

6. [1E] “storing” the statistics record in a license database “so that the user data is accessible to the third party online retailer.”

Peled stores user demographic data within a user profile (claimed “statistics record”) in “database 31.” EX1003, ¶¶169-70, FIG. 6; Sections VI.D.4-5. The database includes refusal data, user profiles, and personal data. EX1003, ¶¶169-70.

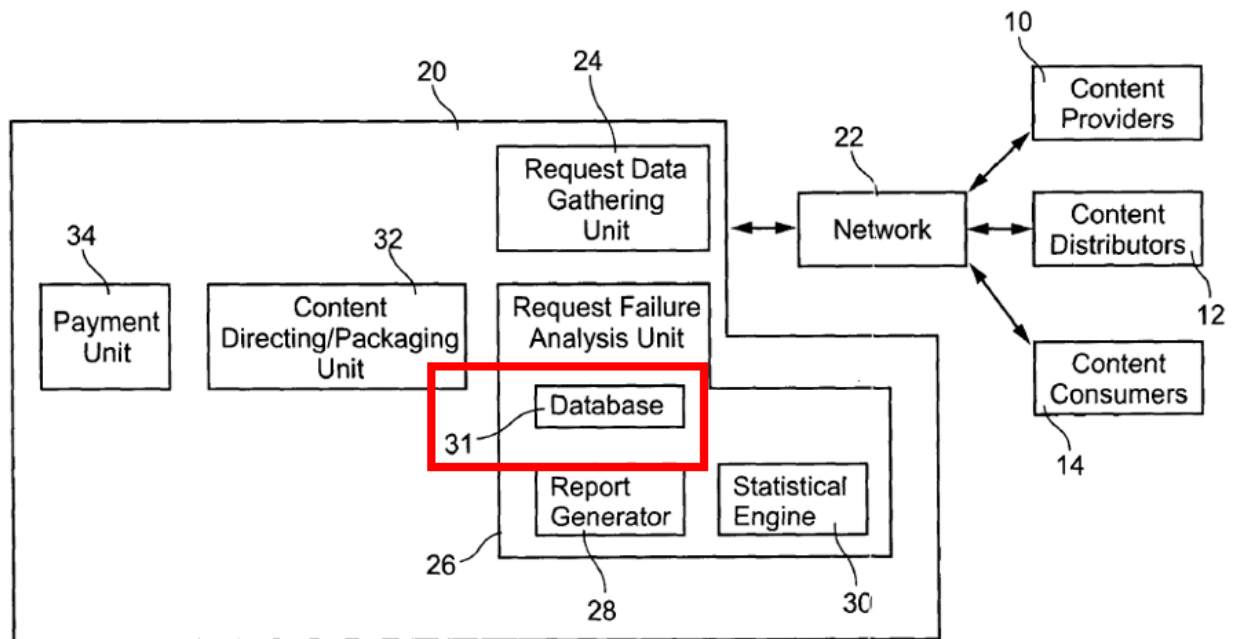


Fig. 6

EX1003, FIG. 6 (annotated).

Thus, Peled describes storing a statistics record in a database to generate reports for content providers. EX1002, ¶¶231-41; Sections VI.D.4-5. “Request failure analysis unit 26” generates these reports and provides user data summaries to content providers and content distributors, such that the user data is accessible.

EX1003, ¶¶155, 168-69, 172, 177, 187, 196, 199-200; EX1002, ¶¶232-38. Those reports, in turn, are “provided ... to individual content providers” or any “party requesting the report.” *Id.* ¶¶168, 183; see Section VI.D.4.2. Specifically, Peled explains that reports may be provided “on a content provider basis, or ***on a per distributor basis.***” EX1003, ¶183. Peled uses the term “distributor” or “content distributors 12” to refer to third party online retailers. *Id.*, ¶¶157-58, 166, FIGs. 1-2, 6. And, in fact, Peled refers specifically to “***content retailers***” who make content available to consumers “via the Internet,” *id.*, ¶157; EX1002, ¶239.

A POSA would have found it obvious to store Peled’s user profile data in a licensing database, such as the “central license database 250” described in Pou because both are conventional memory systems. See Section VI.D.6; EX1002, ¶¶240-41. Peled’s and Pou’s databases commonly organize media information based on particular users—allowing for the efficient management of the license management system. EX1002, ¶¶240-41.

7. [1F] “analyzing a plurality of statistics records... to provide the third party online retailer with the aggregated user data.”

Peled analyzes a plurality of statistics records and provides reports to content providers and third parties, such as content distributors over the Internet. EX1003, ¶¶93, 110, 127, 177, 183. See Sections VI.D.4-5; EX1003, ¶¶93, 110, 127, 169, 177, 183. For example, Peled describes analyzing multiple “profiles of individual

consumers or groups of consumers” to generate reports. *Id.*, ¶169. The reports contain target demographic information and may be used by the requesting party to engage in targeted marketing of that demographic. *See* Section VI.D.4-5. In particular, Peled explains that its reports enable requesting parties “to focus marketing efforts on potential market segments (both for the relevant content and for similar content items).” *Id.*, ¶200; EX1002, ¶¶242-48.

E. Claim 6.

Claim 6 is similar to claim 1 in most material respects, but its preamble focuses on a “media content licensing and verification system,” and the claim recites “digital media information includ[ing] at least one identification characteristic that is unique to the media content item that is included in the media content item when the media content item is initially created and not dependent on any encoding during any mastering of the media content item,” a “media catalog database,” and a “media content record,” none of which is patentably distinct. Again, the claim steps need not occur at any particular device. Section VI.D.1. Peled-Pou renders claim 6 obvious for the reasons presented in claim 1, and as further explained below. EX1002, ¶¶249-58.

[6P]	Section VI.D.1 ([1P]).
[6A]	Section VI.D.2 ([1A]).
[6B]	Section VI.D.3 ([1B]).
[6C]	Section VI.D.4 ([1C])

[6D]	Section VI.D.5 ([1D]).
[6E]	Section VI.D.6 ([1E]).
[6F]	Section VI.D.7 ([1F]).

Claim 6 recites, in [6P], a “media content licensing and verification system.” Peled’s apparatus 20 discloses such a system because it receives and processes consumers’ requests and enables consumers to reproduce media content EX1003, ¶¶166-67; Section VI.D.3; EX1002, ¶250. Pou’s central server also discloses this system. Section VI.D.3; EX1002, ¶250. When determining whether a user has already obtained a license, Pou’s central server checks one “central license database 250 that stores and identifies licenses held by individual users.” EX1005, ¶¶55, 59.

The claim also recites, in [6A], that the user’s request to stream content includes “digital media information includ[ing] at least one identification characteristic that is unique to the media content item.” Peled discloses a system that “independently analyz[es] content requests” to identify requested media content items. EX1003, ¶158. A POSA would have understood that a well-known way to uniquely identify content would be using ***fingerprints*** as described in Pou. EX1002, ¶¶251-56. As shown in Figure. 1, Pou identifies a file in step 110 by extracting a “fingerprint.” EX1005, FIG. 1, ¶¶13, 51, 42, 64, 82.

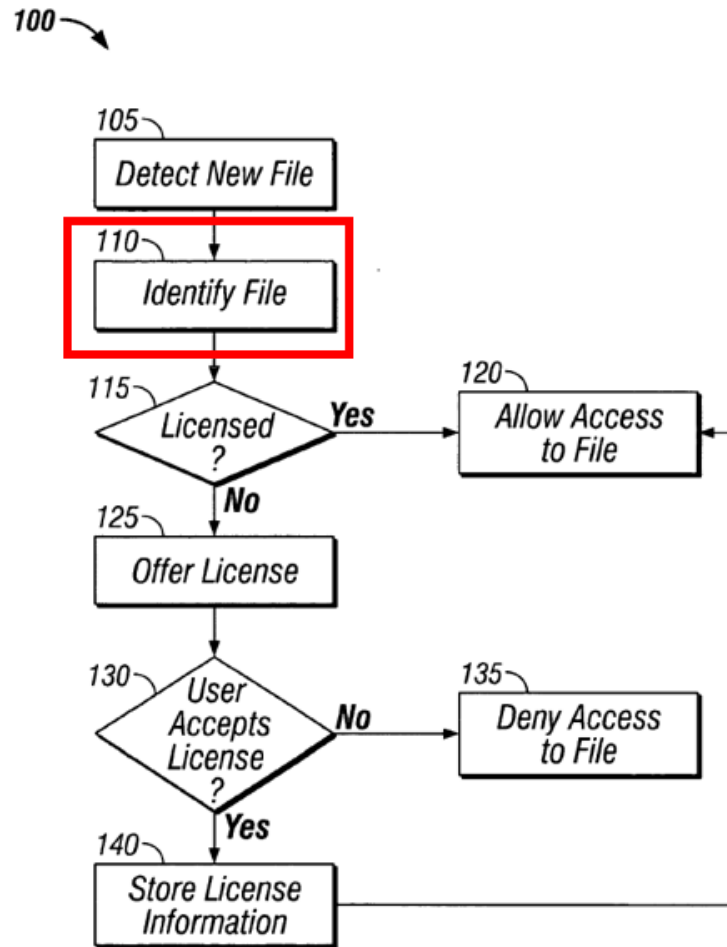


FIG. 1

EX1005, FIG. 1 (annotated).

The extracted “digital fingerprint” embodies the “internal attributes” of the file and can be compared to other fingerprints in “a database of known works.”

EX1005, ¶¶13, 51, 54, 82. Pou makes clear that its fingerprints are based on

“*implicit characteristics*” of a media content item, and thus “allow[s] for accurate identification of the file *even if someone has attempted to disguise the file* (e.g.,

by changing the file name, extensions, or other attributes).” *Id.*, ¶¶53-54.

Therefore, Pou’s fingerprints identify a unique characteristic of the media content item. EX1002, ¶¶251-56.

Pou’s fingerprint also identify a unique characteristic based on when the content was created and is not dependent on any encoding during any mastering of the content. *Id.* For this limitation, the ’560 patent describes an “inherently present” media characteristic as distinguishing between different versions of the same content, such as between a “live version and a studio version” of a song. EX1001, 4:23-40, 9:17-24. Pou incorporates another reference which also states that fingerprints can be used with other information to “differentiat[e] ***between [a] live and studio version[] of the same song.***” EX1063, ¶46; EX1005, ¶¶53-54.

Thus, Pou’s fingerprints similarly disclose the same unique feature captured during creation and lack of dependency on any encoding during mastering. EX1002, ¶256.

Claim 6 additionally recites, in [6B], that determining whether to grant a user’s requests is based on a “media content record” stored in a “media catalog database.” Peled-Pou discloses accessing a “media catalog database” to identify a “media content record” to identify requested media content. EX1001, 10:39-64. Pou’s identification of licensing rights for specific media discloses this same content identification. Therefore, Pou’s “central license database” discloses the

claimed “media catalog database” containing a “media content record.” EX1002, ¶¶257-58. Pou’s central license database includes digital fingerprints and UFIDs identifying different digital files. EX1005, ¶¶43, 51-52, 65, 99. Pou describes searching the central database using the UFID and “matching the identified file with its unique file ID stored at the central database.” *Id.*, ¶¶43, 51-52, 83, 99-100. This allows Pou to identify media and make the license determination recited in [6B] and [1B]. Thus, the UFIDs/fingerprints disclose the “media content record.” EX1002, ¶¶257-58; EX1005, ¶¶54, 83, 100. Likewise, as explained above with regard to claim 1, Pou’s central license database is the “license database” recited in [6E]. Section VI.D.6; EX1002, ¶¶257-58.

F. Claim 11.

Independent claim 11 claims a “system” that performs substantially the same method recited in claim 1. Thus, Peled-Pou renders claim 11 obvious for the reasons presented in claim 1, and as further explained below. EX1002, ¶¶259-62.

[11P]	Section VI.D.1 ([1P]). <i>See also</i> below.
[11A]	Section VI.D.2 ([1A]).
[11B]	Section VI.D.3 ([1B]).
[11C]	Section VI.D.4 ([1C]).
[11D]	Section VI.D.5 ([1D]).
[11E]	Section VI.D.6 ([1E]).
[11F]	Section VI.D.7 ([1F]).

Claim 11 additionally recites a “processor” and “memory,” but these are not patentably distinct features. Regarding the “processor”, Peled-Pou discloses

processors/memory configured to perform the method steps described in claim 1. EX1003, ¶¶62-63, 69, 74, Claims 33-34, 40, 45, 130-31, 137, 142; EX1005, ¶¶26, 57, 112-14, Claims 74, 78-80, 82-86, 89, 92, 95-96, 98-101, 104-05, 107-08, 111, 113-16; EX1002, ¶¶260-61. Regarding the “memory,” a POSA would have also found it obvious for Peled-Pou to also include memory to provide instructions to the processor. EX1002, ¶¶260-61. As Pou explains, processors generally “receive instructions and data from a read-only memory.” EX1005, ¶113.

G. Claim 16.

Claim 16 likewise recites a “system” that performs substantially the same method recited in claim 6, except that its preamble focuses on a “media content licensing and verification system,” which is not patentably distinct. Thus, Peled-Pou renders claim 16 obvious for the reasons presented in claims 1 and 6, and as further explained below. EX1002, ¶¶263-69.

[16P]	Sections VI.D.1, VI.E ([1P], [6P]).
[16A.1]	Sections VI.D.2, VI.E ([1A], [6A]).
[16A.2]	Section VI.F ([11P]).
[16B]	Sections VI.D.3, VI.E-F ([1B], [6B], [11B]).
[16C]	Sections VI.D.4, VI.E-F ([1C], [6C], [11C]).
[16D]	Sections VI.D.5, VI.E-F ([1D], [6D], [11D]).
[16E]	Sections VI.D.6, VI.E-F ([1E], [6E], [11E]).
[16F]	Sections VI.D.7, VI.E-F ([1F], [6F], [11F]).

Claim 16 additionally recites a “receiver,” a “processor,” and “memory,” but these are not patentably distinct features. Regarding the “receiver,” Peled-Pou

discloses transmitting and receiving communications over the Internet and therefore discloses transmitters/receivers that would facilitate such communications. EX1002, ¶¶264-68. Peled's Figure 6 depicts "network interactive distribution auxiliary apparatus 20" performing bi-directional communications over "network 22." EX1003, ¶¶166-67; *see also* EX1003, ¶¶157-58, 173, 197. Apparatus 20 therefore uses a transmitter/receiver to facilitate these communications. EX1002, ¶¶264-68.

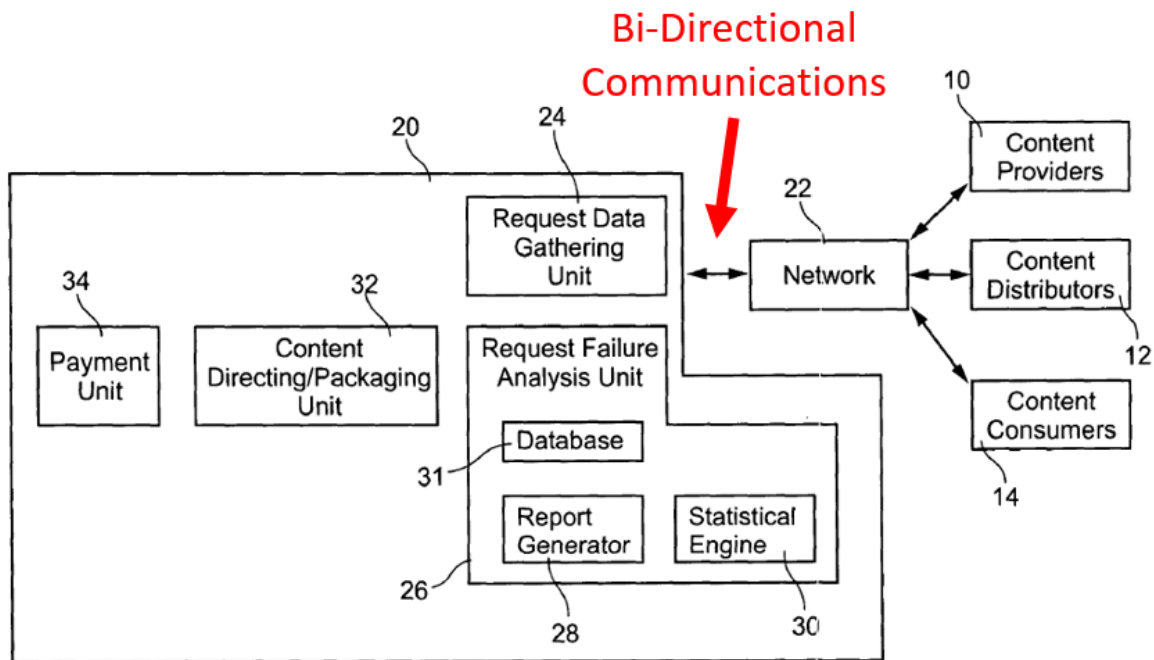


Fig. 6

EX1003, FIG. 6 (annotated).

Pou also describes "central server 240" facilitating bi-directional communications with "user device 205." EX1003, ¶59.

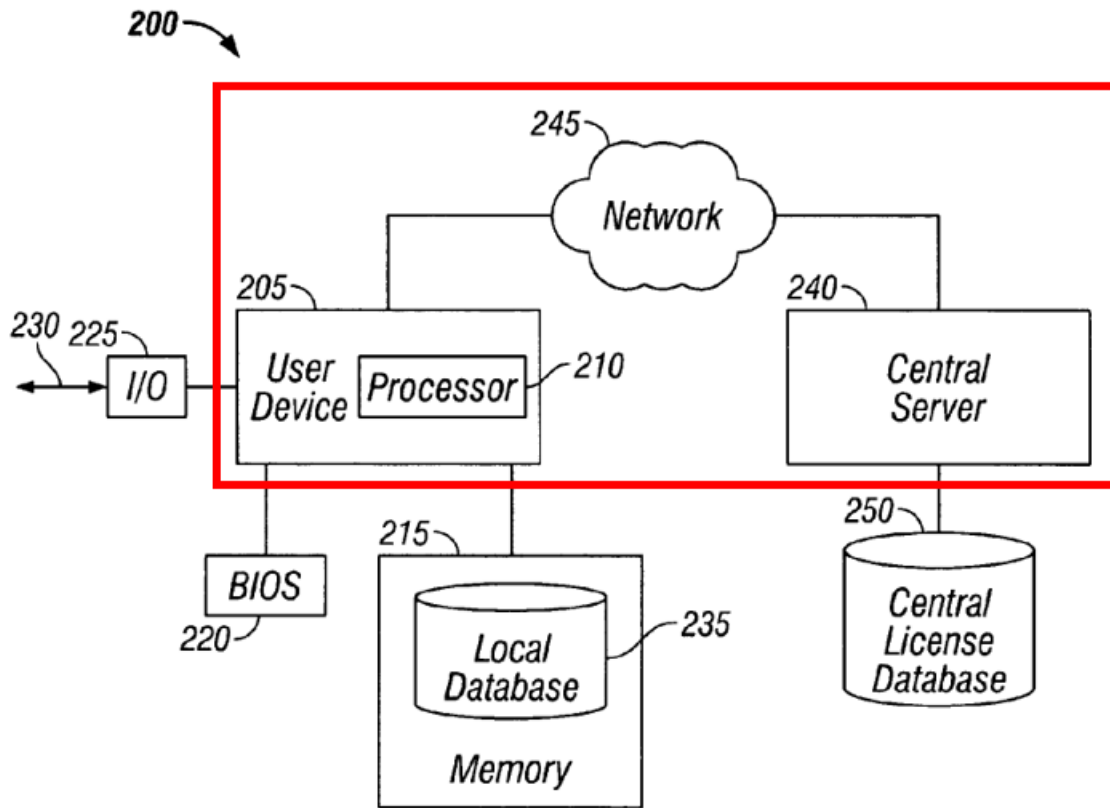


FIG. 2

EX1005, FIG. 2.

Pou describes communications over a wireless network or the Internet.

EX1003, ¶59. Thus, both Peled and Pou describe servers with receivers to receive communications from user devices. EX1002, ¶¶264-68.

Regarding the “processor” and “memory,” Peled and Pou disclose server processors configured to perform the method steps. EX1003, ¶¶62-63, 69, 74, Claims 33-34, 40, 45, 130-31, 137, 142; EX1005, ¶¶26, 57, 112-14, Claims 74, 78-

80, 82-86, 89, 92, 95-96, 98-101, 104-05, 107-08, 111, 113-16; EX1002, ¶269. A POSA would have understood Peled's server to include memory to execute Peled's functionality. EX1002, ¶269. Pou explicitly recites such a configuration with its central server including memory like a "central license database" 250 and explains that processors commonly include memory to provide instructions for execution. EX1005, ¶¶59, 62, 113, FIG. 2.

H. Claims 2 and 12 (receiving a license to [reproduce/stream] the media content from a licensing system when the request is granted, and "preventing streaming... when the request is declined").

Pou updates its local or central database when a user has purchased a license to a media file. EX1005, ¶¶11, 13, 17, 56, 77-79, 85, 101. If purchased, the user device receives and stores the license. *Id.*, ¶¶25-27, 56, 101; EX1002, ¶¶270-78. In this case, the user is permitted to reproduce or stream the content. EX1005, ¶¶56, 79; EX1002, ¶¶270-78.

Pou prevents streaming when the licensing request is declined; for example, when "no payment method offered is validated. EX1005, ¶80; EX1002, ¶¶274-78. Peled also describes declining a request to obtain a license based on business rules as well as to prevent fraud. EX1003, ¶¶175, 187; EX1002, ¶¶274-78.

I. Claims 3 and 13 (“plurality of [reproduction/streaming] parameters”).

The claimed reproduction/streaming parameters refer to the terms of a license. EX1002, ¶¶279-85. Peled-Pou discloses such reproduction/streaming parameters. Peled describes packaging content with “additional advertising content” that may affect the price of a license. EX1003, ¶¶158, 177. Peled also offers a “lower resolution or edited versions of the movie” to reduce costs. *Id.*, ¶158; *see also id.*, ¶¶175-76 (“Italian subtitles” and age restrictions). These examples show Peled reproducing content based on different reproduction parameters. EX1002, ¶¶279-82.

Pou similarly describes “distribution limitations” and “license terms, such as duration, use and distribution limitations” set forth in a license that control reproduction. EX1005, ¶56. Pou also discloses “temporary licenses” with an “expiration date/time.” *Id.*, ¶96; *see also id.*, ¶44, 65, 83, 103-111. Pou’s duration and use license terms also disclose the claimed reproduction/streaming parameters. EX1002, ¶¶283-85.

J. Claims 4, 9, 14, and 18 (storing in the license database the user data so that it is “accessible to a third party online media retailer”).

Claims 4, 9, 14, and 18 are nearly identical and refer to allowing a “third party online media retailer” to access the stored user data. EX1002, EX1002, ¶286.

Peled explains that “profiles of individual consumers or groups of consumers”—which include “geographical factors” and “personal data of the individual consumers”—are stored in a “database” 31 located on Peled’s server-based apparatus. EX1003, FIG. 6, ¶169; Section VI.D.4-7. Peled states that the database stores “personal data of a statistically constructed group of consumers.” EX1003, ¶169. As previously explained, Peled provides access to this data to “content distributors” which disclose the claimed “third party online media retailer.” EX1003, ¶¶166, 183; EX1002, EX1002, ¶¶287-91. A POSA would have understood that the third-party online media retailers are those that have been selected by the copyright owner to distribute the media content item. Indeed, copyright owners—by definition—have exclusive rights to distribute their content. EX1003, ¶183; EX1002, ¶¶287-91.

K. Claims 5 and 19 (“geographic location”).

Peled discloses tracking geographic location information as part of the stored demographic user data. See Sections VI.D.4-5; EX1003, ¶¶56, 74, 169, 176, 186, 196; EX1002, ¶¶292-93. Peled also enables a content provider (i.e., “copyright owner”) to gauge the geographic location as well. See Sections VI.D.4-5.

L. Claim 7 and 17 (generating and storing a “license record in a registered user database”).

Peled-Pou discloses storing license information corresponding to different users and granting licenses to user devices attempting to reproduce content. *See* Sections VI.D.3, VI.D.6. Peled-Pou also disclose generating and storing license records in a registered user database. EX1002, ¶¶294-97. Pou stores user license information for “individual users” in a local database and/or a central database, which discloses the claimed generation and storage of a “license record.” EX1005, ¶¶27, 55, 59, 85, 101; Section VI.D.4.

Peled-Pou also track “registered” users and storing records in a “registered user database.” EX1002, ¶¶298-302. Peled tracks user identification and purchase habits via a “cookie” or a user “logging in” with registered user credentials. EX1003, ¶¶177, 187, 194. Pou also describes a central server identifying a user based on user login credentials. EX1005, ¶¶91, 96.

M. Claim 8 (“fingerprint”).

Pou discloses digital media information including a “fingerprint” associated with the media content item. *See* Section VI.D.3, VI.D.6, VI.E; EX1005, ¶¶13, 51-52, 54, 82; EX1002, ¶¶303-07.

N. Claim 10 (user data includes “additional media content items” previously accessed).

Peled discloses tracking additional media content items that a user has previously accessed via a consumer’s previous purchase history. EX1003, ¶177; *see also id.*, ¶¶162, 169, 181, 200; EX1002, ¶¶308-09. The user’s previous purchase “history” refers to “additional media content items” as claimed. EX1002, ¶¶308-09.

VII. GROUND 2: CLAIM 15 IS OBVIOUS OVER PELED, POU, AND BRANDSTETTER.

Dependent claim 15 requires the additional feature of tracking “a quantity of times that the user has previously accessed the media content item and additional media content items.” Brandstetter discloses this feature. EX1004, ¶¶147, 173; Section VIII.A. For example, this occurs where Brandstetter implements a “play n-number of times licensing package.” *Id.*; EX1002, ¶¶310-13; *see also* Section VIII.A.

A POSA would have been motivated to combine Brandstetter with Peled and Pou to provide additional accuracy for Peled’s user demographic data and to provide a rental option that tracks a number of plays. EX1003, ¶169; EX1002, ¶313. For example, tracking the number of times a user has previously accessed a content item may aid Peled’s system when offering alternative content to a user. EX1002, ¶313; EX1003, ¶177. Also, Brandstetter’s rental option may be offered

for a lower price and be provided when a consumer has “shown a willingness to purchase at a given lower price” as explained in Peled. EX1002, ¶313; EX1003, ¶177; EX1004, ¶¶75, 120. Implementing Brandstetter’s tracking would provide rental functionality for offering content and also provide additional accuracy for Peled’s user demographic data. EX1002, ¶313. Peled-Pou-Brandstetter thus renders claim 15 obvious.

VIII. GROUND 3: CLAIMS 1-19 ARE OBVIOUS OVER BRANDSTETTER-LEVY.

Brandstetter-Levy discloses every element of independent claims 1, 6, 11, and 16, which are materially identical. Brandstetter discloses the alleged point of novelty (i.e., gathering demographic data when users accept or decline content license offers). Levy discloses many of the claimed conventional content identification techniques recited in the claims as well. Brandstetter and Levy both describe the management of content licenses. EX1002, ¶¶314-499.

A. Overview of Brandstetter

Brandstetter also discloses an online platform where content creators can market and distribute digital content. EX1004, Abstract, ¶¶69, 118. FIG. 1C depicts Brandstetter’s platform. The platform includes a central server 101 communicating with user client devices 111 via the Internet 121. *Id.*, ¶¶91, 109.

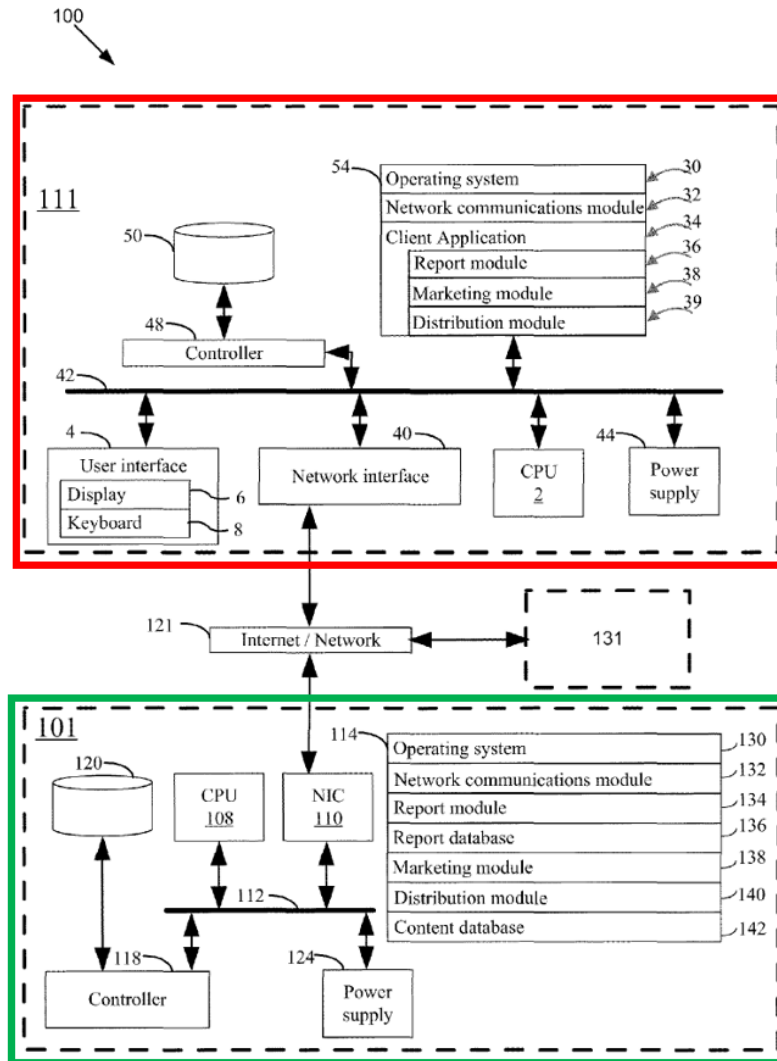


FIG. 1C

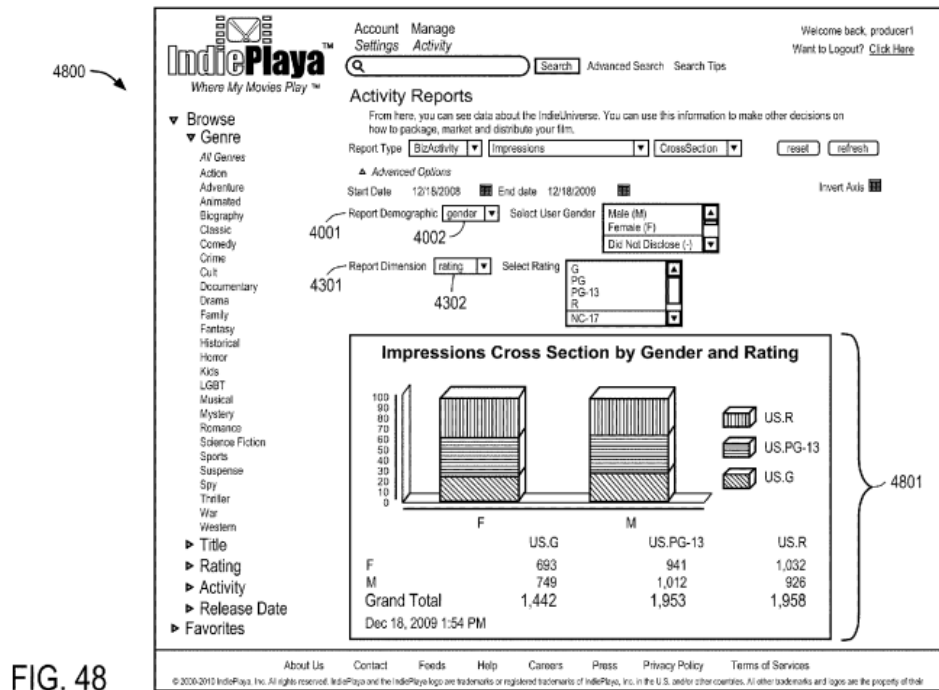
EX1004, FIG. 1C (annotated).

Brandstetter's platform licenses and distributes digital media content to a user. EX1002, ¶¶116-28. Distribution module 140 provides the content "in accordance with digital rights management constraints defined by the content

creator.” EX1004, ¶98. A user can purchase a license to rent or download content. *Id.*, ¶¶77, 120, 126, 173.

Brandstetter also includes a report module 134 that “collects information about user activity with respect to media content on the platform.” *Id.*, ¶¶71, 83, 96. This includes “user demographics (e.g., ages, geographical locations, ethnicities, genders),” as well as media characteristics and how users interacted with media content. *Id.*, ¶¶65, 71. Brandstetter also tracks user “activity up to and including a purchase” so that, “even if a purchase is not made, data related to audience interaction with content on the website can be indexed and used for later analysis.” *Id.*, ¶130; EX1002, ¶¶117-20.

Brandstetter stores this user data and uses it to generate activity reports. EX1004, ¶¶71, 96, 130. Any party with the right to market or distribute the content can request an activity report for one or more content items. *Id.*, ¶¶73, 84, 96. Activity reports statistically summarize how different users perceive a particular media content item and are compiled from aggregated demographic and platform activity data. *Id.*, ¶¶8, 65, 78, 133, 172. Figure 48 provides an example. EX1002, ¶¶124-28.



EX1004, FIG. 48.

The report in Figure 48 summarizes user impressions by gender, but the reports can be generated according to other demographic parameters, such as user location. EX1004, ¶¶173-74, 179. After receipt, content providers can analyze the report to inform marketing decisions. *Id.*, ¶¶73, 75-76, 80, 85-86, 97. Thus, Brandstetter “enable[s] content creators to efficiently market and distribute their content to a target audience.” *Id.*, ¶6; EX1002, ¶¶124-28.

B. Overview of Levy

Levy describes “integrating content identifiers with digital rights management systems.” EX1006, ¶¶3, 5-6, 10, 17; EX1002, ¶¶136-47. To manage digital rights, Levy describes a “Media Server” user device, which may be a “cell

phone, MP3 player, iPod® and personal computer[]” that includes “Client Player Application” software for playing content. EX1006, ¶¶83-84. Levy depicts a method for authenticating content usage rights in Figure 17d. *See also id.*, FIG. 17a.

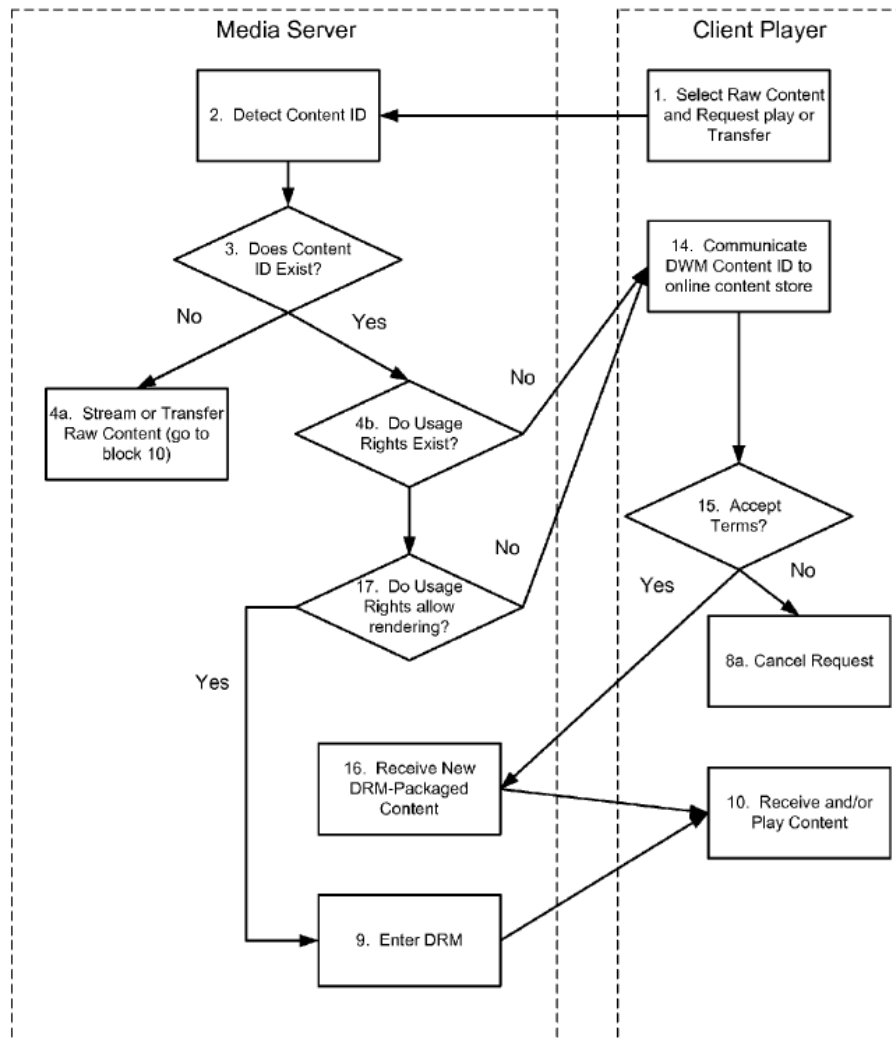


Fig. 17d

EX1006, FIG. 17d.

When a “user selects raw content for playing,” the Media Server identifies a corresponding digital watermark (DWM) Content ID. EX1006, ¶108. “Raw content” includes files downloaded from a Peer-to-Peer (P2P) network or ripped from CDs. *Id.*, ¶107. The DWM Content ID may be a “fingerprint” and may be extracted using a fingerprinting algorithm. *Id.*, Abstract, ¶¶140-42, Claims 19, 23, 26, 33, 39. A “fingerprint (e.g., a hash, derived signature or reduce-bit representation of content)” allows Levy’s system to “uniquely identify” media content. *Id.*, ¶140. Levy’s Media Server “calculates or derives a fingerprint of content” and uses the fingerprint to identify corresponding “Usage Rights.” *Id.* “Usage Rights” refers to a “License” and defines the conditions for playing the media content. *Id.*, ¶87.

Levy’s Media Server identifies Usage Rights from a “Rights Registry” database that may be local to or remote from the Media Server. *Id.*, ¶¶90, 97-98. As seen in Figure 17d, Levy determines whether Usage Rights exist that allow playing of the media. *Id.*, ¶115. “If not, the Media Server is directed to an online content store.” *Id.* The online store then presents an offer for the user to purchase a license to the content. *Id.*, ¶112. “The user can accept or reject the Usage Rights.” *Id.*, ¶110. If the user declines, the Client Player Application “prohibits access” to the file. *Id.* If the user accepts, “the content is played.” *Id.*

C. A POSA Would Have Combined Brandstetter and Levy.

1. A POSA would have been motivated to improve Brandstetter's content licensing platform with Levy's content identification and fingerprinting framework.

A POSA would have been motivated to combine Brandstetter with Levy to (1) provide an efficient mechanism for tracking purchased licenses, and (2) confirm adherence to license terms for downloaded media files. EX1002, ¶¶315-26. For example, a POSA would have known that Levy's "Usage Rights" via "Content ID" or "fingerprint" features are the kind of tracking techniques that would aid in the management and control of purchased licenses and downloaded media. EX1006, ¶¶85, 87, 97, 112-13, 140-42; EX1002, ¶¶315-22.

First, combining Brandstetter and Levy would have resulted in a system that efficiently tracks purchased licenses. Brandstetter tracks user purchase history and indexing all "audience interaction" with Brandstetter's platform. EX1004, ¶¶5-9, 130, FIGs. 27-44. For example, Brandstetter describes tracking user license purchases via active rentals and a download history, an example of which is illustrated in Figure 28 below. *See id.*, FIGs. 26-29, ¶166.

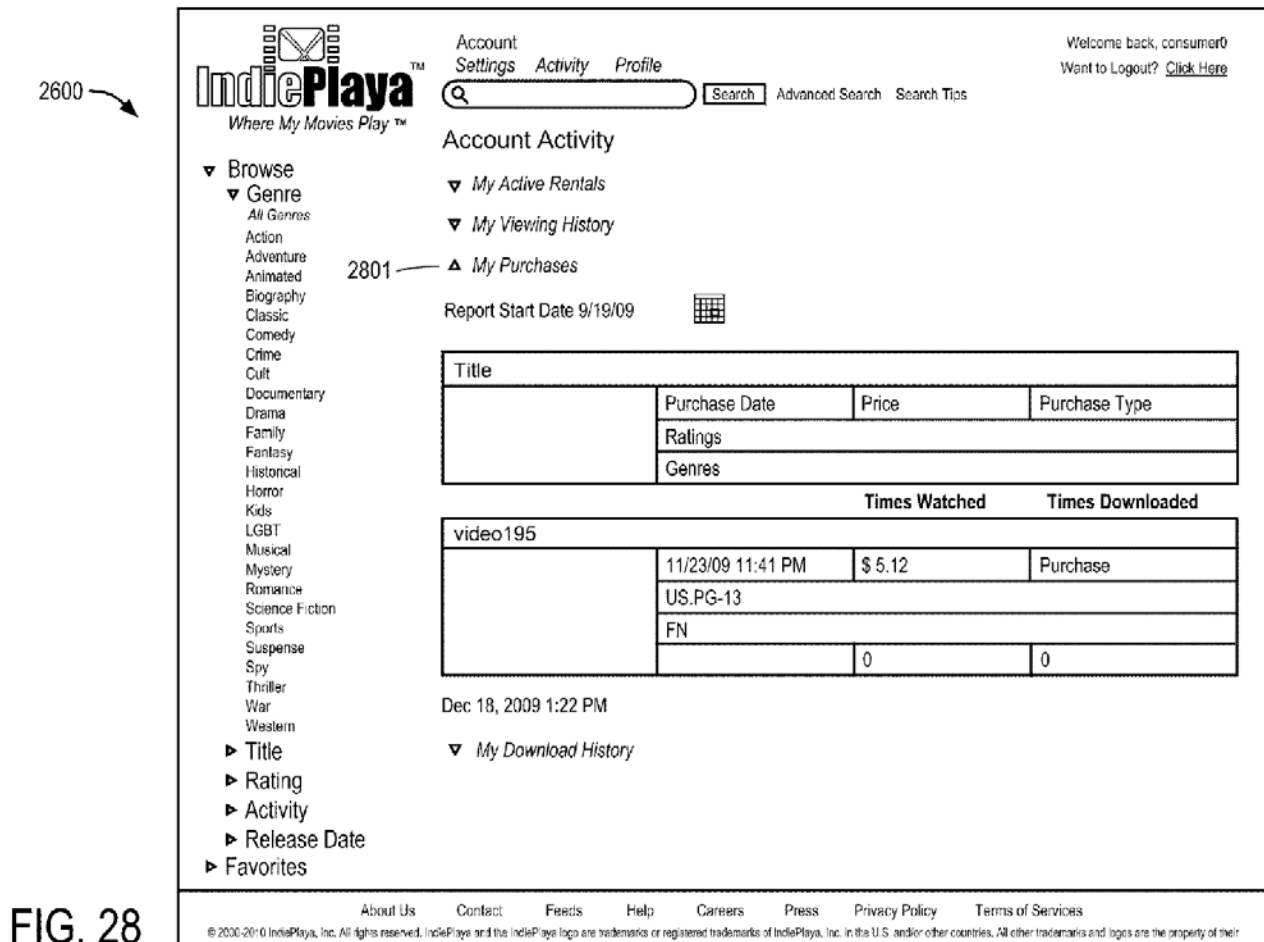


FIG. 28

EX1004, FIG. 28.

Brandstetter uniquely identifies the content using a “globally constant description.” EX1004, ¶118. And this tracking helps with “marketing and distribution strategies for media content.” *Id.*, ¶¶7, 66; EX1002, ¶322. A common way to uniquely track purchased media content would be using a unique content identifier. EX1002, ¶322. Levy explicitly recites such techniques, including the use of watermarks and digital fingerprints (e.g., “Content ID”). EX1006, ¶¶10, 14, 58-66; 85, 140. A POSA would have been motivated to combine these techniques with

Brandstetter to efficiently track user purchases and identify previously obtained media content. EX1006, ¶¶58-66; EX1002, ¶¶315-22. A fingerprint is a compact, “reduce-bit representation of content” and therefore provides fast and computationally efficient comparisons. EX1006, ¶142; EX1002, ¶317.

Brandstetter-Levy would track licenses on a server platform as well as media files local to client devices using such fingerprints. EX1004, ¶¶77, 125, 145, 166, 169, 173; EX1002, ¶¶315-22.

Levy’s techniques would even allow Brandstetter’s platform to distinguish between different versions of content using Content IDs and/or fingerprints rather than the full versions themselves. *See* EX1006, ¶142; EX1004, ¶6. Thus, implementing Levy’s unique Content ID or fingerprinting would provide an efficient mechanism for organizing purchased licenses. EX1002, ¶322.

Second, combining Levy with Brandstetter would aid in confirming adherence to license terms for downloaded media files. EX1002, ¶¶323-26. While Brandstetter offers licenses to download, a POSA would have recognized that content creators would not want licensees to freely distribute downloaded files due to revenue stream harms. EX1002, ¶¶323-26; EX1006, ¶¶13, 66; EX1004, ¶¶4-5, 77, 125, 145, 166. Combining Levy’s Content ID or fingerprint checking to control access via Usage Rights would help to prevent unauthorized access to media

content. EX1002, ¶¶323-26; EX1006, ¶¶106-114. A POSA would have been motivated to implement such control with Brandstetter to prevent the unauthorized distribution of downloaded media content items and to further allow content creators to secure revenue streams. EX1004, ¶¶4-5; EX1002, ¶¶316-26.

2. A POSA would have known how to combine Brandstetter and Levy and would have had a reasonable expectation of success.

A POSA would have known how to combine Brandstetter and Levy and would have had a reasonable expectation of success. EX1002, ¶¶327-29. A POSA would have implemented Levy's purchase and license tracking and fingerprinting and DWM techniques with Brandstetter to distribute licensed content. EX1005, ¶¶56-73, 76-79. The combined system would manage different rentals and/or purchases and control downloaded content. *See* Section VIII.C.1; EX1002, ¶¶327-29; EX1004, ¶¶77, 125, 145, 166, 169, 173.

Both Brandstetter and Levy describe conventional server systems for managing digital media files. EX1004, ¶¶90-101; EX1006, ¶¶17, 49-57. A POSA would have therefore combined them using well-known computer programming techniques. EX1002, ¶329. Combining Brandstetter and Levy would have thus amounted to nothing more than combining known prior art elements according to known methods to yield predictable results and applying a known technique to a known device ready for improvement to yield predictable results. *Id.*

D. Brandstetter-Levy Discloses Claim 1.

1. [1P].

To the extent the preamble is limiting, Brandstetter provides a “platform ... by which a plurality of content providers can market and distribute media content to users.” EX1004, ¶¶6-10. Brandstetter’s “client device 111” discloses the claimed “multimedia hardware device.” EX1004, ¶¶91, 92, 102-110, FIG. 1C; EX1002, ¶¶330-47.

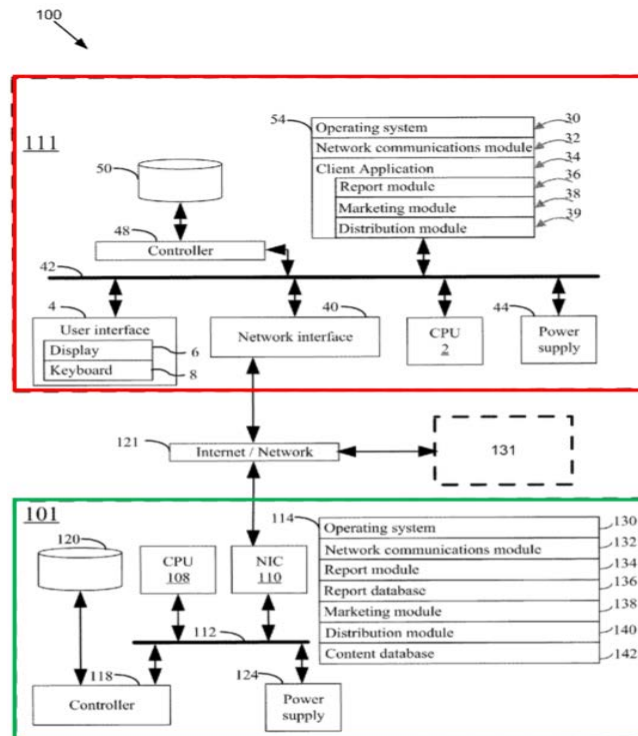
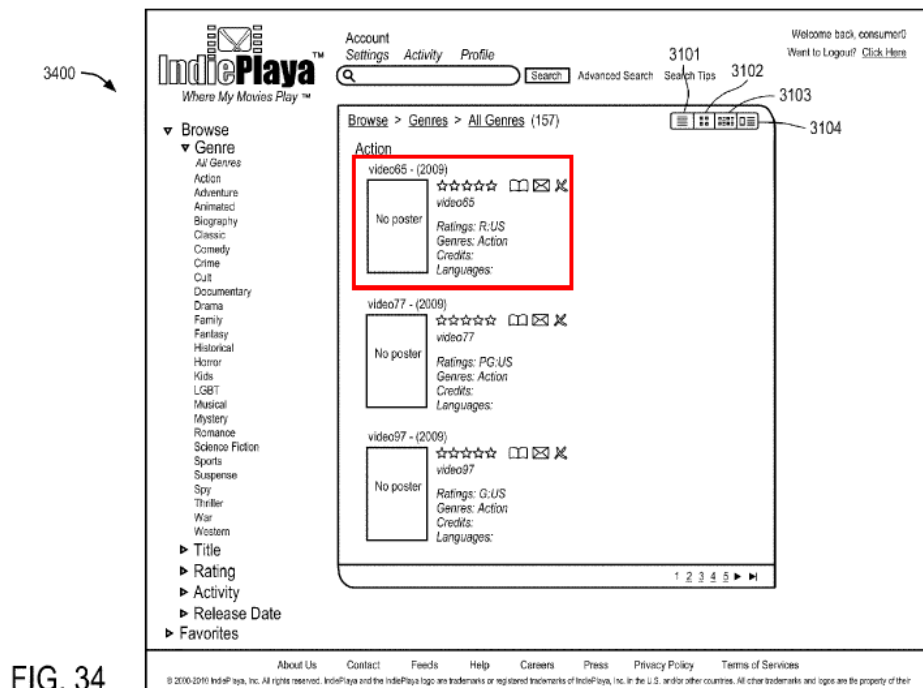


FIG. 1C

EX1004, FIG. 1C (annotated).

Server 101 distributes media content to the “user’s computer” client device 111 over the Internet or network 121. EX1004, ¶¶69, 90-109. This distribution

includes streaming a media content item included in a digital media file. EX1002, ¶¶330-34; EX1004, ¶¶7, 67, 69, 118, 173, FIG. 2. For example, Brandstetter offers allowing a user to “stream [a] film as often as [they] like.” EX1004, FIGS. 16, 19; *see also id.*, FIG. 35A. Brandstetter provides these content items when a license is purchased and therefore discloses generating authorized reproductions. EX1002, ¶¶330-38; EX1004, ¶¶93-99. Brandstetter also streams content, which also discloses reproducing media content items. EX1004, ¶¶69, 173, FIG.2. Figure 34 depicts digital media files that may be streamed or downloaded upon acquiring a license. *Id.*, ¶¶71, 75, 77, 125, 145, 166, 169, 173, FIG. 29; EX1002, ¶¶339-41.



EX1004, FIG. 34 (annotated).

Accordingly, Brandstetter's client devices are configured to stream media content items. EX1002, ¶¶330-41.

As explained above, the context of claim 1 suggests that at least some of its limitations recited below would be practiced by the licensing system on the server. Section VI.D.1. Regardless, a POSA would have found it obvious that each of the claim steps could be performed either on Brandstetter's server or its client devices. Brandstetter explains that "there may be little or no difference between the architecture of the serving devices and the client devices," and that "other embodiments that do not make use of a client-server architecture are possible." EX1004, ¶72; EX1002, ¶¶342-47.

2. [1A] "receiving a request from a user to stream the media content item."

Brandstetter discloses receiving a request from a user to stream content. EX1004, ¶173; EX1002, ¶¶348-49. Brandstetter describes a "distribution module" at a server that "receives user requests for distribution of items of media content." EX1004, ¶98; EX1002, ¶¶348-49. Brandstetter states that its users can make "requests" for media content using their client devices. EX1004, Abstract, ¶¶6, 10, 66, 69, 71, 75, 77, 78-79, 81, 91, 98, 141-147, FIG. 48; EX1002, ¶¶348-49. As previously explained, these may be requests to stream content based on the user

purchasing a license to “stream the film as often as the[y] like.” *Id.*, FIG. 16, 18-19, FIG. 35A; EX1002, ¶¶348-49.

3. [1B] “evaluating the request to stream to determine whether the user has acquired a license ...and offering the license ... when the user does not have the license to stream the media content item.”

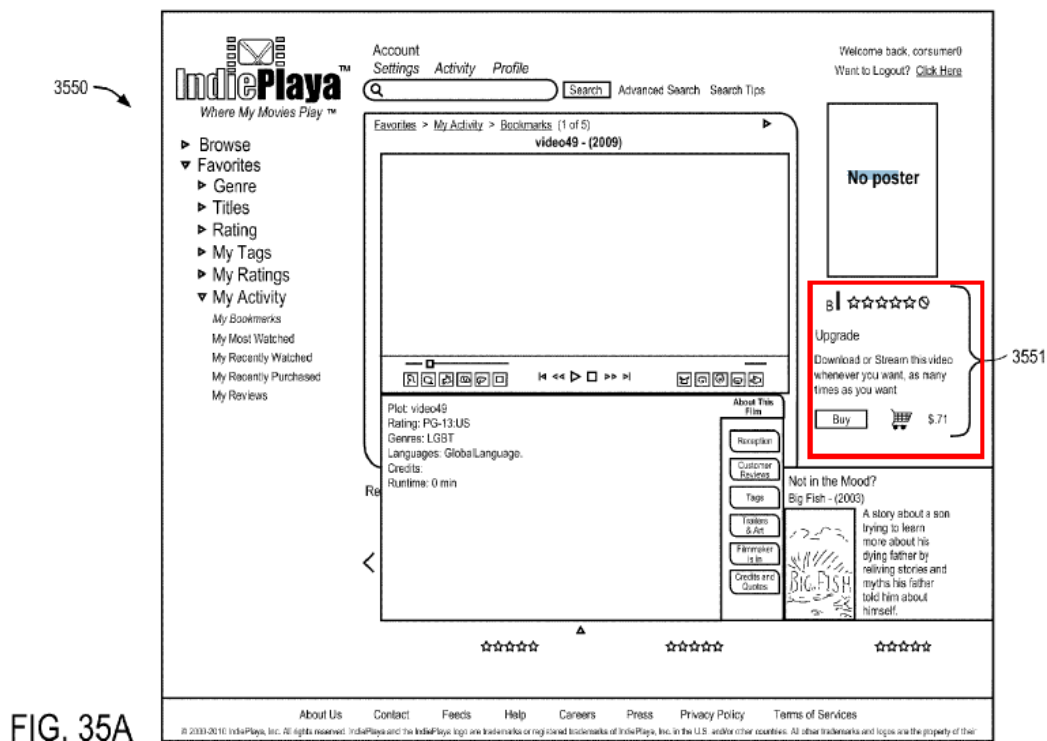
Brandstetter evaluates whether a user has already acquired a license when evaluating different rental packages. EX1004, ¶147. For example, in an unlimited rental package, a licensee “can play the content any number of times desired within a period of time.” *Id.* In another “play n-number of times licensing package,” the user “can only play the content n number of times.” *Id.*, ¶147. To track an active rental time period or a number of times played, Brandstetter would have evaluated the license transaction to determine a user’s usage rights. EX1002, ¶¶357-61.

Brandstetter also performs this evaluation when a user is permitted to stream content (e.g., when a consumer is allowed to “stream [a] film as often as they like for 168 hours after the film has started.”). EX1004, FIG. 16, 18-19, 26, 28, FIG. 35A.

Brandstetter also evaluates existing user rights to determine whether the user has acquired a license to stream content when providing dynamic offers to the (e.g., up-sell, cross-sell) to the user. *See*, EX1004, ¶¶4, 75, 77, 87, 120-24, 130 FIG. 16, 18-19, FIG. 35A; EX1002, ¶¶350-60. For example, Brandstetter identifies

previously acquired licenses and offers an upgrade based on this evaluation (“up-sell”). EX1004, ¶¶75, 87, 119-126; EX1002, ¶¶350-60.

If the user is not licensed, Brandstetter offers a license to reproduce the media content item. For example, Brandstetter offers an up-sell option to obtain an upgraded license as depicted in FIG. 35A. *See id.* ¶¶119-126.



EX1004, FIG. 35A (annotated).

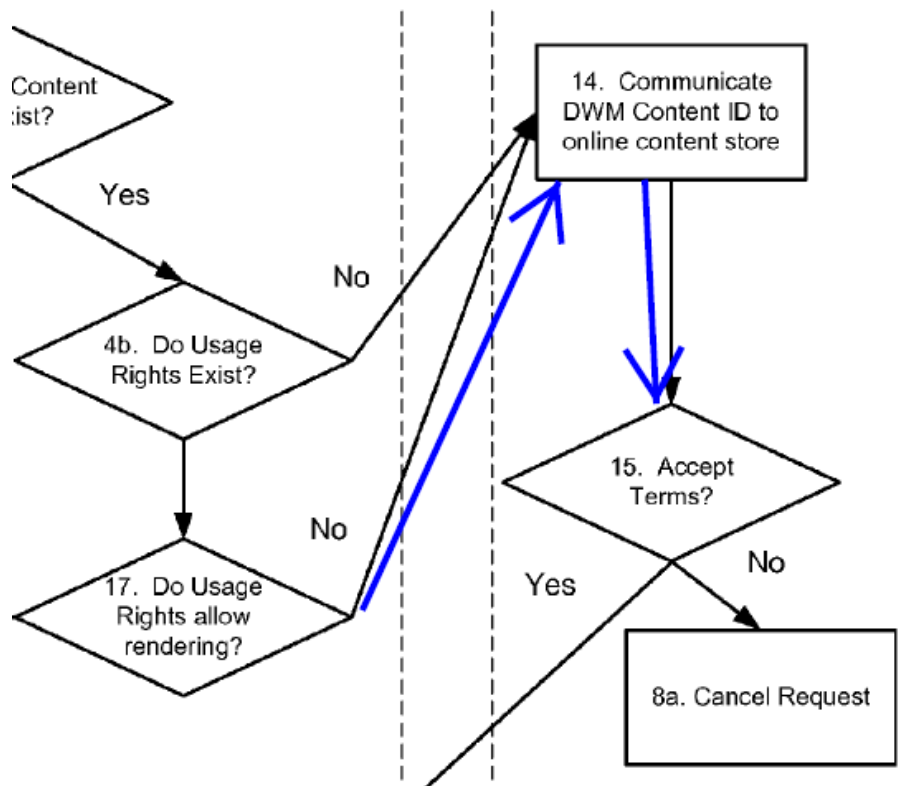
Levy also evaluates the license transaction to determine whether the user has acquired a license. Levy uses a “Content ID” or “fingerprint” to determine whether any corresponding “Usage Rights” (i.e., a license) already exist for a user.

EX1006, ¶¶16-17, 85, 87 107, 110, 140-42, 145-46; EX1002, ¶362. Levy’s Media

Server interrogates a “Rights Registry” with a Content ID to “determine whether there are any associated Usage Rights.” EX1006, ¶110. This discloses the claimed “evaluating.” EX1002, ¶362.

When the Media Server does not identify Usage Rights that allow rendering, the Media Server transmits the Content ID to an “online content store.” EX1006, ¶¶109, 112-14, 117, FIG. 17d. The online store performs another check using the Content ID and therefore discloses another instance of the claimed “evaluating.” EX1002, ¶¶363-64.

Levy also discloses offering a license to an unlicensed user. EX1002, ¶¶365-67. Levy’s Media Server “receives the usage rights from the rights registry” and “presents the usage rights for user acceptance.” EX1006, ¶¶17, 110. “The user can accept or reject the Usage Rights” (Step 15 of Figure 17d). EX1006, ¶110. A POSA would have found it obvious to offer this license to multiple users who do not already possess a license. EX1002, ¶¶365-67.



EX1006, FIG. 17d (excerpted, annotated).

A POSA would have implemented Levy's Content ID or fingerprint checking with Brandstetter to provide an efficient way for Brandstetter to organize license information. See Sections VIII.C; EX1002, ¶368. After determining that a license had not been previously acquired, Brandstetter-Levy would offer a license to the user as described in both references. EX1002, ¶368.

4. [1C] “extracting user data that is specific to the user” when the user streams and declines to stream the media content item, “wherein the user data includes demographic data” that enables a third party online retailer to gauge a demographic that streamed the media content item and a demographic that declined to stream that “enables the third party online retailer to target marketing of different media content items” based on a user’s “trend of interest.”

(a) [1C.1] “extracting user data”

Brandstetter records user demographic data when users accept to stream content. EX1004, ¶¶65, 71, 83, 93, 130; EX1002, ¶¶369-76. This includes “ages, geographical locations, ethnicities, [and] genders.” EX1004, ¶71. Brandstetter tracks “all activity up to and *including a purchase*.” *Id.*, ¶130. Brandstetter extracts this user data for “marketing and distributing media content.” *Id.*, ¶¶1-7.

Brandstetter also extracts user demographic data when a user *declines* to stream media content. Brandstetter’s platform collects user-specific data, “*even if a purchase is not made*, data related to audience interaction with content on the website can be indexed and *used for later analysis*” (i.e., in Brandstetter’s activity reports). *Id.*, ¶130.

A user may *implicitly* decline to stream content by viewing the content and then navigating away. EX1002, ¶¶373-76. Alternatively, a user may *explicitly* decline to stream by declining a particular offer provided by Brandstetter’s platform. For example, as shown in Figure 16, a user may select a “rental” license

rather than a “purchase” license, in which case the user affirmatively declines the “purchase” license. EX1004, FIG. 16, ¶¶75, 77, 87, 119, 120, 123-126, 130, 147. Likewise, a user may choose a certain licensing package over another, which will have the effect of affirmatively declining the other package. *Id.*, ¶169. In either case, user data is tracked and extracted to ascertain the demographics of users who “are not interested in” certain media content. *Id.*, ¶¶77, 130, 173; EX1002, ¶¶369-76.

**(b) [1C.2] “user data includes demographic data”
enabling a third party online retailer to gauge a
demographic**

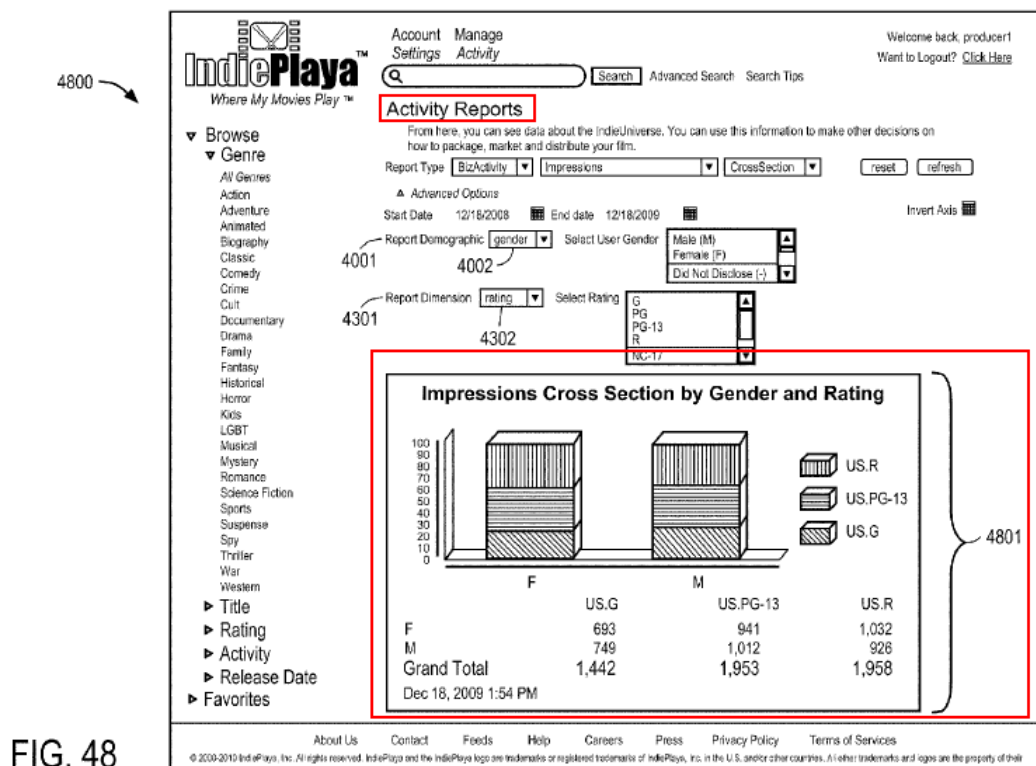
Brandstetter’s platform “collect[s] information about the users (e.g., *their demographics*) and user activity.” EX1004, ¶¶65-66, 75, 83, 130; EX1002, ¶¶377-92. This includes “ages, geographical locations, ethnicities, [and] genders.” EX1004, ¶71. Brandstetter extracts user data for rental and purchase licenses to stream. *Id.*, ¶¶75, 77, 87, 119, 120, 123, 124, 126, FIGs. 16, 19, 35A; EX1002, ¶¶377-87. Brandstetter records and provides this user data to empower content creators (e.g., copyright owner) and “content providers” to market and distribute content. EX1004, ¶¶4-5, 67; EX1002, ¶¶388-92. Brandstetter’s “content provider” discloses the claimed “third party online media retailer” and is “any third party granted the right to market or distribute ... a content creator’s content.” EX1004,

¶¶159-60. Brandstetter also provides activity reports to the content providers. *Id.*, Abstract, ¶¶4-9, 79, 81, 89.

Brandstetter’s “report module 134” summarizes the user demographic data to generate “activity reports.” EX1004, ¶¶65, 96; EX1002, ¶¶379-80.

Brandstetter’s Figures 40-49 illustrate examples of such reports. EX1004, ¶174.

Figure 48 provides an example based on gender. *Id.*, ¶¶65, 174; EX1002, ¶¶388-92.



EX1004, FIG. 48 (annotated).

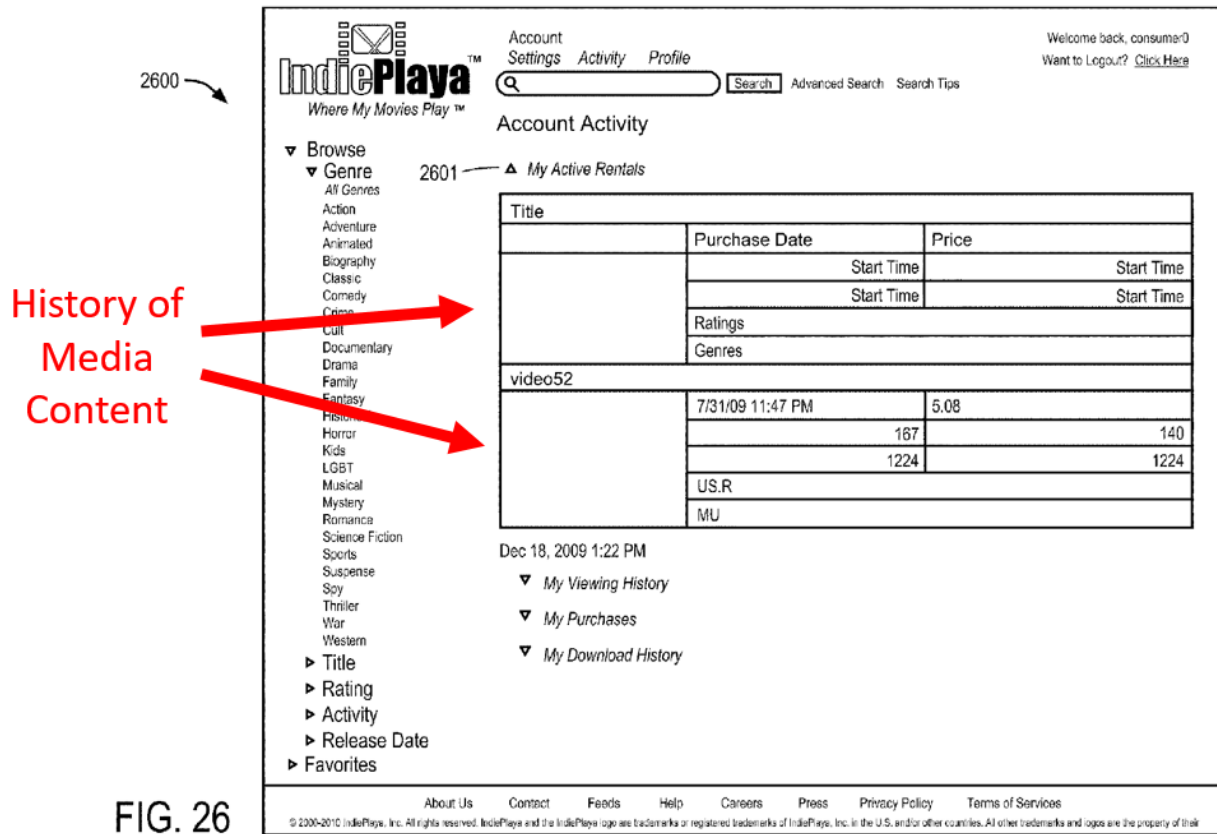
As further explained in Section VIII.D.6-7, Brandstetter’s reports are provided to a “content provider” (i.e., “any third party granted the right to market

or distribute” content), which discloses the claimed “third party online retailer.”

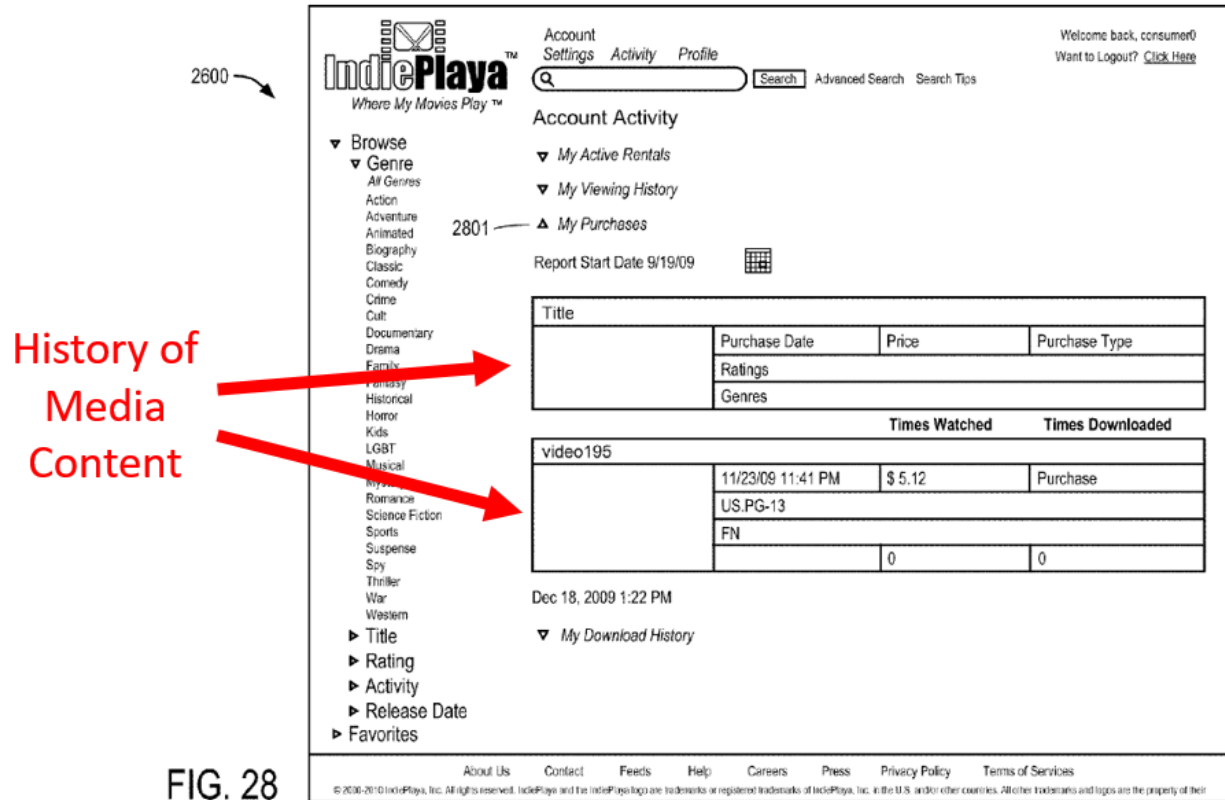
EX1004, ¶¶8-9, 159. By providing the report to content providers, Brandstetter allows the content providers to gauge user demographics based on the summarized user data. *Id.*, ¶¶6, 65, 71, 74, 85, 86, 93, 130, 174-79, FIGs. 40-49; EX1002, ¶¶388-92.

(c) [1C.3] user data includes a “history of media content items” that the user has streamed to allow for targeted marketing

Brandstetter also tracks a user’s history of rentals and purchases as depicted in FIGs. 26 and 28. EX1002, ¶¶393-95. Brandstetter organizes this information based on user accounts and tracks all user interactions including when a user declines to stream content. EX1004, ¶¶71, 130, FIG. 25. Brandstetter uses this information when making content recommendations as discussed below. *See* Section VIII.D.4.d.



EX1004, FIG. 26 (annotated).



EX1004, FIG. 28 (annotated).

(d) [1C.4] marketing media content items based on a determined trend of interest for the user

Based on the tracking of user streaming purchases, Brandstetter identifies a “trend of interest” to target marketing of different media content items. EX1004, ¶¶133-34, 169, 172, FIG. 35. Brandstetter’s “reports can be used by a content creator to examine account histories and to make one or more content recommendations or offers.” *Id.*, ¶172. This “cross-content recommendation” may apply to “a single account or for a group of related accounts.” *Id.*, ¶¶134, 172.

Brandstetter therefore also discloses targeted marketing to a user based on a trend of interest. EX1002, ¶396.

5. [1D] “aggregating the user data into a statistics record.”

Brandstetter describes aggregating data that its platform gathers, including the demographic data described above. EX1004, ¶71; Section VIII.D.4. Such data is used to generate “intelligence” and “*statistics*” for particular users. EX1004, ¶¶132-33, 172. The “intelligence” and/or “statistics” disclose the claimed “statistics records.” Brandstetter uses them to generate activity reports. *Id.*; see Section VIII.D.4; EX1002, ¶¶397-99. As explained above, Brandstetter collects for analysis—and thus aggregates into statistics records—user data both when a user accepts and declines to stream content. EX1004, ¶130.

6. [1E] “storing” the statistics record in a license database “so that the user data is accessible to the third party online retailer.”

Brandstetter stores user activity and demographic data to build statistics and reports for content providers. See Sections VIII.D.4-5. Brandstetter uses the same memory to store report information and to store license data. *Id.*; EX1004, ¶¶92-93, 96, 98; EX1002, ¶¶400-08. Thus, Brandstetter stores the statistics record in a “license database.”

Brandstetter stores these statistics for subsequent retrieval when generating activity reports. EX1004, ¶¶74, 85, 93, 172, FIG. 1C; EX1002, ¶¶400-08. As

depicted in FIG. 1C, “report module 134” within memory 114 collects user data, stores this data in report database 136, and then generates activity reports.”

EX1004, ¶¶65, 93, 96, 100, 131. Brandstetter uses the same memory 114 to store report information and to store license data and therefore stores the statistics record in a “license database.” EX1004, ¶¶92-93, 96, 98; EX1002, ¶¶400-08.

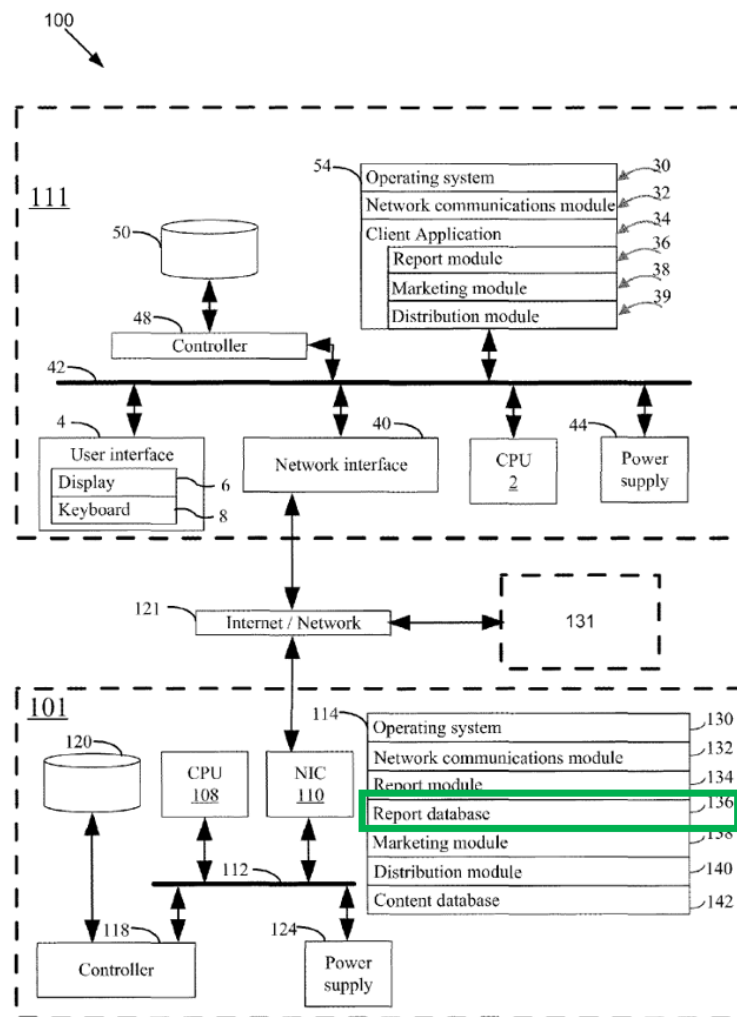


FIG. 1C

EX1004, FIG. 1C (annotated).

Brandstetter’s statistics are used to generate activity reports that summarize the user data. EX1004, ¶¶65, 93; *see* Section VIII.D.4. Those reports, in turn, can be provided to **any** user who requests them, which can include a third-party online retailer. *Id.* ¶93. Brandstetter states that its reports “may be provided to ... content provider[s]” and makes clear that “[a] content provider is **any third party granted the right to market or distribute** (including, without limitation, subdistribution, syndication, and licensing of) a content creator’s content or content-related data.” *Id.*, ¶¶8-9, 159. Brandstetter goes on to make clear that a content provider can comprise a “**sales agent.**” *Id.*, ¶159. A POSA would have understood from this disclosure that Brandstetter’s statistics records are accessible to third-party online retailers—i.e., third parties providing the media content item to be streamed. *Id.*, ¶¶8-9, 10, 91-92, 159, FIG. 1C; EX1002, ¶¶400-08.

7. [1F] “analyzing a plurality of statistics records... to provide the third party online retailer with the aggregated user data.”

Brandstetter’s process leading to the generation of “activity reports” discloses the analysis of a plurality of statistics records. *See* Sections VIII.D.4-6; EX1002, ¶¶409-24. Brandstetter’s “report module 134” analyzes the aggregated data to generate reports and to identify a user demographic for targeted marketing of media content. EX1004, ¶¶6, 73-79, 83, 86, 96-97, 115, 132-33. Brandstetter analyzes the indexed site activity to generate statistics for particular users and to

generate reports for copyright owners. *Id.*, ¶¶6, 8-10, 130, 132-33, 172; EX1002, ¶¶411-14. The reports contain “historical information regarding purchases... *by one or more demographic groups.*” EX1004, ¶6, FIG. 48.

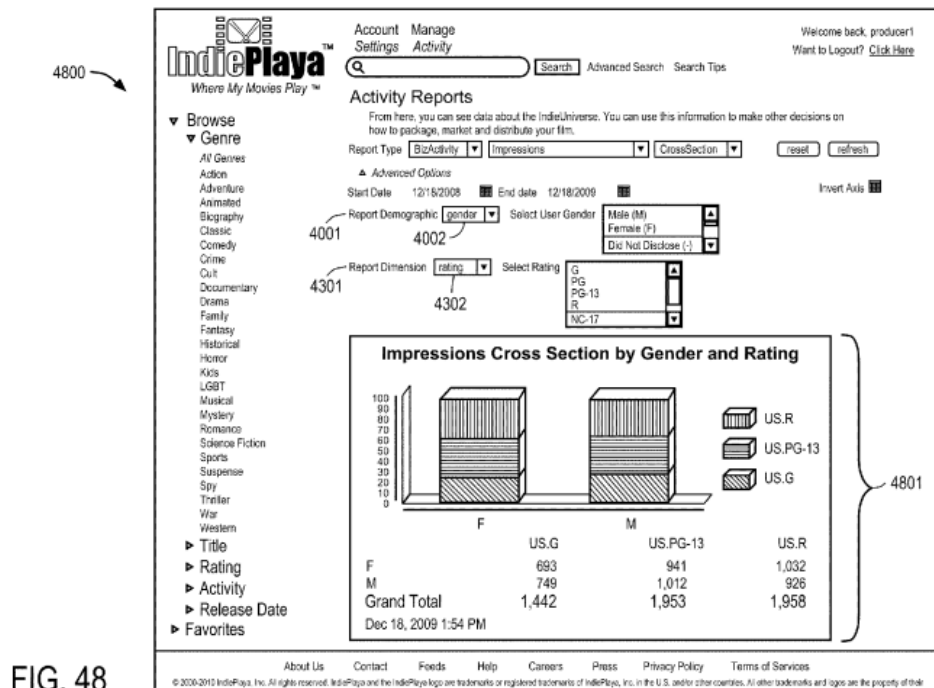


FIG. 48

EX1004, FIG. 48.

Figure 48 shows an example report that provides gender information, but Brandstetter’s reports can also categorize other user demographic and interaction data. EX1004, ¶¶173-74, 179; EX1002, ¶¶414-15. Brandstetter describes a demographic of individuals who accept and who decline to stream content. *Id.*, ¶130. A POSA would have understood that Brandstetter’s reports therefore analyze user data for both categories of users. *Id.*, ¶81; EX1002, ¶417.

Brandstetter states that its activity reports—which convey a target demographic—can be “retrieved from persistent storage and ***provided to the***” requesting party. EX1004, ¶74. Reports can be provided, for example, by displaying them “via an appropriate interface device, such as a display screen connected to the client computer.” *Id.*, ¶85. As another example, Brandstetter states that its server “transmits ... activity reports to client device 111 via network 121” to a requesting party. *Id.*, ¶93. In either scenario, the report is provided to the requesting party, including a third-party online retailer. *See* Section VIII.D.4-6; EX1002, ¶¶419-20.

The reports contain target demographic information and may be used by the requesting party to “***efficiently market and distribute their content to a target audience.***” EX1004, ¶6; *see also id.*, ¶¶4-9, 65-66 (explaining that reports allow content creators to “develop and execut[e] one or more strategies for marketing and distributing their own content” to particular demographics), 75 (further explaining that reports allow a creator “to market his particular item of media content (e.g., to users of a particular demographic (15) or known interest”), 79, 81, 89, FIG. 1A; EX1002, ¶¶420-24.

E. Claim 6.

Claim 6 is similar to claim 1 in most material respects, but its preamble focuses on a “media content licensing and verification system,” and the claim

recites “digital media information includ[ing] at least one identification characteristic that is unique to the media content item,” a “media catalog database,” and a “media content record,” none of which is patentably distinct. Again, the claim steps need not occur at any particular device. Section VIII.D.1. Brandstetter-Levy renders claim 6 obvious for the reasons presented in claim 1, and as further explained below. EX1002, ¶¶425-39.

[6P]	Section VIII.D.1 ([1P]).
[6A]	Section VIII.D.2 ([1A]).
[6B]	Section VIII.D.3 ([1B]).
[6C]	Section VIII.D.4 ([1C]
[6D]	Section VIII.D.5 ([1D]).
[6E]	Section VIII.D.6 ([1E]).
[6F]	Section VIII.D.7 (1F).

Claim 6 recites, in [6P], a “media content licensing and verification system.” Brandstetter’s server 101 discloses such a system. EX1004, ¶¶6-7, 10, 69, 98; Section VI.E. Levy likewise discloses a server that evaluates whether a user has already obtained a license and also discloses the system of [6P]. Section VIII.B; EX1002, ¶426.

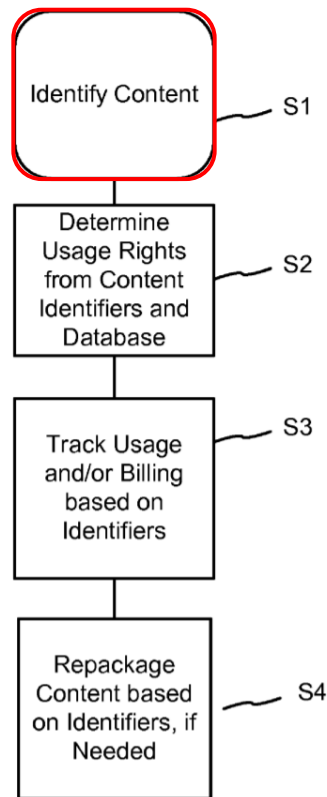
The claim also recites, in [6A], that the user’s request to stream content includes “digital media information includ[ing] at least one identification characteristic that is unique to the media content item.” As previously explained in reference to [1A], Brandstetter discloses receiving requests from users to stream

media content items. *Id.*, ¶¶10, 69, 77, 98; EX1002, ¶¶427-34. A POSA would have understood that Brandstetter discloses “digital media information includ[ing] at least one identification characteristic” included with requested media content items, generally, because there would be no way to provide a user with the requested item without first identifying that which the user has requested. Indeed, Brandstetter states that its system obtains “the characteristics of the media content with which each of the users interact, such as the type of media content (e.g., video, audio, graphic, or literary work).” EX1004, ¶¶ 71, 83, FIGs. 1A-1B; *see also id.*, ¶118. A POSA would have understood from this disclosure that Brandstetter’s platform identifies requested media content based on digital media information including at least one identifying characteristic of the content.

Brandstetter further explains that this “static information” uniquely identifies content and includes a “globally constant description” that individually identifies content. EX1004, ¶118. A POSA would have understood that a common mechanism for uniquely identifying media content is to use fingerprints as described in Levy. EX1002, ¶¶427-34.

As shown in Figure 1 below, Levy describes an algorithm by which multimedia files such as songs, videos, and images are “identified” before being rendered, EX1006, ¶¶4, 42, 69, 93; *see also id.*, FIG. 17a-18, ¶¶108-109:

Fig. 1



EX1006, FIG. 1 (annotated).

Levy explains that this identification can be performed using a “digital watermark” that “includes a unique content identifier.” EX1006, ¶¶7, 12, 13, 42, 47-48, 54-58, 77, 80, 89, 0108-109. Alternatively, Levy explains that fingerprinting can be used to “*uniquely identify*” media content. *Id.*, Abstract, ¶¶140-42, Claims 19, 23, 26, 33, 39. Levy explains that this fingerprint “*is generated during content creation.*” *Id.*, ¶140. Levy makes clear that its watermarks/fingerprints “*derive[] from the content itself*” and thus include content

IDs that are “**unique to a specific**” media content item. *Id.* ¶85, Claim 23.

Likewise, Levy emphasizes that its watermarks/fingerprints “survive end-user recording of the content onto new media or into **a new format**” so as to allow for accurate identification even if the content is subsequently modified. *Id.*, ¶¶47, 85.

A POSA would have understood that Levy’s watermarks/fingerprints describe “at least one identification characteristic that is unique to the media content item that is included in the media content item when the media content item is initially created.” EX1002, ¶431.

Similarly, Levy’s watermarks/fingerprints also teach the same embodiment described in the specification regarding not being dependent on any encoding during any mastering of the media content item. EX1002, ¶432. As previously explained, the ’560 patent describes an identifier that distinguishes between different versions of the same content. EX1001, 4:23-40, 9:17-24; Section VI.E. Levy’s fingerprint likewise provides this same functionality and describes using fingerprints to “**uniquely identify versions of songs.**” EX1006, ¶142; EX1002, ¶433. Thus, Levy’s fingerprint is “not dependent on any encoding during any mastering of the media content item.”

Claim 6 additionally recites, in [6B], that the determination as to whether to grant a user’s requests is based on a media content record stored in a “media

catalog database.” Brandstetter-Levy discloses accessing a “media catalog database” to identify a “media content record” to identify requested media content. Brandstetter-Levy’s identification of licensing rights for specific media discloses this same content identification. EX1002, ¶¶435-39. Levy discloses its “Media Server” (i.e., user device) communicating a derived “Fingerprint Content ID” to a “Fingerprint Rights Registry to obtain corresponding Usage Rights.” *Id.*, ¶¶83-84, 140. The Usage Rights convey the license terms for the content item corresponding to the particular fingerprint. *Id.*, ¶87. Levy’s Fingerprint Rights Registry discloses the claimed “digital media catalog database” storing the claimed “media content record,” and Levy’s comparison of fingerprints discloses the claimed “determining” because it identifies specific media and corresponding license rights. EX1002, ¶437. As previously described, Brandstetter-Levy offers users licenses if they do not already have one. Section VIII.D.3. Likewise, Brandstetter-Levy discloses a “license database.” Section VIII.D.6.

F. Claim 11.

Independent claim 11 claims a “system” that performs substantially the same method recited in claim 1. Thus, Brandstetter-Levy renders claim 11 obvious for the reasons presented in claim 1, and as further explained below. EX1002, ¶¶440-43.

[11P]	Section VIII.D.1 ([1P]).
[11A]	Section VIII.D.2 ([1A]).
[11B]	Section VIII.D.3 ([1B]).
[11C]	Section VIII.D.4 ([1C]).
[11D]	Section VIII.D.5 ([1D]).
[11E]	Section VIII.D.6 ([1E]).
[11F]	Section VIII.D.7 ([1F]).

Claim 11 additionally recites a “processor” and “memory,” but these are not patentably distinct features. Regarding the “processor,” Brandstetter and Levy disclose processors configured to perform the method steps described in claim 1. EX1004, ¶¶92, 180-83; EX1006, ¶¶9, 83-84, 114, 150. Regarding the “memory,” Brandstetter discloses “a memory coupled with the processor, the memory including instructions.” In particular, Brandstetter states that a server contains “a memory 114” that stores the operating system and software required to carry out Brandstetter’s server-side tasks. *Id.*, ¶¶92-99, 183.

G. Claim 16.

Claim 16 likewise recites a “system” that performs substantially the same method recited in claim 1, except that its preamble focuses on a “media content licensing and verification system,” which is not patentably distinct. Thus, Brandstetter-Levy renders claim 16 obvious for the reasons presented in claim 6, and as further explained below. EX1002, ¶¶444-52.

[16P]	Sections VIII.D.1, VIII.E ([1P], [6P]).
[16A.1]	Sections VIII.D.2, VIII.E ([1A], [6A]).
[16A.2]	Section VIII.F ([11P]).

[16B]	Sections VIII.D.3, VIII.E-F ([1B], [6B], [11B]).
[16C]	Sections VIII.D.4, VIII.E-F ([1C], [6C], [11C]).
[16D]	Sections VIII.D.5, VIII.E-F ([1D], [6D], [11D]).
[16E]	Sections VIII.D.6, VIII.E-F ([1E], [6E], [11E]).
[16F]	Sections VIII.D.7, VIII.E-F ([1F], [6F], [11F]).

Claim 16 additionally recites a “receiver,” a “processor,” and “memory,” but these are not patentably distinct features. Regarding the “receiver,” Brandstetter-Levy disclose transmitters and receivers that facilitate Internet communications. EX1002, ¶¶445-50. For example, Brandstetter discloses bi-directional communication over a network such as the Internet as seen in FIG. 1C—“network or other communications interface (NIC) 110” discloses the claimed “receiver.” EX1004, ¶¶92-93; EX1002, ¶¶445-50.

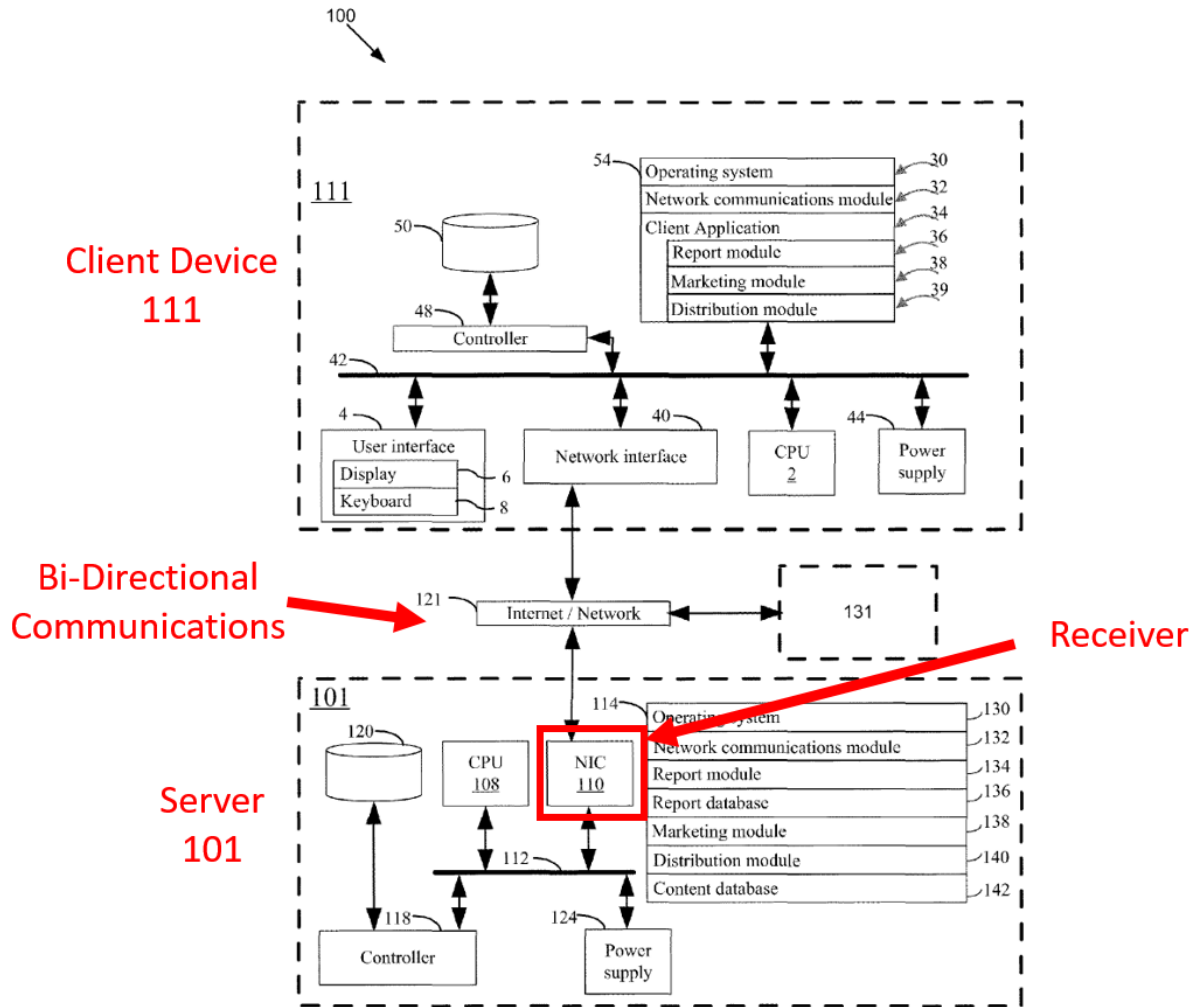


FIG. 1C

EX1004, FIG. 1C (annotated).

Levy also describes bi-directional communications between a media server and an online content store. For example, Levy describes the Media Server transmitting an identified Content ID to the online content store and **receiving** license offers. EX1006, ¶¶109, 112-14, 117, FIG. 17d. This demonstrates bi-directional communications between the media server and the online content store.

EX1002, ¶449; EX1006, ¶¶50-51, 64, 97, 121, FIG. 18. Thus, Brandstetter and Levy disclose the claimed “receiver.”

Regarding the “processor” and “memory,” both Brandstetter and Levy disclose processors and memory configured to perform the method steps described in claim 6 as explained with reference to claim 11. EX1004, ¶¶92, 180-83; EX1006, ¶¶9, 83-84, 114, 150; *see* Section VIII.F; EX1002, ¶451.

H. Claims 2 and 12 (receiving a license to [reproduce/stream] the media content from a licensing system when the request is granted, and “prevent[ing] streaming... when the request is declined”).

Brandstetter-Levy discloses receiving a license when a user request is granted. EX1002, ¶¶452-60. When a user purchases a license, the user account receives a license, which is tracked by Brandstetter’s platform. EX1004, ¶¶87, 99, 166, FIG. 26, FIG. 28. Brandstetter also prevents reproduction when the request is declined. EX1004, ¶¶4-5; EX1002, ¶¶453-54.

Levy also discloses its “Media Server” receiving a license after a purchase has been made. EX1006, ¶¶98, 110, 112. Levy’s Media Server receives “DRM-packaged” content that is packaged with corresponding Usage Rights. *Id.*, ¶¶87, 98, 112. The Usage Rights are stored in a “DWM or re-linking Rights Registry,” which may be “stored locally on the Media Server.” *Id.*, ¶¶90, 97, 110. Therefore, Levy’s Media Server also receives a license. EX1002, ¶¶455-58. Levy also

discloses preventing reproduction of media content when the licensing request is declined—the “Client Player Application preferably prohibits access.” *Id.*, ¶110. A POSA would have been motivated to use this feature of Levy’s system in Brandstetter’s platform to prevent contravention of Brandstetter’s licenses. EX1002, ¶¶459-60; EX1004, ¶¶2-5.

I. Claims 3 and 13 (“plurality of [reproduction/streaming] parameters”).

The claimed reproduction/streaming parameters refer to the terms of a license. EX1002, ¶462. Brandstetter discloses reproduction parameters that would have been used in combination, such as tracking a “number of times” a content may be played as defined in a license. EX1004, ¶147. Brandstetter also varies licenses and their price based on video quality, bonus content, or downloadability. EX1004, ¶¶75, 120, 125, 141. A POSA would have understood Brandstetter would have used a plurality of streaming/reproduction parameters depending on the terms of the license obtained by the consumer. EX1002, ¶¶463-65. Levy’s “copy control information (CCI)” bits also disclose reproduction/streaming parameters because they specify copy restrictions for streamed or copied media. EX1006, ¶¶37, 86, 122-23; EX1002, ¶¶466-67.

J. Claims 4, 9, 14, and 18 (storing in a license database the user data ... that is accessible to the third party).

Claims 4, 9, 14, and 18 are nearly identical and refer to allowing a “third party online media retailer” to access the stored user data. EX1002, ¶468.

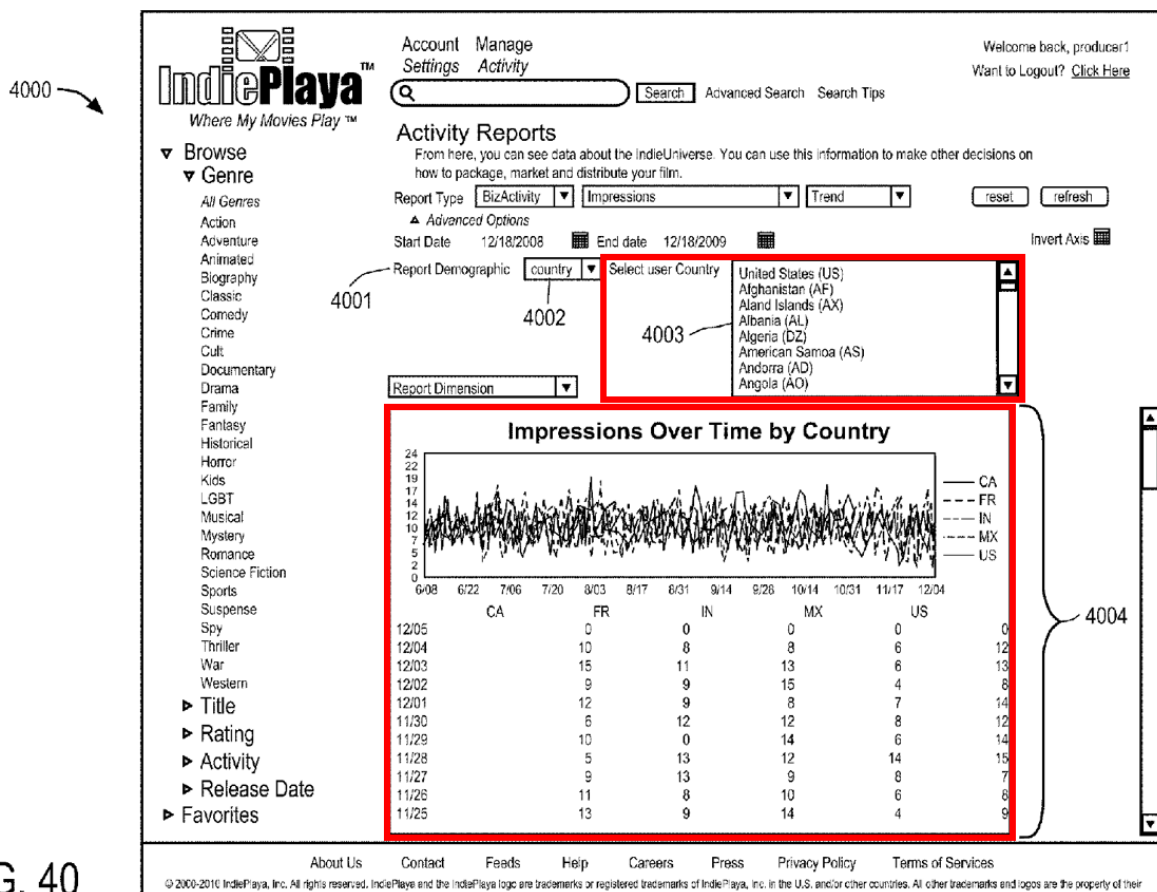
Brandstetter explains that user statistics and data—which include age, geographical location, gender, and ethnicity—are stored in a “report database” 136 on the server. EX1004, FIG. 1C, ¶169; Section VIII.D.4-6. Brandstetter recognizes that other storage may also be possible, including storage on client devices. *Id.*, ¶85.

Brandstetter expressly discloses that its memory 114 stores information relating to licenses. *Id.*, ¶93. Accordingly, it would have been obvious to a POSA that Brandstetter’s memory 114 is a license database. *Id.*, ¶93. Moreover, Brandstetter also describes that such user activity may include user credentials and digital rights status. *Id.*, ¶71; EX1002, ¶¶469-73.

Further, as explained with reference to [1D]-[1F], consumer data is compiled into reports that Brandstetter provides to requesting third parties, including online media retailers. Section VIII.D.5-7. A POSA would have understood that the third-party online media retailers are those that have been selected by the copyright owner to distribute the media content item. EX1002, ¶¶469-73.

K. Claims 5 and 19 (“geographic location”).

Brandstetter discloses tracking geographic location information as part of the stored demographic user data. See Sections VIII.D.4-5; EX1004, ¶¶71, 142-43, 174, FIG. 40. FIG. 40 depicts an example of sorting the user data based on geographic location. EX1002, ¶¶474-76.



EX1004, FIG. 40.

L. Claims 7 and 17 (generating and storing a “license record in a registered user database”).

Brandstetter-Levy discloses storing license information in a registered user database and granting licenses to user devices attempting to reproduce content. See Sections VIII.D.3, VIII.H; EX1002, ¶¶477-83.

Brandstetter generates a license record and stores license records with user profiles in memory 114 and/or 120. EX1004, ¶¶92, 98-100, 166, FIG. 25; EX1002, ¶¶478-79. Users may then view their purchased licenses. EX1004, ¶166, FIG. 26, 28.

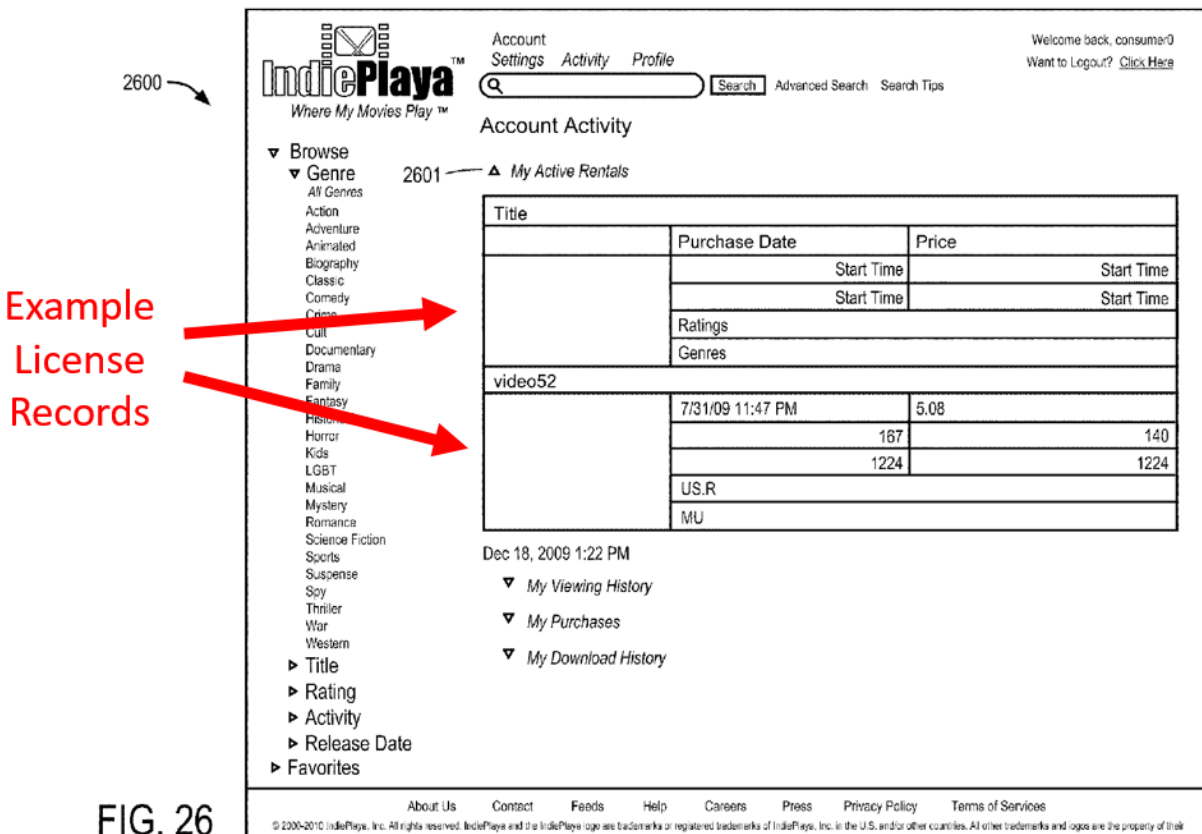
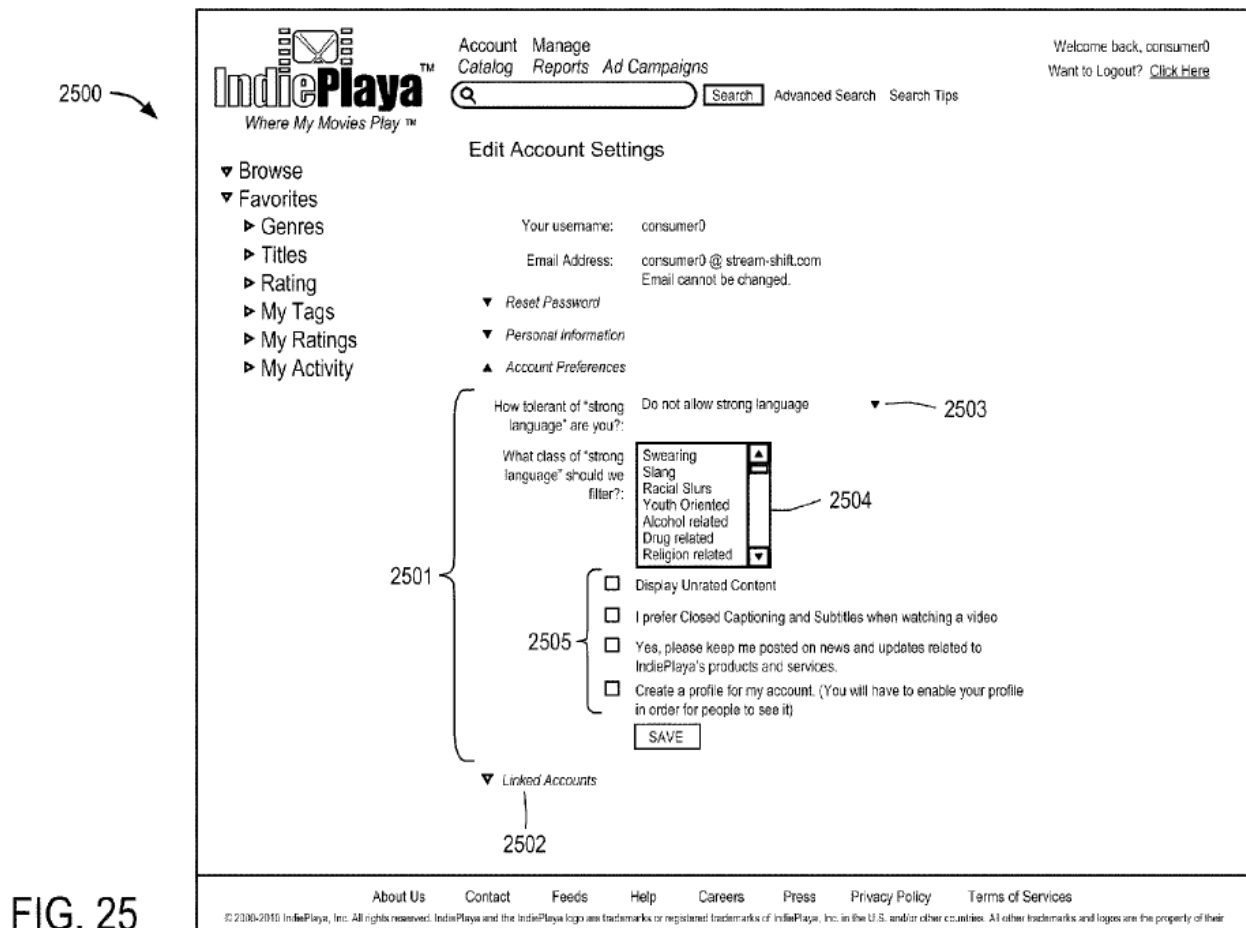


FIG. 26

EX1004, FIG. 26 (annotated).

Brandstetter also registers users as seen from Figure 25, which depicts an interface for creating/editing a profile with a user name and password. EX1004, ¶¶98; EX1002, ¶¶480-81.



EX1004, FIG. 25.

Levy also updates a registered user database when a user purchases a license via an online content store. EX1006, ¶¶52, 101. “The Media Server/User will typically maintain an account with the online store.” *Id.*, ¶¶112, 114; EX1002,

¶¶482-83. Levy also stores purchased license information, by updating a “DRM Rights Registry.” EX1006, ¶101; EX1002, ¶¶482-83.

M. Claim 8 (“fingerprint”).

Levy discloses digital media information including a “fingerprint” associated with the media content item. See Section VIII.D.3, VIII.E; EX1006, Abstract, ¶¶140-42; EX1002, ¶¶484-94.

N. Claims 10 and 15 (user data includes “additional media content items” previously accessed and “a quantity of times that the user has previously accessed the media content item”).

Brandstetter discloses identifying “additional media content items” that a user has previously accessed. EX1002, ¶¶495-99; EX1004, ¶¶71, 123.

Brandstetter’s description of “cross-selling” and offering secondary content also discloses tracking additional media content that a user has previously accessed, “(e.g., if you like A, you can buy A and B together for \$10.00).” EX1004, ¶¶150-53.

Brandstetter also tracks a quantity of times that the user has previously accessed the media content item. EX1004, ¶147. For example, this is tracked when enforcing a “play n-number of times licensing package.” *Id.*; EX1002, ¶498.

IX. PETITIONER IS UNAWARE OF ANY SECONDARY CONSIDERATIONS OF NON-OBVIOUSNESS.

Petitioner is unaware of any alleged evidence of secondary considerations, or that PO has made any non-conclusory assertions of any secondary considerations of non-obviousness.

X. THE BOARD SHOULD NOT EXERCISE ITS DISCRETION TO DENY THIS PETITION BASED ON EITHER 35 U.S.C. § 314(A) OR § 325(D).

The Board should not deny the Petition under §314(a) because the *Fintiv-NHK* factors weigh in favor of institution. The Board should also not deny the Petition under §325(d) because there are no previous pending cases involving the '560 patent at the USPTO, and, with the exception of Pou, the prior art applied here has never been considered by the USPTO.

A. The Board Should Not Use its Discretion to Deny the Petition Under § 314(a).

1. This case is at its very earliest stages.

The Board should reach the strong merits of this Petition. The *Apple v. Fintiv* factors weigh strongly against the Board's exercise of discretion to deny review.

On January 8, 2021, PO filed a lawsuit against Petitioner asserting the '560 patent in the Western District of Texas. EX1064. PO did not serve Petitioner with notice of the lawsuit until January 19, 2021. EX1069. Thus the triggering date for

35 U.S.C. § 315(b) is January 19, 2022. On December 7, 2021, the case was transferred to the Northern District of California. EX1065. This occurred before any significant investment in the proceeding and prior to the submission of any claim construction briefing. EX1066, 1. Following transfer, a case management conference has been scheduled for March 15, 2022, but no other deadlines have been set. EX1071. And, on average, patent cases in the Northern District of California take nearly three years to get to trial. EX1080. Thus, given the scheduling uncertainty, the *Fintiv* factors weigh in favor of institution.

(a) Factors 1 and 2 weigh in favor of institution.

Given scheduling uncertainty, the Board has recognized that even cases with schedules are unpredictable. *See Sand Revolution II, LLC v. Continental Intermodal Group–Trucking LLC*, IPR2019-01393, Paper 24 at 9 (P.T.A.B. June 16, 2020). Given the speculative nature of any schedule in this case, factor 2 weighs heavily in favor of institution.

Factor 1 is neutral. *VMware, Inc. v. Intellectual Ventures II LLC*, IPR2020-00859, Paper 13 at 12 (P.T.A.B. Nov. 5, 2020).

(b) Factors 3-5 weigh in favor of institution.

Given that no case schedule has yet been set, by the time of institution, the investment in the co-pending district court litigation will have been minimal, with

Markman briefing unlikely to have been completed at that time. Factor 3 therefore weighs against denial.

Similarly, it is unclear at this stage whether there will be any overlap with the issues raised in the Petition. However, Petitioner represents that, if instituted, it will not rely in district court on IPR prior art references asserted in any ground here. Thus, *Fintiv* factor 4 weighs against denial.

The IPR parties are the same as in the litigation. Weighing this factor against institution prejudices Petitioner merely for being sued. The Board should therefore consider *Fintiv* factor 5 neutral.

(c) Factor 6 weighs in favor of institution.

The strength of the merits weighs heavily in favor of institution as fully laid out above.

Thus, the *Fintiv* factors weigh in favor of institution.

**2. The Board should not avoid the merits of the case under
General Plastics because there is only one pending petition.**

The Board should not exercise discretionary authority under § 314(a). There have been no previous or current IPRs, reexams, or reissues involving the patent. Therefore, *General Plastics* does not provide a basis to deny the Petition.

B. This Case Does Not Implicate § 325(d) as a Basis for Denial.

The Board analyzes discretionary denial under § 325(d) using the *Advanced Bionics* factors. These factors address whether the IPR seeks a “do-over” of examination of the patent. Here, the primary references (Peled and Brandstetter)—which disclose the alleged point of novelty—were never considered by the USPTO. While the Examiner identified Pou, Pou was never discussed in an Office Action or applied in any rejection. EX1009, 0157-83. Thus, the art combinations and arguments presented in this Petition are new and non-cumulative and demonstrate that extracting user demographic data when users acquire or decline a license was already well-known in the art. *See* Sections VI-VIII. Those precise arguments were never before the Examiner.

XI. MANDATORY NOTICES (37 C.F.R. § 42.8(A)(1))

A. Real Party In Interest (37 C.F.R. § 42.8(b)(1))

The real party-in-interest is Petitioner Roku, Inc.

B. Related Matters (37 C.F.R. § 42.8(b)(2))

The '560 patent was at issue in a district court litigation proceeding captioned *Media Chain, LLC v. Roku, Inc.*, Case No. 1:21-cv-00027 (WDTX), filed January 8, 2021. On December 7, 2021, the case was transferred to the Northern District of California, Case No. 3-21-cv-09528 (NDCA), and is currently pending.

***Petition for Inter Partes Review of
U.S. Patent No. 10,489,560***

The '560 patent and U.S. Patent Nos. 9,898,590, 10,657,226, 10,515,191, 10,860,691, 10,885,154, and 10,650,120 claim the benefit of U.S. Patent No. 9,715,581 (the '581 patent). Pending U.S. Patent Application Nos. 16/877,349 and 16/877,360 also claim the benefit of the '581 patent.

Petitioner is concurrently filing petitions for *inter partes* review against the '581 patent (IPR2022-00389), and U.S. Patent Nos. 9,898,590 (IPR2022-00390), 10,515,191 (IPR2022-00392), 10,860,691 (IPR2022-00393), and 10,885,154 (IPR2022-00394), which were also asserted in the *Media Chain, LLC v. Roku, Inc.* district court litigation proceeding.

C. Lead and Back-up Counsel (37 C.F.R. § 42.8(b)(3))

Pursuant to 37 C.F.R. § 42.8(b)(3) and 42.10(a), Petitioner appoints **Lestin L. Kenton** (Reg. No. 72,314) as lead counsel. Additionally, Petitioner appoints **Jon E. Wright** (Reg. No. 50,720), **Nirav N. Desai** (Reg. No. 69,105), **Richard A. Crudo** (Reg. No. 65,245), and **Timothy L. Tang** (Reg. No. 75,187) as back-up counsel, at the address: Sterne, Kessler, Goldstein & Fox P.L.L.C., 1100 New York Avenue, N.W., Washington, D.C., 20005, phone number (202) 371-2600, and facsimile (202) 371-2540.

D. Service Information (37 C.F.R. § 42.8(b)(4))

Petitioner consents to electronic service by email at: **lkenton-PTAB@sternekessler.com, jwright-PTAB@sternekessler.com, ndesai-**

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XII. STANDING (37 C.F.R. § 42.104(a))

Petitioner certifies that the '560 patent is available for IPR, and that Petitioner is not barred or estopped from requesting an IPR of the '560 patent. The assignee of the '560 patent, Media Chain, LLC, served a complaint against Petitioner in the Western District of Texas (case no. 1:21-cv-00027) on January 19, 2021, asserting the '560 patent. EX1069.

XIII. CONCLUSION

The Board should institute this IPR and issue a final written decision finding claims 1-19 unpatentable.

Respectfully submitted,
STERNE, KESSLER, GOLDSTEIN & FOX
P.L.L.C.

/Lestin Kenton/

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APPENDIX A: LISTING OF CHALLENGED CLAIMS

1. **[1P]** A computer implemented method for configuring a multimedia hardware device to enable an authorized stream of a media content item included in a digital media file, comprising:

[1A] receiving a request from a user to stream the media content item;

[1B] evaluating the request to stream to determine whether the user has acquired a license to stream the media content item and offering the license to stream the media content item to the user when the user does not have the license to stream the media content item;

[1C] **[1C.1]** after the evaluation of the request to stream, extracting user data that is specific to the user that is attempting to stream the media content item when the user at least one of streams and declines to stream the media content item, **[1C.2]** wherein the user data includes demographic data associated with the user that enables a third party online retailer that is providing the media content item to be streamed by the user to gauge at least one of a demographic that streamed the media content item of a copyright owner and a demographic that declined to stream the media content item of the copyright owner and **[1C.3]** the user data includes each media content item that the user streamed and each media content item that the user declined to stream that enables the third party online retailer to target marketing of different media content items to the user based on the

demographic of the user and based on a history of media content items that the user has streamed and media content items that the user has declined to stream **[1C.4]** to determine a trend of interest in media content items by the user and to thereby target the marketing of the different media content items to the user based on the determined trend of interest associated with the user;

[1D] aggregating the user data into a statistics record for the request to stream the media content item when the user streams or declines to stream the media content item, wherein the statistics, record summarizes the user data associated with the request to stream the media content item;

[1E] storing in a license database the statistics record so that the user data is accessible to the third party online retailer that is providing the media content item to be streamed; and

[1F] analyzing a plurality of statistics records aggregated from each request to stream the media content item as provided by the third party online retailer to be streamed to provide the third party online retailer with the aggregated user data from each request to stream the media content item.

2. The method of claim 1, further comprising:

receiving a license to reproduce the media content from a licensing system when the request is granted by the licensing system; and

preventing streaming of the media content item when the request is declined by the licensing system.

3. The method of claim 2, further comprising:

reproducing the media content item based on a plurality of reproduction parameters in the license that is received from the licensing system.

4. The computer implemented method of claim 1, further comprising:

storing in the license database the user data that is associated with the user that is attempting to stream the media content item that is accessible to a third party online media retailer that has been selected by the copyright owner to distribute the media content item.

5. The method of claim 1, wherein the user data includes a geographic location of the user who is streaming the media content item.

6. **[6P]** A computer implemented method for configuring a media content licensing and verification system to license media content for streaming the method comprising:

[6A] receiving a request from an external device associated with a user to stream a media content item, wherein the request to stream includes digital media information associated with the media content item included in a digital media file and the digital media information includes at least one identification characteristic that is unique to the media content item that is included in the media content item when the media content item is initially created and not dependent on any encoding during any mastering of the media content item;

[6B] determining whether the request to stream is to be granted based on a media content record stored in a media catalog database that is associated with the media content item and offering a license to stream the media content item to the user when the user does not have the license to stream the media content item;

[6C] after the determination of the request to stream, extracting user data that is specific to the user that is attempting to stream the media content item when the user at least one of streams and when the user declines to stream the media content item, wherein the user data includes demographic data associated with the user that enables a third party online retailer that is providing the media content

item to be streamed by the user to gauge at least one of a demographic that streamed the media content item of a copyright owner and a demographic that declined to stream the media content item of the copyright owner and the user data includes each media content item that the user streamed and each media content item that the user declined to stream that enables the third party retailer to target marketing of different media content items to the user based on the demographic of the user and based on a history of media content items that the user has streamed and media content items that the user has declined to stream to determine a trend of interest in media content items by the user and to thereby target the marketing of the different media content items to the user based on the determined trend of interest associated with the user;

[6D] aggregating the user data into a statistics record for the request to stream the media content item when the user streams or declines to stream the media content item, wherein the statistics record summarizes the user data associated with the request to stream the media content item;

[6E] storing in a license database the statistics record so that the user data is accessible to the third party online retailer that is providing the media content item to be streamed; and

[6F] analyzing a plurality of statistics records aggregated from each request to stream the media content item as provided by the third party online retailer to be streamed to provide the third party online retailer with the aggregated user data from each request to stream the media content item.

7. The method of claim 6, further comprising:
generating a license record that includes license granting information associated with the license granted to the external device; and
storing the license record in a registered user database that is associated with the user.

8. The method of claim 6, wherein the digital media information includes the at least one identification characteristics that is a fingerprint associated with the media content item.

9. The method of claim 6, further comprising:
storing in the license database the user data that is associated with the user that is attempting to stream the media content item that is accessible to a third party

online media retailer that has been selected by the copyright owner to distribute the media content item.

10. The method of claim 6, wherein the user data includes additional media content items that the user has previously accessed.

11. **[11P]** A system for configuring a multimedia hardware device, to generate an authorized stream of a media content item included in a digital media file, comprising: at least one processor; and a memory coupled with the processor, the memory including instructions that, when executed by the processor cause the processor to:

[11A] receive a request from a user requesting to stream the media content item;

[11B] evaluate the request to stream to determine whether the user has acquired a license to stream the media content item and offer the license to stream the media content item to the user when the user does not have the license to stream the media content item;

[11C] after the evaluation of the request to stream, extract user data that is specific to the user that is attempting to stream the media content item when the

user at least one of streams and declines to stream the media content item, wherein the user data includes demographic data associated with the user that enables a third party online retailer that is providing the media content item to be streamed by the user to gauge at least one of a demographic that streamed the media content item of a copyright owner and a demographic that declined to stream the media content item of the copyright owner and the user data includes each media content item that the user streamed and each media content item that the user declined to stream that enables a third party online retailer to target marketing of different media content items to the user based on the demographic of the user and based on a history of media content items that the user has streamed and media content items that the user has declined to stream to determine a trend of interest in media content items by the user and to thereby target the marketing of the different media content items to the user based on the determined trend of interest associated with the user,

[11D] aggregate the user data into a statistics record to stream the media content item for the request when the user, streams or declines to stream the media content item, wherein the statistics record summarizes the user data associated with the request to stream the media content item,

[11E] store in the license database the statistics record so that the user data is accessible to the third party online retailer that is providing the media content item to be streamed, and

[11F] analyze a plurality of statistics records aggregated from each request to stream the media content item as provided by the third party online retailer to be streamed to provide the third party online retailer with the aggregated user data from each request to stream the media content item.

12. The system of claim 11, wherein the processor is further configured to: receive a license to stream the media content item from a licensing system when the request is granted by the licensing system; and prevent streaming of the media content item when the request is declined by the licensing system.

13. The system of claim 11, wherein the processor is further configured to stream the media content item based on a plurality of streaming parameters included in the license that is received from the licensing system.

14. The system of claim 11, wherein the processor is further configured to store in the license database the user data that is associated with the user that is attempting to stream the media content item that is accessible to a third party online media retailer that has been selected by the copyright owner to distribute the media content item.

15. The system of claim 11, wherein the user data includes a quantity of times that the user has previously accessed the media content item and additional media content items.

16. **[16P]** A system for configuring a media content licensing and verification system to license media content for streaming, comprising:

[16A.1] a receiver configured to receive a request from an external device associated with a user to stream the media content item, wherein the request includes digital media information associated with the media content item included in a digital media file and the digital media information includes at least one identification characteristic that is unique to the media content item that is included in the media content item when the media content item is initially created and not dependent on any encoding during any mastering of the media content item;

[16A.2] at least one processor; and a memory coupled with the processor, the memory including instructions that, when executed by the processor cause the processor to:

[16B] determine whether the request a stream is to be granted based on the media content record stored in the media catalog database that is associated with the media content item and offer a license to stream the media content item to the user when the user does not have the license to stream the media content item,

[16C] after the determination of the request to stream, extract user data that is specific to the user that is attempting to stream the media content item when the user at least one of, streams and declines to stream, wherein the user data includes demographic data associated with the user that enables a third party online retailer that is providing the media content item to be streamed by the user to gauge at least one of a demographic that streamed the media content item of a copyright owner and a demographic that declined to stream the media content item of the copyright owner and the user data includes each media content item that the user streamed and each media content item that the user declined to stream that enables the third party online retailer to target marketing of different media content items to the user based on the demographic of the user and based on a history of media content items that the user has streamed and media content items that the user has declined

to stream to determine a trend of interest in media content items by the user and to thereby target the marketing of the different media content items to the user based on the determined trend of interest associated with the user,

[16D] aggregate the user data into a statistics record for the request to stream the media content item when the streams or declines to stream the media content item, wherein the statistics record summarizes the user data associated with the media licensing request to stream the media content item, and

[16E] store in a license database the statistics record so that the user data is accessible to the third party online retailer that is providing the media content item to be streamed, and

[16F] analyze a plurality of statistics records aggregated from each request for to stream the media content item as provided by the third party line retailer to be streamed to provide the third party online retailer with the aggregated user data from each request to stream the media content item.

17. The system of claim 16, wherein the processor is further configured to:
generate a license record that includes license granting information associated with the license granted to the external device; and

store the license record in a registered user database that is associated with the user.

18. The system of claim 16, wherein the processor is further configured to store in the license database the user data that is associated with the user that is attempting to stream the media content item that is accessible to a third party online media retailer that has been selected by the copyright owner to distribute the media content item.

19. The system of claim 16, wherein the user data includes a geographic location of the user who is accessing the media content item that enables the copyright owner to gauge geographic locations where the media content item is being accessed.

CERTIFICATION OF SERVICE (37 C.F.R. §§ 42.6(e), 42.105(a))

The undersigned hereby certifies that on January 10, 2022, true and correct copies of the foregoing **PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 10,489,560**, Petitioner's Power of Attorney, and all associated exhibits were served in their entireties on the following parties via FedEx Express® or Express Mail:

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**CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION,
TYPEFACE REQUIREMENTS, AND TYPE STYLE REQUIREMENTS**

1. This Petition complies with the type-volume limitation of 14,000 words, comprising 13,950 words, excluding the parts exempted by 37 C.F.R. § 42.24(a).

2. This Petition complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft® Word 2016 in 14-point Times New Roman.

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