

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ROKU, INC.,
Petitioner

v.

MEDIA CHAIN, LLC,
Patent Owner

Case IPR2022-00392
U.S. Patent 10,515,191

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 10,515,191**

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PETITIONER’S EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 10,515,191 (“’191 patent”)
1002	Declaration of John Tinsman in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent No. 10,515,191
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	U.S. Patent Publication No. 2013/0166921 to Vijay <i>et al.</i> (“Vijay”)
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/)
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”)

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Exhibit No.	Description
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”)
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”)

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Exhibit No.	Description
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)
1056	<i>Intentionally Left Blank</i>
1057	<i>Intentionally Left Blank</i>
1058	<i>Intentionally Left Blank</i>

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Exhibit No.	Description
1059	<i>Intentionally Left Blank</i>
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	<i>Intentionally Left Blank</i>
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>
1068	U.S. Patent No. 7,577,703 to Boucher et al. (“Boucher”)
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	U.S. Patent No. 10,489,560 to Estes (“’560 Patent”)
1075	<i>Intentionally Left Blank</i>

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Exhibit No.	Description
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

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Roku, Inc. petitions for *inter partes* review (“IPR”) of claims 1-23 of U.S. Patent No. 10,515,191 to Estes, “Digital Media Reproduction and Licensing.” EX1001, ’191 patent, Title.

I. INTRODUCTION

The ’191 patent purportedly improves the tracking of user demographic data when a user acquires or declines a license to digital media content. EX1001, 11:64-12:26; EX1012, ’191 Pros. History, 0130-41. Specifically, the ’191 patent claims a licensing system that determines whether a user has already acquired a license to reproduce desired content. EX1001, 9:34-47. If not, the user is offered a license. *Id.* When the user acquires or declines the license, the licensing system records demographic data corresponding to the user. *Id.*, 5:32-40, 7:63-8:9, 11:64-12:26. The licensing system then provides a summary of these statistics to copyright owners, so that the copyright owners can gauge user demographics and target marketing accordingly. *Id.*, 11:64-12:26.

Unfortunately for Patent Owner (“PO”), tracking user demographic data in response to acquiring or declining a media license was both trivial and already disclosed by several prior-art references, including at least U.S. Patent Publication Nos. 2004/0010417 (EX1003, “Peled”), 2011/0191246 (EX1004, “Brandstetter”), 2005/0004873 (EX1005, “Pou”), and 2008/0140433 (EX1006, “Levy”). EX1002, Tinsman Decl., ¶¶68-76. These references illustrate that offering media licenses

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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. *Id.* This Petition demonstrates the unpatentability of all claims of the '191 patent.

II. IDENTIFICATION OF UNPATENTABILITY GROUNDS

Ground	Prior Art	Basis	Claims Challenged
1	Peled (EX1003) and Pou (EX1005)	35 U.S.C. § 103	1-4, 6-10, 12-16, 19-21, and 23
2	Peled, Pou, and Vijay (EX1008)	35 U.S.C. § 103	5, 11, 17, and 22
3	Peled, Pou, and Brandstetter (EX1004)	35 U.S.C. § 103	18
4	Brandstetter and Levy (EX1006)	35 U.S.C. § 103	1-4, 6-10, 12-16, 18-21, and 23
5	Brandstetter, Levy, and Vijay	35 U.S.C. § 103	5, 11, 17, and 22

The alleged earliest priority date of the '191 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.

- Vijay (EX1008) is prior art under pre-AIA 35 U.S.C. § 102(e) because it was filed on May 31, 2011.

III. LEVEL OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art (“POSA”) at the time the ’191 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, ¶¶1-49.

IV. OVERVIEW OF THE ’191 PATENT

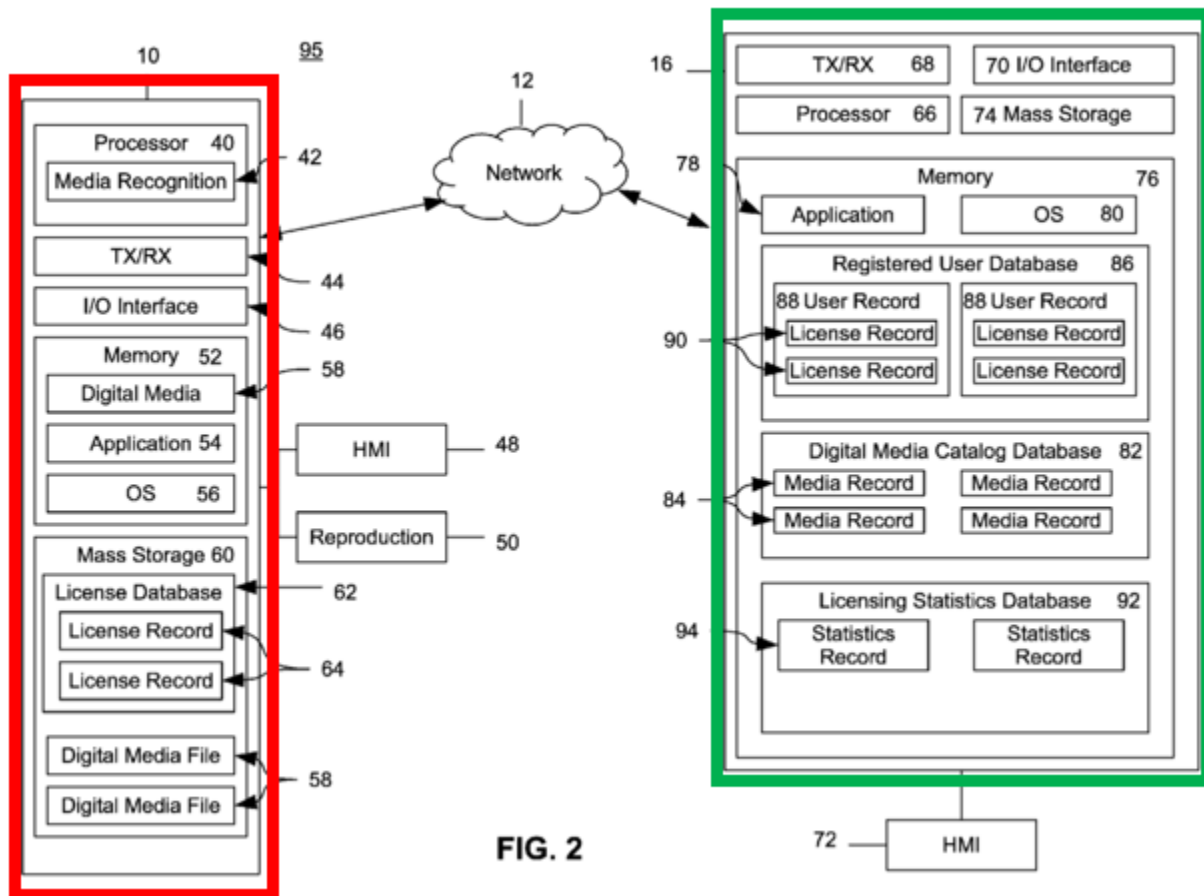
The claims of the ’191 patent are generally directed to two concepts: (1) licensing and distributing digital-media content, and (2) targeted marketing: gathering and summarizing user demographic data when a user accepts or declines a license—the alleged point of novelty being found in the second concept (i.e., ***“storing demographic data about users that decline a media license”***¹ to inform a marketing analysis). EX1012, 0140. However, the second concept and the other claimed conventional concepts were well known in the art. EX1002, ¶¶50-76.

¹ All emphasis added unless otherwise noted.

A. Summary of Disclosure

1. Licensing and Distributing Digital-Media Content

The '191 patent describes a platform for distributing, licensing, and marketing digital-media content. EX1001, Abstract, 1:17-20, 1:61-63, 3:37-44, FIG. 2.

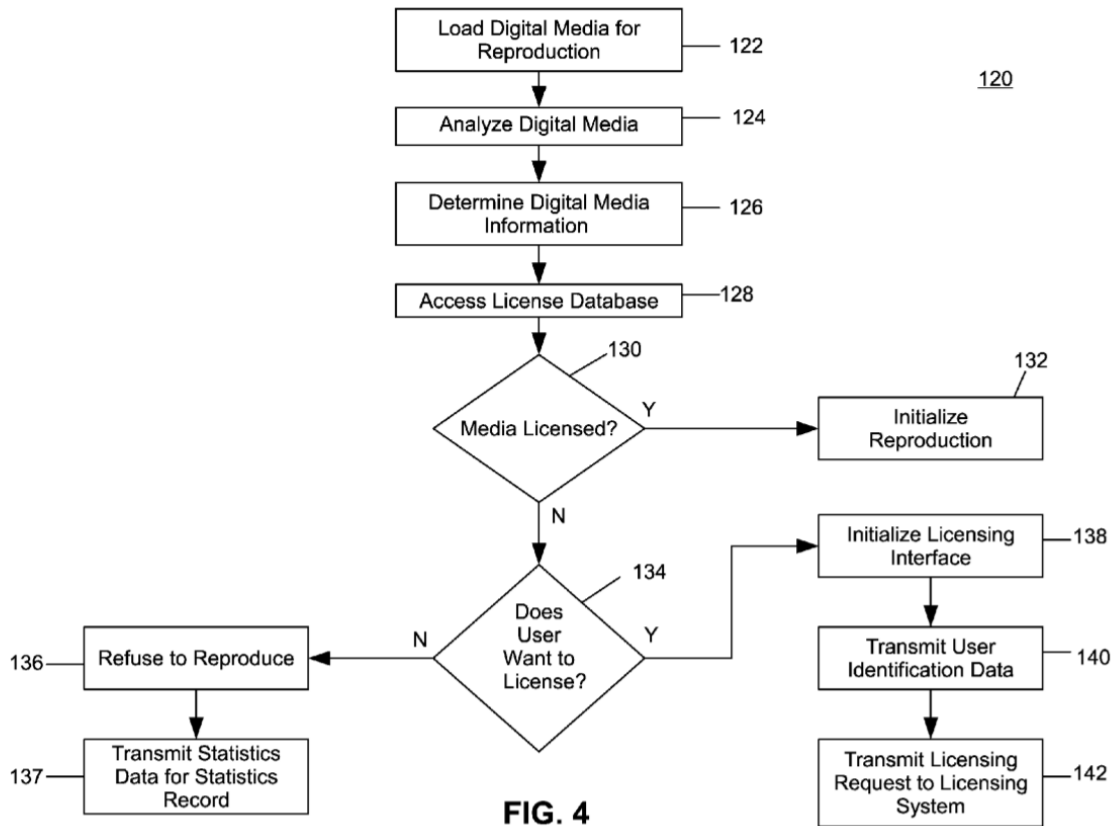


EX1001, FIG. 2 (annotated).

The platform includes a “licensing system 16” (green) and user “device 10” (red). EX1001, 3:28-36, 3:67-4:9. The '191 patent broadly describes its functionality as capable of being implemented at any of these devices. *Id.*, 8:10-20,

10:18-22, 11:38-42; EX1002, ¶¶77-79. Figures 4-5 depict this functionality.

EX1002, ¶80.



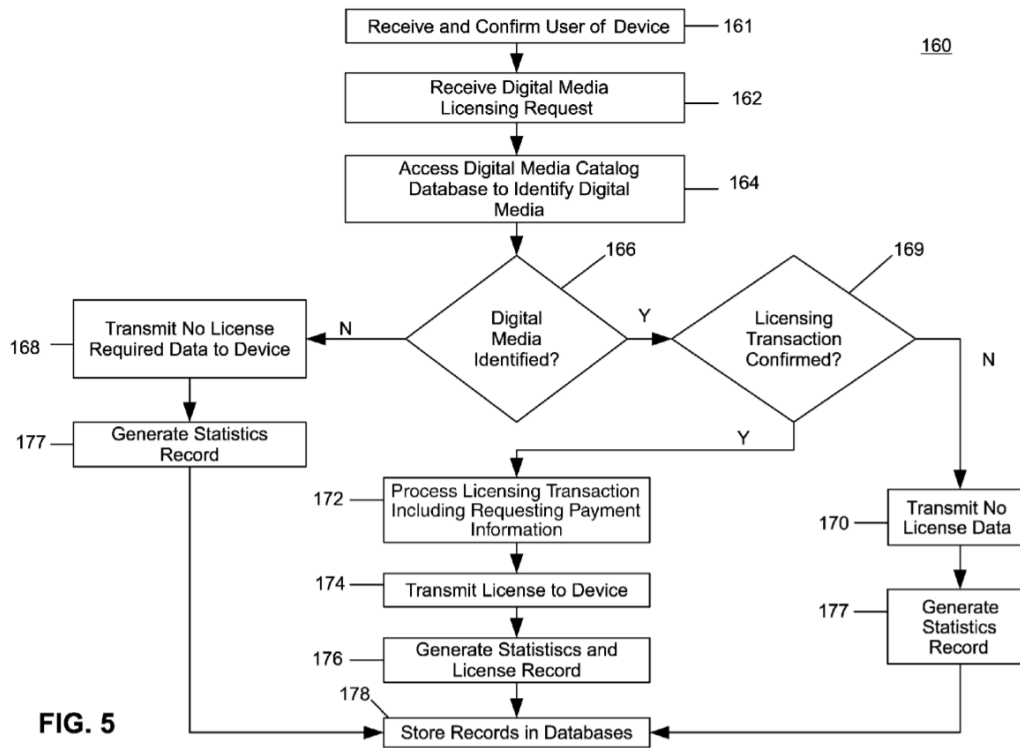


FIG. 5

EX1001, FIGs. 4-5.

“[L]icensing system 16” is loaded with a “catalog of media content items.” See EX1001, FIG. 3, 7:41-45, 8:22-57, 13:27-30. The content items are analyzed to determine “identifying characteristics” that are “inherently present.” *Id.*, 4:15-33, 6:59-7:2, 8:28-51, 9:4-11, 9:18-22. This may be a “fingerprint” or “digital watermarking.” *Id.*, 4:33-39, 13:27-30.

A user device then provides a license request. EX1002, ¶¶81-85. The request may occur when the user has loaded a digital media file on the user’s device 10. EX1001, 4:15-24. A license database is accessed to determine whether the user has licensed the content. *Id.*, 4:43-46, 9:34-38. If so, the device “initializes

reproduction of the digital media file.” *Id.*, 9:38-41. If not, the user receives a “query” asking whether the user would like to purchase a license. *Id.*, 9:42-47; *see also id.*, 4:46-49. If the user declines, the device denies access to the content. *Id.*, 4:50-64, 9:48-50, 10:9-11:13. If the user accepts, the licensing system permits the user to play or stream the content. *Id.*

2. Targeted Marketing

User demographic data is collected when a user accepts or declines a license and provided as reports so that content providers can gauge interest and perform targeted marketing. *Id.*, 5:32-40, 7:63-8:9, 9:50-58, 11:13-37, 11:62-12:26; EX1002, ¶¶86-88. Figure 7 depicts this process:

200

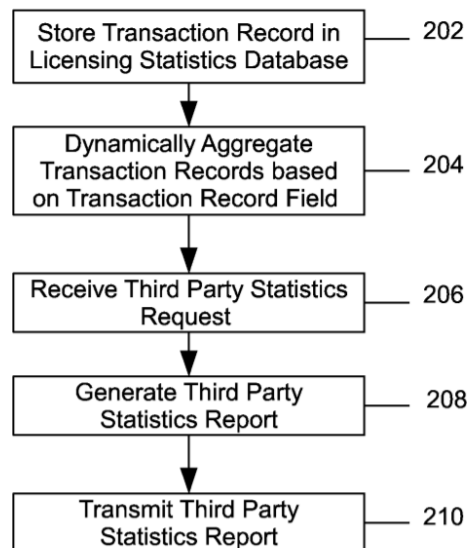


FIG. 7

EX1001, FIG. 7.

B. Prosecution History and Alleged Novelty

The '191 patent purports to claim priority to U.S. Patent No. 9,715,581 (“’581 patent”). Prior to allowance of the ’581 patent, the applicant amended the claims in response to a rejection to emphasize the collection of demographic data when a user acquires or declines a license. EX1009, ’581 Pros. History, 0344-54. In allowing the claims, the Examiner highlighted that the prior art did not disclose ***“storing demographic data about users that decline a media license*** in order to inform a marketing analysis.”² *Id.*, 0376. The ’191 patent was filed years later and quickly issued based on the Examiner making the same determination that targeted marketing based on user demographic data gleaned when a user declines a license was novel. EX1012, 0130-42. The Examiner was unaware, however, that these features are explicitly disclosed in Peled and Brandstetter as further explained below. EX1002, ¶¶97-98.

C. The ’191 Patent Claims

The ’191 patent contains twenty-three claims, four of which (claims 1, 7, 13, and 19) are independent. A claim appendix has been included with this Petition identifying the claims and claim elements.

Claim 1 recites a method for determining a target demographic for media marketing based on data associated with two different users requesting to

² All emphasis added unless otherwise noted.

reproduce the same media-content item. EX1002, 89-93. Elements [1A]-[1C] are directed to licensing and distributing digital-media content, while elements [1D]-[1I] 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 1-3 (Peled-Pou grounds) and Grounds 4-5 (Brandstetter-Levy grounds) demonstrate that this was obvious, not inventive. Sections VI-X; EX1002, ¶¶89-93.

Importantly, claim 1 does not explicitly require a single device or system to perform all of its steps. *Id.*, ¶¶89-93. Indeed, when Patent Owner (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 a licensing system on a server would practice its limitations. EX1001, FIG. 5, 7:63-8:9, 10:55-11:3, 11:21-37; EX1002, ¶¶89-93. 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, ¶¶89-93.

Additionally, an apparent dependency error exists for claims 14-18, which depend from claim 12 but have conflicting preambles. It appears claims 14-18 should depend from system claim 13. Similarly, claims 20-23 face the same issue.

D. Other Challenged Patents

Petitioner has filed IPR petitions challenging other patents in the same family as the '191 patent: '581 patent and U.S. Patent Nos. 9,898,590; 10,489,560; 10,860,691; 10,885,154. Claim features unique to the individual patents can be found, for example, at EX1002, ¶¶94-96 of the Declaration of John Tinsman (EX1002). Each of these patents recites identifying whether a user has accepted or declined an offer, recording user demographic data, and providing a summary of the user demographic data. EX1002, ¶¶94-96. The '191 patent likewise claims these concepts except that it refers to two users and aggregating user data for the two users, where one has accepted a license and the other has declined a license. 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).

***Petition for Inter Partes Review of
U.S. Patent No. 10,515,191***

In the parallel litigation, PO represented to the court that the “decline” limitation ([1D]) “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, Plaintiff’s Response, 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. That interpretation renders the word “decline” superfluous in the claims. Further, PO’s interpretation is inconsistent with narrowing amendments made during prosecution. 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, ¶¶189-195. 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 ’191 patent specification. EX1002, ¶¶189-195.

VI. GROUND 1: CLAIMS 1-4, 6-10, 12-16, 19-21, AND 23 OF THE '191 PATENT ARE OBVIOUS OVER PELED-POU.

Peled-Pou discloses every element of independent claims 1, 7, 13, and 19, which are materially identical. Peled and Pou both describe facilitating content distribution to aid content creators with monetizing content. EX1002, ¶¶100-113, 126-133, 150. Peled discloses the alleged point of novelty (i.e., gathering demographic data when users 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 over the Internet. EX1003, Abstract, ¶¶1-2, 3, 7, 155; EX1002, ¶¶100-113. 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. *Id.*, ¶169. Peled compiles this demographic data and generates “reports to individual content providers” or distributors. *Id.*, ¶¶168, 183, 199. These reports are used to focus marketing efforts. *Id.*, ¶200; see also *id.*, ¶¶9, 157, 196. Therefore, just like

the '191 patent, Peled describes gathering user demographic data when an offer for content has been accepted or declined. EX1002, ¶¶100-113.

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, ¶¶126-133.

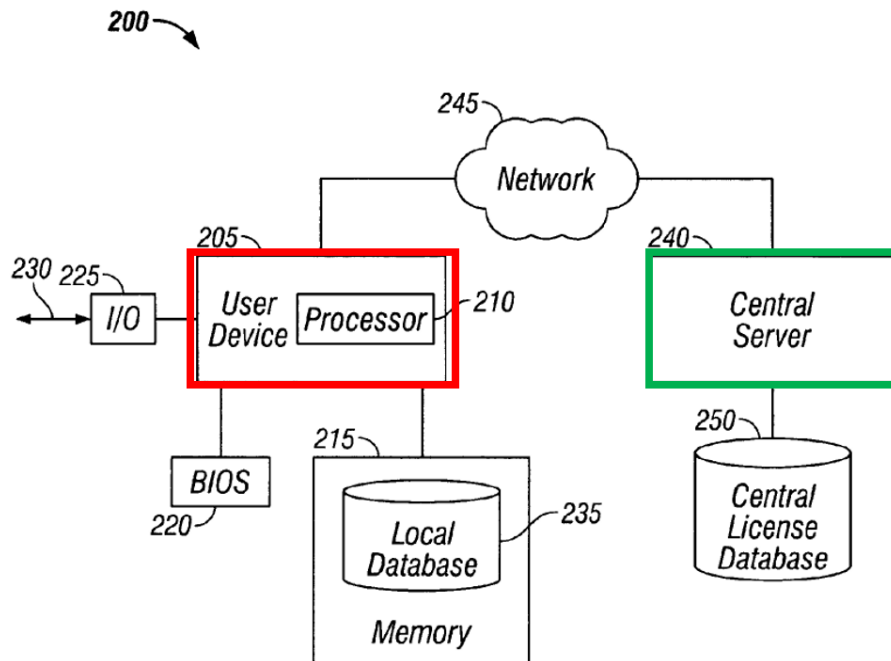


FIG. 2

EX1005, FIG. 2 (annotated).

Pou's system (Figure 2 above) includes a “central server” 240 (green), as well as a plurality of “user device[s]” 205 (red). EX1005, ¶¶31, 43, 57, 59. Figure

1 (below) depicts Pou's licensing and digital rights management process. *Id.*, ¶¶31, 50-56.

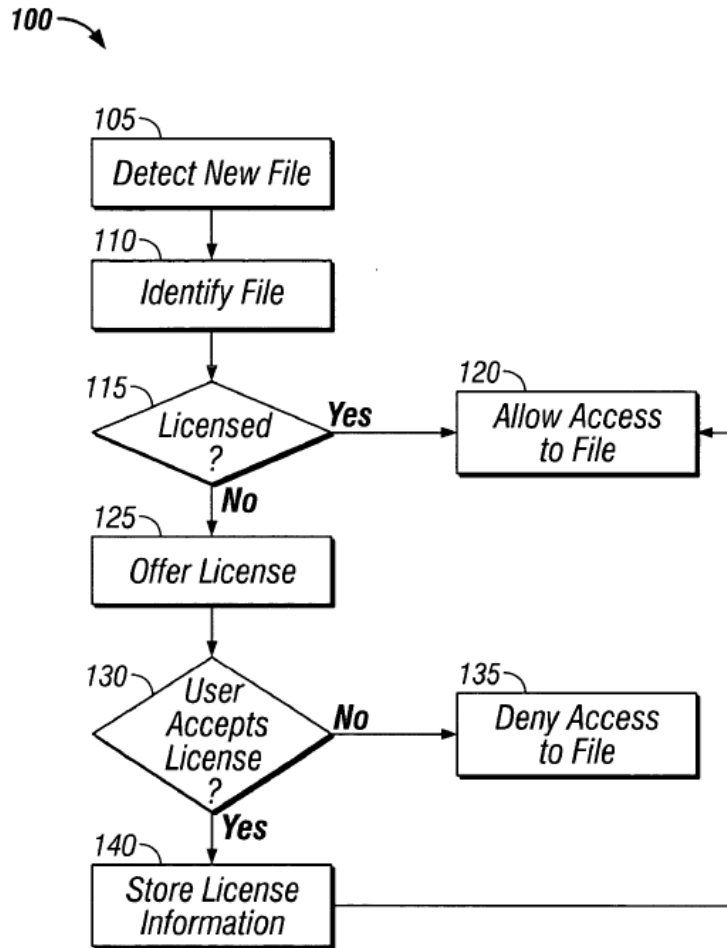


FIG. 1

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 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). *Id.*, ¶¶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, ¶¶150-152. 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.*, ¶152. 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.*, ¶152.

Peled already 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, ¶153. Pou describes one technique that uses a “fingerprint” or “‘Unique File ID’ (UFID)” to identify media files. EX1005, ¶¶51-55, 65, 82, 111. A POSA would have combined Pou’s fingerprint and UFID techniques with Peled to track user purchases including licenses and to identify media content that a user has already obtained. EX1005, ¶¶55-56, 59; EX1002, ¶¶152-155. 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, ¶¶152-155. For example, a fingerprint is a compact, “reduce-bit representation of content,” and therefore provides fast and computationally efficient comparisons. EX1006, ¶140; EX1002, ¶¶152-155.

The Peled-Pou combination would also help combat and prevent “illegal content distribution.” EX1003, ¶184; EX1005, ¶3; EX1001, 1:36-57. 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, 196, 198, 200; EX1002, 155-158.

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, ¶¶159-161. 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 license and potentially identify reasons for refusal. *See* EX1002, ¶¶159-161.

Both Peled and Pou describe conventional server systems for managing digital media files. EX1003, ¶¶164-66; EX1005, ¶¶55, 59. A POSA would have therefore easily combined the relevant technology described by the references using well-known computer programming techniques. EX1002, ¶¶159-161; 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, ¶¶159-161.

D. Peled-Pou Discloses Claim 1.

Peled-Pou discloses claim 1. This 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 distributes media-content items to content consumers 14. EX ¶¶1, 7, 10, 158, 166, 175-177, 197. Peled’s “apparatus 20” distributes authorized reproductions of media-content items to content consumers 14. *Id.*, ¶¶166-68, FIG. 6; EX1002, ¶¶162.

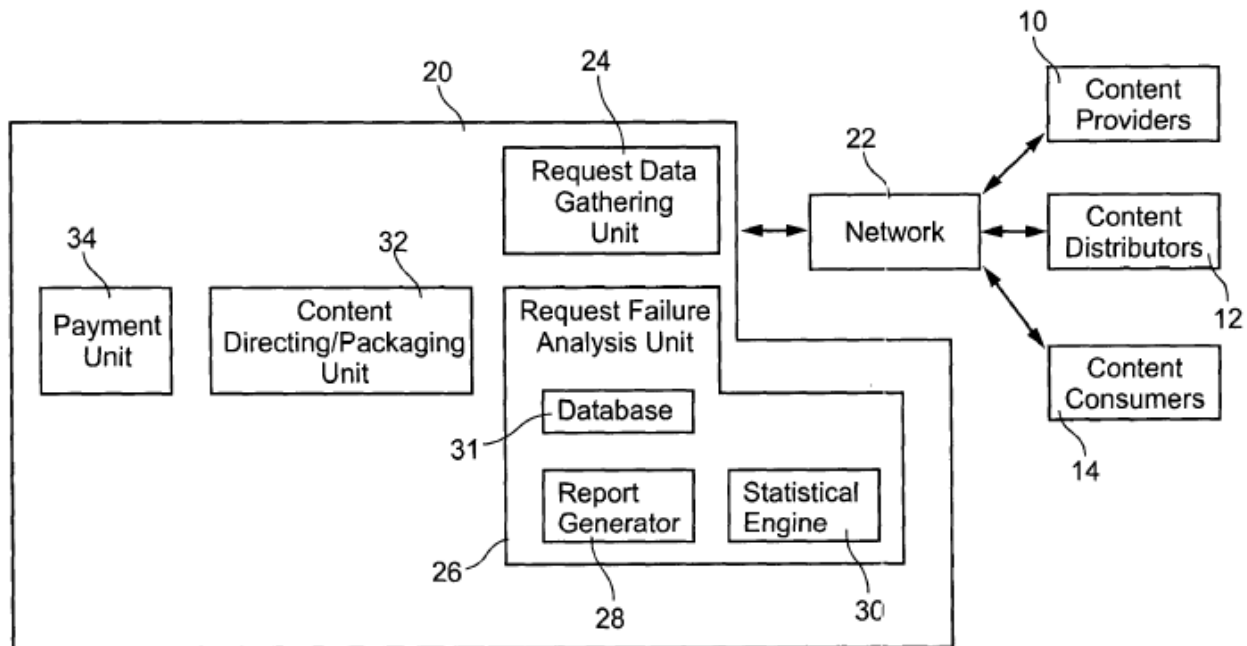


Fig. 6

EX1003, FIG. 6.

Apparatus 20 facilitates the determination of a target demographic for media marketing. EX1002, ¶¶162-169. As further described with reference to claim elements [1H] and [1I], a “report generator” 28 compiles collected user demographic information and “statistically analyz[es] the data” to generate a report that describes “why requests are not being completed.” EX1003, ¶¶69-70, 92, 168-69, 183, 198-99; *see also id.*, ¶158 (explaining that Peled’s system uses extracted data to “build[] ... a statistical picture of non-fulfilled transactions”). The reports “provid[e] content providers with information about potential new markets that are currently being excluded and also to provide consumers with acceptable alternatives.” *Id.*, ¶¶155, 180-81. The reports “reveal a hidden demand” for content, allowing content providers and retailers “to focus marketing efforts on potential market segments (both for the relevant content and for similar content items).” *Id.*, ¶200. Thus, Peled determines target demographics for media marketing. EX1002, ¶¶169-172.

The preamble does not require all claim steps to be performed only on a single 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 could 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, ¶¶169-172.

2. [1A] “receiving” a first/second request to reproduce media content

Peled supports “the distribution of products, services and especially electronic content over a network,” and refers specifically to digital media content such as movies. EX1003 ¶¶1, 7, 10, 158, 166, 175-177. Each item corresponding to such content is a “media content item.” *See, e.g., id.*, ¶¶14-15 (referring to “content items” corresponding to requested media content). Peled describes consumers making “online **requests for content**,” like a movie. *Id.*, ¶¶61, 155, 158-59, 175-78. These requests are “received” by Peled’s server. *Id.*, ¶¶28, 159, 167, claims 12, 112; EX1002, ¶173.

By servicing multiple “content consumers,” Peled discloses receiving requests from the claimed first and second users. EX1002, ¶¶173-176; EX1003, FIG. 6. Peled “receiv[es] requests from **consumers** for the content.” EX1003, ¶159. Peled likewise refers to tracking data from a “**group of consumers**.” *Id.*, ¶169.

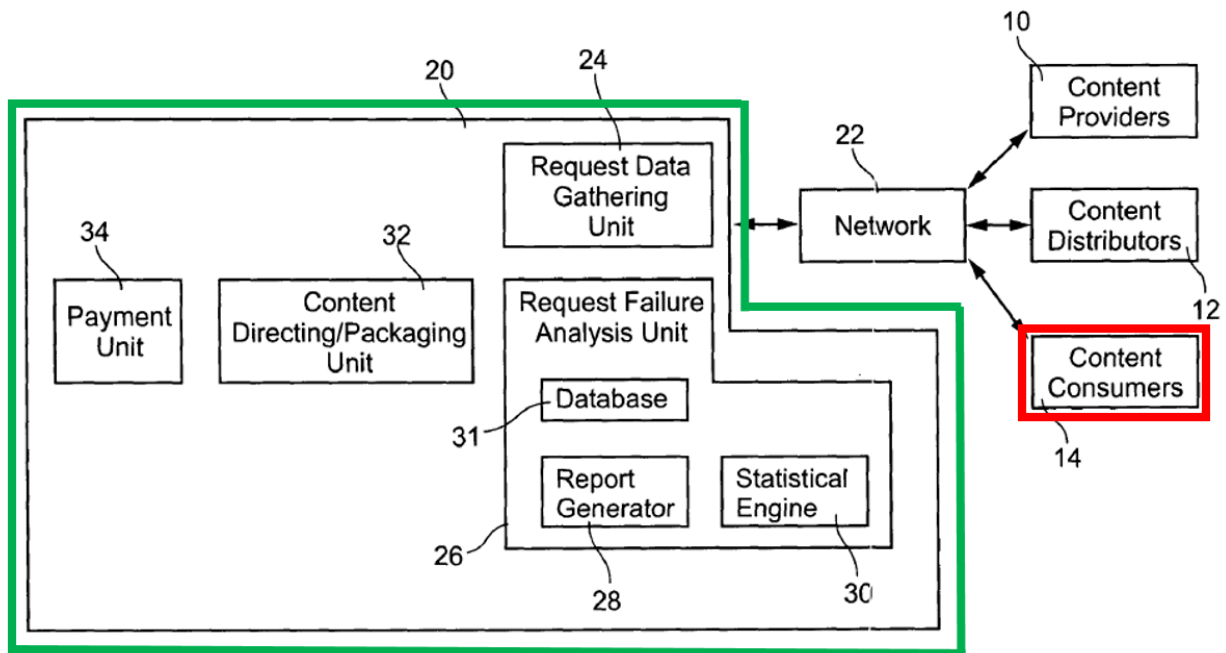


Fig. 6

EX1003, FIG. 6 (annotated).

3. [1B] “evaluating” the requests to determine whether the users have previously acquired a license and “offering the license” when they do not

Peled-Pou disclose the claimed “evaluating” and “offering.” Pou’s steps 115, 120, and 125 in Figure 1 are examples of the claimed “evaluating.”

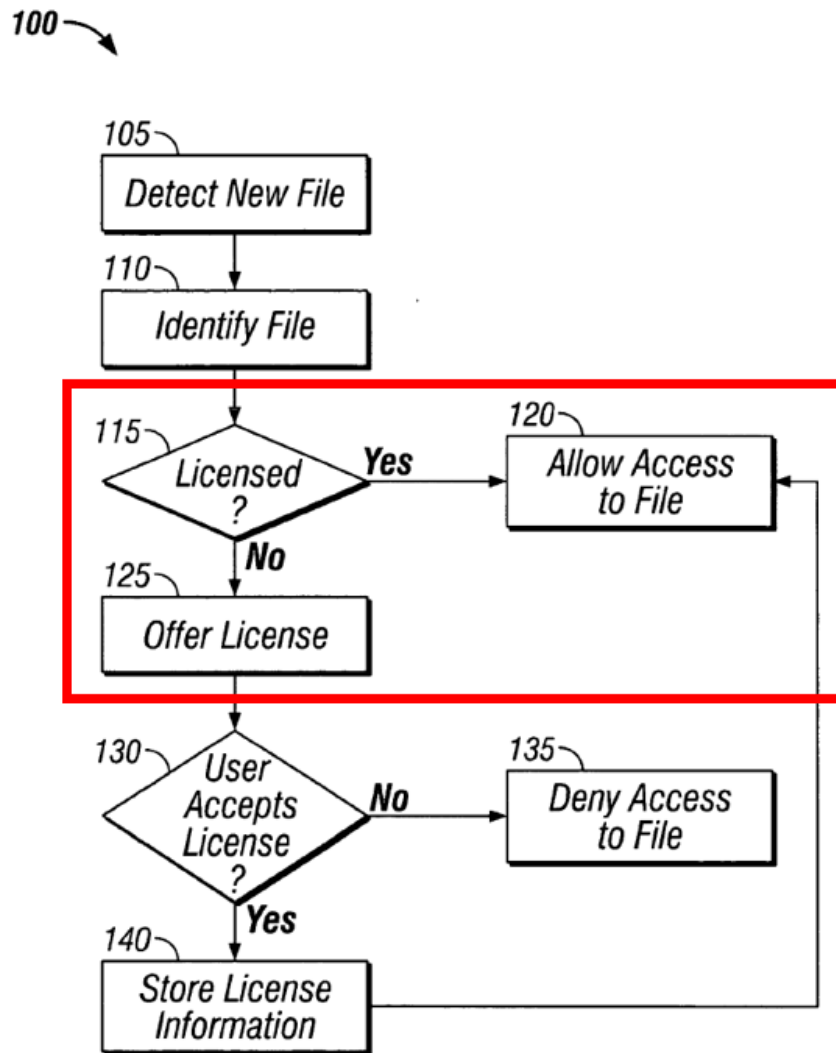


FIG. 1

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.D.4. Thus, Pou checks a database at step 115 and discloses the claimed "evaluating." EX1002, ¶¶177-180; *see also* EX1005, ¶¶55-56. After

checking step 115, Pou allows access to the file at step 120 if the user has already obtained a license. EX1005, ¶55. “If the file is not licensed, a license may be offered to the user for purchase (step 125).” *Id.*, ¶56. Thus, Pou also discloses the claimed “offering.” EX1002, ¶¶180-185. Pou further explains that this evaluating and offering process would apply to multiple users. *See, e.g.*, EX1005, ¶¶46, 58, 88, 96; EX1002, ¶¶180-185.

Peled also discloses offering content licenses to “content consumers” who are not already permitted to access content. EX1003, ¶159, FIG. 3; *see also id.*, ¶28. For example, Peled offers “alternative content item[s],” which also disclose the claimed license offer. *Id.*, ¶¶32, 162, 176-77; EX1002, ¶¶178. These alternatives indicate that the user has not already obtained a license to reproduce the media content. EX1003, ¶¶181, 185-86, 197.

A POSA would have been motivated to combine Pou with Peled to efficiently evaluate whether a user has license. EX1002, ¶¶183-185. A POSA would have also known how to combine Pou with Peled, and would have had a reasonable expectation of success for all the reasons discussed above. Section VI.C; EX1002, ¶¶184-185.

4. [1C] “extracting first user data ... when the first user accepts the offer and acquires the license”

Peled-Pou discloses offering a license query. *See* Section VI.D.3. Peled extracts user demographic data when users acquire a license. EX1003, ¶¶1-2, 169, 172, 175-77, 186, 199. Peled analyzes personal data for “approved purchase requests” and “content that was actually sold.” *Id.*, ¶¶2, 177, 199. Peled also tracks user data for consumers who have “shown a willingness to purchase at a given lower price.” *Id.*, ¶177. The user data “may include profiles of individual consumers or groups of consumers,” including “geographical factors,” age, or “personal data.” *Id.*, ¶¶169, 186; *see also id.*, ¶¶2, 175-77, 199; EX1002, ¶¶186-188.

5. [1D] “extracting second user data ... when the second user declines the offer”

Peled also extracts user demographic data when users decline a license. EX1003, ¶¶155, 169, 175-77, 186; EX1002, ¶¶189-194. Peled extracts user data when “a consumer simply looks at a content item but then chooses not to buy it,” and when the consumer aborts a purchase attempt. EX1003, ¶185. In one example, an Italian-speaking consumer requests a movie from an American-based company only to discover that the movie is in English and does not have 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.* ¶¶176-77; EX1002, ¶¶191-192. By tracking this information, Peled’s system can determine the reason why the requested media content item was declined. EX1003, ¶186; EX1002, ¶¶192-194.

Therefore, Peled extracts user data for content requests and specifically “online requests that do not result in a sale.” *Id.*, ¶155. This may be for “individual consumers or groups of consumers.” *Id.*, ¶169. As previously explained, Peled extracts user demographic data including “geographical factors,” age, or “personal data.” *Id.*, ¶¶169, 186; Section VI.D.4. A POSA would have understood that multiple consumers may simultaneously make requests for the same media-content item and that Peled’s system processes all such requests. *See* Section VI.C.

6. [1E] “aggregating” the first/second user data into a statistics record

Peled aggregates user data into a statistics record. EX1003, ¶¶1-2, 169, 172, 175-77, 186; Section VI.D.4-VI.D.5. 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, ¶¶195-197.

Peled describes tracking “profiles of individual consumers or groups of consumers” along with “refusal information.” 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. “Individual requests may be analyzed ***in the light of other requests*** and in the light of a personal profile ... or of ***a profile of a group*** to which the consumer is deemed to belong” *Id.*, ¶180. Peled aggregates “personal data of a statistically constructed group of consumers,” and therefore aggregates data from multiple users. *Id.*, ¶169; EX1002, ¶¶197-199.

7. [1F] “statistics record summarizes” the user data

As previously described, Peled compiles “personal data of the individual consumers” and demographic information, and therefore “summarizes” the user data. EX1003, ¶¶169, 199; Section VI.D.6.; EX1002, ¶¶200-202. Peled’s compilation of user data for multiple users therefore summarizes the first and second user data. *Id.*

8. [1G] “storing” the statistics record so that the first/second user data is accessible to a third party

Peled stores user demographic data within a user profile (claimed “statistics record”) in “database 31.” EX1003, ¶¶169-70, FIG. 6; Sections VI.D.6-VI.D.7. The database includes refusal data, user profiles, and personal data. EX1003, ¶¶169-70.

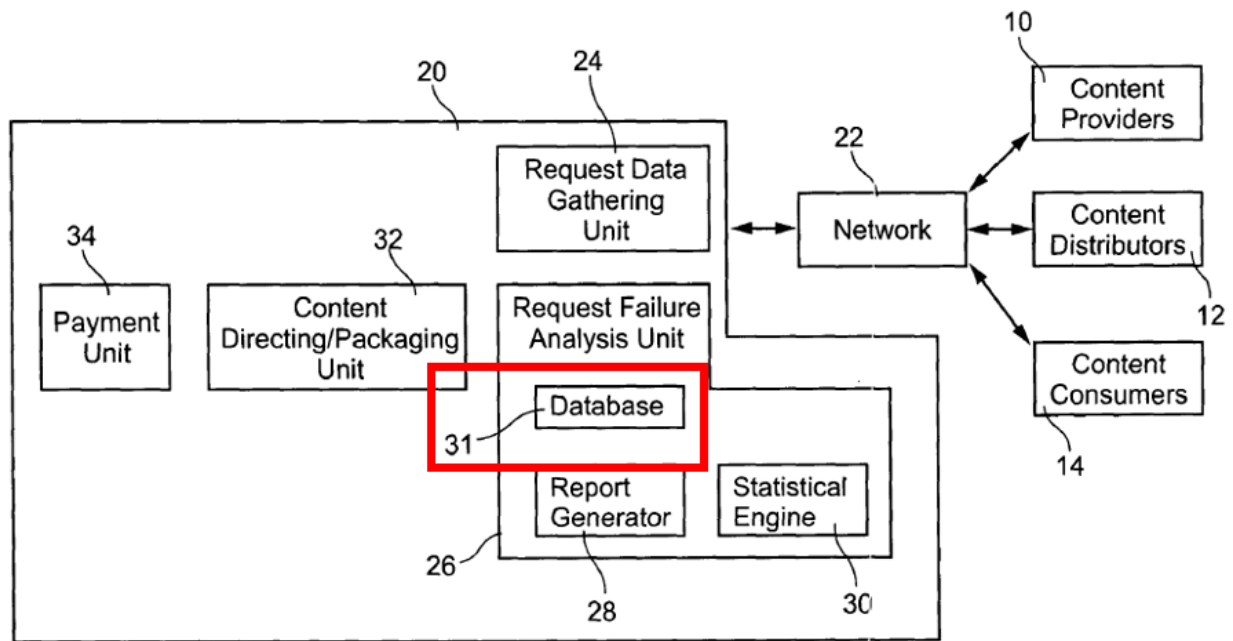


Fig. 6

EX1003, FIG. 6 (annotated).

Thus, Peled describes storing a statistics record in a database to generate reports for content providers. EX1002, ¶¶203-204; Sections VI.D.6-VI.D.7. “[R]equest failure analysis unit 26” generates these reports and provides user data summaries to content providers, such that the user data is accessible. EX1003, ¶¶155, 168-69, 172, 177, 187, 196, 199-200; EX1002, ¶205. Third-party content providers may analyze the reports—and the statistics records therein—to identify demographic information for marketing purposes. EX1003, ¶¶155, 172, 196, 199-200; EX1002, ¶206. The content providers can also provide queries to obtain consumer data as well. EX1003, ¶187.

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 EX1005, ¶59; EX1002, ¶207. 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, ¶208.

9. [1H] "analyzing by the third party the statistics record to determine the target demographic"

Peled describes a content provider or retailer (i.e., a "third party") analyzing a statistics record provided in the form of reports. See Sections VI.D.6-VI.D.8; EX1002, ¶209. As previously explained, Peled's "report generator" 28 compiles the collected user demographic information and "statistically analyz[es] the data" to generate a report that describes "why requests are not being completed." EX1003, ¶¶69-70, 92, 168-69, 183, 198-99; *see also id.*, ¶158 (explaining that Peled's system uses extracted data to "build[] ... a statistical picture of non-fulfilled transactions"). These reports convey a target demographic for media-content items and "provid[e] content providers with information about potential new markets that are currently being excluded." *Id.*, ¶¶155, 180-183.

Peled provides these reports to third parties, such as content providers and creators. *Id.*, ¶¶93, 110, 127, 177, 183. The third parties then independently

analyze the reports—and the aggregated user data contained therein—to determine the target demographic and to “focus marketing efforts.” *Id.*, ¶¶172, 200; EX1002, ¶¶210-213. For example, content providers or retailers may then view these reports to identify a “hidden demand for products” and “to focus marketing efforts on potential market segments (both for the relevant content and for similar content items).” EX1003, ¶¶196, 200. These reports may also be provided on a “per content item basis” which summarizes target demographic data from multiple users. *Id.*, ¶183; EX1002, ¶¶214-215.

10. [1I] “marketing, by the third party, the media content ... to the determined target demographic”

As previously discussed, Peled’s activity reports are analyzed by third parties to determine a target demographic for particular media-content items. See Section VI.D.9; EX1002, ¶216. The third parties then “focus marketing efforts on potential market segments (both for the relevant content and for similar content items).” EX1003, ¶200. This target demographic marketing is based on the “type of buyers and their characteristics, and more.” *Id.*, ¶196; *see also, e.g., id.*, ¶¶88, 196 (describing companies changing their products, services, or “the way that they are sold” based on the analysis). Thus, Peled discloses the claimed “marketing.” EX1002, ¶¶216-217.

E. Claim 7

Claim 7 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,” 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 7 obvious for the reasons presented in claim 1 and as further explained below.

EX1002, ¶¶218-238.

[7P]	Section VI.D.1 ([1P]).
[7A]	Section VI.D.2 ([1A]).
[7B]	Section VI.D.3 ([1B]).
[7C]	Section VI.D.4 ([1C]).
[7D]	Section VI.D.5 ([1D]).
[7E]	Section VI.D.6VI.D.7 ([1E]-[1F]).
[7F]	Section VI.D.8 ([1G]).
[7G]	Section VI.D.9 ([1H]).
[7H]	Section VI.D.10 ([1I]).

Claim 7 recites, in [7P], 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, ¶¶166-167; Section VI.D.3; EX1002, ¶¶219. Pou’s central server also discloses this system. *Id.* 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 [7A], that the users' requests to reproduce content include "digital media information associated with the media content item." Peled receives user requests from consumer computing devices such as personal computers, which access apparatus 20 via the Internet by interacting with websites. EX1003, ¶¶121, 159; EX1002, ¶220. A POSA would have understood that to interact with websites, consumers would use a web browser installed on a computing device, which discloses the claimed "external devices." EX1002, ¶120. Pou explicitly describes such user devices as computers. EX1005, ¶¶50, 64, 108. Pou describes playing media on such a device. *Id.*, ¶¶55, 64, 108-10. Therefore, Peled-Pou discloses conventional user computer devices communicating with conventional server systems. EX1002, ¶221; EX1003, ¶¶164-66; EX1005, ¶¶55, 59.

Peled-Pou also discloses the claimed "digital media information." EX1002, ¶222. Initially, Peled discloses the purchase of "video files," and therefore discloses the claimed "digital media file." EX1003, ¶197; EX1002, ¶222. Peled also discloses retrieving such files from content-holding sites to service requests. EX1003, ¶¶158-59, 161. To organize, identify, and retrieve this content, Peled would have used a mechanism for uniquely identifying the content to retrieve, similar to the mechanism described in Pou. Section VII.C.; EX1002, ¶¶222-224. As previously explained, Pou describes using a "fingerprint" or "'Unique File ID'

(UFID)” associated with a media file to uniquely identify the file. EX1005, ¶¶65, 111. Pou describes identifying the fingerprint or UFID when content is loaded onto a user’s external device and transmitting this identifier to a central server to determine whether the content is already licensed by the user. *Id.*, ¶¶51-54; see also *id.*, ¶¶13, 65, 83; EX1002, ¶¶224-225. Thus, Pou discloses its central server receiving a request with a fingerprint or UFID to determine whether the user is already licensed. EX1002, ¶¶225-227. Peled-Pou would service multiple users and receive multiple requests in this manner. *Id.*, ¶¶228-229; EX1003, ¶¶159, 169; EX1005, Abstract. As previously explained, a POSA would have been motivated to combine Pou’s fingerprinting with Peled to efficiently and uniquely identify media content. EX1002, ¶¶228-229 Section VI.C.

Claim 7 additionally recites, in [7B], that the determination as to whether to grant users’ requests is based on a media content record stored in a “media catalog database that is associated with the media content item.” Peled-Pou also discloses accessing a “media catalog database” to identify a “media content record” to identify requested media content. EX1001, 10:40-65. Pou’s identification of licensing rights for specific media discloses this same content identification. Therefore, Pou’s central license database also discloses a “media catalog database” containing a “plurality of media content records.” EX1002, ¶230.

Pou’s “central license database” also discloses the claimed “media catalog database.” EX1002, ¶¶231-232. Pou’s central license database includes digital fingerprints and UFIDs corresponding to different digital files. EX1005, ¶¶43, 51-52, 65, 99. Pou describes searching the central database and identifying media 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. The fingerprints and UFIDs likewise disclose the “media content record” because they identify media content. EX1002, ¶¶231-235; EX1005, ¶¶54, 83, 100; Section VI.D.3.

Finally, the claim recites, in [7G], analyzing “a plurality of statistics records aggregated from requests for the media content item when the user is granted the license and when the second user declines the license.” Peled describes analyzing a plurality of statistics records similar to a single statistics record. Section VI.D.9; EX1002, ¶¶236-238. Peled analyzes multiple represents and groups of individuals. EX1003, ¶¶155, 180-81, 196, 200. Peled’s “report generator” 28 compiles and analyzes user demographic information to generate reports. *Id.*, ¶¶69-70, 92, 168-69, 183, 198-99. Third parties also analyze the statistics records in the reports. Section VI.D.9.

F. Claim 13.

Claim 13 recites a “system” that performs substantially the same method recited in claim 1, which is not patentably distinct. Peled-Pou thus renders claim 13

obvious for the reasons presented in claim 1 and as further explained below.

EX1002, ¶¶239-248.

[13P]	Sections VI.D.1, VI.E ([1P], claim 7).
[13A.1]	See below.
[13A.2]	See below.
[13B]	Section VI.D.2 ([1A]).
[13C]	Section VI.D.3 ([1B]).
[13D]	Section VI.D.4 ([1C]).
[13E]	Section VI.D.5, VI.E ([1D], claim 7).
[13F]	Section VI.D.6-VI.D.7 ([1E]-[1F]).
[13G]	Section VI.D.8, VI.E ([1G], claim 7).
[13H]	Section VI.D.9, VI.E ([1H], claim 7).
[13I]	Section VI.D.10, VI.E ([1I], claim 7).

Claim 13 recites a “processor” and “memory” in [13A.1] and [13A.2], respectively. Conventional computing devices (i.e., the claimed multimedia hardware devices), such as those described in Peled, include at least one processor and memory coupled to the processor. EX1002, ¶¶240-241. Pou provides this express teaching and states that “user device 205 includes ***a processor 210, which may execute instructions stored in a memory 215 and/or other storage mediums***” for performing the methods described in Pou’s disclosure. EX1005, ¶57. A POSA would have combined Peled and Pou for the reasons described above. See Section VI.C.; EX1002, ¶¶241-242.

Additionally, claim 13 recites, in [13C], a user’s “license to stream the media content.” Peled discloses streaming media content. EX1003, ¶197; EX1002, ¶¶243. Peled describes a consumer that “requests content via streaming video.”

EX1003, ¶178. Peled-Pou discloses evaluating a corresponding license for the reasons previously described. Section VI.D.4.; ¶¶244-247.

G. Claim 19

Claim 19 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. Peled-Pou thus renders claim 19 obvious for the reasons presented in claim 1, and as further explained below. EX1002, ¶¶248-262.

[19P]	Section VI.D.1 ([1P]).
[19A.1]	Section VI.D.2 ([1A]).
[19A.2]	Section VI.D.2 ([1A]).
[19A.3]	See below.
[19A.4]	See below.
[19B]	Section VI.D.3, VI.E ([1B], claim 7).
[19C]	Section VI.D.4 ([1C]).
[19D]	Section VI.D.5 ([1D]).
[19E]	Section VI.D.6-VI.D.7 ([1E]-[1F]).
[19F]	Section VI.D.8, VI.E ([1G], claim 7).
[19G]	Section VI.D.9, VI.E ([1H], claim 7).
[19H]	Section VI.D.10, VI.E ([1I], claim 7).

Claim 19 recites, in [19A.1] and [19A.2], a “receiver configured to receive ... request[s] from ... external device[s]” that include “digital media information associated with the media content item.” Peled-Pou disclose external devices used by consumers to request and consume media. See Section VI.F. Peled-Pou also describes the exchange of digital media information via a fingerprint. See Section

VI.E. Peled-Pou discloses transmitters/receivers that facilitate communications over the Internet. EX1002, ¶¶248-252. Peled's Figure 6 depicts "network interactive distribution auxiliary apparatus 20" performing bi-directional communications over "network 22." EX1003, ¶¶166-67; *see also id.*, ¶¶157-58, 173, 197. Apparatus 20 therefore uses a transmitter/receiver to facilitate these communications. EX1002, ¶¶248-252.

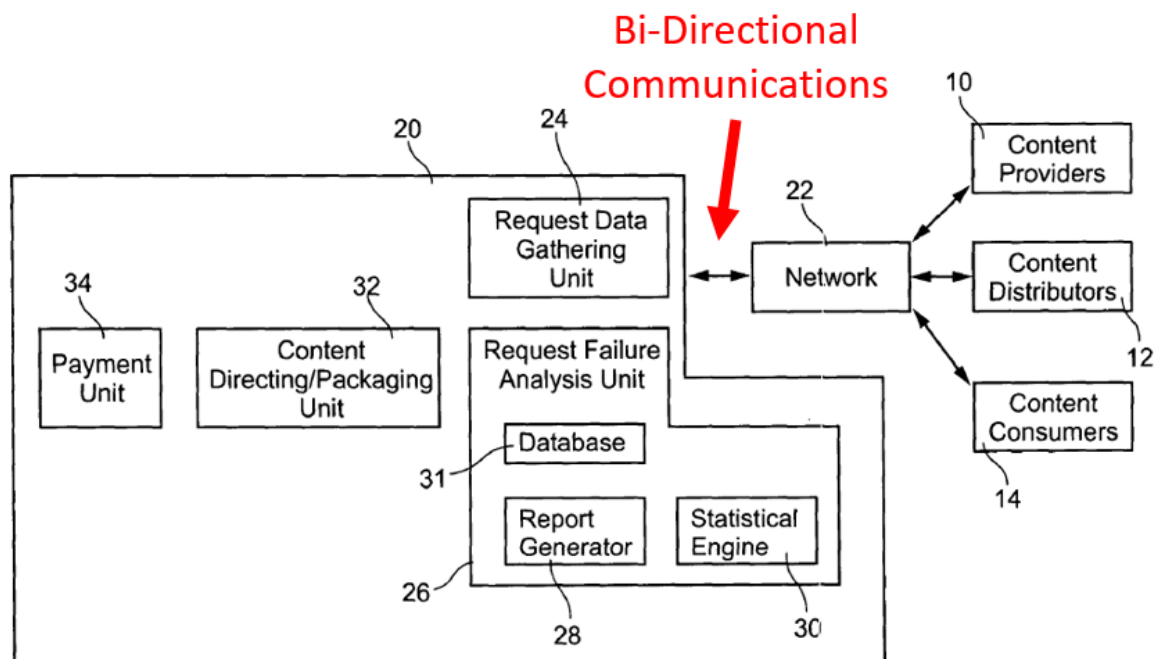


Fig. 6

EX1003, FIG. 6 (annotated).

Pou also describes "central server 240" facilitating bi-directional communications with "user device 205." EX1005, ¶59.

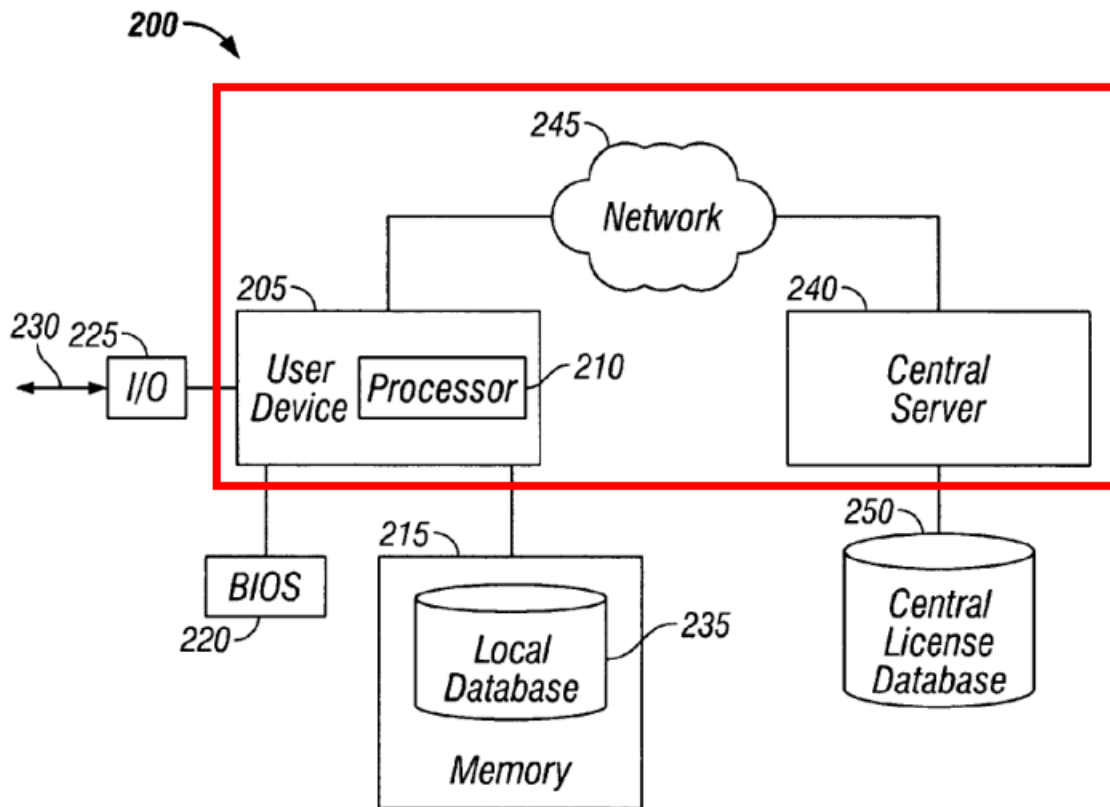


FIG. 2

EX1005, FIG. 2.

Pou describes communications over a wireless network or the Internet.

EX1005, ¶59. Thus, both Peled and Pou describe servers with receivers to receive communications from user devices. EX1002, ¶¶253-255. Peled’s receiver would similarly receive multiple requests from multiple users. See Section VI.D.2; EX1002, ¶256.

Claim 19 also recites, in [19A.3], a “processor.” Peled- 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, ¶257.

Finally, claim 19 recites, in [19A.4], a “memory.” A POSA would have understood Peled’s server to include memory to execute Peled’s functionality. EX1002, ¶258. Pou explicitly recites such a configuration with its central server including memory like a “central license database” 250. EX1005, ¶¶59, 62, FIG. 2.

H. Claims 2 and 14 (“receiv[ing] a license” and “prevent[ing] reproduction” when the first/second requests are declined by the licensing system)

Pou updates the 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 so that “access to the media file on the user device is allowed.” *Id.*, ¶¶25-27, 56, 101; EX1002, ¶¶263-265. Pou also describes storing a license on the user device, which is obtained from the remote server. EX1005, ¶¶25-26, 56.

Pou prevents reproduction when the licensing request is declined; for example, when “no payment method offered is validated.” *Id.*, ¶80; EX1002, ¶266. Peled also describes declining a request to obtain a license based on business rules as well as to prevent fraud. EX1003, ¶¶175, 187; EX1002, ¶267-270. As previously discussed, Peled-Pou accommodates multiple users and a POSA would have been motivated to combine Peled and Pou. Section VI.C.

I. Claims 3 and 15 (“plurality of reproduction parameters”).

“Reproduction parameters” refer to the terms of a license. EX1002, ¶¶271-272. Peled-Pou discloses such reproduction 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, ¶¶273-274.

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 license terms also disclose the claimed reproduction parameters. EX1002, ¶¶275-276.

J. Claims 4, 10, 16, and 21 (storing user data such that it is “accessible to a third party online media retailer”)

Claims 4, 10, 16, and 21 are nearly identical and refer to allowing a “third party online media retailer” to access the stored user data. EX1002, ¶¶277-283. Peled provides user data to third party online retailers (“content retailers RT1 ... RTn”), which differ from “content providers CP1 ... CPn.” EX1003, ¶157, FIG. 1; EX1002, ¶¶278-279.

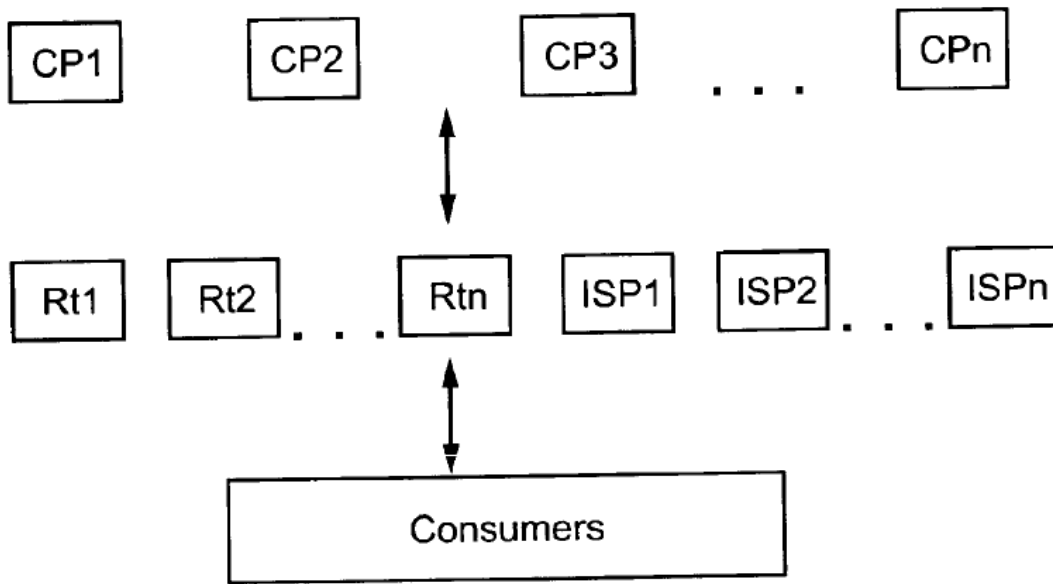


Fig. 1

EX1003, FIG. 1.

Figure 2 also depicts this distinction. EX1003, ¶158.

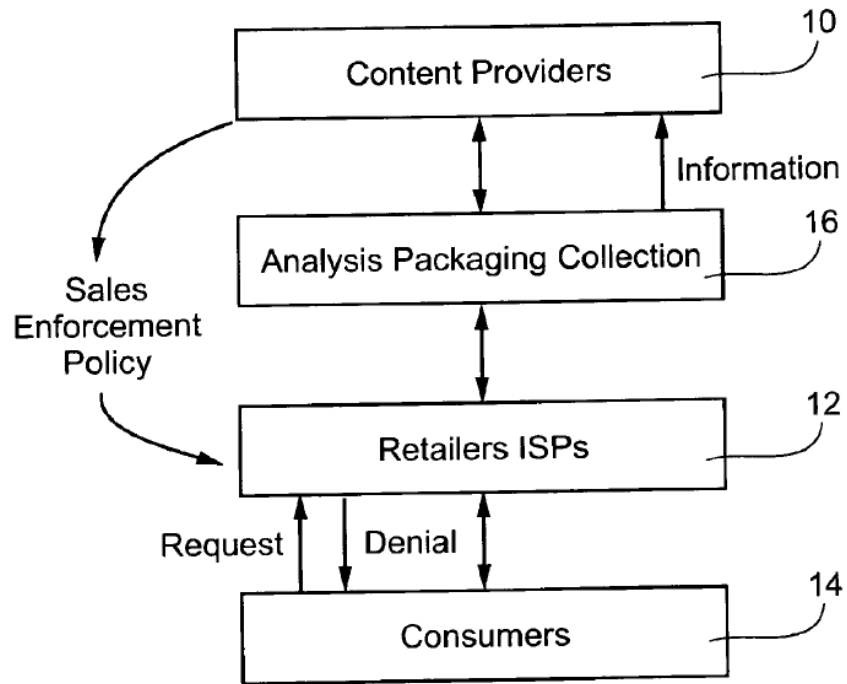


Fig. 2

EX1003, FIG. 2.

Peled refers to “content distributors” as retailers using the same identifier

“12.” EX1003, ¶¶157-58, 166; EX1002, ¶¶279-280.

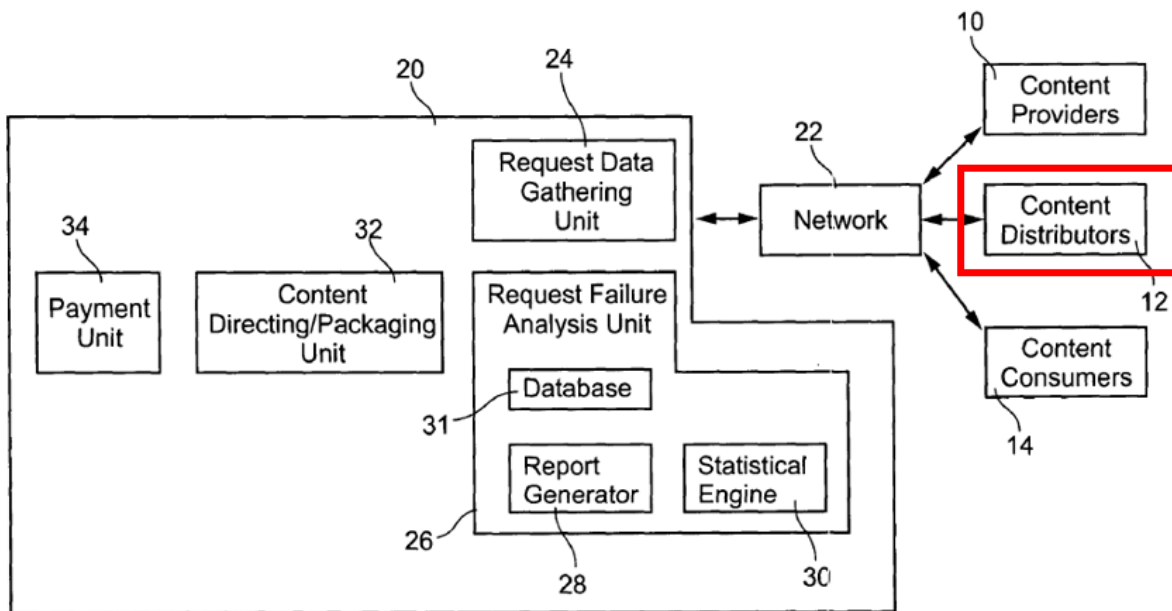


Fig. 6

EX1003, FIG. 6 (annotated).

Peled provides reports to retailers “on a per distributor basis” or to parties requesting the report. See Section VI.D.8; EX1003, ¶183; EX1002, ¶281-282. Peled therefore provides reports to the claimed “third party online media retailer.” EX1002, ¶282-283.

K. Claims 6 and 23 (“geographic location[.]”)

Peled discloses tracking geographic location information as part of the stored demographic user data. See Sections VI.D.4-VI.D.5; EX1003, ¶¶56, 74, 169, 176, 186, 196; EX1002, ¶284-287. This also allows copyright owners to gauge geographic locations to further perform targeted marketing. EX1003, ¶¶176, 186,

196; EX1002, ¶286. Peled also enables a content provider (i.e., “copyright owner”) to gauge the geographic location as well. See Sections VI.D.4-VI.D.5.

L. Claims 8 and 20 (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.H. Peled-Pou also discloses generating and storing license records in a registered user database. EX1002, ¶¶288-289. 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.5.

Peled-Pou also tracks “registered” users and stores records in a “registered user database.” EX1002, ¶¶290-291. 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; EX1002, ¶¶293-296.

M. Claim 9 (“fingerprint”)

Pou discloses digital media information including a “fingerprint” associated with the media-content item, as discussed above. See Section VI.E.; VI.G. (7B, 19B)]; EX1005, ¶¶13, 51-52, 54, 82; EX1002, ¶¶297-298.

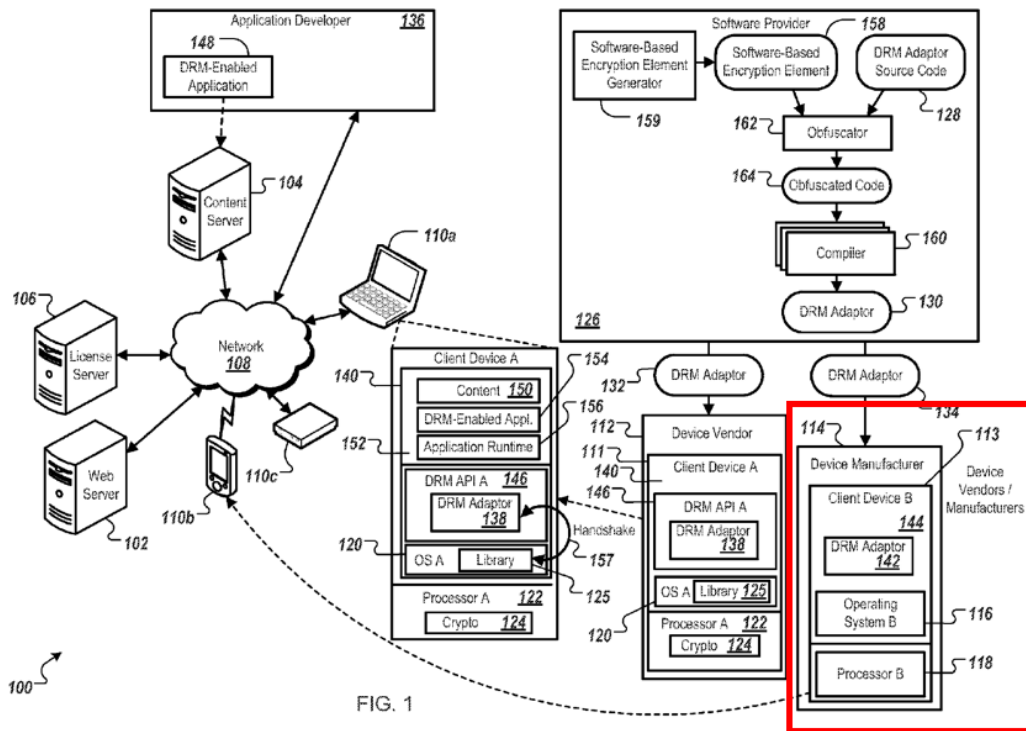
N. Claim 12 (user data includes “additional media content items” previously accessed)

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, ¶¶299-300. The user’s previous purchase “history” refers to “additional media content items,” as claimed, and is also tracked as user data. EX1002, ¶¶300-301.

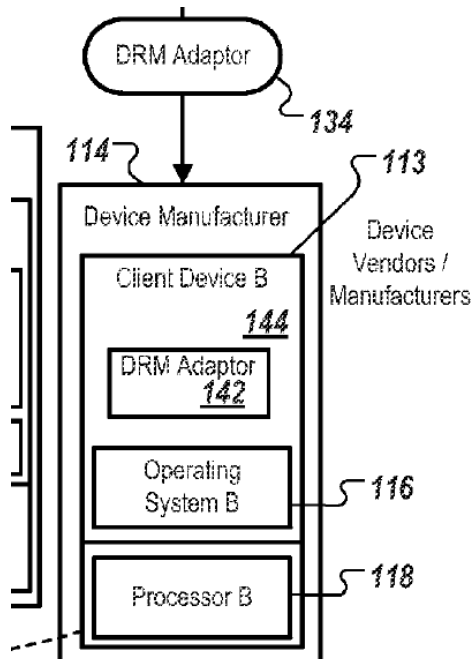
VII. GROUND 2: CLAIMS 5, 11, 17, AND 22 ARE OBVIOUS OVER PELED, POU, AND VIJAY.

Dependent claims 5, 11, 17, and 22 are nearly identical and describe storing user data such that it is “accessible to a hardware device manufacturer.” Vijay discloses this feature.

Vijay discloses protecting electronic content using a “digital rights management (‘DRM’) system.” EX1008, Vijay, ¶¶2-3.



EX1008, FIG. 1 (annotated).



Device manufacturer 114 (Fig.1 above) provides client devices 110 with DRM protection. EX1008, ¶¶22, 25, 27. “[D]evice manufacturer 114 may develop both an operating system 116 and a hardware processor 118 for the client device 113” to provide “hardware-based encryption.” *Id.*, ¶¶22-23, 27, 45-46. To achieve this feature, device manufacturer 114 provides client devices 110 with a “DRM adaptor.” EX1008, ¶¶22, 25, 27. Vijay thus discloses storing user data such that it is accessible to a “hardware device manufacturer.” EX1002, ¶¶145-147, 302-305; EX1008, ¶¶23, 27, 45-46. Peled, in turn, provides user data to any “party requesting the report.” EX1003, ¶183; EX1002, ¶306. Peled-Pou-Vijay thus discloses providing user data to a “hardware device manufacturer.”

A POSA would have found it obvious to allow a DRM device manufacturer to access encryption-related information to provide additional “secure, dynamic device profiling” prior to decrypting content for reproduction. EX1008, ¶¶29, 34, 39, 56, 60, 73-76; EX1002, ¶¶306-307. For example, Peled-Pou-Vijay would use a consumer’s geographic location information to confirm an expected user device prior to decrypting content for reproduction. EX1003, ¶¶56, 74, 169, 176, 186, 196; EX1002, ¶307. A POSA would have been motivated to combine Vijay with Peled and Pou to provide this additional security. EX1002, ¶¶307-308.

VIII. GROUND 3: CLAIM 18 IS OBVIOUS OVER PELED, POU, AND BRANDSTETTER.

Dependent claim 18 requires the user data to include “a quantity of times that the user has previously accessed the media content item and additional media content items.” As explained for claim 12, Peled discloses tracking user data including additional media-content items. *See* Section VI.N; EX1003, ¶177; *see also* EX1003, ¶¶162, 169, 181, 200.

Brandstetter discloses tracking a quantity of times that the user has previously accessed a media-content item. EX1004, ¶¶147, 173. For example, this occurs for a “play n-number of times licensing package.” *Id.*; EX1002, ¶¶309-311; *see also* Section IX.A.

A POSA would have made the Peled-Pou-Brandstetter combination 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, ¶¶312-313. 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, ¶¶312-313; 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, ¶¶312-313; 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, ¶¶312-313.

IX. GROUND 4: CLAIMS 1-4, 6-10, 12-16, 18-21, AND 23 ARE OBVIOUS OVER BRANDSTETTER-LEVY.

Brandstetter-Levy discloses every element of independent claims 1, 7, 13, and 19, which are materially identical. Brandstetter discloses the alleged point of novelty (i.e., gathering demographic data when users accept or decline content license offers) while Levy discloses many of the claimed conventional content-identification techniques. Brandstetter and Levy both describe the management of content licenses. EX1002, ¶¶314.

A. Overview of Brandstetter

Brandstetter discloses an online platform where content creators can market and distribute digital content. EX1004, Abstract, ¶¶69, 118. Figure 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.

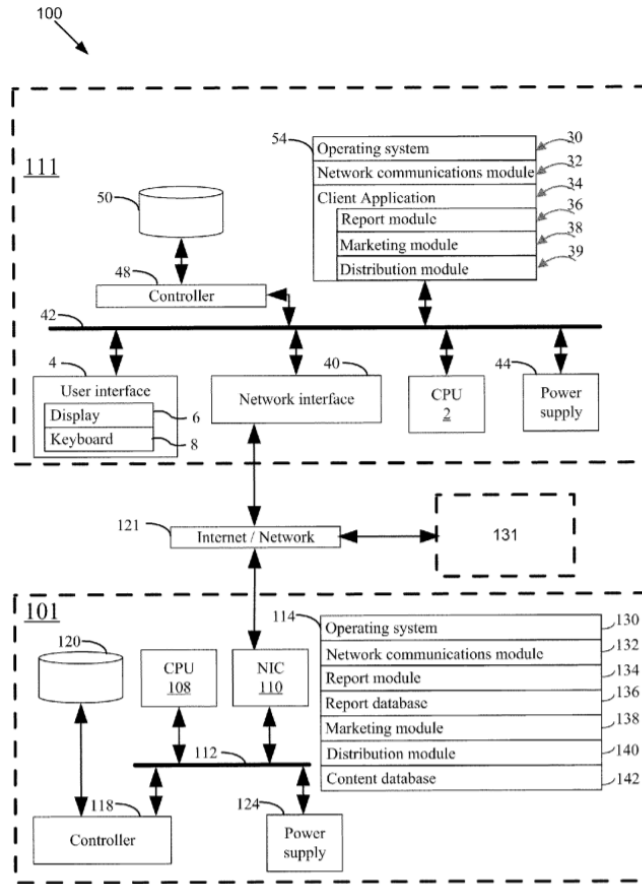


FIG. 1C

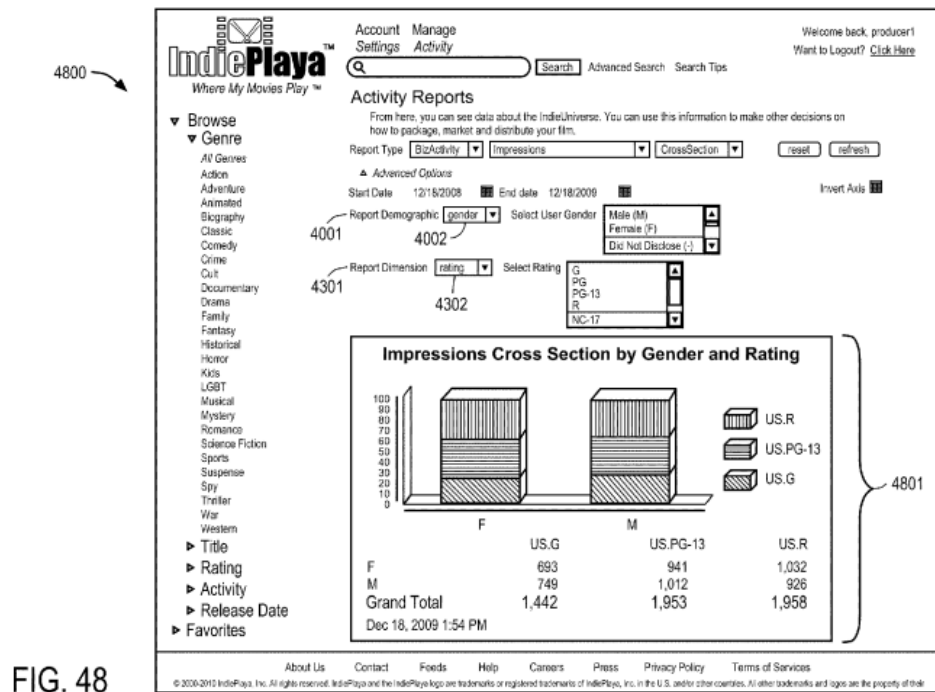
EX1004, FIG. 1C.

Brandstetter’s platform licenses and distributes digital media content to a user. EX1002, ¶¶113-115. 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, ¶¶116-120.

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, ¶¶121-123.



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, ¶¶123-125.

B. Overview of Levy

Levy describes “integrating content identifiers with digital rights management systems.” EX1006, ¶¶3, 5-6, 10, 17. 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. *Id.*, ¶¶83-84. Levy depicts a method for authenticating content usage rights in Figure 17d. *Id.*, FIG. 17d; *see also id.*, FIG. 17a; EX1002, ¶¶133-135.

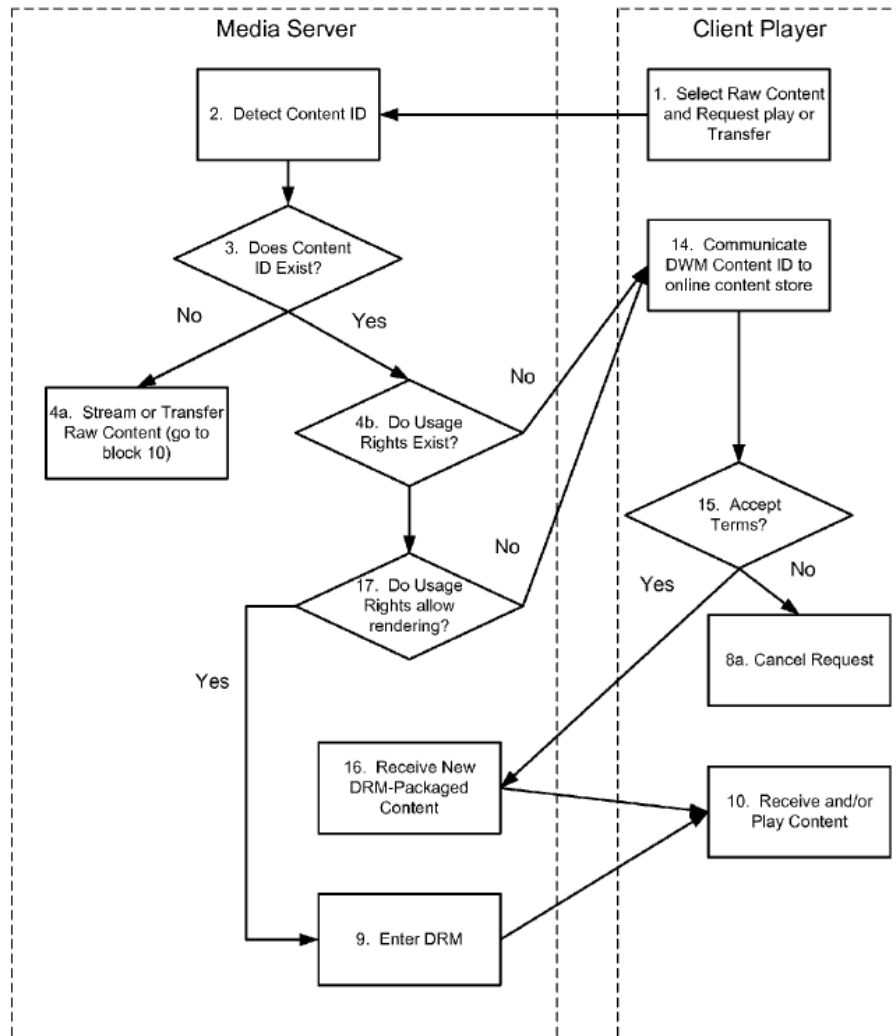


Fig. 17d

EX1006, FIG. 17d.

When a “user selects raw content for playing,” the Media Server identifies a corresponding digital watermark (DWM) Content ID. EX1006, ¶108. “[R]aw 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, ¶¶140-142, 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, 142. 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 define the conditions for playing the media content. *Id.*, ¶87; EX1002, ¶136.

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.*; EX1002, ¶¶137-144.

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, ¶¶314-316, 320. 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, ¶¶316-320.

First, the Brandstetter–Levy combination would efficiently tracks purchased licenses. Brandstetter tracks user purchase history and indexes 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.

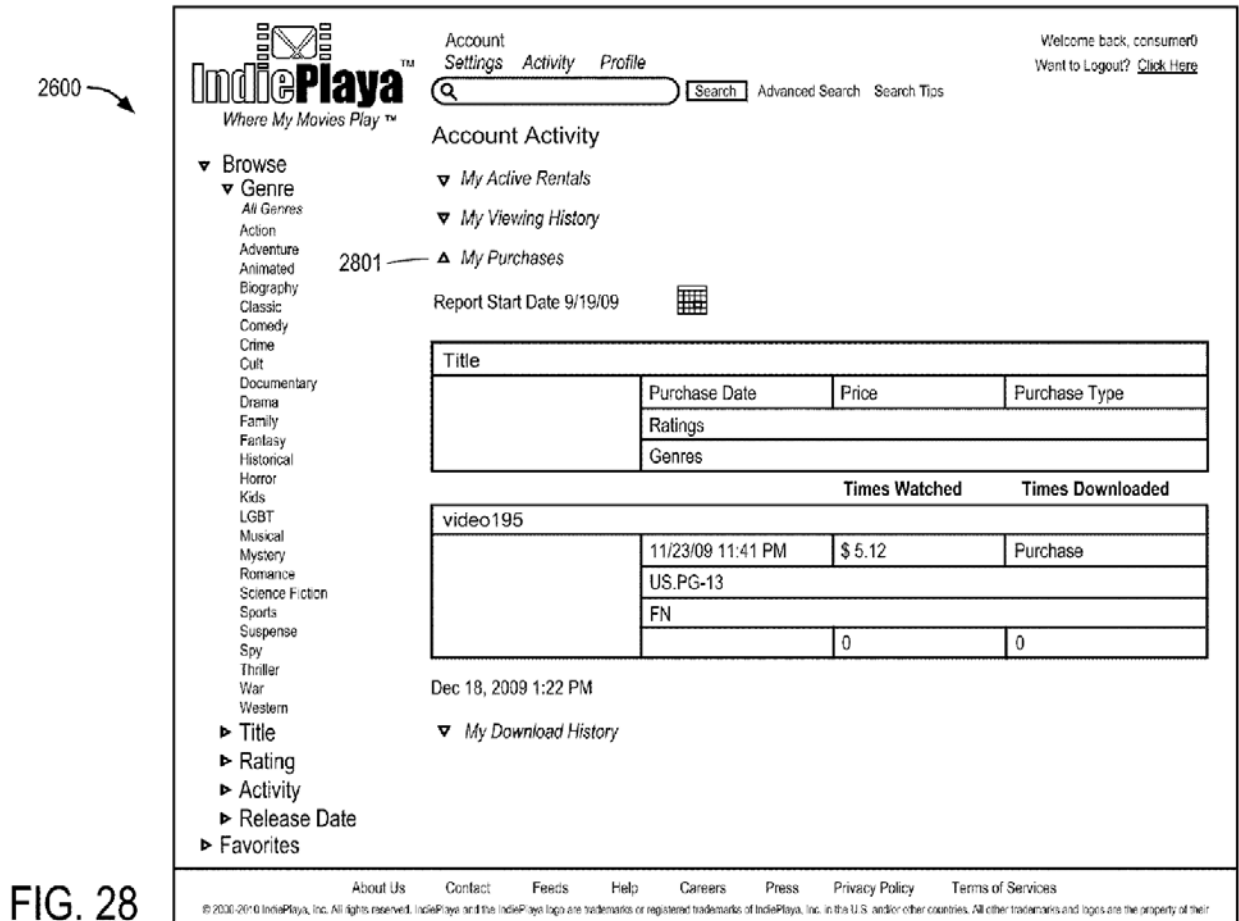


FIG. 28

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, ¶¶320-322. A common way to uniquely track purchased media content would be using a unique content identifier. EX1002, ¶¶320-322. 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. *Id.*, ¶¶58-66; EX1002, ¶¶320-322. A fingerprint is a compact, “reduce-bit representation of content” and therefore provides fast and computationally efficient comparisons. EX1006, ¶¶140, 142; EX1002, ¶¶317-318. 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, ¶322.

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, the Brandstetter-Levy combination would aid in confirming adherence to license terms for downloaded media files. *Id.* 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. *Id.*, ¶323; 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; EX1006, ¶¶106-14. A POSA would have been motivated to implement such

control with Brandstetter to prevent the unauthorized distribution of downloaded media-content items and to allow content creators to secure revenue streams.

EX1004, ¶¶4-5; EX1002, ¶323-326.

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. A POSA would have implemented Levy's purchase and license tracking, and fingerprinting and DWM techniques, with Brandstetter to distribute licensed content. EX1006, ¶¶56-73, 76-79. The combined system would manage different rentals and/or purchases and control downloaded content. *See* EX1002, ¶¶327-329; 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 easily combined the references using well-known computer programming techniques to perform a combined algorithm. EX1002, ¶328. Combining Brandstetter and Levy would have been predictable and would have simply amounted to updating Brandstetter's license management software algorithm to include Levy's Content ID or fingerprint management. *Id.*, ¶329. This would be 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 describes a computer-based method for “marketing and distributing media content, including motion pictures, television programming, online games, music, and other media content,” to users over the Internet. EX1004, Abstract, ¶¶1, 6, 10, 69. Brandstetter’s central server 101 distributes content to “client devices 111.” EX1004, ¶¶91, 92, 102-110, FIG. 1C; EX1002, ¶¶330-331. This discloses a computer system for executing the claimed computer-implemented method. *Id.*

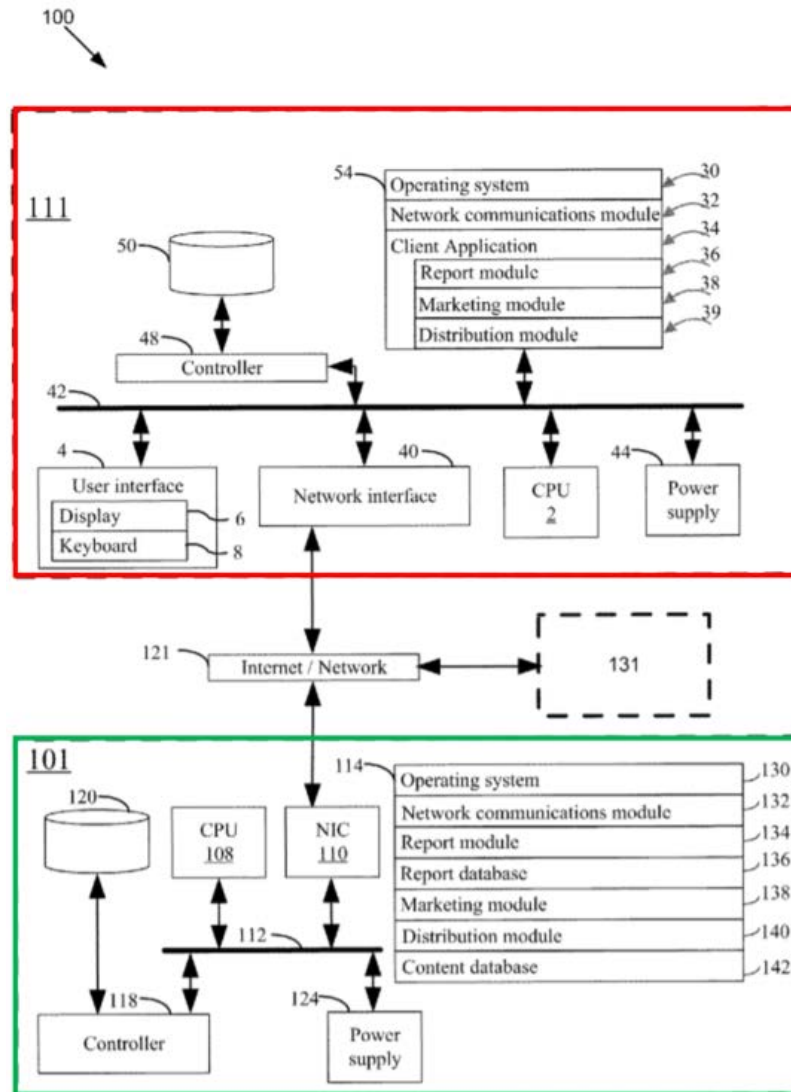
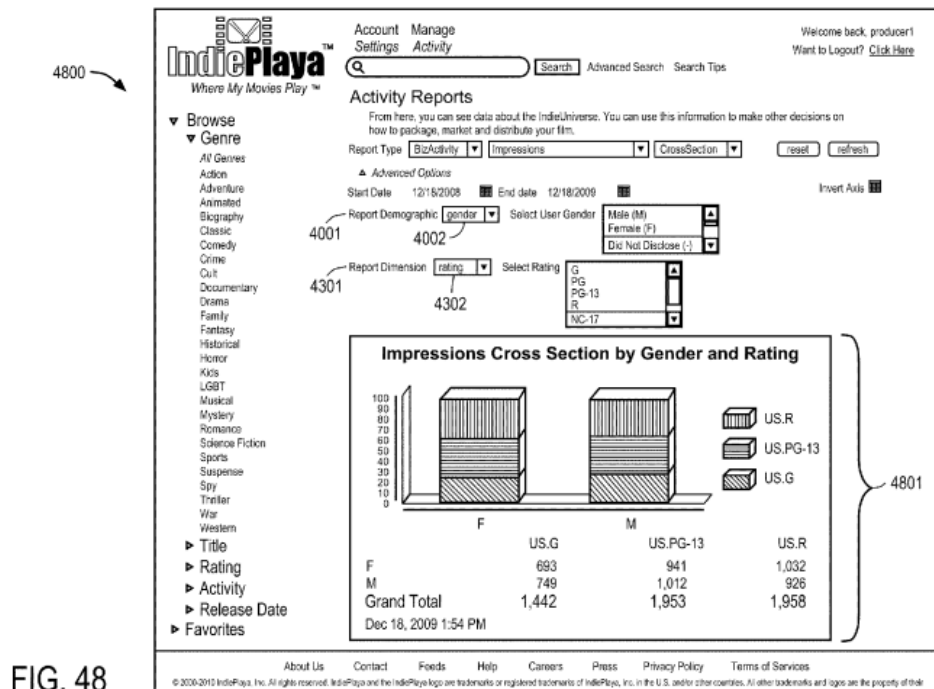


FIG. 1C

EX1004, FIG. 1C (annotated).

Brandstetter also provides reports to content creators for determining target demographics for media marketing. Section IX.D.9-IX.D.10; EX1002, ¶¶332-333. “Report module 134” on Brandstetter’s server analyzes aggregated user data to “generat[e] activity reports,” which “enable content creators to efficiently market

and distribute their content to a **target audience based upon reports.**” EX1004, ¶¶6, 96. The reports include purchase information for “one or more demographic groups.” *Id.* Figure 48 depicts an example report.



EX1004, FIG. 48.

Brandstetter’s reports convey target demographic information such as user location or age. EX1004, ¶¶173-74, 179. Using the reports, content creators can “develop a strategy for marketing primarily to that demographic.” *Id.*, ¶¶66; see also *id.*, ¶¶73, 75-76, 79, 83, 86, 97, 115, 132-133; EX1002, ¶¶334-338.

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, ¶¶339-341.

2. [1A] "receiving" a first/second request to reproduce media content

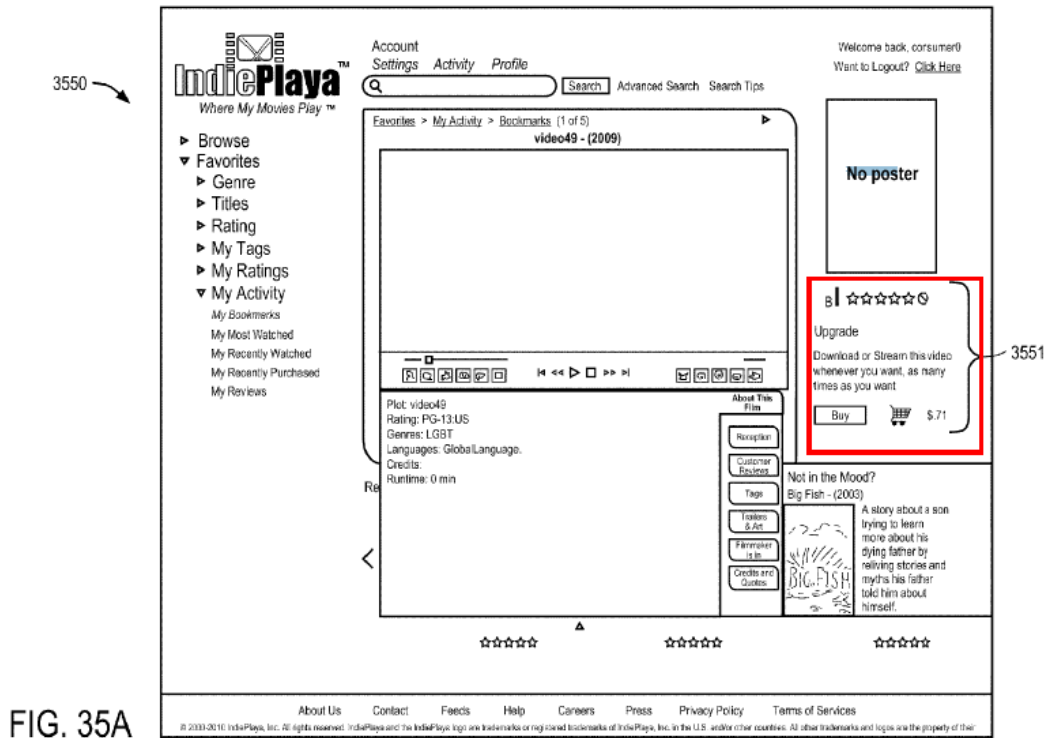
Brandstetter distributes media-content items to users. EX1004, Abstract, ¶¶1, 6-7, 10, 69. Brandstetter's platform receives a request to reproduce content when a user browses for content. *Id.*, ¶¶66, 71, 75, 77, 141-147. Such requests may be made by a user "click[ing] on an advertisement" or using a "search" bar in one of Brandstetter's interfaces. *Id.*, ¶¶71, 87, FIG. 4. Brandstetter's "distribution module 140 ... receives user requests" for media content. *Id.*, ¶98. Brandstetter's platform further services "hundreds, thousands, or even hundreds of thousands of client devices 111" which may request the same media-content items. *Id.*, ¶91. This is how Brandstetter collects consumer information for determining target demographics. *Id.*, Abstract, ¶¶6, 10, 78-79, 81, 91. Thus, Brandstetter discloses receiving multiple requests from different users to reproduce media-content items. EX1002, ¶¶342-345.

3. [1B] “evaluating” the requests to determine whether the users have previously acquired a license and “offering the license” when they do not

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.* 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, ¶346. Brandstetter also performs this evaluation when a user is permitted to download content. EX1004, ¶¶71, 77, 125, 145, 166, 169, 173, FIG. 28.

Brandstetter also evaluates existing user rights and provides the requisite authorization to reproduce the requested media when providing dynamic offers (e.g., up-sell, cross-sell) to the user. *See* EX1004, ¶¶75, 77, 87, 120-124, 130; EX1002, ¶347. For example, Brandstetter identifies previously acquired licenses and offers an upgrade based on this evaluation (“up-sell”). EX1004, ¶¶75, 87, 119-126; EX1002, ¶347-354.

If a 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 Figure 35A. *See id.*, ¶¶119-126.



EX1004, FIG. 35A (annotated).

Levy also evaluates the license transaction to determine whether the user has acquired a license. EX1002, ¶¶355-356. 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, ¶¶355-356. 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, ¶¶356.

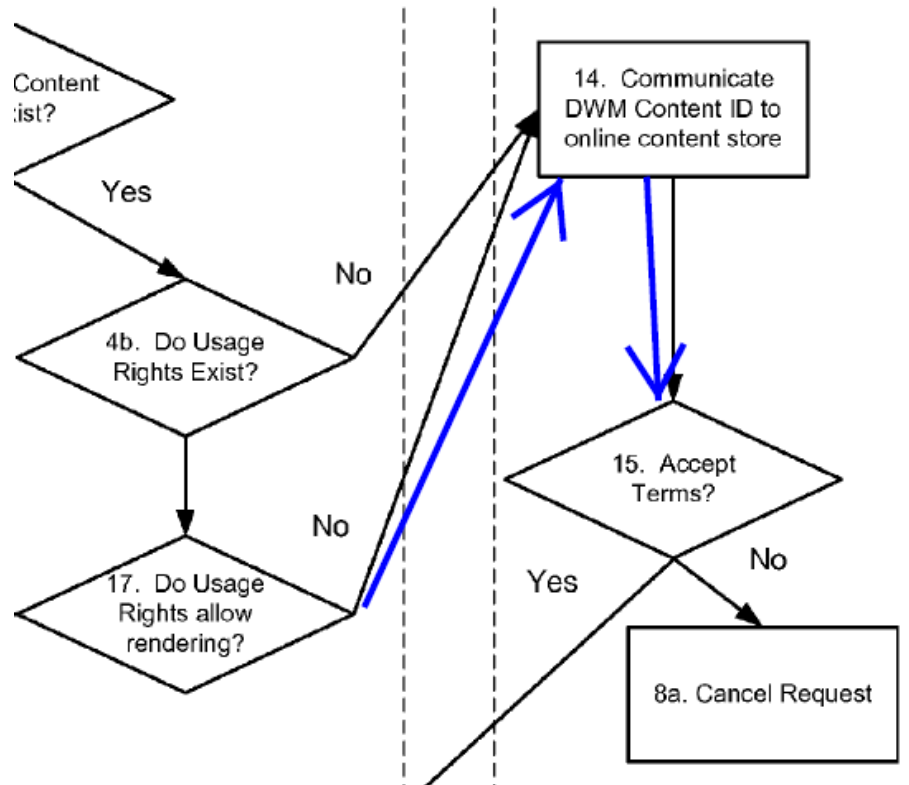
When the Media Server does not identify Usage Rights that allow rendering, the Media Server transmits the Content ID to an “online content store.” EX1006, ¶¶109, 112-14, 117, FIG. 17d. The online store performs another check using the

Content ID and therefore discloses another instance of the claimed “evaluating.”

EX1002, ¶¶357-358.

Levy also discloses offering a license to an unlicensed user. *Id.*, ¶359.

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). *Id.*, ¶110. A POSA would have found it obvious to offer this license to multiple users who do not already possess a license. EX1002, ¶¶359-362. In fact, Levy’s system is designed to be used by multiple users. *See, e.g.*, EX1006, ¶¶13, 47, 60. Levy’s system evaluates whether each user has previously acquired a license to reproduce the requested media-content item. If any of the requesting users does not possess a license, Levy’s system offers that user a license. EX1002, ¶¶359-362.



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 IX.C.1-2; EX1002, ¶¶362-364. 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, ¶¶362-364.

4. [1C] “extracting first user data ... when the first user accepts the offer and acquires the license”

Brandstetter records user demographic data when users acquire or decline a license. EX1004, ¶¶65, 71, 83, 93, 130; EX1002, ¶¶365-366. Brandstetter extracts this user data for “marketing and distributing media content.” EX1004, ¶¶1-7.

Brandstetter’s platform “collect[s] information about the users (e.g., their demographics) and user activity.” EX1004, ¶¶65, 83, 130; EX1002, ¶¶366-367. This includes “ages, geographical locations, ethnicities, [and] genders” as well as how a “user interacted with the media content.” EX1004, ¶71. Brandstetter tracks “all activity up to and including a purchase.” *Id.*, ¶130. Thus, Brandstetter extracts user data when a user accepts a license offer. EX1002, ¶¶367-369.

5. [1D] “extracting second user data ... when the second user declines the offer”

Brandstetter also records user demographic data when users decline a license. EX1004, ¶¶65, 71, 83, 93, 130; EX1002, ¶¶370-371. As previously described, Brandstetter’s platform “collect[s] information about the users (e.g., their demographics) and user activity.” EX1004, ¶¶65, 83, 130; EX1002, ¶371; Section IX.D.4. Brandstetter tracks “all activity up to and including a purchase. Thus, ***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.” EX1004, ¶¶130, 173.

The decline of a license may occur when a user chooses a purchase license or a rental license over the other. *Id.*, ¶¶75, 77, 87, 119, 120, 123, 124, 126, FIG. 16; EX1002, ¶372. This declining may also occur when selecting one license package over another. EX1004, ¶169. By selecting one license, the user has

affirmatively declined the other. EX1002, ¶¶373-374. As previously explained, Brandstetter’s platform processes requests and tracks usage data for multiple users. See Section IX.D.3.

6. [1E] “aggregating” the first/second user data into a statistics record

Brandstetter’s platform aggregates user demographic data. EX1004, ¶¶65, 71, 74, 85, 86, 93, 130; Sections IX.D.4, IX.D.5. 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 record.” EX1002, ¶375. Brandstetter uses them to generate activity reports. EX1004, ¶¶132-33, 172; see Section IX.D.2. Brandstetter tracks user data when a user both accepts *and* declines to license content. See Sections IX.D.4-IX.D.5; EX1004, ¶130. Thus, Brandstetter aggregates data in both instances. EX1002, ¶376. As previously explained, Brandstetter also aggregates this information for multiple users, as seen from Brandstetter’s activity reports. EX1004, FIG. 48; Section IX.D.2.

Brandstetter also describes aggregating user data for multiple users into a single profile (the claimed “statistics record”) rather than multiple profiles: “[R]eports can be used to examine account histories and make recommendations (e.g., for a single account or for a *group of related accounts*).” EX1004, ¶133; see also EX1004, ¶¶6, 172; EX1002, ¶¶377-378.

7. [1F] “statistics record summarizes” the user data

Brandstetter’s statistics contain personal data of individual users. EX1004, ¶¶128-133; Section IX.D.6. These statistics summarize the user data for multiple users. Section IX.D.6; EX1002, ¶¶379-381.

8. [1G] “storing” the statistics record so that the first/second user data is accessible to a third party

Brandstetter stores user activity and demographic data to build statistics and reports for content providers. *See* Sections IX.D.9I, IX.D.10. Brandstetter stores these statistics for subsequent retrieval when generating activity reports. EX1004, ¶¶74, 85, 93, 96, 172, FIG. 1C; EX1002, ¶382-383. As depicted in Figure 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.

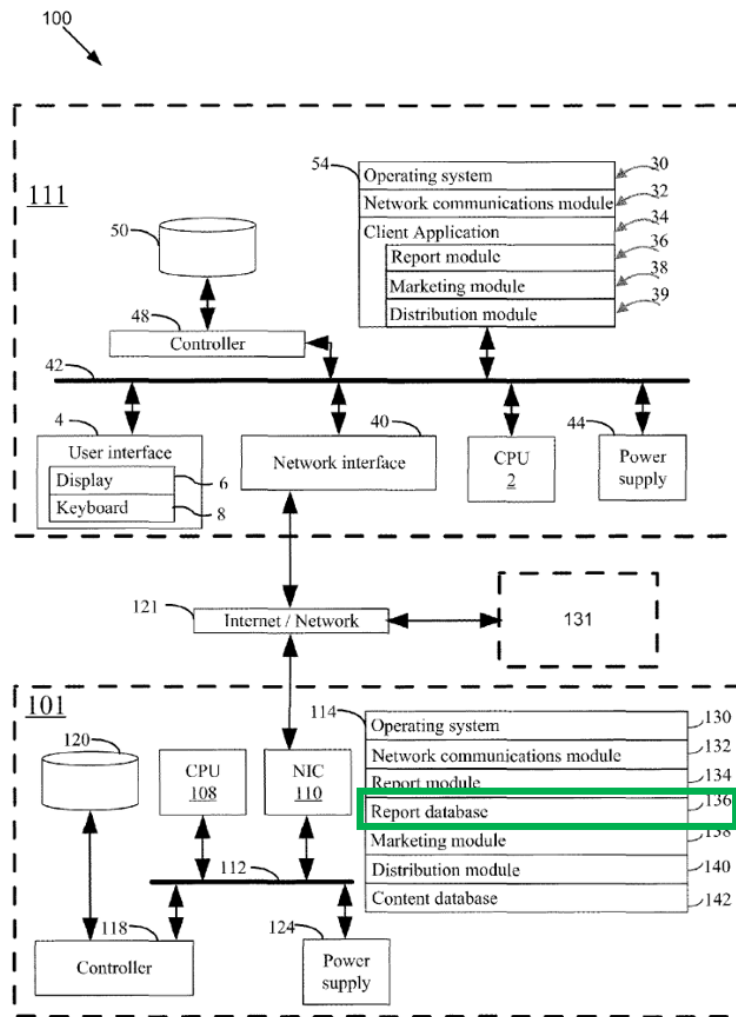


FIG. 1C

EX1004, FIG. 1C (annotated).

Brandstetter therefore uses the same memory 114 to store report information and to store license data. EX1004, ¶¶71, 85, 92-93, 96, 98; EX1002, ¶¶383-385.

Thus, Brandstetter stores the statistics record in a “license database.”

Brandstetter also describes providing access to its statistics to a third party. EX1002, ¶386. Brandstetter’s reports can be provided to *any* user who requests

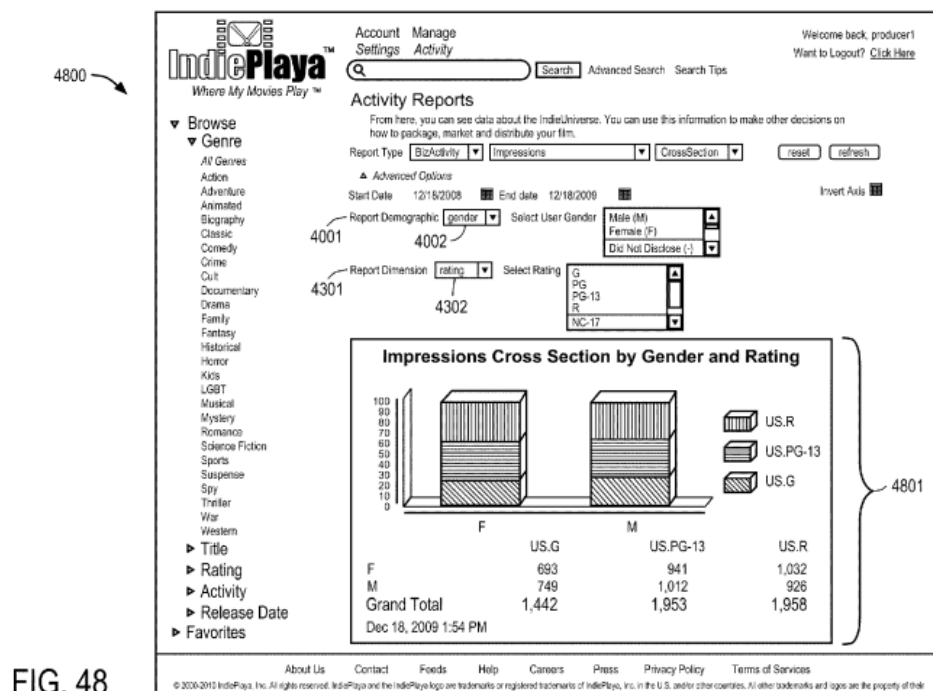
them, which can include a third-party online retailer. EX1004, ¶¶93. Brandstetter provides reports to content providers as well as “any third party granted the right to market or distribute” content. *Id.*, ¶¶8-9, 159. This occurs in the same manner as described in the ’191 specification. See EX1001, 4:43-46, 7:27-32, 7:63-8:9; EX1002, ¶387.

Levy also describes Rights Registries, which also disclose the claimed “license databases.” EX1006, ¶¶17, 109-10, 112-13, 140. When combining Levy with Brandstetter, a POSA would have found it obvious to store the user data with the licensing information described in Levy. EX1002, ¶¶388-390; Section IX.D.3. This is because Brandstetter already suggests the storage of user data using memory 114, which includes license information. EX1004, ¶¶92-93, 96, 98.

9. [1H] “analyzing by the third party the statistics record to determine the target demographic”

Brandstetter generates “activity reports” that allow for the analysis of a plurality of statistics records. EX1002, ¶391. Brandstetter’s “report module 134” analyzes the aggregated data to generate reports and to identify a target user demographic for targeted marketing of media content. EX1004, ¶¶6, 77, 96. Analyzing such reports “enable[s] content creators to efficiently market and distribute their content to a *target audience based upon reports.*” *Id.*, ¶6.

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, ¶¶392-393. The reports contain “historical information regarding purchases ... **by one or more demographic groups.**” EX1004, ¶6, FIG. 48.



EX1004, FIG. 48.

Figures 48 shows an example report that provides gender information, but Brandstetter’s reports can also categorize other user demographic and interaction data. EX1004, ¶¶66, 75, 173-74, 179; *see also* EX1004, ¶¶73, 76, 79, 83, 86, 97, 115, 132-133; EX1002, ¶¶394-395. Brandstetter describes a demographic of individuals who accept and who decline to stream content. EX1004, ¶130. Using

this information, content creators “can choose two or more different demographics” to compare and analyze for different “marketing campaigns.” *Id.*, ¶81. Brandstetter provides these reports to third parties who request them—including content providers and creators—to perform further analysis. *Id.*, ¶¶74, 85, 93. This allows the third parties to determine a target demographic. EX1002, ¶¶396-398.

10. [1I] “marketing, by the third party, the media content ... to the determined target demographic”

As previously explained, third parties analyze Brandstetter’s “activity reports” to determine a target demographic. Section IX.D.9; EX1002, ¶399. The third parties then “efficiently market and distribute their content to [the] target audience.” EX1004, ¶6; *see also* EX1004, ¶¶65-66, 75, 79. The third parties may develop marketing and distribution strategies based on particular demographics of interest. *Id.*, ¶¶75, 79. Figure 1A depicts this targeted marketing:

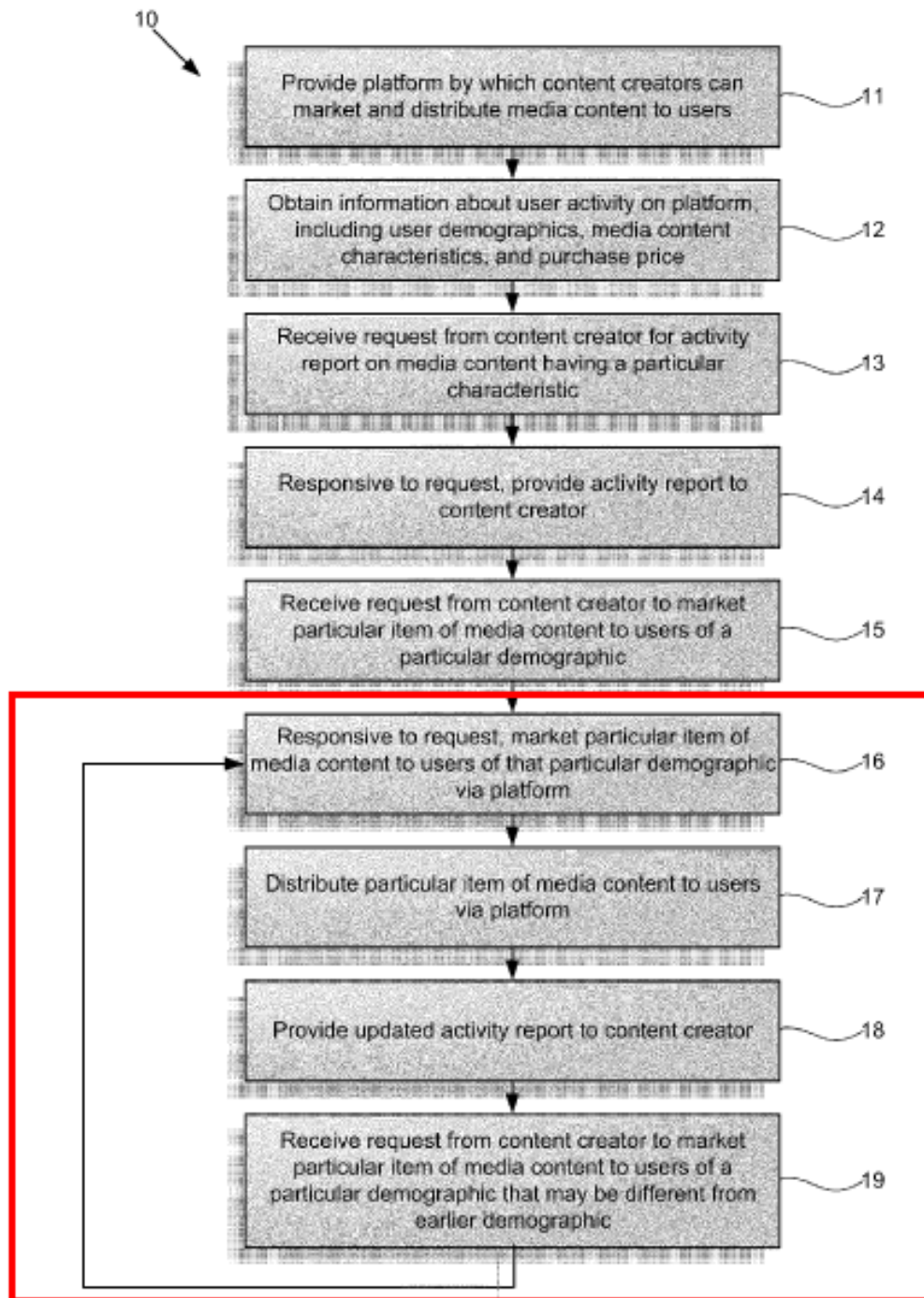


FIG. 1A

EX1004, FIG. 1A (annotated).

As seen from steps 16-18, content creators, third-party retailers, or distributors market content based on received demographic data. EX1004, ¶¶4-9; *see also* EX1004, ¶¶79, 81, 89; EX1002, ¶¶400-402.

E. Claim 7

Claim 7 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,” 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 IX.D.1. Brandstetter-Levy discloses claim 7 for the reasons presented in claim 1 and as further explained below.

EX1002, ¶¶403-404.

[7P]	Section IX.D.1 ([1P]).
[7A]	Section IX.D.2 ([1A]).
[7B]	Section IX.D.3 ([1B]).
[7C]	Section IX.D.4 ([1C]).
[7D]	Section IX.D.5 ([1D]).
[7E]	Section IX.D.6-IX.D.7 ([1E]-[1F]).
[7F]	Section IX.D.8 ([1G]).
[7G]	Section IX.D.9 ([1H]).
[7H]	Section IX.D.10 ([1I]).

Claim 7 recites, in [7P], a “media content licensing and verification system.” Brandstetter’s server 101 discloses such a system. EX1004, ¶¶6-7, 10, 69, 98; Section IX.D.1. Levy likewise discloses a server that evaluates whether a user has

already obtained a license and also discloses the system of [7P]. Section IX.D.1.; EX1002, ¶¶404.

The claim also recites, in [7A], that the users' requests to reproduce content include "digital media information associated with the media content item." Brandstetter's server receives requests from multiple client devices 111 (i.e., the claimed "external devices") to reproduce media content. EX1004, ¶¶69, 91, 101, 109; Section IX.D.2. Brandstetter likewise discloses a media catalog with media content and "static elements" describing the content. EX1004, ¶¶71, 118. This includes a "globally constant description" that individually identifies content. *Id.*, ¶118. This description and other content identification information discloses the claimed "digital media information." *Id.*; EX1002, ¶405.

Levy provides an example of such a description and discloses a "fingerprint" or "digital watermark," which also disclose the claimed "digital media information." EX1006, ¶¶7, 12, 13, 42, 47-48, 54-58, 77, 80, 89, 108-109, 140-42; EX1002, ¶¶141-143; 406-408. A fingerprint is a "hash, derived signature or reduce-bit representation of content" and allows Levy to "uniquely identify" media content. EX1006, ¶¶140, 142; EX1002, ¶¶141-144, 409. Levy also communicates a "Fingerprint Content ID" to a "Fingerprint Rights Registry to obtain corresponding Usage Rights." *Id.*, ¶140. The Usage Rights convey the license terms for the content item corresponding to the particular fingerprint. EX1002, ¶¶410. When

combined with Brandstetter, Brandstetter's platform would receive such a fingerprint with a user's request to access content. Section IX.C.; EX1002, ¶¶411-412. Brandstetter and Levy also contemplate receiving such requests with digital media information from multiple users. EX1004, Abstract, ¶¶6, 10, 78-79, 81, 91; EX1002, ¶¶411-412.

Claim 7 additionally recites, in [7B], that the determination as to whether to grant users' requests is based on a media content record stored in a "media catalog database that is associated with the media content item." Brandstetter-Levy also 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, ¶413. Therefore, Brandstetter-Levy discloses a "media catalog database" containing a "media content record" based on the tracking/identification of content and corresponding licenses. *Id.* Likewise, Brandstetter-Levy disclose a "license database." Section IX.D.6, IX.D.11; EX1002, ¶413. 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." EX1006, ¶¶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.” EX1002, ¶414-415. As previously described, Brandstetter-Levy offers users licenses if they do not already have one. Section IX.D.3. Likewise, Brandstetter-Levy discloses a “license database.” Section IX.D.8; EX1002, ¶416-419.

Finally, the claim recites, in [7G], analyzing “a plurality of statistics records aggregated from requests for the media content item when the user is granted the license and when the second user declines the license.” Brandstetter describes analyzing profile data for multiple users to determine non-overlapping or partially overlapping target demographics. Section IX.D.9. Multiple demographics may be targeted and may overlap. EX1004, ¶¶78-79, 81. In this case, Brandstetter describes analyzing multiple statistics records to generate reports. EX1002, ¶¶420-422. “Report module 134” analyzes the aggregated data to “generat[e] activity reports,” which “enable content creators to efficiently market and distribute their content to a target audience.” EX1004, ¶¶6, 96, 130-133, 172.

F. Claim 13

Claim 13 recites a “system” that performs substantially the same method recited in claim 1, which is not patentably distinct. Brandstetter-Levy thus renders claim 13 obvious for the reasons presented in claim 1 and as further explained below. EX1002, ¶¶423-431.

[13P]	Sections IX.D.1, IX.E ([1P], claim 7)
[13A.1]	See below.
[13A.2]	See below.
[13B]	Section IX.D.2 ([1A]).
[13C]	Section IX.D.3 ([1B]).
[13D]	Section IX.D.4 ([1C]).
[13E]	Section IX.D.5, IX.E ([1D], claim 7).
[13F]	Section IX.D.6-IX.D.7 ([1E]-[1F]).
[13G]	Section IX.D.8, IX.E ([1G], claim 7).
[13H]	Section IX.D.9, IX.E ([1H], claim 7).
[13I]	Section IX.D.10, IX.E ([1I], claim 7).

Claim 13 recites a “processor” and “memory” in [13A.1] and [13A.2], respectively. Brandstetter’s client device 111 includes “one or more processing units (CPUs),” which may be “general [or] special purpose microprocessors.” EX1004, ¶¶103, 183. Client device 111 also includes “a memory 54” that stores an operating system and the software required to carry out Brandstetter’s client-side tasks. *Id.*, ¶105. Brandstetter also describes several example memory devices. *Id.*, ¶183; EX1002, ¶¶424-426.

Additionally, claim 13 recites, in [13C], a user’s “license to stream the media content.” Brandstetter teaches that users may use their client devices to “stream” media content. EX1002, ¶427. Brandstetter depicts “viewing area 3001” in Figure 30, and Figures 35, 35A, and 36-39 which are used for viewing content. EX1004, ¶167. Brandstetter also provides licenses for a user to “stream” a film. *Id.*, FIGs. 16, 19; *see also id.*, FIG. 35A, ¶173; EX1002, ¶¶428-431.

G. Claim 19

Claim 19 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. Peled-Pou thus renders claim 19 obvious for the reasons presented in claim 1 and as further explained below. EX1002, ¶¶432-446.

[19P]	Section IX.D.1 ([1P]).
[19A.1]	Section IX.D.2 ([1A]).
[19A.2]	Section IX.D.2 ([1A]).
[19A.3]	See below.
[19A.4]	See below.
[19B]	Section IX.D.3, IX.E ([1B], claim 7).
[19C]	Section IX.D.4 ([1C]).
[19D]	Section IX.D.5 ([1D]).
[19E]	Section IX.D.6-IX.D.7 ([1E]-[1F]).
[19F]	Section IX.D.8, IX.E ([1G], claim 7).
[19G]	Section IX.D.9, IX.E ([1H], claim 7).
[19H]	Section IX.D.10, IX.E ([1I], claim 7).

Claim 19 recites, in [19A.1] and [19A.2], a “receiver configured to receive ... request[s] from ... external device[s]” that include “digital media information associated with the media content item.” Brandstetter-Levy disclose devices used by consumers to request and consume media. See Section IX.F. Brandstetter discloses bi-directional communication over a network such as the Internet for server 101 to receive communications. EX1004, ¶¶92-93. This communication is depicted in Figure 1C. As seen from this figure, the “network or other

communications interface (NIC) 110” discloses the claimed “receiver” because it receives communications over the Internet from client device 111. *Id.*; EX1002, ¶¶434-437.

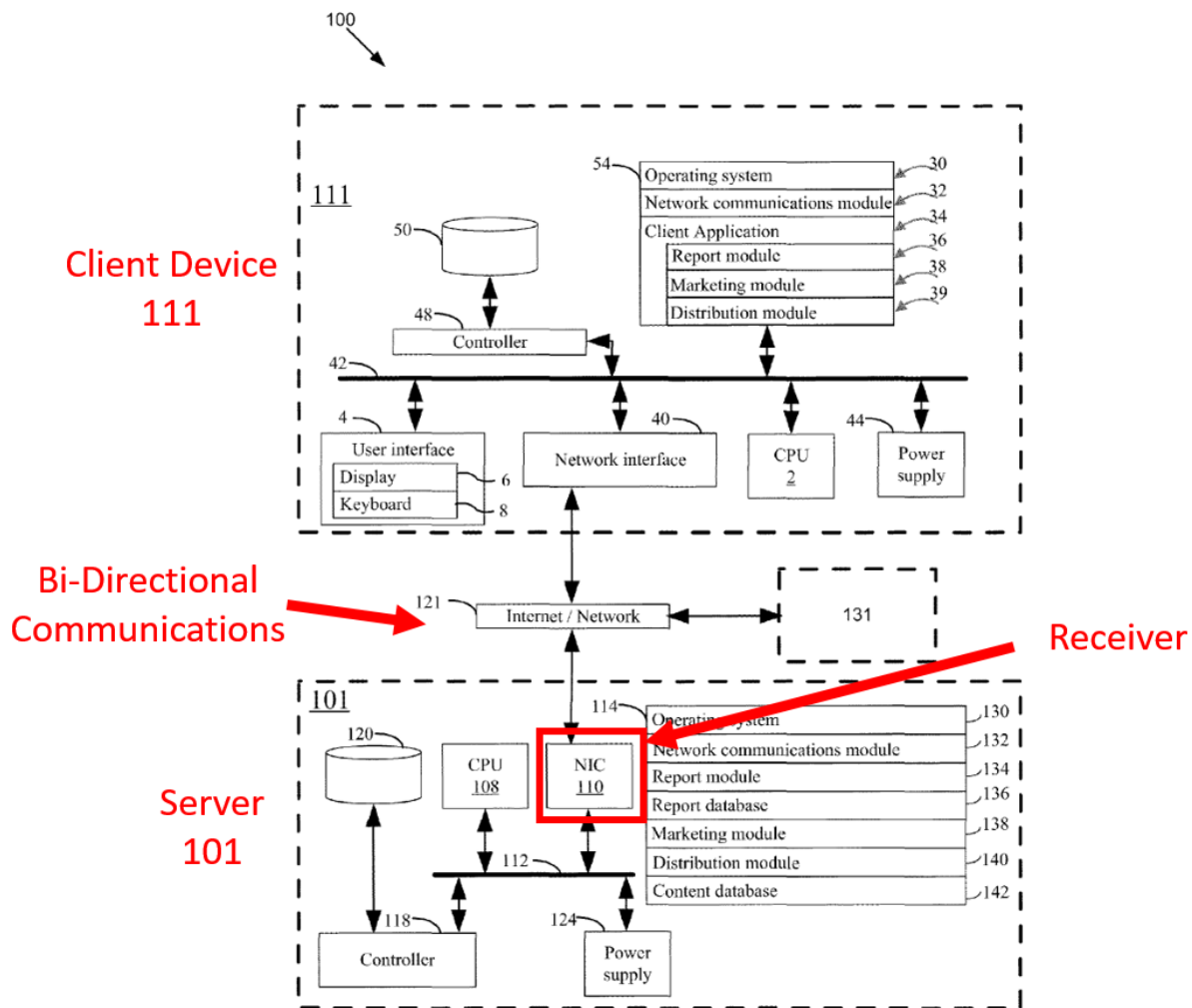


FIG. 1C

EX1004, FIG. 1C (annotated).

Levy also describes bi-directional communications between a Media Server and an online content store. EX1002, ¶¶438. The Media Server transmits an

identified Content ID to the online content store. EX1006, ¶¶109, 112-14, 117, FIG. 17d. The term “online” further suggests that the communications occur over the Internet as well. *Id.*, ¶¶50-51, 64, 97, 121, FIG. 18. The online content store receives the communications and therefore also discloses the claimed “receiver.” EX1002, ¶438. Brandstetter’s receiver would similarly receive multiple requests from multiple users. See Section IX.D.2; EX1002, ¶¶439-440.

Claim 19 also recites, in [19A.3], a “processor.” Brandstetter states that its central server includes “one or more processing units (CPUs) 10,” which may be “general [or] special purpose microprocessors.” EX1004, ¶¶92, 183; EX1002, ¶441.

Finally, claim 19 recites, in [19A.4], a “memory.” Brandstetter’s server includes “memory 114” that stores the operating system and software required to carry out Brandstetter’s server-side tasks. *Id.*, ¶¶92-99. Brandstetter also describes several example memory devices. *Id.*, ¶183; EX1002, ¶442.

H. Claims 2 and 14 (“receiv[ing] a licensing” and “prevent[ing] reproduction” when the first/second requests are declined by the licensing system)

Brandstetter-Levy discloses receiving a license when a licensing request is granted. EX1004, ¶¶87, 99, 166, FIGs. 26, 28. When a user purchases a license, the user account receives a license, which is tracked by Brandstetter’s platform. *Id.*;

EX1002, ¶¶447-448. Brandstetter also prevents reproduction when the licensing request is declined. EX1002, ¶449; EX1004, ¶¶4-5.

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, ¶¶450-451. Levy also discloses preventing reproduction of media content when the licensing request is declined—the “Client Player Application preferably prohibits access.” EX1006, ¶110; Section IX.I. 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, ¶¶452-455; EX1004, ¶¶2-5.

I. Claims 3 and 15 (“plurality of reproduction parameters”)

“Reproduction parameters” refer to the terms of a license. EX1002, ¶¶456-458. 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. *Id.*, ¶¶75, 120, 125, 141. A POSA would have understood Brandstetter would have used a plurality of

reproduction parameters depending on the terms of the license obtained by the consumer. EX1002, ¶¶458-460.

Levy's "copy control information (CCI)" bits also disclose reproduction parameters because they specify copy restrictions for streamed or copied media. EX1006, ¶¶37, 86, 122-23; EX1002, ¶¶461-462.

J. Claims 4, 10, 16, and 21 (storing user data such that it is "accessible to a third party online media retailer")

Claims 4, 10, 16, and 21 are nearly identical and refer to allowing a "third party online media retailer" to access the stored user data. EX1002, ¶¶463-469. Brandstetter discloses "content providers," which disclose the claimed "third party online media retailer." EX1004, ¶159; EX1002, ¶465. A "content provider 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, ¶¶8-9. These reports include the user data that has been previously stored. See Sections IX.D.6, IX.D.8, IX.D.9; EX1004, ¶¶6, 65, 71, 74, 85, 86, 93, 130, 174-79, FIGs. 40-49; EX1002, ¶467-469.

K. Claims 6 and 23 ("geographic[al] location[]")

Brandstetter discloses tracking geographic location information as part of the stored demographic user data. See Sections IX.D.4, IX.D.5; EX1004, ¶¶71, 142-43, 174, FIG. 40. Figure 40 depicts an example of sorting the user data based on geographic location. EX1002, ¶¶470-473.

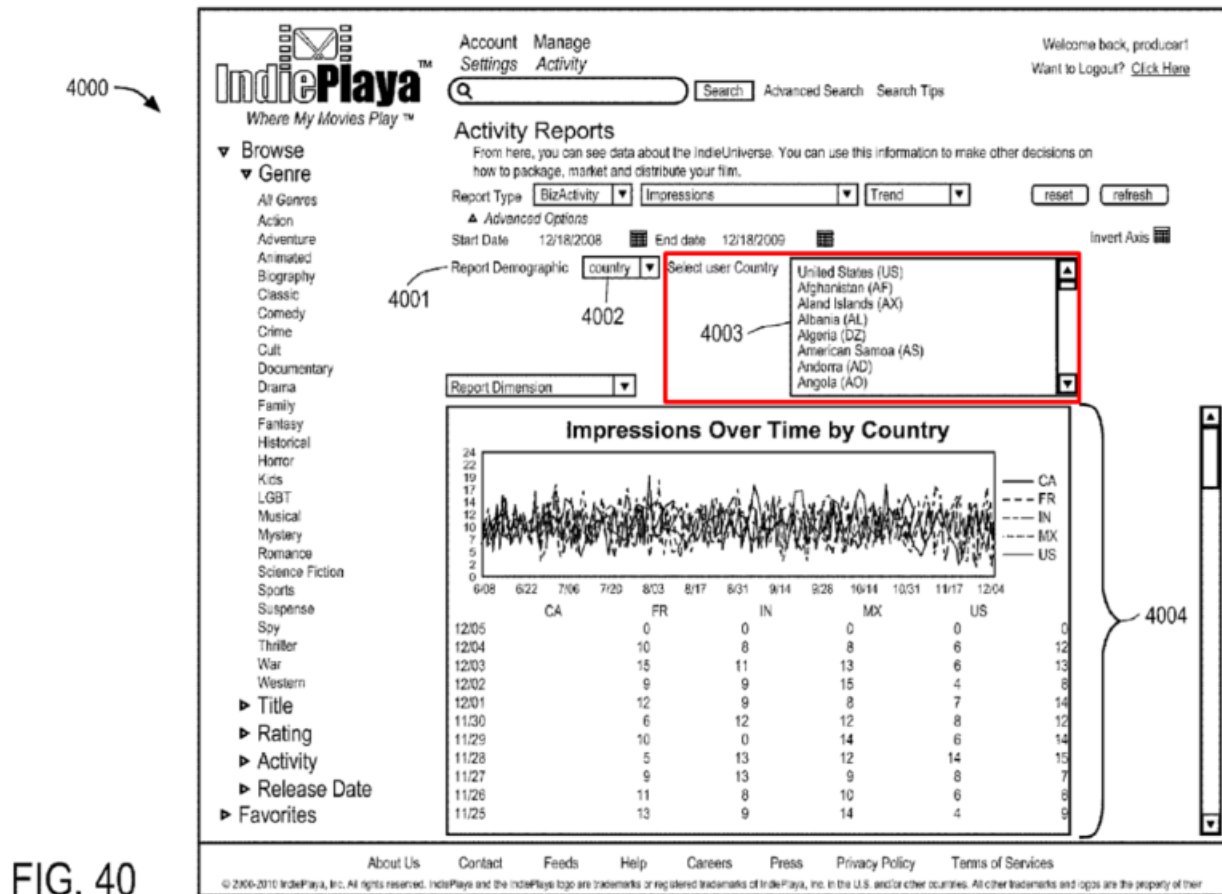


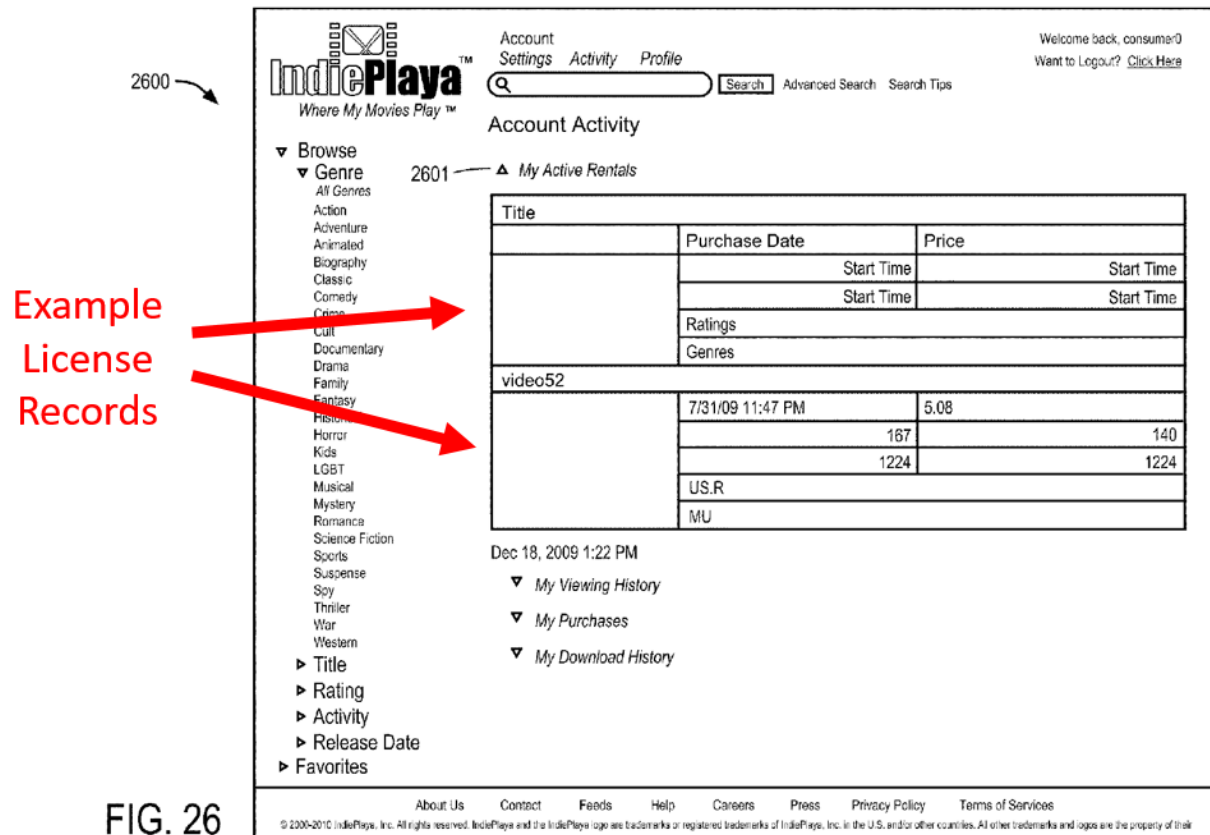
FIG. 40

EX1004, FIG. 40 (annotated).

L. Claims 8 and 20 (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 IX.D.3, IX.H; EX1002, ¶¶474-482.

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, ¶476. Users may then view their purchased licenses. EX1004, ¶166, FIGs. 26, 28.



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, ¶198; EX1002, ¶478.

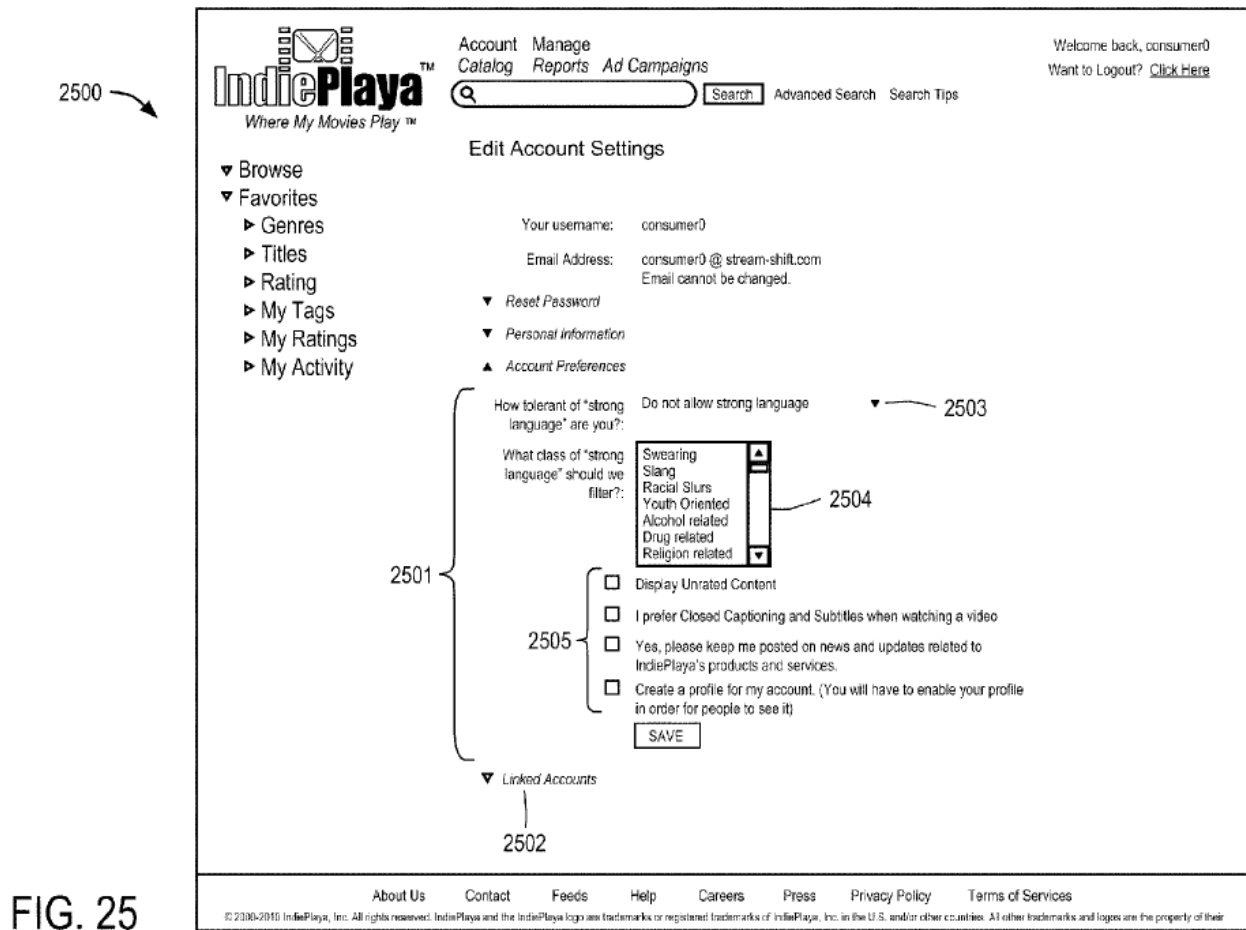


FIG. 25

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....” EX1006, ¶¶112, 114; EX1002, ¶479. Levy also stores purchased license information by updating a “DRM Rights Registry.” EX1006, ¶101; EX1002, ¶¶480-482.

M. Claim 9 (“fingerprint”)

Levy discloses digital media information including a “fingerprint” associated with the media-content item. *See* Sections IX.D.3-IX.D.6; EX1006, Abstract, ¶¶140-142; EX 1002, ¶484.

N. Claims 12 and 18 (user data includes “additional media content items” previously accessed and “quantity of times”).

Brandstetter discloses identifying “additional media content items” that a user has previously accessed. EX1002, ¶¶485-489; EX1004, ¶¶71, 123.

Brandstetter’s description of “cross-sell[ing]” 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. *Id.*, ¶147. For example, this is tracked when enforcing a “play n-number of times licensing package.” *Id.*; EX1002, ¶¶485-489.

X. GROUND 5: CLAIMS 5, 11, 17, AND 22 ARE OBVIOUS OVER BRANDSTETTER, LEVY, AND VIJAY.

Vijay discloses hardware device manufacturers that provide DRM protection as explained in Section VII; EX1002, ¶¶490-494; EX1008, ¶¶2-3, 22-23, 25, 27, 45-46, FIG. 1. Brandstetter-Levy-Vijay discloses providing user data to a “hardware device manufacturer.” A POSA would have found it obvious to allow a

DRM device manufacturer to access Brandstetter's reports to provide additional "secure, dynamic device profiling" prior to decrypting content for reproduction. EX1008, ¶¶29, 34, 39, 56, 60, 73-76. For example, Brandstetter-Levy-Vijay could use a consumer's geographic location information to confirm an expected user device prior to decrypting content for reproduction. EX1002, ¶¶145-147, 495-498. A POSA would have been motivated to combine Vijay with Brandstetter and Levy to provide this additional security. *Id.*

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

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

XII. 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 '191 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 '191 patent in the Western District of Texas. EX1064, Complaint. PO did not serve Petitioner with notice of the lawsuit until January 19, 2021. EX1069, Affidavit. 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, Motion to Transfer Order. This occurred before any significant investment in the proceeding and prior to the submission of any claim construction briefing. EX1066, Scheduling Order, 1. Following transfer, a case management conference has been scheduled for March 15, 2022, but no other deadlines have been set. EX1071, Conference Order. And, on average, patent cases in the Northern District of California take nearly three years to get to trial. EX1080, NDCA Time to Milestones. Thus, given the scheduling uncertainty, the *Fintiv* factors weigh in favor of institution.

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

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. *Fintiv* 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 '191 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 precise art combinations and arguments presented in this Petition are new and non-cumulative and never before the Examiner. *See* Sections VI-X.

XIII. 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 '191 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.

U.S. Patent Nos. 9,898,590, 10,657,226, 10,515,191, 10,860,691, 10,885,154, 10,650,120, and 10,489,560 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), 10,489,560 (IPR2022-00391), 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-PTAB@sternekessler.com**, **rcrudo-PTAB@sternekessler.com**, **ttang-PTAB@sternekessler.com**, and **PTAB@sternekessler.com**.

XIV. STANDING (37 C.F.R. § 42.104(a))

Petitioner certifies that the '191 patent is available for *inter partes* review, and that Petitioner is not barred or estopped from requesting an *inter partes* review of the '191 patent. The assignee of the '191 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 '191 patent.

XV. CONCLUSION

The Board should institute this IPR and issue a final written decision finding claims 1-23 unpatentable.

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

/Lestin Kenton/

Lestin L. Kenton (Reg. No. 72,314)
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Date: January 10, 2022

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APPENDIX A: LISTING OF CHALLENGED CLAIMS

1. **[1P]** A computer implemented method for determining a target demographic for media marketing, comprising:

[1A] receiving a first request from first user and a second request from a second user to reproduce the media content item;

[1B] evaluating each of the first and second request to determine whether each of the first and second users has previously acquired a license to reproduce the media content item and offering the license to reproduce the media content item to each user when the each user does not have the license to reproduce the media content item;

[1C] after the evaluation of the first request, extracting first user data specific to first user when the first user accepts the offer and acquires the license;

[1D] after the evaluation of the second request, extracting second user data specific to the second user when the second user declines the offer to acquire the license;

[1E] aggregating the extracted first and second user data into a statistics record;

[1F] wherein the statistics record summarizes the first user data and second user data;

[1G] storing in a license database the statistics record so that the summarized first and second user data is accessible to a third party;

[1H] analyzing by the third party, the statistics record, to determine the target demographic based on a first demographic corresponding to the first user data and a second demographic corresponding to the second user data;

[1I] and marketing, by the third party, the media content item to a plurality of other users corresponding to the determined target demographic.

2. The method of claim 1, further comprising:

receiving a license to reproduce the media content from a licensing system when at least one of the first request and second is granted by the licensing system; and

preventing reproduction of the media content item when the first and second requests are 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 a licensing system.

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

storing in the license database the first and second user data that is associated with the respective first and second user that is attempting to reproduce the media content item that is accessible to a third pa[r]ty online media retailer that has been selected by a copyright owner to distribute the media content item.

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

storing in the license database the first and second user data that is associated with the respective first and second user that is attempting to reproduce the media content item that is accessible to a hardware device manufacturer that manufacturers hardware for the multimedia hardware device.

6. The method of claim 1, wherein the first and second user data includes respective first and second geographic locations of the respective first and second user who is accessing the media content item.

7. **[7P]** A computer implemented method for configuring a media content licensing and verification system to license media content for reproduction, the method comprising:

[7A] receiving a request from an external device associated with a user and a second request from a second external device associated with a second user to reproduce a media content item, wherein the request and second request includes digital media information associated with the media content item included in a digital media file;

[7B] determining whether the request and the second request 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 reproduce the media content item to each of the user and the second user when the each user does not have the license to reproduce the media content item;

[7C] after the determination of the request extracting user data that is specific to the user that is attempting to reproduce the media content item when the user is granted the license;

[7D] after the determination of the second request, extracting second user data that is specific to the second user that is attempting to reproduce the media content item when the user declines the license;

[7E] aggregating the extracted user data and second user data into a statistics record, wherein the statistics record summarizes the user data and second user data associated with the request;

[7F] storing in a license database the statistics record so that the user data and second user data is accessible to a party other than the user and the second user;

[7G] and analyzing a plurality of statistics records aggregated from requests for the media content item when the user is granted the license and when the second user declines the license to determine a target demographic based on a first demographic corresponding to the user data and a second demographic based on the second user data;

[7H] and marketing, by the party, the media content item to a plurality of other users corresponding to the target demographic.

8. The method of claim 7, 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.

9. The method of claim 7, wherein the digital media information includes a fingerprint associated with the media content item.

10. The method of claim 7, further comprising:

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

11. The method of claim 7, further comprising:

storing in the license database the user data that is associated with the user that is attempting to reproduce the media content item that is accessible to a hardware device manufacturer that manufactures hardware that is implemented by the multimedia hardware device.

12. The method of claim 7, wherein the user data includes additional media content items that the user has previously accessed.

13. **[13P]** A system for configuring a multimedia hardware device to generate an authorized reproduction of a media content item included in a digital media file, comprising:

[13A.1] at least one processor; and;

[13A.2] a memory coupled with the processor, the memory including instructions that, when executed by the processor cause the processor to:

[13B] receive a request from a user and a second request from a second user, each request requesting to reproduce the media content item;

[13C] evaluate the each request to determine whether the respective each user has acquired a license to reproduce the media content item and offer the license to reproduce the media content item to the respective each user when the respective each user does not have the license to stream the media content item;

[13D] after the evaluation of the request, extract user data that is specific to the user that is attempting to reproduce the media content item when the user acquires the license,

[13E] after the evaluation of the request, extract second user data that is specific to the second user that is attempting to reproduce the media content item when the user declines the license,

[13F] aggregate the extracted user data and second user data into a statistics record, wherein the statistics record summarizes the user data and the second user data associated with the respective request and second request,

[13G] store in the license database the statistics record so that the user data and the second user data is accessible to a party other than the user,

[13H] and analyze a plurality of statistics records aggregated from requests for the media content item when the user acquires the license and when the second user declines the license to determine a target demographic based on a first demographic corresponding to the user data and a second demographic based on the second user data;

[13I] and market, by the party, the media content item to a plurality of other users corresponding to the target demographic.

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

15. The system of claim 12, wherein the processor is further configured to reproduce the media content item based on a plurality of reproduction parameters included in the license that is received from the licensing system.

16. The system of claim 12, 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 reproduce the media content item that is accessible to a third party online media retailer that has been selected by a copyright owner to distribute the media content item.

17. The system of claim 12, 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 reproduce the media content item that is accessible to a hardware device manufacturer that manufactures hardware that is implemented by the multimedia hardware device.

18. The system of claim 12, wherein the user data includes a quantity of times that the user has previously accessed the media content item and additional media content items.

19. **[19P]** A system for configuring a media content licensing and verification system to license media content for reproduction, comprising:

[19A.1] a receiver configured to receive a request from an external device associated with a user to reproduce the media content item, wherein the request

includes digital media information associated with the media content item included in a digital media file;

[19A.2] the receiver further configured to receive a second request from a second external device associated with a second user to reproduce the media content item, wherein the second request includes digital media information associated with the media content item included in a digital media file;

[19A.3] at least one processor; and

[19A.4] a memory coupled with the processor, the memory including instructions that, when executed by the processor cause the processor to:

[19B] determine whether the request and second request 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 reproduce the media content item to each of the user and second user when the each user does not have the license to reproduce the media content item,

[19C] after the determination of the request, extract user data that is specific to the user that is attempting to reproduce the media content item when the user acquires the license,

[19D] after the determination of the second request, extract second user data that is specific to the second user that is attempting to reproduce the media content item when the second user declines the license,

[19E] aggregate the extracted user data and second user data into a statistics record, wherein the statistics record summarizes the user data and second user data associated with the respective request and second request, and

[19F] store in a license database the statistics record so that the user data and second user data is accessible to a party other than the user and second user,

[19G] and analyzing a plurality of statistics records aggregated from requests for the media content item when the user is granted the license and when the second user declines the license to determine a target demographic based on a first demographic corresponding to the user data and a second demographic based on the second user data;

[19H] and market, by the party, the media content item to a plurality of other users corresponding to the target demographic.

20. The system of claim 18, 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.

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21. The system of claim 18, 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 reproduce the media content item that is accessible to a third party online media retailer that has been selected by a copyright owner to distribute the media content item.

22. The system of claim 20, 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 reproduce the media content item that is accessible to a hardware device manufacturer that manufactures hardware that is implemented by the multimedia hardware device.

23. The system of claim 18, 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. 10,515,191**, Petitioner's Power of Attorney, and all associated exhibits were served in their entirety on the following parties via FedEx Express® or Express Mail:

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

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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 13,981 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.

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

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