

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD., , and
SAMSUNG ELECTRONICS, AMERICA, INC.,

Petitioners

v.

TRUESIGHT COMMUNICATIONS LLC,

Patent Owner

Case IPR2024-01477

U.S. Patent No. 8,898,803

**Declaration Of Anthony Wechselberger
In Support Of Petition for *Inter Partes* Review of
U.S. Patent No. 8,898,803**

Table of Contents

I.	ASSIGNMENT.....	1
II.	BACKGROUND AND QUALIFICATIONS.....	1
III.	MATERIALS REVIEWED	10
IV.	LEVEL OF ORDINARY SKILL IN THE ART.....	12
V.	RELEVANT LEGAL STANDARDS	13
VI.	SUMMARY OF OPINIONS	17
VII.	OVERVIEW OF THE '803 patent.....	18
	A. The Specification.....	18
	B. Prosecution History	25
VIII.	THE CLAIMS	27
IX.	OVERVIEW OF THE PRIOR ART REFERENCES	31
	A. <i>Kirkland</i>	31
	B. <i>Olaiya</i>	34
	C. <i>Kang</i>	37
	D. <i>Hasegawa</i>	38
	E. <i>Raja</i>	38
	F. <i>Mavrakakis</i>	39
	G. <i>Takano</i>	39
	H. <i>Hodecker</i>	40
X.	CLAIM CONSTRUCTION	41

XI.	DETAILED EXPLANATION OF GROUNDS.....	41
A.	Ground 1: <i>Kirkland</i> In View of <i>Olaiya</i> and <i>Kang</i> Renders Claims 1-13 Obvious	41
1.	Claim 1	41
a.	[1pre] “A method of delivering content by integrating a kiosk delivery system with a streaming service”	41
b.	[1a] “transferring content from a kiosk to a flash memory media device”	43
c.	[1b] “wherein the flash memory media device is configured to be connected to a playback device; and” ..	51
d.	[1c] “transferring user service information, including user account information for one or more account based digital content streaming services, from the kiosk to the flash memory media device,”	53
e.	[1d] “wherein, responsive to the flash memory media device being connected to the playback device:”	54
f.	[1e] “if the playback device is connected to a network via a network connection having a speed that meets a threshold for streaming digital content, the transferred user service information from the connected flash memory media device is used to access at least one of the one or more account based digital streaming services to stream a higher quality version of the content to the connected playback device for playback”	55
g.	[1f] “wherein the higher quality version of the content is a high definition version of standard definition content transferred from the kiosk to the flash memory media device,”	61
h.	[1g] “otherwise, the content stored on the connected flash memory media device is used for playback of the content.”	63

i.	POSITAs Would Have Been Motivated To Combine <i>Kirkland , Olaiya, Kang And Hasegawa</i>	63
2.	Claim 2 “The method of claim 1, wherein the user account information for each account based digital streaming service comprises an account identifier and login information.’	66
3.	Claim 3 “The method of claim 1, wherein user service information includes information necessary to access a digital streaming service for delivery of content over a network.”	66
4.	Claim 4: “The method of claim 1, wherein the content transfer can occur without removing the flash memory media device from a device containing the flash memory media device.”	66
5.	Claim 5 “The method of claim 1, wherein the content transfer can occur by removing the flash memory media device from a device containing the flash memory media device.”	66
6.	Claim 6 “The method of claim 1, wherein the user service information is received from a user device.”	67
7.	Claim 7 “The method of claim 1, wherein the user service information is received through a website.”	68
8.	Claim 8 “The method of claim 1, wherein the user service information is received from a data feed from a provider of the streaming service.”	68
9.	Claim 9 “The method of claim 1, wherein users can register for the streaming service at the kiosk.”	69
10.	Claim 10: “The method of claim 1, wherein users may update user service information via the kiosk.”	69
11.	Claim 11	69
a.	[11pre] “A method of operating a playback device to automatically play back content from either a flash memory media device or a digital streaming service depending upon playback circumstances, the method comprising:”	70

- b.** [11a] “receiving, from a connected flash memory media device, user service information, including user account information for an account based digital media content streaming service,” 70
- c.** [11b] “wherein the user service information enables access to the account based digital media content streaming service; and” 74
- d.** [11c] “wherein the connected flash memory media device previously has received content from a kiosk delivery system including the user service information that includes user account information for one or more account based digital streaming services;” 74
- e.** [11d] “responsive to the user service information being unrecognized by the playback device, playing back the content from the connected flash memory media device, the content previously received from the kiosk delivery system; and” 75
- f.** [11e] “responsive to the user service information being recognized by the playback device:” 79
- g.** [11f] “responsive to the playback device not being connected to a network, playing back the content from the connected flash memory media device; and” 79
- h.** [11g] “responsive to the playback device being connected to a network, accessing the account based digital media content streaming service using the user service information, by:” 79
- i.** [11h] “responsive to a speed of the connection not meeting a threshold for streaming digital content, playing back the content from the connected flash memory media device; and” 80
- j.** [11i] “responsive to the speed of the connection meeting the threshold for streaming digital content, streaming the

	content from the account based digital media content streaming service”	80
k.	[11i] “wherein streaming the content from the account based digital media content streaming service comprises streaming the content in high definition, and wherein the content on the flash memory media device is standard definition.”	80
12.	Claim 12 “The method of claim 11, wherein accessing the account based digital media content streaming service using the user service information comprises automatically logging the user into the account based digital media content streaming service.”	80
13.	Claim 13 “The method of claim 11, wherein the threshold is a lower limit on speed consistent with avoiding service interruptions.”	81
B.	Ground 2: <i>Kirkland-Olaiya-Kang-Hasegawa</i> or <i>Kirkland-Olaiya-Kang-Hasegawa</i> in View of <i>Mavrakakis</i> Renders Claim 4 Obvious	82
1.	Claim 4: “The method of claim 1, wherein the content transfer can occur without removing the flash memory media device from a device containing the flash memory media device.”	82
C.	Ground 3: <i>Kirkland-Olaiya-Kang-Hasegawa</i> or <i>Kirkland-Olaiya-Kang-Hasegawa-Hodecker</i> Renders Claim 10 Obvious	85
1.	Claim 10: “The method of claim 1, wherein users may update user service information via the kiosk.”	85
D.	Ground 4: <i>Kirkland-Olaiya-Kang-Hasegawa</i> in View of <i>Takano</i> Renders Claim 14 Obvious	86
1.	Claim 14: “The method of claim 11, wherein a flash memory media device can be transferred between playback devices.” ..	86
E.	Ground 5: <i>Olaiya</i> in View of <i>Raja</i> and <i>Hasegawa</i> Renders Claims 1-4, 8-14 Obvious	87
1.	Claim 1	87

- a. [1pre] “A method of delivering content by integrating a kiosk delivery system with a streaming service” 87
 - b. [1a] “transferring content from a kiosk to a flash memory media device” 89
 - c. [1b] “wherein the flash memory media device is configured to be connected to a playback device; and”.90
 - d. [1c] “transferring user service information, including user account information for one or more account based digital content streaming services, from the kiosk to the flash memory media device,” 91
 - e. [1d] “wherein, responsive to the flash memory media device being connected to the playback device:” 93
 - f. [1e] “if the playback device is connected to a network via a network connection having a speed that meets a threshold for streaming digital content, the transferred user service information from the connected flash memory media device is used to access at least one of the one or more account based digital streaming services to stream a higher quality version of the content to the connected playback device for playback” 94
 - g. [1f] “wherein the higher quality version of the content is a high definition version of standard definition content transferred from the kiosk to the flash memory media device,” 96
 - h. [1g] “otherwise, the content stored on the connected flash memory media device is used for playback of the content.” 96
 - i. POSITAs Would Have Been Motivated To Combine *Olaiya, Raja And Hasegawa* 96
2. Claim 2 “The method of claim 1, wherein the user account information for each account based digital streaming service comprises an account identifier and login information.’ 98

3.	Claim 3 “The method of claim 1, wherein user service information includes information necessary to access a digital streaming service for delivery of content over a network.”.....	99
4.	Claim 4 “The method of claim 1, wherein the content transfer can occur without removing the flash memory media device from a device containing the flash memory media device.”	99
5.	Claim 6 “The method of claim 1, wherein the user service information is received from a user device.”	99
6.	Claim 7 “The method of claim 1, wherein the user service information is received through a website.”	99
7.	Claim 8 “The method of claim 1, wherein the user service information is received from a data feed from a provider of the streaming service.”	100
8.	Claim 9 “The method of claim 1, wherein users can register for the streaming service at the kiosk.”	100
9.	Claim 10: “The method of claim 1, wherein users may update user service information via the kiosk.”	100
10.	Claim 11	101
a.	[11pre] “A method of operating a playback device to automatically play back content from either a flash memory media device or a digital streaming service depending upon playback circumstances, the method comprising:”	101
b.	[11a] “receiving, from a connected flash memory media device, user service information, including user account information for an account based digital media content streaming service,”	101
c.	[11b] “wherein the user service information enables access to the account based digital media content streaming service; and”	102

- d. [11c] “wherein the connected flash memory media device previously has received content from a kiosk delivery system including the user service information that includes user account information for one or more account based digital streaming services;” 102
- e. [11d] “responsive to the user service information being unrecognized by the playback device, playing back the content from the connected flash memory media device, the content previously received from the kiosk delivery system; and” 103
- f. [11e] “responsive to the user service information being recognized by the playback device:” 105
- g. [11f] “responsive to the playback device not being connected to a network, playing back the content from the connected flash memory media device; and” 106
- h. [11g] “responsive to the playback device being connected to a network, accessing the account based digital media content streaming service using the user service information, by:” 106
- i. [11h] “responsive to a speed of the connection not meeting a threshold for streaming digital content, playing back the content from the connected flash memory media device; and” 106
- j. [11i] “responsive to the speed of the connection meeting the threshold for streaming digital content, streaming the content from the account based digital media content streaming service” 106
- k. [11i] “wherein streaming the content from the account based digital media content streaming service comprises streaming the content in high definition, and wherein the content on the flash memory media device is standard definition.” 106

11.	Claim 12 “The method of claim 11, wherein accessing the account based digital media content streaming service using the user service information comprises automatically logging the user into the account based digital media content streaming service.”	107
12.	Claim 13 “The method of claim 11, wherein the threshold is a lower limit on speed consistent with avoiding service interruptions.”	107
F.	Ground 6: <i>Olaiya-Raja-Hasegawa-Takano</i> Renders Claims 5 and 14 Obvious	107
1.	Claim 5: “The method of claim 1, wherein the content transfer can occur by removing the flash memory media device from a device containing the flash memory media device.”	107
2.	Claim 14: “The method of claim 11, wherein a flash memory media device can be transferred between playback devices.”	108
3.	Motivation to Combine	109
G.	Ground 7: <i>Olaiya-Raja-Hasegawa or Olaiya-Raja-Hasegawa-Kirkland</i> Renders Claims 6-8 Obvious	110
1.	Claim 6 “The method of claim 1, wherein the user service information is received from a user device.”	110
2.	Claim 7 “The method of claim 1, wherein the user service information is received through a website.”	111
3.	Claim 8 “The method of claim 1, wherein the user service information is received from a data feed from a provider of the streaming service.”	111
H.	Ground 8: <i>Olaiya-Raja-Hasegawa or Olaiya-Raja-Hasegawa-Hodecker</i> Renders Claim 10 Obvious.....	112
1.	Claim 10: “The method of claim 1, wherein users may update user service information via the kiosk.”	112
XII.	SECONDARY CONSIDERATIONS	113

XIII. CONCLUSION.....	113
-----------------------	-----

I, Anthony Wechselberger, declare that:

I. ASSIGNMENT

1. I have been retained by Samsung Electronics Co., Ltd., Samsung Electronics America, Inc. (together “Samsung or “Petitioners”) as an independent expert consultant in this proceeding before the United States Patent and Trademark Office (“PTO”).

2. I am being compensated at a rate of \$475/hour for my services in this proceeding, which is my regular and customary rate.

3. My compensation is in no way contingent on the nature of my findings, the presentation of my findings in testimony, or the outcome of this or any other proceeding. I have no other interest in this proceeding.

4. I have been asked to consider whether certain references disclose or suggest the features recited in the claims of U.S. Patent No. 8,898,803 (“the ’803 patent”) (Ex. 1001).¹ My opinions are set forth below.

II. BACKGROUND AND QUALIFICATIONS

5. I am an independent consultant. All of my opinions stated in this declaration are based on my own personal knowledge and professional judgment. In

¹ Where appropriate, I refer to exhibits I understand will be attached to the petition for *inter partes* review of the ’803 patent (the “Petition”).

forming my opinions, I have relied on my education, experience, and knowledge regarding electrical engineering, computer science, and video and audio communications sciences and technologies.

6. I am over 18 years of age and, if I am called upon to do so, I would be competent to testify as to the matters set forth herein. A copy of my current curriculum vitae, which details my education and professional and academic experience, as well as a list of testifying experiences in the past five years, is included as Ex. 1003 in this proceeding. The following provides an overview of some of my experience that is relevant to the matters set forth in this declaration.

7. I received a Bachelor of Science degree in electrical engineering from the University of Arizona in 1974 and a Master of Science degree in electrical engineering from San Diego State University in 1979. In addition, in 1984, I completed the Executive Program for Scientists and Engineers at the University of California at San Diego.

8. I am currently the President of Entropy Management Solutions (“EMS”), a position I have held since I founded the company in 1999. In this capacity, I perform consulting services related to technology and business development, content management, distribution and merchandising, systems engineering, and product design in the areas of industrial and consumer broadband and multimedia technologies and associated commercial systems. As a result of my

twenty-five years of extensive technology experience in corporate life, and continuing as President of EMS, I have worked with various aspects of Internet, cable, broadcast, wireless and satellite television programming distribution, including systems and equipment used at satellite uplinks and cable head-ends, such as real-time computer control systems and associated databases used in conjunction with consumer appliances, such as mobile devices and set-top boxes.

9. I have over 45 years of experience working with high technology systems related to military, commercial, and consumer communication systems, networks, and appliances. I have held various design, leadership, and executive positions in, for example, engineering, operations, sales and marketing, and product management at leading companies, such as TV/COM International, Inc. (TV/COM) and Oak Communications, Inc. (Oak), in those fields. As Vice President at Oak Communications (in the 1980s), Chief Technology Officer at TV/COM (in the 1990s), and a consulting systems engineer (1999 to the present), I have specialized in the areas of digital communications technologies, systems and networks, including infrastructures, communications equipment and associated signal processing, network management and command-and-control, and information security as used for content management, merchandising, and delivery to the receivers/consumers of information/content.

10. Consumer appliances are often the receivers/consumers of the communications systems I have worked with, and I have been involved, for example, in the design, manufacturing, sales, and servicing of consumer appliances, such as set-top boxes (STBs), since the early 1980s. My experience includes the development of centralized and distributed terrestrial broadcast, satellite uplink, and cable head-end commercial equipment for television transmissions, as well as consumer appliance equipment, such as STBs and other home-based or home-networked devices. These architectures included computer control systems for networks and associated network device command and control, and for management of content distribution and consumer appliance functions. For example, these systems are addressable. “Addressability” enables the system operator to control the delivery of content and network services, network sourcing and receiving devices (e.g., servers and transmission equipment and PC or STB receivers), and the consumer experience. Examples are delivery of multimedia, software or data files, for which purchased or subscription services of content is available, electronic program guides, and à la carte functions such as pay-per-view (PPV) and video-on-demand (VOD). Many of these data types were either streamed for real-time utility or downloaded and stored in consumer appliances, both characteristics of the technologies of the challenged ‘803 Patent.

11. I have direct experience in the design and installation of the headend computer control systems used to support centralized and/or distributed two-way interactive addressable cable television systems. At Oak Communications our Cable Sigma System supported à la carte programming requests via upstream communications from the STB to cable headend, wherein the STB could interoperate in real-time with our computer. The computer maintained a user database of authorized subscribers including their subscription choices (e.g., basic and/or premium programming packages) as well as supported real-time interaction with the STB with respect to the types of information being received (e.g., requests for a special event, change in subscription choices, parental control functions, home shopping, and polling). This experience is relevant to the technologies of the current matter because it references database information associated with users and/or devices (“user service information”) to enable access privileges based on contingencies. In particular, the controlled access processes above are technically similar to the “user account information” constraints found in the ‘803 Patent.

12. In the 1990s, the successor company to Oak Communications—TV/Com International—developed and introduced counterpart media distribution and control systems for all-digital content: MPEG-2 based digital television systems. The above are all examples of computer-controlled network operations where real-time continuous throughput of command and control functions and database

management is fundamental. Additionally, Oak and TV/Com developed interactive broadband content distribution systems where content sources, databases, control functions and communications connectivity was distributed amongst a plurality of processing locations. Our digital systems were capable of both standard definition (SD) and high definition (HD) content generation, distribution and receipt/consumption—technical concepts also found in the ‘803 Patent.

13. I have been a participant in the development and evolution of modern consumer digital audio and digital video communications systems and technologies. In 1991, my employer, TV/COM, and I began to participate in the newly formed International Organization for Standardization (ISO) MPEG-2 digital television standards initiatives, and in the following year, we participated in both the European Digital Video Broadcast (DVB) and U.S. Advanced Television Systems Committee (ATSC) forums (which were based upon MPEG-2). By the mid-1990s, as the technologies and standards in support of digital television (DTV) moved towards implementation, the dawn of the Internet age also arrived. This had a dramatic impact on the way broadband systems engineers like myself began to plan for the future. This is because the concept of convergence—the melding of traditional broadband communications systems and equipment, computers, and computer networks, with that of the telecommunications world—was changing the communications infrastructure and technology landscape. When television

distribution went all-digital, the information of television became simply “data”—and it became possible for the technologies of digital television, computers and computer networks, and the telephony industry (which was in the midst of its transition to digital infrastructure that began in the 1970s) to coalesce. Support for on-line and real-time Internet services demanded a high-performance two-way data transmission capability, and so broadband network providers began to upgrade their distribution infrastructures accordingly.

14. In conjunction with this convergence, as TV/COM’s Chief Technology Officer, I directed the expansion of our network products into broadband data communications generally, from its initial focus on digital television. Networks became more advanced in order to support real-time interaction between consumers and various information sources, and interactive and on-line applications led to rapid adoption of client-server information access architectures. The ubiquitous set-top box (STB) began to evolve from a minimalist appliance towards its current status as a centralized or distributed communications hub of consumer households. This was supported by the exponential increase in the capabilities of powerful yet inexpensive integrated circuits, such as microprocessors and memory that allowed STBs to become more software driven and support advanced digital signal processing (DSP) needs—and eventually—become powerful Internet-driven broadband communications appliances.

15. In my consulting work, I have continued to work with technologies, equipment, and network infrastructures for content generation, distribution, and consumption. My current work involves both traditional and newly developing architectures and distribution channels. As an example of the latter, I am the chief security systems architect on behalf of the five major Hollywood studios for their “Digital Cinema Initiatives” (DCI) consortium. DCI has developed and evolved the requirements and specifications for transitioning first-run theatrical movie releases from film to digital files for distribution and exhibition display. I am responsible for all elements of command and control and digital rights management (DRM) for the digital cinema system design and implementation.

16. I also represent DCI at the Society of Motion Picture and Television Engineers (SMPTE), which has developed and is continuing to develop a set of internationally recognized standards for global adoption of digital cinema. The migration to all-digital distribution impacts other content distribution channels, such as early window release for hospitality, airplane, and cable/satellite video-on-demand (VOD), as well as newer so called “over-the-top” (OTT) distribution channels based on Internet distribution. I have also been a strategy and technology consultant to content management and distribution entities in these areas.

17. I am currently a member of the Society of Cable & Telecommunications Engineers (SCTE), the Society of Motion Picture and

Television Engineers (SMPTE) and the Institute of Electrical and Electronic Engineers (IEEE). I have previously been a member of the International Organization for Standardization (ISO), Motion Picture Experts Group (MPEG), the Digital Video Broadcast (DVB) group, and as Chief Technology Officer of TV/Com International I was a voting member of the Advanced Television Systems Committee (ATSC).

18. I am an inventor on U.S. Patent No. 4,531,020, issued July 23, 1985, and entitled “Multi-layer Encryption System for the Broadcast of Encrypted Information” and U.S. Patent No. 5,113,440, issued May 12, 1992, and entitled “Universal Decoder.” I am an inventor on two patent applications: Application No. 10/028,013, filed December 21, 2001 and published as U.S. Publication No. 20030120541A1, entitled “Storage and Delivery of Electronic Media Content with Advertising” (abandoned); and Application No. 63/091,518, filed October 14, 2020, which was converted to nonprovisional Application No. 17/499,824 on October 12, 2021, published as U.S. Publication No. US2022/0116463A1, and is entitled “Remote Audience Participation at Live Events” (abandoned). I have participated in U.S. patent prosecution and have a general understanding of the process.

19. I believe that my extensive industry experience and educational background qualify me as an expert in the technologies of the ‘803 Patent. I am also knowledgeable of the relevant skill set that would have been possessed by the

hypothetical person of ordinary skill in the art (POSITA) at the time of the invention of the ‘803 Patent. While the ‘803 Patent’s Field of Art describes the distribution of digital media content via a classical kiosk, I understand that Patent Owner is asserting claim scope that a kiosk can be a downloaded application to a consumer device—technologies that I have been directly involved with since the late 1990s.

III. MATERIALS REVIEWED

20. The opinions contained in this declaration are based on the documents I reviewed, my professional judgment, as well as my education, experience, and knowledge regarding electrical engineering, computer science, video and audio and communications sciences and technologies.

21. In forming my opinions expressed in this declaration, I reviewed the following materials:

Exhibit No.	DESCRIPTION
1001	U.S. Patent 8,898,803 (“’803Pat”)
1004	File History of U.S. Patent 8,898,803 (Serial No. 13/004,806) (“’803FH”)
1005	US Patent Publication No. 20080263634 (“Kirkland”)
1006	US Patent Publication No. 20090083412 (“Olaiya”)
1007	US Patent Publication No. 20090049464 (“Kang”)
1008	Japanese Patent Publication No. 2009048715A (“Hasegawa”)
1009	US Patent Publication No. 20090187654 (“Raja”)

Exhibit No.	DESCRIPTION
1010	US Patent Publication No. 20090117846 (“ <i>Mavrakakis</i> ”)
1011	US Patent Publication No. 20100005492 (“ <i>Takano</i> ”)
1012	US Patent Publication No. 20070044133 (“ <i>Hodecker</i> ”)
1013	Selections from Patent Owner’s Plaintiff’s Disclosure Of Asserted Claims And Infringement Contentions, served in Truesight Communications LLC v. Samsung Electronics LTD., Case No. 2:23-cv-00643-JRG (E.D. Tex.)
1014	US Patent Publication 20090288138 (“ <i>Kalofonos</i> ”)
1015	Feldman, <i>Overcoming Free-Riding Behavior in Peer-to-Peer Systems</i> , ACM SIGecom Exchanges, Vol. 5, No. 4, July 2005, Pages 41–50.

22. I have also reviewed any other materials I refer to in this declaration in support of my opinions.

23. All of the opinions contained in this declaration are based on the documents I reviewed and my knowledge and professional judgment. My opinions have also been guided by my appreciation of how a person of ordinary skill in the art would have understood the claims and the specification of the ’803 patent at the time of the alleged invention, which I have been asked to initially consider as no earlier than January 11, 2010 (the filing date of U.S. Provisional Patent Application 61/294,070). My opinions reflect how one of ordinary skill in the art would have understood the ’803 patent, the prior art to the patent, and the state of the art at the time of the alleged invention.

24. Based on my experience and expertise, it is my opinion that certain references disclose and/or suggest all the features recited in claims 1-14 (“challenged claims”) of the ’803 patent, as I discuss in detail below.

IV. LEVEL OF ORDINARY SKILL IN THE ART

25. I have been informed and understand that, in the context of an invalidity analysis, a person having ordinary skill in the art (“POSITA”) is a hypothetical person who looks to prior art at the time of the invention. I further understand that the factors that may be considered in determining the level of ordinary skill include: (1) the problems encountered in the art; (2) the prior art solutions to the problems encountered in the art; (3) the rapidity of innovation; (4) the sophistication of the technology; and (5) the education level of active workers in the field. I understand that these factors need not all be considered for the analysis and that one or more of these factors may control.

26. I was asked to provide my opinion on the level of one of ordinary skill in the art with respect to the alleged invention of the ’803 patent as of January 11, 2010. Based on my consideration of the factors above, I believe POSITAs would have had a bachelor’s degree in electrical engineering, computer science, or a similar field and two years of experience in the design of digital content distribution systems, including reception appliances. A POSITA could have also obtained similar knowledge and experience through other means.

27. As of January 11, 2010, I met, and in fact exceeded, the qualifications of a person of ordinary skill in the art. To be clear, all of my opinions in this declaration are from the perspective of one of ordinary skill in the art as I have defined it here during the relevant timeframe.

V. RELEVANT LEGAL STANDARDS

28. I am not an attorney and offer no legal opinions, but in the course of my work, I have had experience studying and analyzing patents and patent claims from the perspective of a person skilled in the art.

29. For the purposes of this declaration, I have been informed about certain aspects of the law that are relevant to forming my opinions. My understanding of the law is as follows.

30. Petitioners' counsel has informed me that a published nonprovisional application is entitled to claim priority to the filing date of its provisional application (as opposed to the filing date of the published non-provisional application) if (1) the provisional application discloses the portions of the published non-provisional application relied upon as prior art, and (2) at least one claim of the published non-provisional claim is supported by the provisional application, i.e., the provisional application must disclose the subject matter of the claim and enable a person of ordinary skill in the art to make and use the claim.

31. Petitioners' counsel has informed me that for the prior art to inherently disclose a claimed limitation, the prior art need not expressly disclose the limitation, so long as the claimed limitation necessarily flows from a disclosure in the prior art. I also understand that it is acceptable to examine evidence outside the prior art reference (extrinsic evidence) in determining whether a feature, while not expressly discussed in the reference, is necessarily present in that reference.

32. Petitioners' counsel has informed me that a patent claim can be considered to have been obvious to a person having ordinary skill in the art at the time the application was filed. I am informed that this means that, even if all of the requirements of a claim are not found in a single prior art reference, the claim is not patentable if the differences between the subject matter in the prior art and the subject matter in the claim would have been obvious to a person having ordinary skill in the art at the time of the invention.

33. I have been informed by Petitioners' counsel that a determination of whether a claim would have been obvious should be based upon several factors, including, among others:

- the level of ordinary skill in the art at the time the application was filed;
- the scope and content of the prior art; and
- what differences, if any, existed between the claimed invention and the prior art.

34. I have been informed by Petitioners' counsel that a single reference can render a patent claim obvious if any differences between that reference and the claims would have been obvious to a person having ordinary skill in the art. Alternatively, I understand that the teachings of two or more references may be combined in the same way as disclosed in the claims, if such a combination would have been obvious to one having ordinary skill in the art. In determining whether a combination based on either a single reference or multiple references would have been obvious, it is appropriate to consider, among other factors:

- whether the teachings of the prior art references disclose known concepts combined in familiar ways, and when combined, would yield predictable results;
- whether a person having ordinary skill in the art could implement a predictable variation, and would see the benefit of doing so;
- whether the claimed elements represent one of a limited number of known design choices, and would have a reasonable expectation of success by those skilled in the art;
- whether a person having ordinary skill would have recognized a reason to combine known elements in the manner described in the claim;
- whether there is some teaching or suggestion in the prior art to make the modification or combination of elements claimed in the patent; and

- whether the innovation applies a known technique that had been used to improve a similar device or method in a similar way.

35. I have been informed by Petitioners' counsel that one of ordinary skill in the art has ordinary creativity and is not an automaton. Petitioners' counsel has also informed me that in considering obviousness, obviousness may not be determined using the benefit of hindsight, including hindsight derived from the patent being considered.

36. I further understand that a hypothetical person of ordinary skill in the art is assumed to know and to have all relevant prior art in the field of endeavor covered by the patent at issue. I have been informed that there are two criteria for determining whether prior art is analogous and thus can be considered prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the patentee's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the patentee is involved. I have also been informed that the field of endeavor of a patent is not limited to the specific point of novelty, the narrowest possible conception of the field, or the particular focus within a given field. I have also been informed that a reference is reasonably pertinent if, even though it may be in a different field from that of the patentee's endeavor, it is one which, because of the

matter with which it deals, logically would have commended itself to a patentee's attention in considering their problem.

37. I further understand that, in making a determination as to whether the claimed invention would have been obvious to a person of ordinary skill, the Board may consider certain objective factors if they are present, such as: commercial success of products practicing the claimed invention; long-felt but unsolved need; teaching away; unexpected results; copying; and praise by others in the field. These factors are generally referred to as “secondary considerations” or “objective indicia” of nonobviousness. I understand, however, that for such objective evidence to be relevant to the obviousness of a claim, there must be a causal relationship (called a “nexus”) between the claim and the evidence and that this nexus must be based on a novel element of the claim rather than something in the prior art. I also understand that even when they are present, secondary considerations may be unable to overcome primary evidence of obviousness (such as motivation to combine with predictable results) that is sufficiently strong.

VI. SUMMARY OF OPINIONS

38. This Declaration explains the conclusions I have formed based on my analysis. These conclusions are summarized below:

- Ground 1: *Kirkland-Olaiya-Kang- Hasegawa* renders claims 1-13 obvious.

- Ground 2: *Kirkland-Olaiya-Kang-Hasegawa-Mavrakakis* renders claim 4 obvious.
- Ground 3: *Kirkland-Olaiya-Kang-Hasegawa-Hodecker* renders claim 10 obvious.
- Ground 4: *Kirkland-Olaiya-Kang-Hasegawa-Takano* renders claim 14 obvious.
- Ground 5: *Olaiya-Raja-Hasegawa* renders claims 1-4 and 9-13 obvious.
- Ground 6: *Olaiya-Raja-Hasegawa-Takano* renders claims 5 and 14 obvious.
- Ground 7: *Olaiya-Raja-Hasegawa-Kirkland* renders claims 6-8 obvious.
- Ground 8: *Olaiya-Raja-Hasegawa-Hodecker* renders claim 10 obvious.

VII. OVERVIEW OF THE '803 patent

A. The Specification

39. The '803 patent discloses a system that “integrat[es] a kiosk distribution system with a streaming service.” '803 patent, 1:17-18. The '803 patent notes that as digital media (e.g., movies) gets more popular, demand for “acquiring digital media content in quick, convenient ways” has increased. *Id.* 1:20-22.

40. The patent identifies use of “kiosks” as one method of distributing digital media. *Id.*, 1:22-23. According to the ’803 patent, kiosks are “placed where it is accessible to customers,” are “connected via a network to one or more servers having access to storage of licensable digital media content,” and that [c]ustomers can interact with the kiosk, for example through a touch screen interface, to select desired digital media content for purchase.” *Id.*, 1:23-27.

41. The patent further identifies “streaming services” as another method of distributing digital media content. *Id.*, 1:35-36. According to the ’803 patent, “[t]he user connects a playback device, such as a computer or a set-top box to the Internet, selects digital media content available through the streaming service for which the user has an account, and the content is streamed to the user's playback device.” *Id.*, 1:36-40.

42. When digital media has been downloaded from a kiosk to a flash memory device that can be inserted into a playback device, “user service information,” which “identifies a streaming service from which the user may also receive content,” is also downloaded. ’803 patent, 2:22-24. In the method of the ’803 patent, users connect their flash memory device storing the downloaded digital media content to a playback device. “[I]f the [playback] device is not connected to a network, the content is played back from the flash media.” *Id.*, 2:25-27.

43. On the other hand, “[i]f the playback device is connected to a network, the streaming service is accessed using the user service information that was downloaded from the kiosk to the flash media, and the streaming service streams the content to the playback device.” ’803 patent, 2:27-31. The ’803 patent, further discloses that the streamed version of the digital media content can be of higher quality, *e.g.*, high definition video as opposed to standard definition video. *Id.*, 2:31-40.

44. Fig. 1A of the ’803 patent illustrates an example of the of the ’803 patent’s kiosk distribution system:

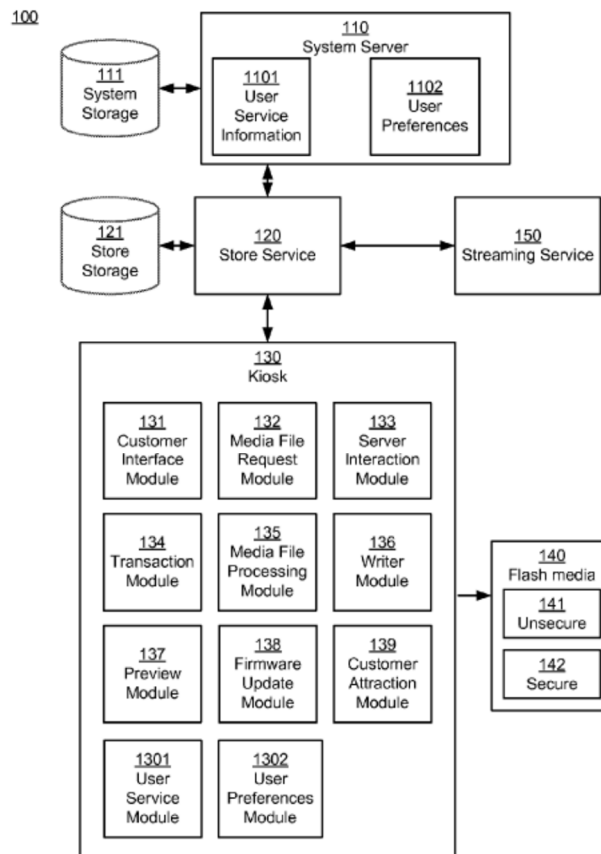


FIG. 1A

45. The main components are system server 110 connected to store service 120, which in turn is connected to one or more kiosk(s) 130. '803 patent, 2:42-47. System storage 111 is coupled to system server 110, and “stores media files for distribution to stores through the system server 110.” *Id.*, 2:62-63.

46. System server 110 accesses the media files stored in system storage 111, and “distributes them to at least one store service 120 in response to a request for the media file from the store service 120, or based on pre-established distribution policies under which the system server 110 operates.” '803 patent, 3:15-19. System

server 110 also “includes user service information 1101 and user preferences 1102.” *Id.*, 3:22-24. According to the ’803 patent, “[u]ser service information and preferences are obtained during a user registration process in order to link the content and streaming services together,” and user service information 1101 can include “a user's account information with streaming service providers 150, such as an individual account identifier and a password or other login information.” *Id.*, 3:24-30. User service information 1101 is “communicated to the kiosk 130 to be written to the user's flash media 140...” *Id.* 3:32-35.

47. Store service 120 can receive media files from system server 110, stores them, and can deliver them to kiosk 130 when kiosk 130 requests such files. *Id.*, 3:47-56. Then, when a customer requests a media file at kiosk 130, kiosk 130 “requests selected media files from the store service 120, receives the media files in response to the requests, and writes the media files to the customer's flash media 140. ’803 patent, 3:57-60.

48. Fig. 3 of the ’803 patent is a flow chart illustrating a method of playing media files using a playback device:

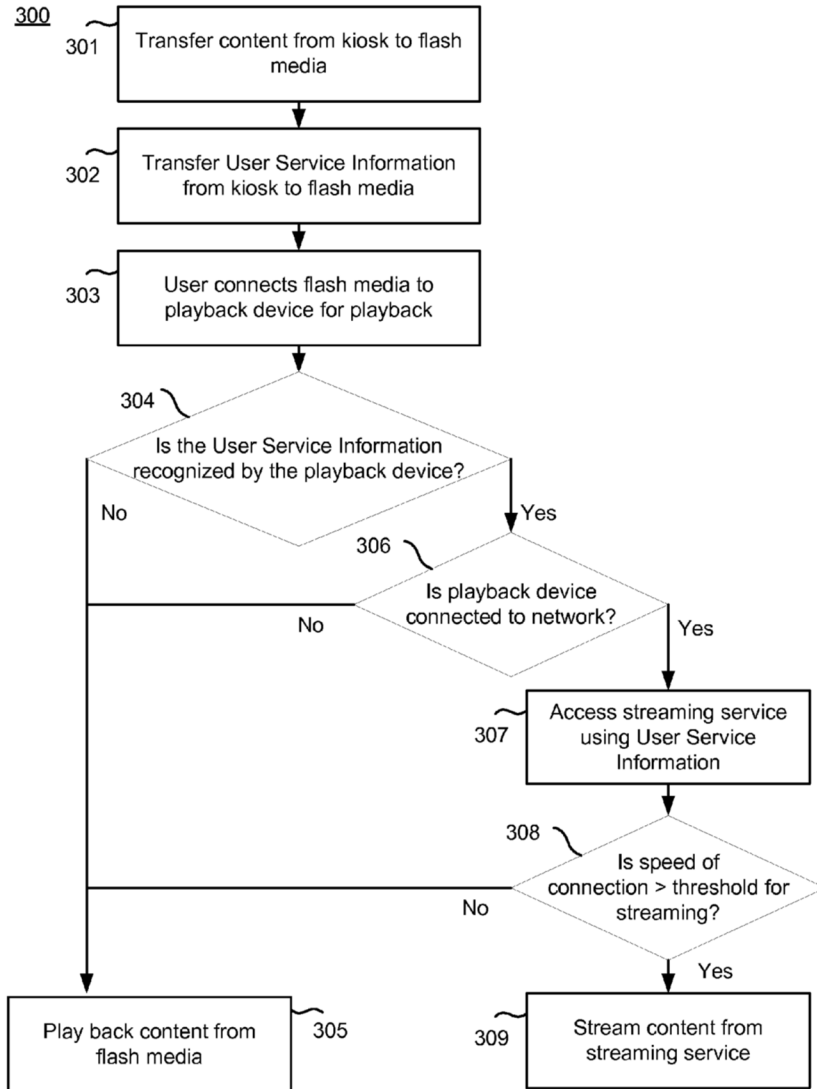


FIG. 3

'803 patent, 2:42-47.

49. At step 301, “[w]hen the user decides on a purchase, the content is transferred 301 from the kiosk to the flash media 140.” ’803 patent, 8:59-65. At step 302, “user service information 1101 is transferred from the kiosk 130 to the flash media 140.” *Id.*, 8:66-9:3. As I discussed above, “user service information 1101

includes information necessary to access a streaming service 150 for the delivery of content over a network.” *Id.*

50. At step 303, the user connects the flash media to the playback device. ’803 patent, 9:4-7. Once connected to the playback device, “a check is made to determine 304 if the user service information 1101 is recognized by the playback device.” *Id.*, 9:5-7. According to the ’803 patent, “[i]f the playback device does not recognize the user service information 1101, then the content is played back from the flash media in step 305.” *Id.*, 9:8-10. On the other hand, “[i]f the playback device recognizes the user service information 1101, then the method 300 advances to step 306,” where “a check is made to determine if the playback device is connected to a network that enables access to the streaming service identified by the user service information 1101.” *Id.*, 9:13-16.

51. If it is determined that “the playback device is not connected to a network that allows access to the streaming service, content is played back from the flash media in step 305.” ’803 patent, 9:16-18. Conversely, “[i]f the playback device is connected to a network that allows access to the streaming service, the streaming service is accessed in step 307 using the user service information 1101 downloaded from the kiosk 130.” *Id.*, 9:18-22. User service information 1101, e.g., the user’s login credentials, can be used to automatically log into the streaming service.

52. Once logged in, at step 308, “a check is made to determine if the speed of the connection to the streaming service exceeds the threshold for streaming content in order to maintain the quality and integrity of the streamed content.” ’803 patent, 9:26-29. If the network speed is not sufficient for the media playback to meet a quality threshold, “then the method 300 reverts to playing the content back from the flash media in step 305.” *Id.*, 9:29-32. If the speed is sufficient, then at step 307 “the content is streamed from the streaming service. In one embodiment, the streamed content is of a higher quality than the version of the content that was downloaded from the kiosk 130.” *Id.*, 37-40. For example, the ’803 patent indicates that streamed playback can be can be played back as high definition video while playback from flash memory is played as standard definition video. *Id.*

B. Prosecution History

53. The ’803 patent was filed on January 11, 2011, and claimed the benefit of provisional application 61/294,070, which was filed on January 11, 2010. I will assume the priority date is January 11, 2010. The original application contained 20 claims.

54. On September 18, 2013, the Examiner issued an office action rejecting all pending claims as obvious under various prior art combinations. On December 18, 2013, patentee amended the independent claims to indicate that the claimed “user

service information” included “user account information for one or more account based streaming services.” Ex. 1004, 136-137.

55. On March 26, 2014, the Examiner issued a final rejection that rejected all claims. Ex. 1004, 158-173. On June 20, 2014, the Examiner and patentee conducted an interview, where no agreement was reached. *Id.*, 197.

56. On June 24, 2014, patentee responded to the final office action, argued against the rejections, and amended claim 1 to recite that “if the playback device is connected to a network via a network that meets a threshold of streaming digital content,” then “the user service information is used to access at least one of the one more streaming services to stream a higher quality version of the content to the playback device for playback, otherwise, the content stored on the flash media device is used for playback.” Ex. 1004, 200 (the underlining is in the original).

57. On July 3, 2014, another Examiner interview took place. There, patentee agreed to an Examiner’s amendment that, *inter alia*, incorporated the requirements of application claims 9 and 13 into independent claims 1 and application claim 12 (issued claim 11), respectively. Ex. 1004, 220-224, 230.

58. On July 9, 2014, the application was allowed. *Id.*, 214. In the Reasons For Allowance the Examiner stated “none of the cited prior art teaches or suggests the steps of” – and then inserted verbatim allowed independent claims 1 and 11. *Id.*, 225-227.

VIII. THE CLAIMS

59. The table below includes identifiers for the '803 patent claims and limitations, which are referenced throughout.

Reference	Claim Limitation
Claim 1	
[1pre]	1. A method of delivering content by integrating a kiosk delivery system with a streaming service, the method comprising:
[1a]	transferring content from a kiosk to a flash memory media device,
[1b]	wherein the flash memory media device is configured to be connected to a playback device; and
[1c]	transferring user service information, including user account information for one or more account based digital content streaming services, from the kiosk to the flash memory media device,
[1d]	wherein, responsive to the flash memory media device being connected to the playback device:
[1e]	if the playback device is connected to a network via a network connection having a speed that meets a threshold for streaming digital content, the transferred user service information from the connected flash memory media device is used to access at least one of the one or more account based digital streaming services to stream a higher quality version of the content to the connected playback device for playback,
[1f]	wherein the higher quality version of the content is a high definition version of standard definition content transferred from the kiosk to the flash memory media device,

Reference	Claim Limitation
Claim 1	
[1g]	otherwise, the content stored on the connected flash memory media device is used for playback of the content.

Claim 2	
[2]	2. The method of claim 1, wherein the user account information for each account based digital streaming service comprises an account identifier and login information.

Claim 3	
[3]	3. The method of claim 1, wherein user service information includes information necessary to access a digital streaming service for delivery of content over a network.

Claim 4	
[4]	4. The method of claim 1, wherein the content transfer can occur without removing the flash memory media device from a device containing the flash memory media device.

Claim 5	
[5]	5. The method of claim 1, wherein the content transfer can occur by removing the flash memory media device from a device containing the flash memory media device.

Claim 6	
[6]	6. The method of claim 1, wherein the user service information is received from a user device.

Claim 7	
[7]	7. The method of claim 1, wherein the user service information is received through a website.

Claim 8	
[8]	8. The method of claim 1, wherein the user service information is received from a data feed from a provider of the streaming service.

Claim 9	
[9]	9. The method of claim 1, wherein users can register for the streaming service at the kiosk.

Claim 10	
[10]	10. The method of claim 1, wherein users may update user service information via the kiosk.

Claim 11	
[11pre]	11. A method of operating a playback device to automatically play back content from either a flash memory media device or a digital streaming service depending upon playback circumstances, the method comprising:
[11a]	receiving, from a connected flash memory media device, user service information, including user account information for an account based digital media content streaming service,
[11b]	wherein the user service information enables access to the account based digital media content streaming service; and

Claim 11	
[11c]	wherein the connected flash memory media device previously has received content from a kiosk delivery system including the user service information that includes user account information for one or more account based digital streaming services;
[11d]	responsive to the user service information being unrecognized by the playback device, playing back the content from the connected flash memory media device, the content previously received from the kiosk delivery system; and
[11e]	responsive to the user service information being recognized by the playback device:
[11f]	responsive to the playback device not being connected to a network, playing back the content from the connected flash memory media device; and
[11g]	responsive to the playback device being connected to a network, accessing the account based digital media content streaming service using the user service information, by:
[11h]	responsive to a speed of the connection not meeting a threshold for streaming digital content, playing back the content from the connected flash memory media device; and
[11i]	responsive to the speed of the connection meeting the threshold for streaming digital content, streaming the content from the account based digital media content streaming service,
[11j]	wherein streaming the content from the account based digital media content streaming service comprises streaming the content in high definition, and wherein the content on the flash memory media device is standard definition.

Claim 12	
[12]	12. The method of claim 11, wherein accessing the account based digital media content streaming service using the user service

Claim 12	
	information comprises automatically logging the user into the account based digital media content streaming service.

Claim 13	
[13]	13. The method of claim 11, wherein the threshold is a lower limit on speed consistent with avoiding service interruptions.

Claim 14	
[14]	14. The method of claim 11, wherein a flash memory media device can be transferred between playback devices.

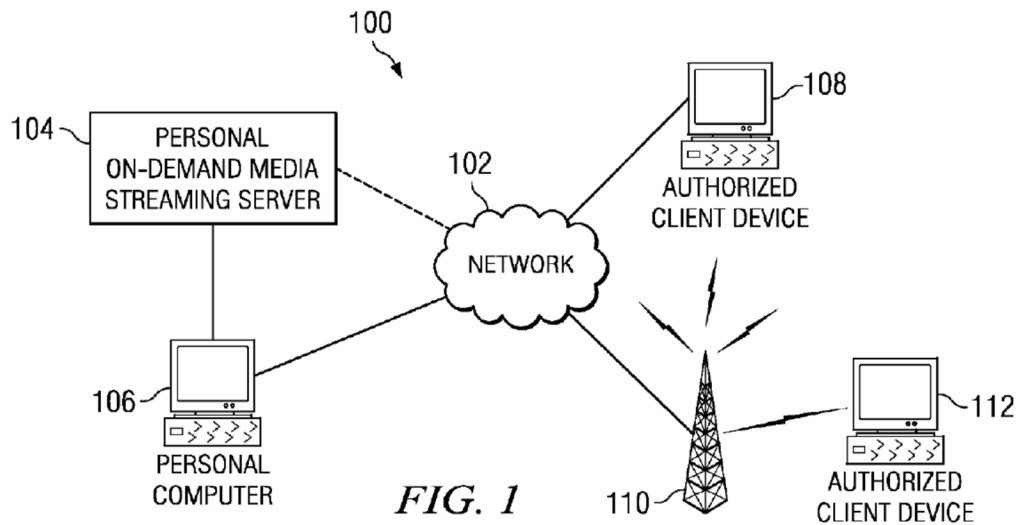
IX. OVERVIEW OF THE PRIOR ART REFERENCES

60. I first note that the prior art references analyzed in the grounds below are analogous to the '803 patent because they are within the same field of endeavor and/or reasonably pertinent to one or more problems addressed by the '803 patent. Like the '803 patent, *Kirkland*, *Olaiya*, *Kang*, *Hasegawa*, *Mavrakakis*, *Hodecker Takano*, and *Raja* disclose various methods of content distribution with various functionality. See, e.g., Abstracts in *Kirkland*, *Olaiya*, *Kang*, *Hasegawa*, *Mavrakakis*, *Hodecker Takano*, and *Raja*.

A. *Kirkland*

61. *Kirkland* discloses a method for “on-demand media streaming from a user's own media library to a user's receiving device that may be located in a different

location from that where the media library is stored.” *Kirkland*, ¶[0012]. *Kirkland*’s system is illustrated in Fig 1:



Kirkland’s system includes personal on-demand media streaming server 104 that is connected to network 102. Various client devices 108, 112 are also connected to network 102. *Kirkland*’s “client devices 108 and 112 may be any data processing device that is capable of outputting streaming media.” *Kirkland*, ¶[0035]. In *Kirkland*, “personal on-demand media streaming server 104 provides streaming media data, to client devices 108 and 112 upon request and authentication of the client devices 108 and 112.” *Id.*, ¶[0036].

62. An embodiment of *Kirkland*’s on-demand media streaming server is shown in Fig. 6:

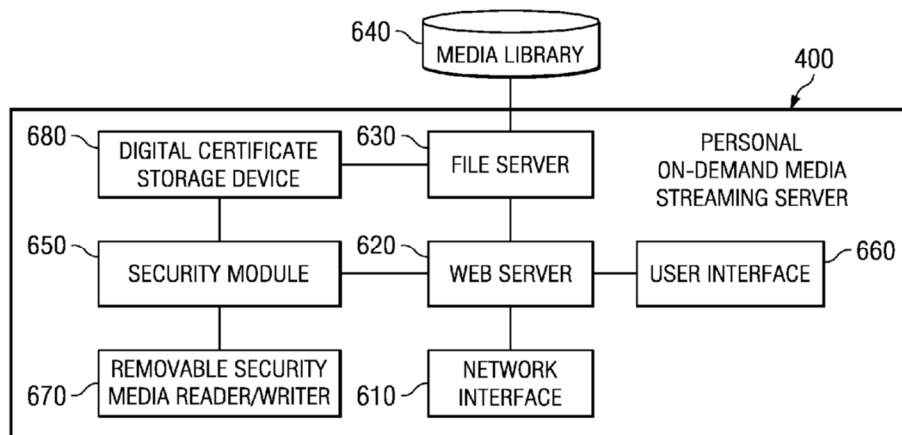


FIG. 6

In this embodiment, on-demand media streaming server 400 includes a mechanism “for ensuring that the user of the client device that is attempting to access media files via the personal on-demand media streaming server is in physical possession of a digital certificate that confirms that the user is an authorized user of the personal on-demand media streaming server.” *Kirkland*, ¶[0078].

63. In this embodiment, the on-demand media streaming server has a “removable security media reader/writer 670, the digital certificate storage device 680 and the operation of the security module 650...” *Kirkland*, ¶[0079]. To ensure that users of client devices have the rights necessary to consume the content streamed from the on-demand media streaming server, the user must “physically possess a physical media upon which a digital certificate or other authentication device is present.” *Id.*, ¶[0080]. *Kirkland* discloses that the “media may be any type of removable and portable media upon which data may be stored,” stating that such

media can include smart cards and USB drives. *Id.* The digital certificate “is written to a removable media via the removable security media reader/writer 670.” *Id.*, ¶[0081].

64. To consume the content stored on the on-demand media streaming server, “the user must insert the removable security media into the client device in order for authentication to succeed.” *Kirkland*, ¶[0083].

B. *Olaiya*

65. *Olaiya* discloses a method for “Peer-to-Peer (P2P) media content streaming.” *Olaiya*, ¶[0003]. Fig. 1 shows *Olaiya*’s architecture:

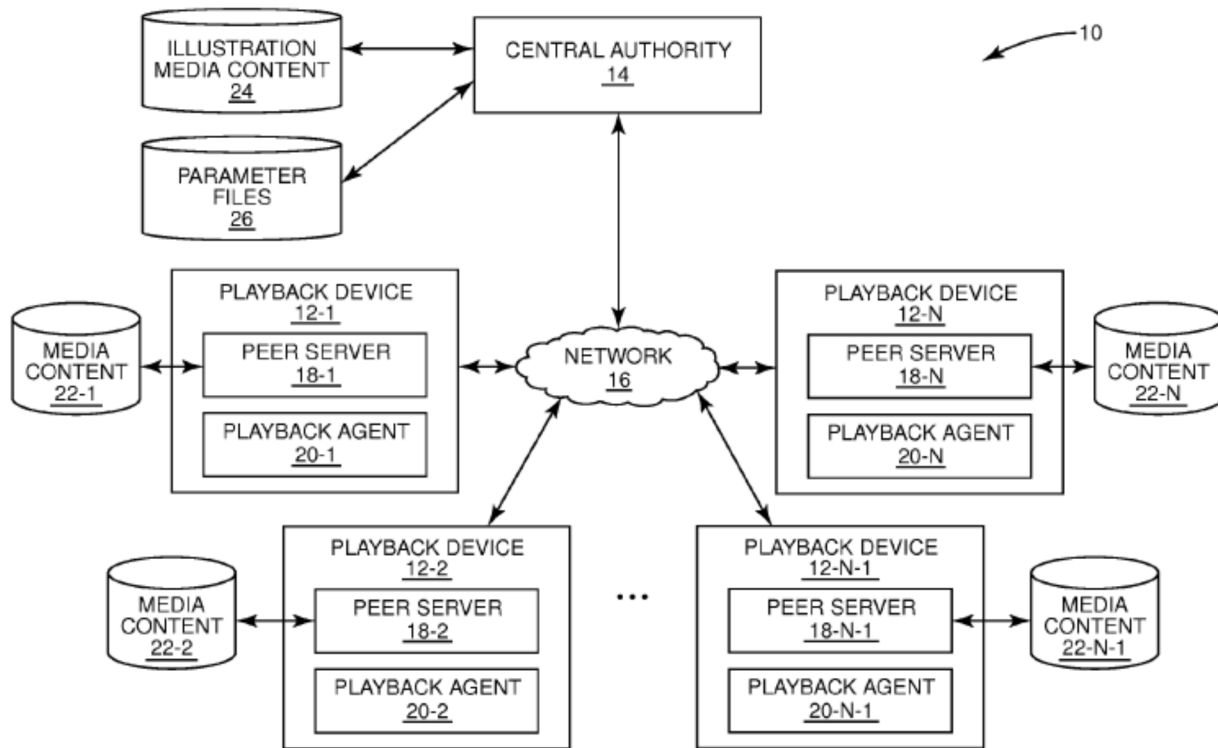


FIG. 1

As seen, *Olaiya* includes a number of playback devices 12-1 through 12-N, and can also have a central authority 14. Each of the playback devices include a peer server 18-1 through 18-N. *Id.*, ¶¶[0013]-[0015].

66. Central authority 14 “may be implemented on a central server,” and can host “illustration media content 24 and corresponding parameter files 26.” *Id.*, ¶¶[0015]-[0016]. An illustration media content item “may be a low or reduced quality version of a media content item...” *Id.*, ¶[0016].

67. To consume a media content item, a user, through a playback device, “selects a media content item for playback.” *Id.*, ¶[0018]. In response to this selection, a playback agent in the user’s playback device downloads the illustrative media content item from central authority 14, and also “initiates streaming from one or more of the peer servers 18-2 through 18-N hosting the media content item.” *Id.*

68. Fig. 2 is a block diagram of a playback agent located in a playback device:

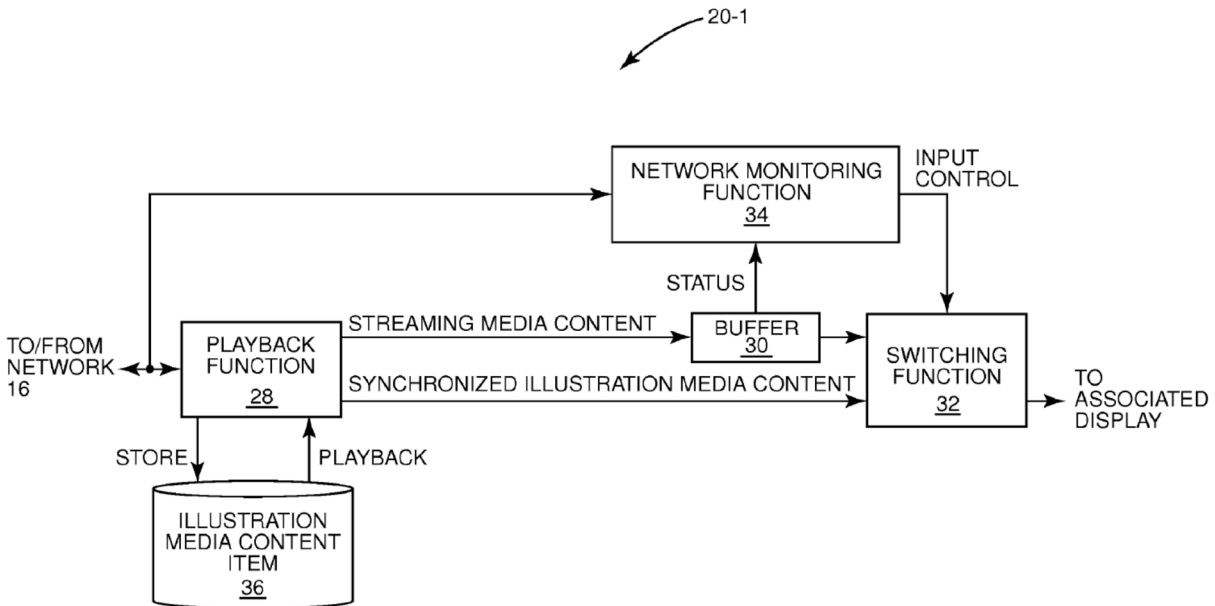


FIG. 2

Olaiya's playback devices include Network Monitoring Function 34, which “operates to monitor a quality of the network connection to one or more of the peer servers 18-2 through 18-N streaming the original media content item to the playback function 28.” *Olaiya*, ¶[0021].

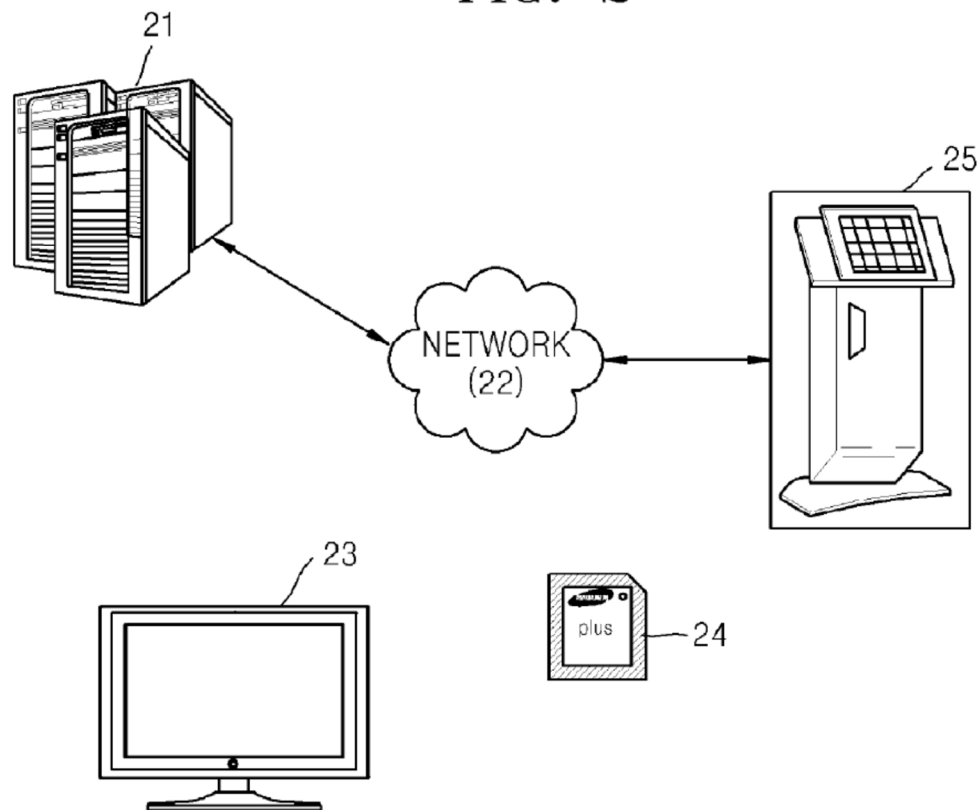
69. When Network Monitoring Function 34 determines that the quality of the network connection to a peer server located in a playback device that is streaming original media content item “is at an acceptable level,” a playback agent’s switching function 32 is controlled by the network monitoring function 34 “such that the streaming original media content item is presented to one or more associated users via an associated display.” *Id.*, ¶[0019]. Conversely, when network monitoring function 34 “detects that the connection is poor, the network monitoring function 34

controls the switching function 32 via an input control such that the synchronized illustration media content item, rather than the streaming media content item, is output to the associated display.” *Id.*, ¶[0021].

C. Kang

70. *Kang* discloses “a method and apparatus to purchase or rent (hereinafter both referred to as ‘purchase’) contents with a portable mass storage medium capable of writing/reading data.” *Kang*, ¶[0011]. The architecture of *Kang*’s system is shown in Fig. 2:

FIG. 2



Kang’s system includes contents providing server 21, wired/wireless network 22,

contents reproducing apparatus 23, portable storage medium 24, and a kiosk 25.

Kang, ¶[0041].

71. *Kang*'s "contents providing server 21 stores various contents data or content files, and provides users with the contents data or content files via the wired/wireless network 22." *Id.*, ¶[0042]. Such content includes audio/video data such as movies. *Id.* *Kang*'s kiosk 25 is "a terminal of a contents distribution system installed in public places," which receives content from contents providing server 21, which in turn saves the contents data (e.g., movies) to portable storage medium 24 that is inserted/connected/communicating with kiosk 25. *Id.*, ¶[0043]. Examples of portable storage medium 24 include SD, multimedia and compact flash cards. *Id.*, ¶[0044].

D. *Hasegawa*

72. *Hasegawa* discloses a system that streams high definition video to a playback device when a network is available, but plays back the standard definition version of the same video on locally stored DVD discs when the network is unavailable. *Hasegawa*, Abstract.

E. *Raja*

73. *Raja* discloses various methods relating to "a remote access server farm." *Raja*, ¶[0005]. *Raja*'s disclosures are pertinent to numerous client-server

applications including “applications for streaming video and/or audio.” *Raja*, ¶[0070].

74. One of *Raja*’s methods is a “Program Neighborhood application.” This application, which may be installed on a client, “disclose[s] to users of the client nodes 102A, 102N those application programs hosted by the application servers that each client node is authorized to use.” To access this application, the user may be required to provide authentication information, including a password and user credentials that may be obtained from, e.g., smart cards. *Raja*, ¶¶[0155], [0157]. This authentication may be via a web browser. *Raja*, ¶¶[0163].

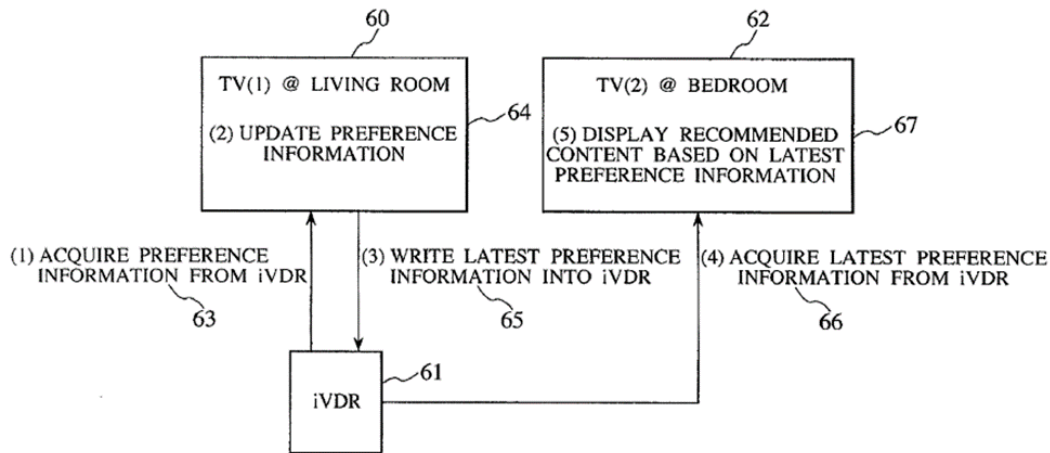
F. *Mavrakakis*

75. *Mavrakakis* discloses a “media distribution kiosk (MDK) 104” that “may interface with one or more personal media devices 108.” *Mavrakakis*, ¶[0029], *Mavrakakis* discloses a number of interface methods between a media device and the kiosk including “Wi-Fi” and “Bluetooth.” *Id.*, ¶¶[0046].

G. *Takano*

76. *Takano* discloses a portable storage device/iVDR that may be transferred between two different televisions to facilitate the recording and playback of media. *Takano*, ¶¶[0022], [0029]. *Takano*’s architecture is shown, e.g., in Fig. 5:

FIG. 5



Takano's iVDR can record and play content on one or both of TV(1) and TV(2). *Id.*, ¶[0029].

77. *Takano* discloses a “portable storage device”/“iVDR” that “can be a semiconductor memory.” *Id.*, ¶[0022]. *Takano* further discloses that its portable storage device/iVDR may be connected to a television, and may be transferred between different televisions in the user’s home. *Id.*, ¶¶[0030]-[0031].

H. *Hodecker*

78. *Hodecker* discloses a content distribution system that “deliver[s] video streaming content to viewers worldwide” that generates content of different formats and bit rates – meaning different quality levels (*Hodecker*, ¶[0016] and ¶[0018]), and which implements a registration and change password function. More specifically, *Hodecker* discloses “[v]iewers 20c are able to create and edit their own accounts and register via the storefront,” and “[t]he broadcast website includes

conventional change password functionality and forgotten password functionality.”

Hodecker, ¶¶[0148], [0151].

X. CLAIM CONSTRUCTION

79. Here, I have given all the claim terms of the challenged claims their plain and ordinary meaning, as would have been understood by a person having ordinary skill in the art at the time of the alleged invention, having taken into consideration the language of the claims, the specification, and the prosecution history of record.

80. For purposes of this declaration, I will assume that the time of the alleged invention is January 11, 2010 (the filing date of U.S. Provisional Patent Application 61/294,070).

XI. DETAILED EXPLANATION OF GROUNDS

A. Ground 1: *Kirkland* In View of *Olaiya* and *Kang* Renders Claims 1-13 Obvious

1. Claim 1

- a. [1pre]² “A method of delivering content by integrating a kiosk delivery system with a streaming service”**

81. To the extent the preamble is limiting, *Kirkland* discloses methods for streaming digital media content to a media player. See e.g., *Kirkland*, ¶[0012]. I

² The claim language is reproduced in LISTING OF CHALLENGED CLAIMS.

have noted that the '803 patent does not define the term “streaming service” or provide any special meaning. Thus, POSITAs would have understood a streaming service to be any system that enables streaming of content to a user over a network. POSITAs would have understood that *Kirkland* (as well as *Olaiya* and *Hasegawa*) discloses a streaming service because *Kirkland* discloses “a system and method for on-demand media streaming from a user's own media library to a user's receiving device,” wherein the media server “includes a file server for accessing a set of files on a storage device, a web server that makes the files accessible via the file server available via the Internet, and a user interface that provides a mechanism by which a user can enter requests for access to files stored on the storage device.” *Kirkland*, ¶[0012]. Additionally, *Kirkland* discloses that access to streaming content by the user's client devices requires authentication of the client device by the streaming server, and that this is enabled by a preceding registration process wherein personal information about the user is provided “to ensure that the owner of the personal on-demand media streaming server 104 and the owner of the client device 108 are the same person.” *Kirkland*, ¶¶[0052], [0054]. Thus, *Kirkland* discloses a streaming service.

82. Likewise, as detailed in Section XI.A.1.b, *Kirkland* (as well as *Kang*) discloses a kiosk.

83. Thus, *Kirkland-Olaiya-Kang-Hasegawa* disclose the preamble.

b. [1a] “transferring content from a kiosk to a flash memory media device”

84. *Kirkland-Olaiya-Kang-Hasegawa* discloses or suggests this feature. As I discussed in Section XI.A.1.a, *Kirkland* discloses a system that streams digital media to media players. *Kirkland*, ¶[0012]; ¶[0036] (“...personal on-demand media streaming server 104 **provides streaming media data**, to client devices 108 and 112 upon request and authentication of the client devices 108 and 112.”).³

85. An embodiment of *Kirkland*’s on-demand media streaming server is shown in Fig. 6:

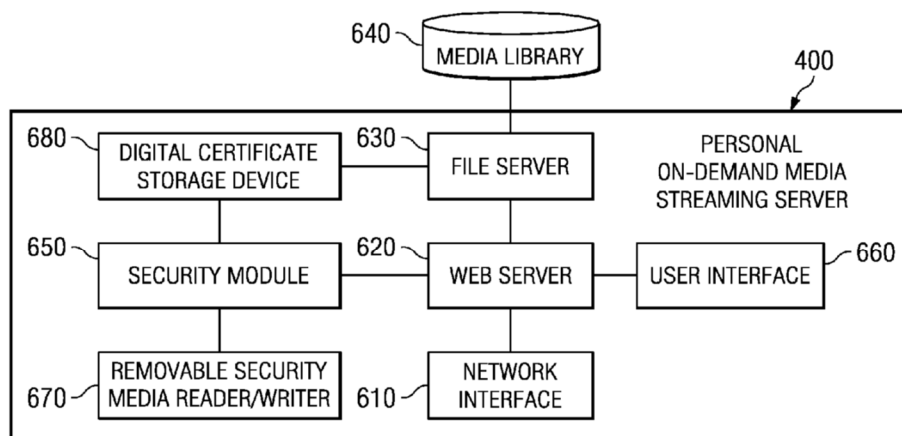


FIG. 6

86. In this embodiment, *Kirkland* discloses that its on-demand media streaming server ensures that a user “attempting to access media files via the

³ Unless I have noted otherwise, I have added all ***bolding***, *italicizing*, and underlining.

personal on-demand media streaming server is in **physical possession** of a digital certificate that confirms that the user is an authorized user of the personal on-demand media streaming server.” *Kirkland*, ¶¶[0078]. *Kirkland* states that such physical possession “**requires that the user physically possess a physical media upon which a digital certificate or other authentication device is present.**” *Id.*, [0080].

87. To enable this, *Kirkland* discloses that its on-demand media streaming server has removable security media reader/writer 670, digital certificate storage device 680 and security module 650. *Id.*, ¶[0079]. Security module 650 generates digital certificates, which are “**written to a removable media via the removable security media reader/writer 670.**” *Id.*, ¶[0081].

88. *Kirkland* discloses that the removable media “may be **any type of removable and portable media upon which data may be stored**,” stating that such media can include smart cards and USB drives. *Id.*

89. The digital certificate “is written to a removable media via the removable security media reader/writer 670.” *Id.*, ¶[0080]. POSITAs would have recognized that smart cards and USB drives are both different types of “flash memory media devices,” as claimed.

90. To stream its content from on-demand media streaming server 600, *Kirkland* discloses that users remove the removable media having the authorization information (e.g., digital certificate) stored thereon and “must insert the removable

security media into the client device in order for authentication to succeed.”
Kirkland, ¶[0083].

91. The ’803 patent does not explicitly define the term “kiosk,” although it does state that kiosks (i) are “placed where it is accessible to customers,” (ii) “connected via a network to one or more servers having access to storage of licensable digital media content,” and (iii) that “[c]ustomers can interact with the kiosk.” ’803 patent, 1:23-28.

92. POSITAs would have understood that *Kirkland’s* on-demand media streaming server 600 corresponds to the claimed “kiosk,” as it satisfies each of the kiosk characteristics disclosed in the ’803 patent. POSITAs would have understood that *Kirkland’s* on-demand media streaming server 600 is placed such that it is accessible to customers, since customers would be the person inserting thereto and removing therefrom the “flash memory media device.” *Kirkland’s* on-demand media streaming server 600 communicates with media library 640 (*Kirkland*, ¶[0082]; Fig. 6), and POSITAs would have recognized that such communication could be through a network. Moreover, *Kirkland’s* media library stores licensable content. *Kirkland*, ¶[0082]. Finally, *Kirkland* further discloses that customers interact with its on-demand media streaming server 600 via user interface 600. *Kirkland*, ¶[0082]. *See also Id.*, ¶[0067]. Thus, POSITAs would have understood

that *Kirkland's* on-demand media streaming server 600 corresponds to the claimed “kiosk.”

93. While *Kirkland* discloses the claimed “kiosks” and the use of “flash memory media devices” in a content delivery system, it does not disclose transferring *content* “to a flash memory media device,” as claimed. Instead, *Kirkland* only discloses transferring authentication information for storage thereon. POSITAs would have recognized, however, that modifying *Kirkland* so that it transfers both authentication information *and content* (e.g., movies) would provide benefits. For example, *Olaiya* discloses a central server 14 that hosts illustration media content 24 that can be transferred to various playback devices 12-1-12-N:

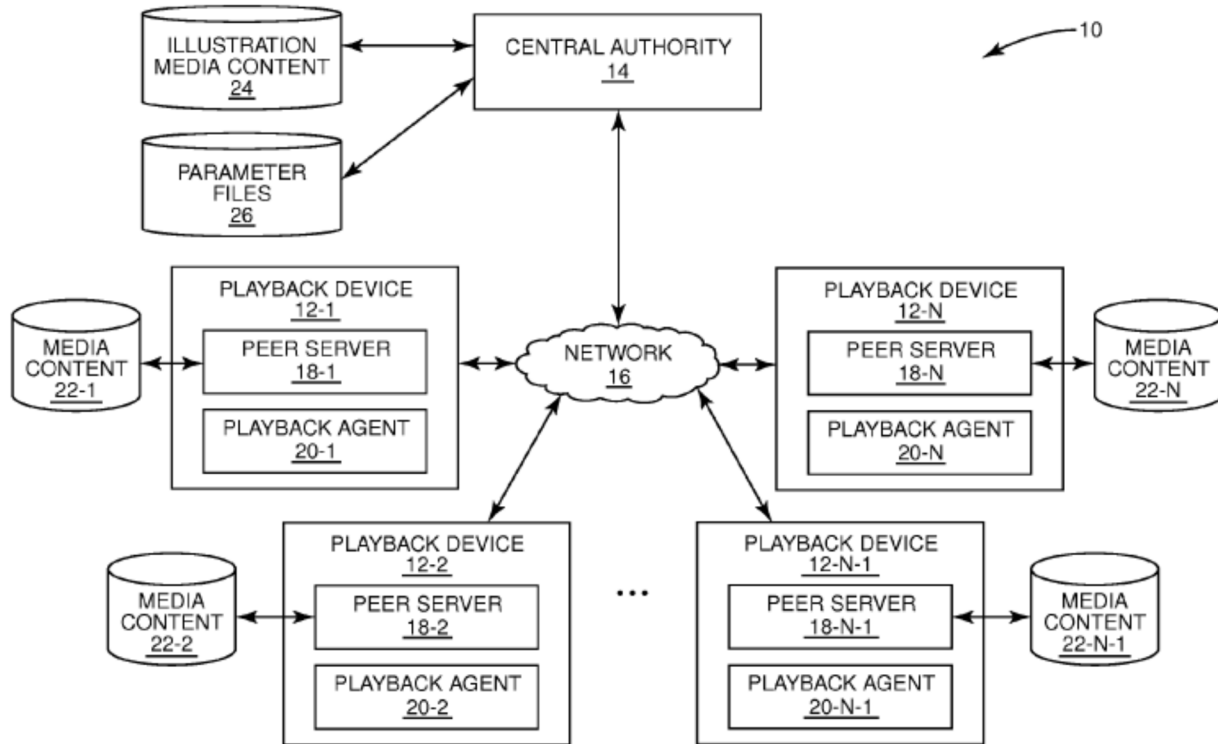


FIG. 1

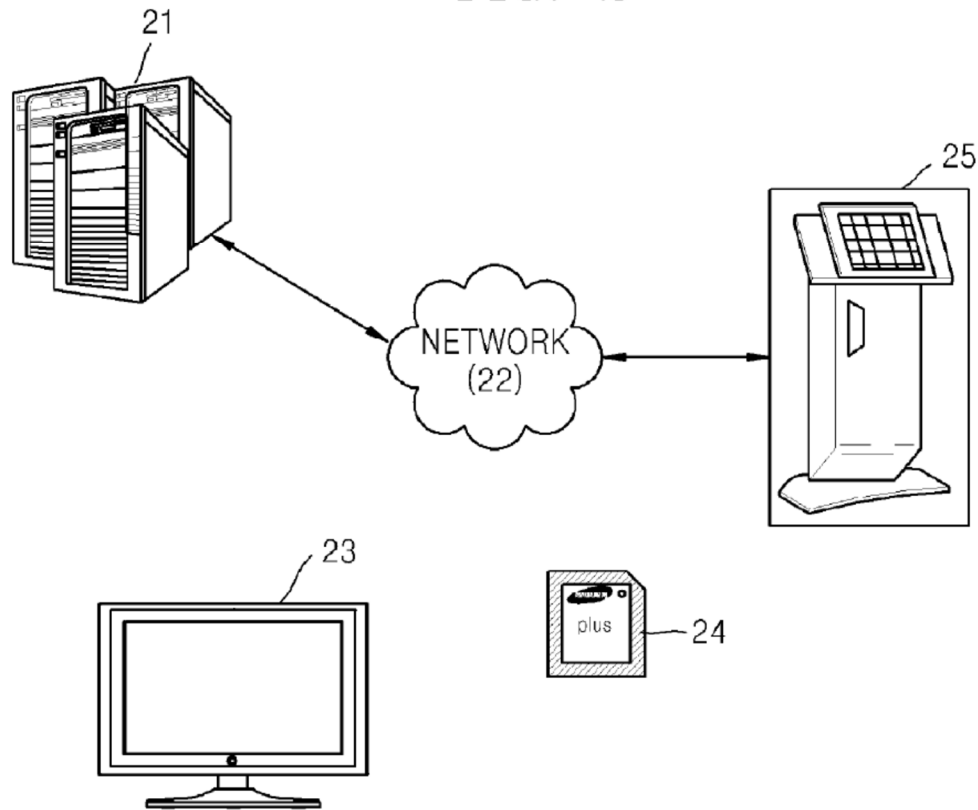
Olaiya, Fig. 6 and ¶¶[0015]-[0016]. *Olaiya*’s illustration media content 24, “may be a low or reduced quality version of a media content item...” *Id.*, ¶[0016].

94. POSITAs would have also recognized that *Olaiya*’s “low or reduced quality version of a media content item” corresponds to the claimed “content,” as the claim puts no restrictions on the quality of content transferred to the flash memory media device, and indeed, as will be discussed with respect elements [1e]-[1f], the ’803 patent claims that the content stored on the flash memory media device is of lower quality than that of the streamed version of the same content.

95. *Olaiya* discloses that a user, through a playback device, “selects a media content item for playback, and in response, the user’s playback device downloads the illustrative media content item 24 from central authority 14 *Id.*, ¶[0018]. POSITAs would have understood that when *Olaiya* is combined with *Kirkland*, the downloaded illustration media content item 24 would be stored on *Kirkland*’s flash memory media device, which would then be inserted into any of *Olaiya*’s playback devices 12-1-12-N (or *Kirkland*’s clients 108/112). Thus, the *Kirkland-Olaiya* combination discloses element [1a]. POSITAs would have been motivated to combine *Olaiya*’s disclosure regarding transferring of content into *Kirkland* for reasons I discussed in Section XI.A.1.i.

96. To the extent the Board determines that *Kirkland* does not disclose a kiosk as claimed, it would have been obvious to implement the *Kirkland-Olaiya* combination with kiosk, as *Kang* suggests. *Kang* discloses a system that allows the purchase of content using a portable mass storage. *Kang*, ¶[0011]. *Kang*’s system is shown in Fig. 2:

FIG. 2



97. *Kang's* system includes contents providing server 21, wired/wireless network 22, contents reproducing apparatus 23, portable storage medium 24, and a kiosk 25. *Kang*, ¶[0041].

98. Similar to both *Kirkland's* media library 640 and *Olaiya's* central authority 14, *Kang* discloses a contents providing server 21 that stores content (e.g., movie data/files. *Id.*, ¶[0042]. *Kang* further discloses a “kiosk 25” that is “a terminal of a contents distribution system installed in public places,” which receives content from contents providing server 21, which in turn saves the contents data (e.g.,

movies) to portable storage medium 24 that is inserted/connected/communicating with kiosk 25. *Id.*, ¶[0043].

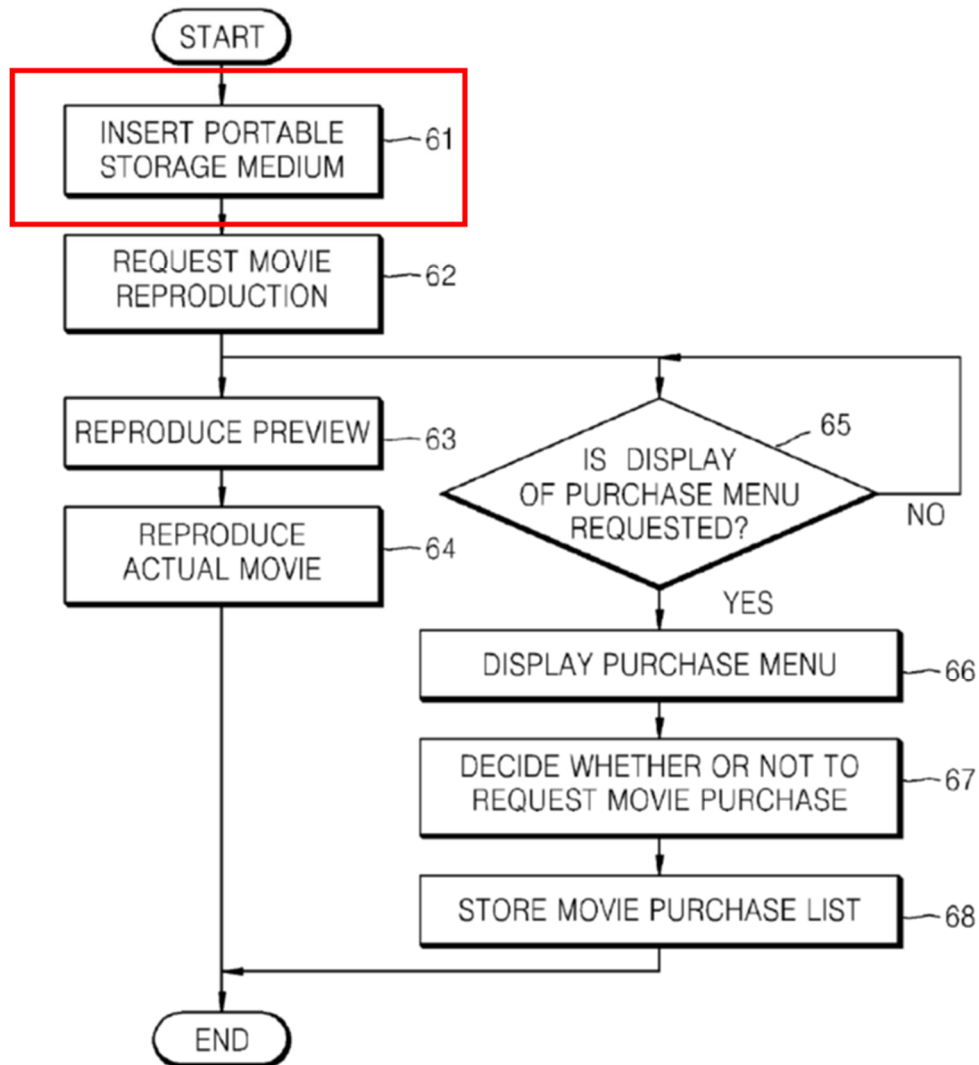
99. POSITAs would have understood that *Kang*'s kiosk 25 corresponds to the claimed "kiosk." In addition to the fact that *Kang* uses the same word, thus demonstrating the term's ordinary meaning, it also satisfies each of the kiosk characteristics disclosed in the '803 patent. *Kang*'s kiosk 25 is placed such that it is accessible to customers, as it is installed in public places and has an interface users interact with. *Kang*, ¶[0043]. *Kang*'s kiosk 25 communicates with its contents providing server 21 via a network, which stores licensable content. *Kang*, ¶¶[0041]-[0043]; Fig. 2. Finally, *Kang* discloses that customers interact with its kiosk 25 via a graphical user interface. *Kang*, ¶[0043]. Thus, POSITAs would have understood that *Kang* discloses the claimed kiosk.

100. Finally, *Kang* discloses that kiosk 25 downloads its content to "portable storage medium 24," which can include SD, multimedia and compact flash cards. *Kang*, ¶[0044]. POSITAs would have understood that each of these are "flash memory media devices," just as claimed. Thus, *Kang* discloses "transferring content from a kiosk to a flash memory device," just as claimed. POSITAs would have been motivated to combine *Kang* with *Kirkland-Olaiya* for the reasons I discussed in Section XI.A.1.i.

c. [1b] “wherein the flash memory media device is configured to be connected to a playback device; and”

101. *Kirkland* discloses that “[w]hen the user of a client device wishes to gain access to the media library storage 640, the user must insert the removable security media into the client device.” *Kirkland*, ¶[0083]. In *Kirkland*, its flash memory media device contains authentication data, but, as I discussed, POSITAs would have been motivated to incorporate *Olaiya*’s disclosure of downloading content to *Kirkland*’s flash memory media devices. And regardless, *Kang* discloses storing content on its flash devices. *Kang*, ¶[0044]. *Kang* further discloses that to play a movie, its flash memory media device is inserted into contents reproducing apparatus 23. *Kang*, ¶[0057]. See also, e.g., Fig 6:

FIG. 6



102. Thus, POSITAs would have understood that *Kirkland-Olaiya-Kang-Hasegawa* discloses element [1b]. POSITAs would have been motivated to combine these references for the reasons I discussed in Section XI.A.1.i.

- d. [1c] “transferring user service information, including user account information for one or more account based digital content streaming services, from the kiosk to the flash memory media device,”

103. *Kirkland* discloses that its security module 650 in its on-demand media streaming server 600 “may be used to generate a digital certificate or other authentication data,” which “is written to a removable media via the removable security media reader/writer 670.” *Kirkland*, ¶[0081]. POSITAs would have understood that *Kirkland*’s “digital certificate or other authentication data” corresponds to the claimed “user service information. POSITAs would have also understood that *Kirkland*’s digital certificates are “user service information” as claimed since it “may be an indicator of which media files are accessible by a device having the smart card or removable media inserted therein.” *Kirkland*., ¶¶[0015] and [0082].

104. Moreover, *Kirkland* also discloses that such “other authentication data” includes user names and passwords that are stored on its flash memory media device. *See e.g., Kirkland*, ¶[0103] (“This authentication information may include, for example, a user ID/password and/or a digital certificate or other authentication data readable from a removable security media.”). The ’803 patent discloses that user service information can be user names and passwords. *See e.g., ’803 patent*, 3:27-30. Thus, *Kirkland* discloses element [1c].

e. [1d] “wherein, responsive to the flash memory media device being connected to the playback device:”

105. I see nothing in the ’803 patent suggesting that the phrase “responsive to,” means “directly responsive to” or requires the result of a “cause-and-effect relationship,” meaning that, in my opinion, POSITAs would also not have that understanding based on the intrinsic record.

106. With this understanding, I note that *Kirkland* discloses that in response to inserting its physical media (i.e., its flash memory media device) into a client device, an authentication check is performed because “the user must insert the removable security media into the client device in order for authentication to succeed...” *Kirkland*, ¶¶[0083], [0103]. Thus, POSITAs would have understood that *Kirkland* discloses this element.

107. However, even if claim 1 requires a direct or immediate response to connecting the flash memory media device to the playback device, POSITAs would have recognized that *Kirkland*’s authentication process, which begins with a “request” from a client device, could be initiated by insertion of *Kirkland*’s physical media into a client device. *Id.*, ¶[0012], [0083].

- f. [1e] “if the playback device is connected to a network via a network connection having a speed that meets a threshold for streaming digital content, the transferred user service information from the connected flash memory media device is used to access at least one of the one or more account based digital streaming services to stream a higher quality version of the content to the connected playback device for playback”

108. *Kirkland* discloses that media content is streamed from a network. *See e.g., Kirkland*, ¶[0012] (“The present invention provides a system and method for **on-demand media streaming** from a user's own media library to a user's receiving device that may be located in a different location from that where the media library is stored.”); ¶[0035] (“...personal **on-demand media streaming server 104 is connected to network 102** either directly or via a personal computer 106. In addition, **client devices 108 and 112 are connected to network 102** either directly or through wireless means, such as wireless network base station 110.”).

109. *Kirkland* also discloses that “user service information from the connected flash memory media device is used to access at least one of the one or more account based digital streaming services,” as claimed. Specifically, *Kirkland* discloses that “[w]hen the user of a client device wishes to gain access to the media library storage 640, the user must insert the removable security media into the client device in order for authentication to succeed.” *Id.*, ¶[0083].

110. POSITAs would have understood that this would require transfer of *Kirkland's* authentication information back to personal on-demand media streaming server 600, especially if the authentication information was a user name and password. This can be seen in *Kirkland's* Fig. 10 (annotated):

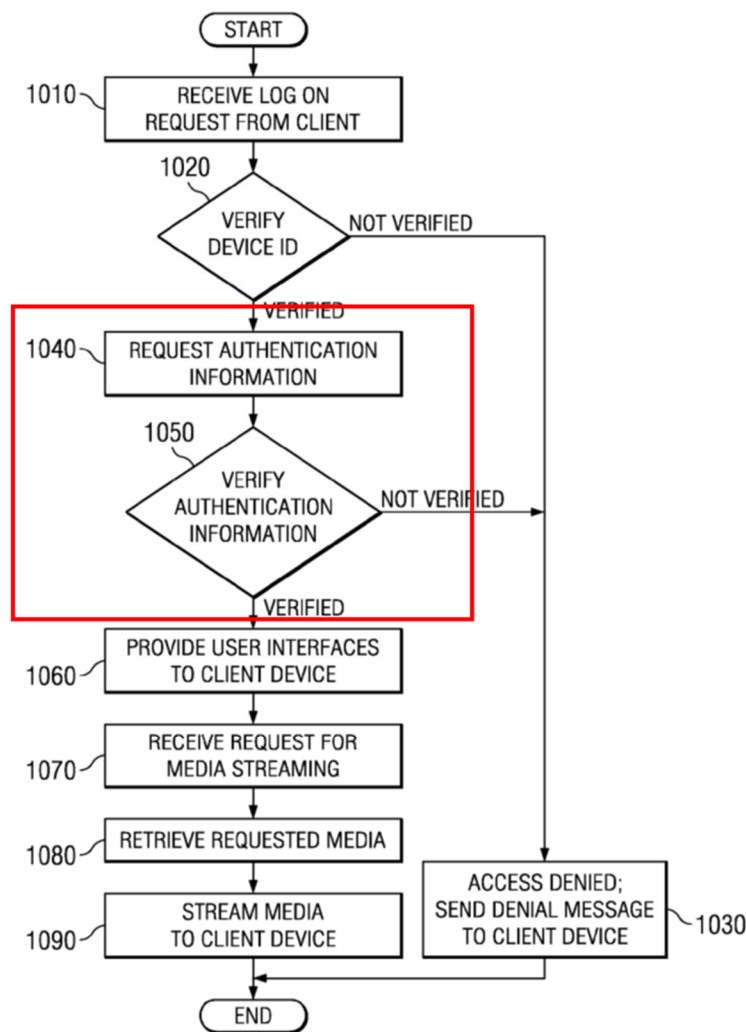


FIG. 10

111. In particular, at step 1040, “a request for authentication information is sent to the client device,” and as I discussed in Section XI.A.1.d, such information

can be user names and passwords stored on the flash memory media device. *Kirkland*, ¶[0103]. Then, at step 1050, the authentication information is verified. *Id.*, ¶[0104]. POSITAs would have further recognized that *Kirkland's* streaming service is “account based,” because the owner may limit access to “the owner, or select individuals that have been granted explicit permission by the owner.” *Kirkland*, ¶[0106].

112. Thus, POSITAs would have recognized that *Kirkland* discloses that its playback device “is connected to a network,” and that “the transferred user service information from the connected flash memory media device is used to access at least one of the one or more account based digital streaming services,” just as claimed.

113. *Kirkland* further discloses that quality of video streams can vary between “...large size, medium size, small size...” *Kirkland*, ¶[0055]. POSITAs would have recognized that video streams having “large size” correspond to “stream[ing] a higher quality version of the content to the connected playback device for playback,” just as claimed.

114. *Kirkland* does not explicitly disclose determining whether its network connection has “a speed that meets a threshold for streaming digital content.” However, *Olaiya* discloses such a feature. In particular, *Olaiya*, like *Kirkland*, discloses that media content is streamed from a network. *See e.g., Olaiya*, ¶[0013] (“In general, the system 10 includes a number of peer playback devices 12-1 through

12-N and, optionally, a central authority 14 interconnected by a network 16.”).
Olaiya also discloses that its playback devices have “playback agents,” which are shown in Fig. 2. Each playback agent has “network monitoring function 34,” shown in Fig. 2 (annotated):

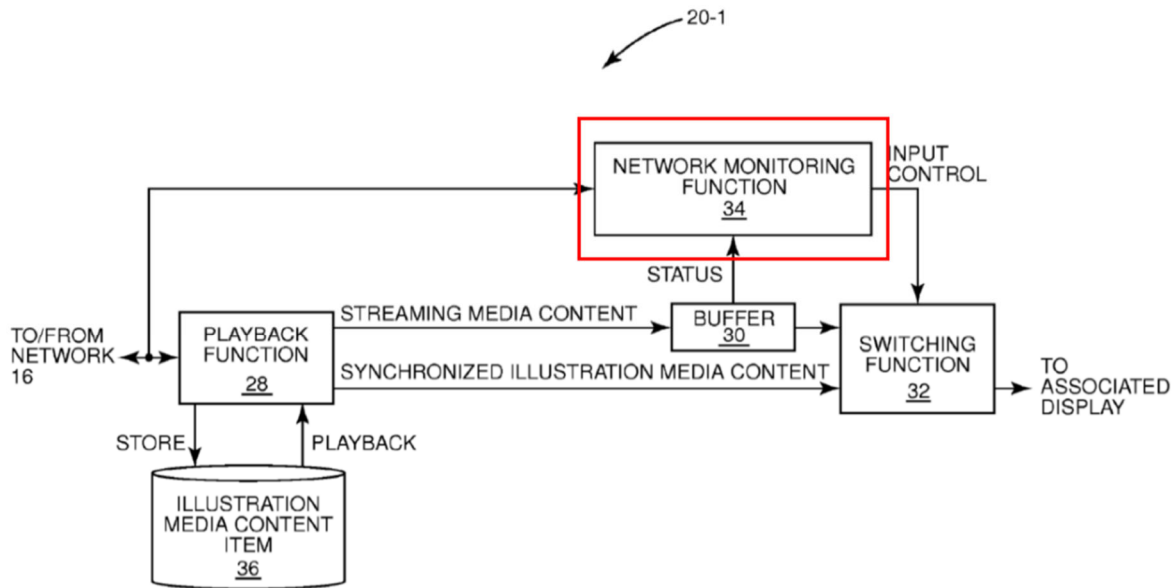


FIG. 2

115. Network monitoring function 34 “operates to monitor a quality of the network connection to one or more of the peer servers 18-2 through 18-N streaming the original media content item to the playback function 28.” *Olaiya*, ¶[0021.] This is also seen in Fig. 3 (annotated):

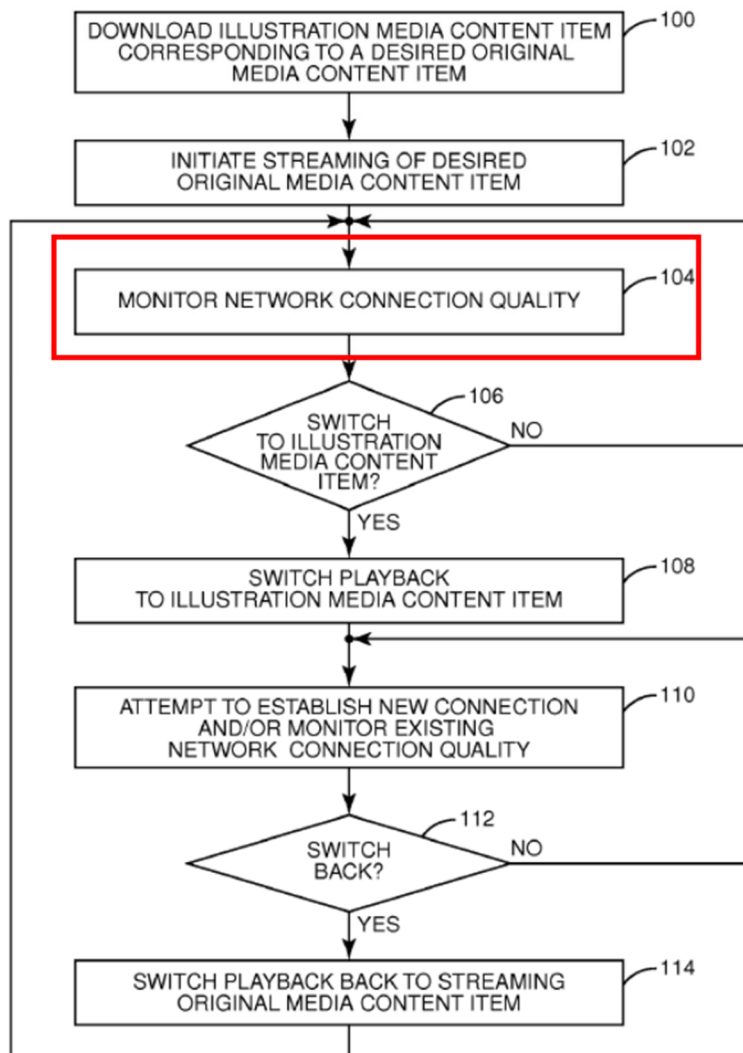


FIG. 3

See also *Olaiya*, ¶[0025] (“While the original media content item is streamed to the playback function 28, the **network monitoring function 34 monitors a quality of the network connection** (step 104).”).

116. *Olaiya* further discloses that one of the network quality factors it monitors is network speed. *Id.*, ¶[0026] (“For example, **the network monitoring**

function 34 may decide to switch playback to the illustration media content item 36 ... **if the bandwidth or speed of the network connection** to the one or more of the peer servers 18-2 through 18-N streaming the original media content item **falls below a predetermined threshold...**”).

117. *Olaiya*’s playback agents also have “switching function 32,” shown in Fig. 2 (annotated):

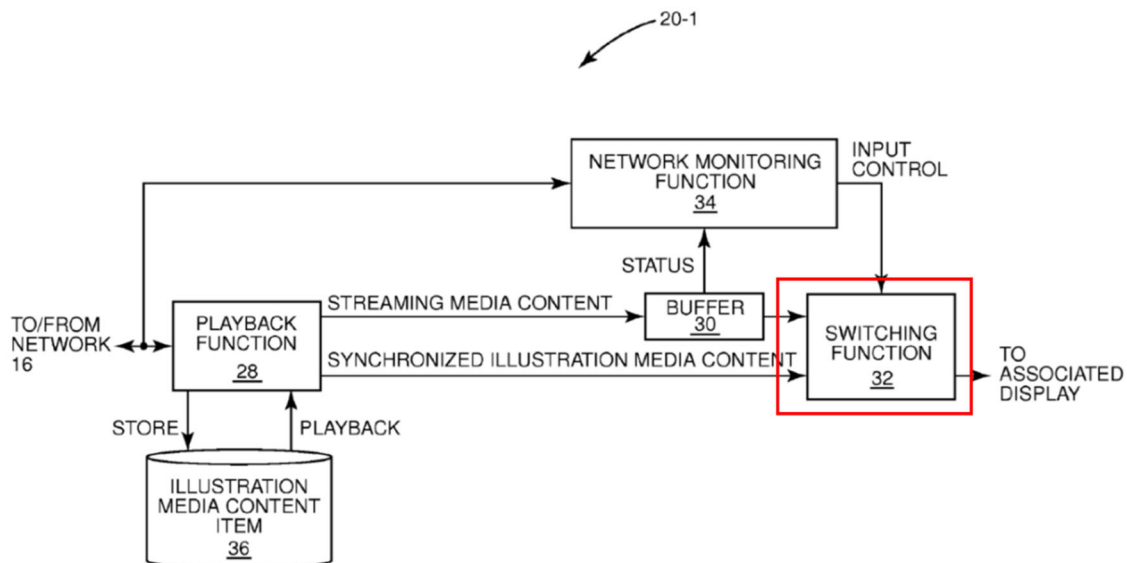


FIG. 2

118. Switching function 32 controls whether content is streamed over the network to a playback device or whether illustration media content that is stored locally (and which in the *Kirkland-Olaiya-Kang-Hasegawa* combination stored on *Kirkland/Kang*’s flash memory media device) is sent to the playback device. *Olaiya*, ¶[0021].

119. In *Olaiya*, when network speed is at “acceptable level,” (i.e., has “a network connection having a speed that meets a threshold for streaming digital content,” as claimed), the playback device’s switching function 32 is controlled by the network monitoring function 34 “such that the streaming original media content item is presented to one or more associated users via an associated display.” *Id.*, ¶[0019].

120. Based on the foregoing, POSITAs would have understood that in the *Kirkland-Olaiya-Kang-Hasegawa* combination, when the network speed meets or exceeds a threshold, as disclosed by *Olaiya*, the high quality version of the video (either *Kirkland*’s or *Olaiya*’s) is streamed to the playback device.

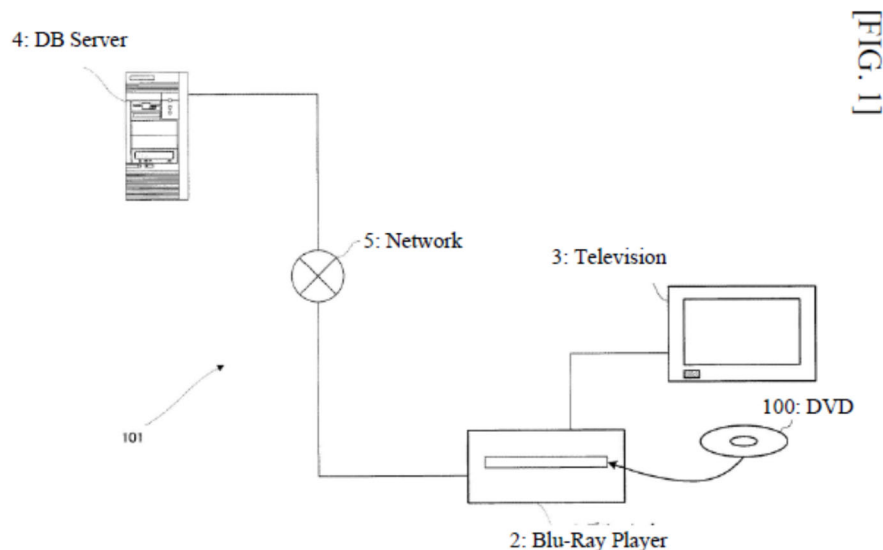
- g. [1f] “wherein the higher quality version of the content is a high definition version of standard definition content transferred from the kiosk to the flash memory media device,”

121. As I discussed in Section XI.A.1.f, *Kirkland* discloses streaming higher quality video (*Kirkland*, ¶[0055]) and *Olaiya* discloses playing such higher quality video when network speeds meet a threshold speed. *Olaiya* also discloses “illustration media content” “may be a low or reduced quality version” of the streamed video. *Id.*, ¶[0016].

122. Neither *Kirkland* nor *Olaiya* explicitly disclose that a “higher quality version” of content would be a “high definition version of standard definition

content.” POSITAs, however, would have understood that such higher quality versions would be in high definition (“HD”) as opposed to standard definition (“SD”) since by the priority date, high definition was common and a feature consumers had come to appreciate, and was therefore desired.

123. That this was the case is demonstrated by *Hasegawa*, which discloses a playback system that streams high-definition content over a network to a disk player having a DVD of the same content loaded. *Hasegawa*, ¶[0004]. *Hasegawa*’s Fig. 1 shows a disk player 2 having a DVD 100 loaded therein that is connected to a server 4 over a network as well as to a playback device 3:



Hasegawa, ¶[0026].

124. *Hasegawa*, as was well-known, notes that DVDs contained SD video content. *Id.*, ¶[0027]. *Hasegawa* further states that viewing HD video content has

“begun to be popular as next-generation media that enable playback of HD (High Definition) video with higher resolution than SD video.” *Id.*, ¶[0002]. Thus, POSITAs, especially in view of *Hasegawa*, would have understood that *Kirkland*’s higher quality video would have included HD.

125. Alternatively, POSITAs would have been motivated to engineer the *Kirkland-Olaiya-Kang* combination such that streaming video was in HD, as disclosed by *Hasegawa*. POSITAs would have been motivated to combine *Hasegawa* with *Kirkland-Olaiya-Kang* for the reasons I discuss in Section XI.A.1.i.

- h. [1g] “otherwise, the content stored on the connected flash memory media device is used for playback of the content.”**

126. *Olaiya* discloses that when network monitoring function 34, shown in *Olaiya*’s Fig. 2 (reproduced above), “detects that the connection is poor, the network monitoring function 34 controls the switching function 32 via an input control such that the synchronized illustration media content item, rather than the streaming media content item, is output to the associated display.” *Id.*, ¶[0021]. Thus, *Kirkland-Olaiya-Kang-Hasegawa* discloses element [1g].

- i. POSITAs Would Have Been Motivated To Combine *Kirkland* , *Olaiya*, *Kang* And *Hasegawa***

127. POSITAs would have been motivated to augment *Kirkland*’s personal streaming server with *Olaiya*’s ability to switch playback between streaming and

local content, and to further improve *Kirkland-Olaiya* with the capability to disseminate content via *Kirkland*'s removable storage, as taught in *Kang*. POSITAs would also have understood that it would have been highly desirable for video to be streamed in HD, as suggested by *Kirkland* and explicitly disclosed by *Hasegawa*, and that video stored on the combination's flash memory media device should be in SD, as *Hasegawa* also discloses.

128. POSITAs would have been motivated to implement *Olaiya*'s downloading of content and playback switching into *Kirkland* to "alleviate[] interruptions in playback resulting from an unstable network." *Olaiya* ¶[0002]. POSITAs would have understood that, as of the January 11, 2010 priority date of the '803 patent, network speed (aka bandwidth capacity) was an important consideration for streaming media, as recognized by *Hasegawa* and *Olaiya*. This consideration of network speed limitation was especially so in mobile networks, which *Kirkland* discloses may be used by the playback device. *Kirkland*, ¶[0076]. *Olaiya*'s downloading of the content and playback switching would mitigate this drawback to *Kirkland*'s system-which does not consider or address network speed dynamics-and is further suggested by *Hasegawa*.

129. POSITAs would have been further motivated to modify *Kirkland-Olaiya* to deliver content via *Kirkland*'s removable media instead of via network download as *Kang* discloses. Given that *Kirkland* already discloses an embodiment

where the user is required to insert a removable media to obtain the credentials needed to access a streaming service, POSITAs would have been motivated to modify the combination so that *Kirkland* incorporates *Kang's* ability to receive content via the removable media, where the content on the removable media is the lower quality “illustration” content disclosed by *Olaiya*. POSITAs would have been motivated to modify *Kirkland* in this way because it allows viewing content where network bandwidth was either limited or insufficient, which as I explain above POSITAs would have known was a significant consideration in 2010 (and in fact remains so today).

130. POSITAs would also have been motivated to incorporate *Hasegawa's* teachings regarding streaming HD video when network speed is sufficient but playing back locally stored SD video when network speed does not meet that threshold into *Kirkland-Olaiya-Kang*. POSITAs would have understood that at the time of the priority date, streaming media quality measures included the well-known HD and SD video references, which were standard formats for viewing movies, meaning that consumers would have been exposed to these variations and expected their use for content viewing.

- 2. Claim 2 “The method of claim 1, wherein the user account information for each account based digital streaming service comprises an account identifier and login information.”**

131. As I discussed, *Kirkland* discloses use of user names and passwords. See Section XI.A.1.d and XI.A.1.f. POSITAs would have recognized that *Kirkland’s* user name is an account identifier and its password is the claimed “login information.”

132. Thus, this claim would have been obvious to POSITAs.

- 3. Claim 3 “The method of claim 1, wherein user service information includes information necessary to access a digital streaming service for delivery of content over a network.”**

133. Given that claim 1 recites that “user service information” includes “user account information,” POSITAs would have understood that claim 3 is obvious for the same reasons as claim 2.

- 4. Claim 4: “The method of claim 1, wherein the content transfer can occur without removing the flash memory media device from a device containing the flash memory media device.”**

134. See Section XI.B.

- 5. Claim 5 “The method of claim 1, wherein the content transfer can occur by removing the flash memory media device from a device containing the flash memory media device.”**

135. *Kirkland’s* and *Kang’s* flash memory media devices download information while inserted into a write device in their respective kiosks, which in

Kang's case, the information includes media content. See Section XI.A.1.b. Further, both *Kirkland* and *Kang* teach that their respective flash memory media devices are inserted into a playback device to enable playback. See Sections XI.A.1.e-XI.A.1.h. Thus, to download content to a flash memory media device, POSITAs would have understood that *Kirkland's* and *Kang's* flash memory media devices will have to be removed from the playback device (if so located prior to the download) and inserted into the writer in the kiosk, just as claimed.

136. Thus, POSITAs would have found this claim obvious.

6. Claim 6 “The method of claim 1, wherein the user service information is received from a user device.”

137. Note that I find language of this claim is ambiguous as to what component receives the user service information or when in the method of claim 1 this receiving occurs. However, I note that the '803 patent discloses that user service information is obtained during a user registration process and provided to the server system before the user can connect to the streaming service. '803 patent, 3:25 and 8:5-25. Given that the claim is silent in this regard, I am construing the claim to be consistent with the specification.

138. *Kirkland* discloses a “registration process” that provides “information for use in authenticating the user” to the server. *Kirkland*, ¶¶[0060]-[0061]. This

registration “may be performed through a personal computer or the like that is coupled to the personal on-demand media streaming server 104” (“user device”). *Id.*

139. POSITAs would have understood that *Kirkland*’s personal computer is the claimed “user device,” and thus would have found that *Kirkland-Olaiya-Kang-Hasegawa* renders this claim obvious.

7. Claim 7 “The method of claim 1, wherein the user service information is received through a website.”

140. I read claim 7 as being similar to claim 6, with the only difference being that claim 7 recites receipt of user service information from a website. *Kirkland* discloses that interactions between a personal computer and the server may be by way of a web browser (“through a website”). *Kirkland*, ¶¶[0060]-[0061]. Thus, POSITAs would have found that *Kirkland-Olaiya-Kang-Hasegawa* renders this claim obvious.

8. Claim 8 “The method of claim 1, wherein the user service information is received from a data feed from a provider of the streaming service.”

141. I read claim 8 as being similar to claim 6, with the only difference being that claim 8 recites receipt of user service information “from a data feed from a provider of the streaming service.”

142. *Kirkland* discloses a “security module 650” (“data feed”) in the “streaming server” (“a provider of the streaming service”) that may generate “a

digital certificate or other authentication data.” *Kirkland*, ¶[0081] and Fig. 6. Thus, POSITAs would have found that *Kirkland-Olaiya-Kang-Hasegawa* renders this claim obvious.

9. Claim 9 “The method of claim 1, wherein users can register for the streaming service at the kiosk.”

143. *Kirkland* discloses a “registration process” that provides “information for use in authenticating the user” to the server. *Kirkland*, ¶[0060]. This registration “may be performed through a personal computer or the like that is coupled to the personal on-demand media streaming server 104.” *Id.* *Kirkland* also discloses that personal computer 106 may be in the same location as the on-demand media streaming server 104 (“kiosk”). *Id.* at Fig. 1; *see also* ¶¶[0012], [0035], [0039], [0049]. Thus, POSITAs would have found that *Kirkland-Olaiya-Kang-Hasegawa* renders this claim obvious.

10. Claim 10: “The method of claim 1, wherein users may update user service information via the kiosk.”

144. See Section XI.C.

11. Claim 11

145. I note initially that claim 11 is similar to claim 1, but instead of being directed to a kiosk that delivers content either via streaming or playback via a flash memory media device, as in claim 1, claim 11 is directed to a playback device.

- a. [11pre] “A method of operating a playback device to automatically play back content from either a flash memory media device or a digital streaming service depending upon playback circumstances, the method comprising:”

146. As I discussed in Sections XI.A.1.a, XI.A.1.f and XI.A.1.h, *Kirkland-Olaiya-Kang-Hasegawa* discloses playing back content either via streaming or locally inserted flash memory media devices, depending on circumstances (e.g., network speed). Thus, *Kirkland-Olaiya-Kang-Hasegawa* disclose the preamble.

- b. [11a] “receiving, from a connected flash memory media device, user service information, including user account information for an account based digital media content streaming service,”

147. *Kirkland* discloses that a person who wants to stream content must have physical possession of “**a physical media upon which a digital certificate or other authentication device is present.**” *Id.*, ¶¶[0078], [0080]. To stream its content from on-demand media streaming server 600, *Kirkland* discloses that users “must **insert the removable security media** into the client device in order for authentication to succeed.” *Kirkland*, ¶[0083]. An exemplary client device 700 is shown in Fig. 7, and contains a streaming media player 740 and streaming media output device 50, making it a playback device, as claimed:

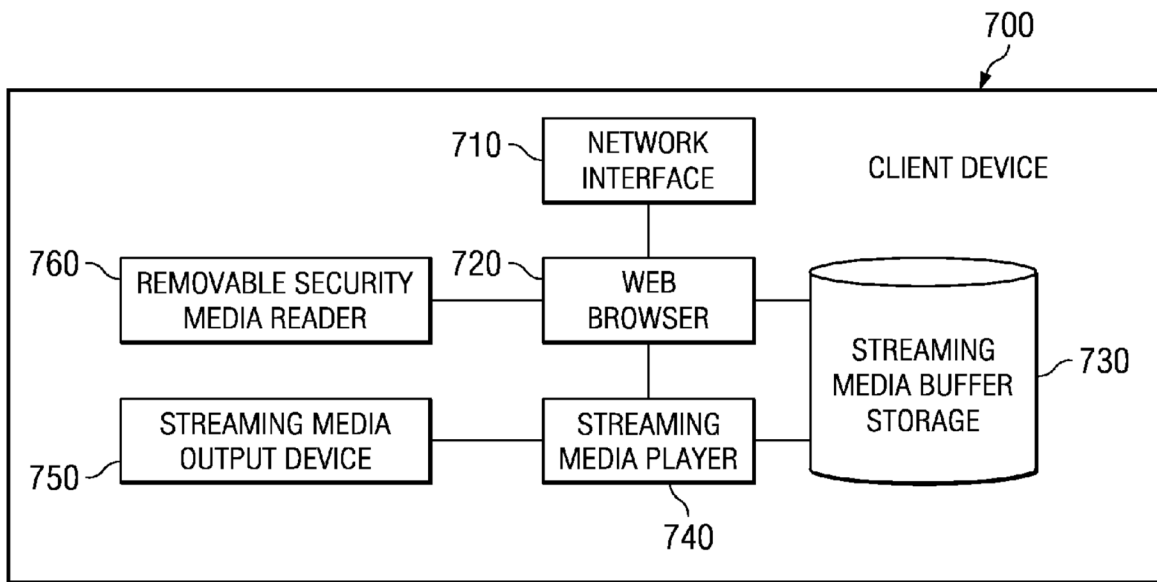
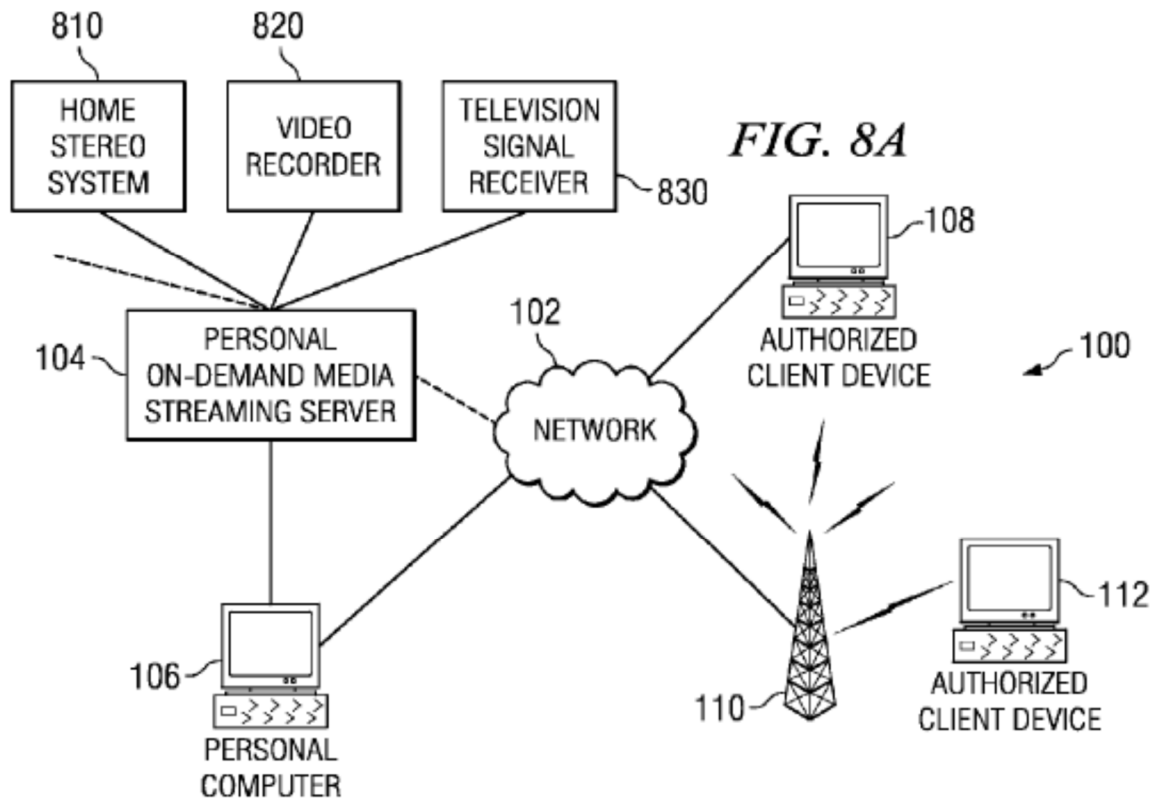


FIG. 7

148. Another example is shown in *Kirkland* Fig. 8A, which has client devices 108/112:



149. POSITAs would have understood that the device inserted into *Kirkland's* removable security media reader corresponds to the claimed “flash memory media device,” especially in view of *Kang*. See also Section XI.A.1.b.

150. When the flash memory media device is inserted into *Kirkland's* removable security media reader 760, the client device, via web browser 720, receives authentication information (i.e., the claimed user service information”). *Kirkland*, ¶[0085] (“The web browser 720 may be configured such that only the removable security media reader 760 may be accessed to obtain the encrypted digital certificate.”).

151. As I discussed in Section XI.A.1.d, *Kirkland* discloses that its on-demand media streaming server 600 generates digital certificates or other authentication data, and writes it onto flash memory media devices.” *Kirkland*, ¶[0081]. POSITAs would have understood that *Kirkland*’s “digital certificate or other authentication data” corresponds to the claimed “user service information. See e.g., *Kirkland*., ¶¶[0015] and [0082].

152. *Kirkland* also discloses that these digital certificates are associated with the specific users. *Kirkland*., ¶[0082] (“The digital certificate may be associated with the entire media file library stored on the media library storage 640 or may be associated with only a portion of the media library storage 640. Thus, for example, **an owner of the personal on-demand media streaming server 600 may designate** a first digital certificate for a first portion of a set of audio files in the media library storage 640, a second digital certificate for a second portion of the set of audio files in the media library, and a third digital certificate for the video media files in the media library. In this way, different digital certificates may be associated with different portions and types of media files and **may be distributed via physical media to a select few users.**”); ¶[0106] (“Only the owner, and **persons explicitly authorized by the owner**, may gain access to the media through the use of various security mechanisms.”).

153. Thus, POSITAs would have understood that *Kirkland's* “user service information” includes “user account information,” just as claimed. Thus, POSITAs would have understood that *Kirkland's* client device receives user service information from a flash memory device, just as recited in element [1a].

- c. **[11b] “wherein the user service information enables access to the account based digital media content streaming service; and”**

154. See Sections XI.A.1.d and XI.A.3.

- d. **[11c] “wherein the connected flash memory media device previously has received content from a kiosk delivery system including the user service information that includes user account information for one or more account based digital streaming services;”**

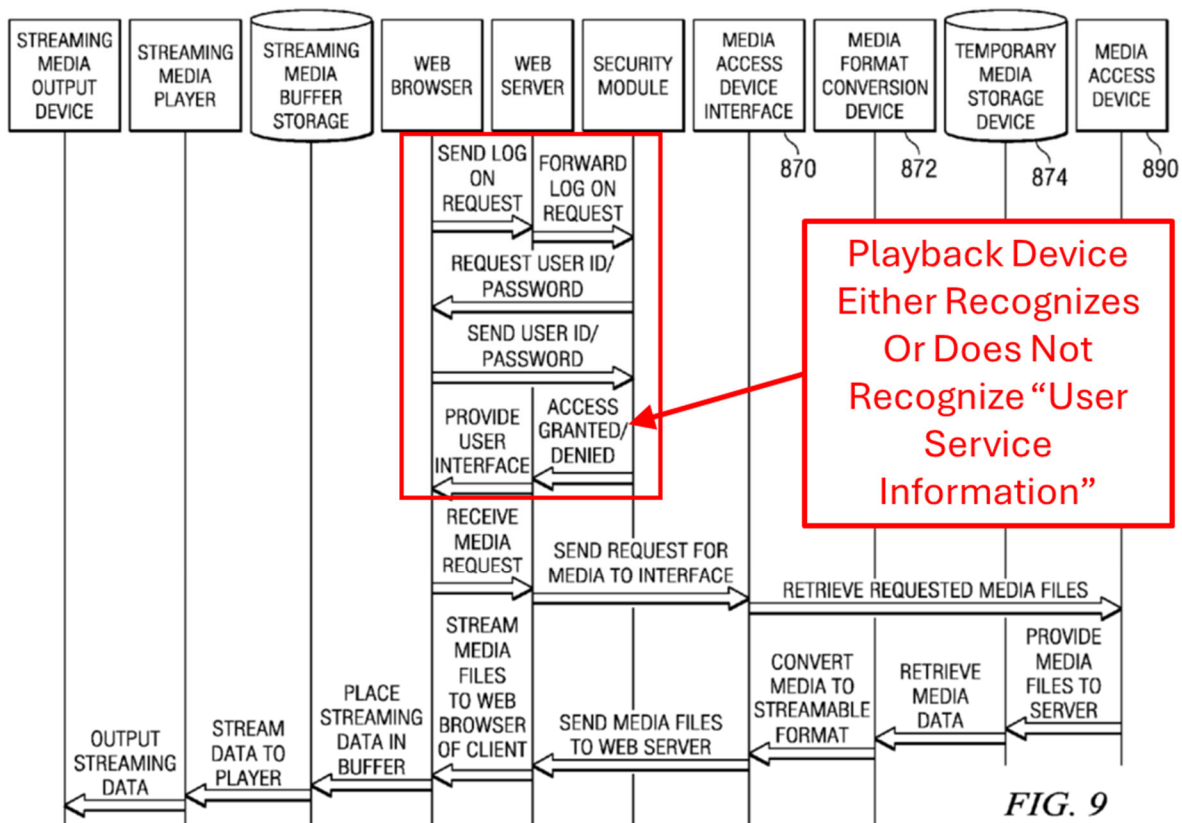
155. As I discussed in Section XI.A.1.b, while *Kirkland* does not disclose storing content on its flash memory media device, *Olaiya* does, as does *Kang*. Moreover, as I discussed in Sections XI.A.1.c and XI.A.11.c, *Kirkland* discloses storing “user service information that includes user account information for one or more account based digital streaming services” its flash memory media device. The only difference between element [11c] and [1a]/[11b] is that [11c] requires that recited flash memory media device “previously” receive content and user service information.

156. POSITAs would have recognized that this is obvious in view of the *Kirkland-Olaiya-Kang-Hasegawa* combination since for the content stored on the

flash memory media device to be played back, both the content and the user service information had to be previously stored thereon.

- e. **[11d] “responsive to the user service information being unrecognized by the playback device, playing back the content from the connected flash memory media device, the content previously received from the kiosk delivery system; and”**

157. Prior to streaming content from the media server, *Kirkland* discloses that the playback device, e.g., clients 108/112/700, determines whether the digital certificate (the claimed “user service information”) is recognized. To make this determination, the playback device may access the “digital certificate located on the smart card or removable media.” *Kirkland*, ¶[0016]. The playback device then sends the certificate to the on-demand media streaming server “for authentication.” *Id.* This authentication is performed by a “security module” in the streaming server. *Id.*, ¶¶[0066], [0096]. Then, only if “the digital certificate is associated with a subgroup of the media files associated with the on-demand media streaming server” (i.e., only if the certificate is recognized) is a session established and streaming enabled. *Id.*, [0016]. When user service information is not recognized, “a denial message is returned to the client devices” from the server. *Id.*, [0104]. Figure 9 (annotated) confirms that the result of the server’s authentication is returned to the client device:



158. POSITAs would have understood that by accessing the security module in the on-demand streaming server, the client device (the claimed playback device) is determining if the user service information is “recognized” because the term would include determining whether the user service information is valid (recognized) and therefore should enable access to media streamed by the streaming service. As shown in figure 5, a series of steps including having the user log on and respond to user ID and password requests, after which the security module “verifies the information received and either grants or denies access to media files based on this verification.” *Id.*, [0071].

159. As I discussed, *Kirkland* does not disclose downloading content to its flash memory media device, but *Olaiya* does (as does *Kang*). As I discussed in Section XI.A.1.f and XI.A.1.h, the *Kirkland-Olaiya-Kang-Hasegawa* combination includes *Olaiya*'s (and *Hasegawa*'s) disclosure to play locally stored content when network speed does not meet a speed threshold necessary for streaming. *Olaiya* further discloses that that locally stored content is played when the “network connection to the one or more of the peer servers 18-2 through 18-N **streaming the original media content item fails or is otherwise unavailable**.” *Olaiya*, ¶[0026].

160. When combined with *Kirkland*, POSITAs would have understood that the playback device's inability to recognize user service information (e.g., *Kirkland*'s digital certificates) is an example of the streamed “original media content” being “unavailable.”

161. POSITAs would have further recognized that in such a situation the *Kirkland-Olaiya-Kang-Hasegawa* combination would revert to playing back the version of the content (*Olaiya*'s “illustration media content”) stored on *Kirkland*'s (and *Kang*'s) flash memory media device. POSITAs would have been motivated to do so for the reasons I discussed in Section XI.A.1.i and also because POSITAs would have recognized that inability to play back locally stored content when the playback device was unable to verify user service information would create significant user frustration, which POSITAs would have sought to avoid by allowing

playback of a lower quality version of the user's content until the playback device could verify the user's rights. While POSITAs would have recognized that under *Kirkland* alone, failure of the digital certificate verification would have disallowed playback of streaming media, POSITAs would have also understood that *Kirkland* alone has no alternative than streaming media. This is not true of the *Kirkland-Olaiya* combination, which provides the improvement of enabling a lesser quality version of the (failed) streaming media content to be available. It is my opinion that PO cannot assert that this improvement breaks or is fatally contrary to *Kirkland's* objectives. It is rather a soft-failure alternative (improvement) over *Kirkland's* hard-failure consequence. Moreover, I note the combination is not constrained to *Kirkland's* teachings that the sever provide only content belonging to single users, because *Olaiya* is not so limited—meaning that POSITAs would have recognized that *Kirkland's* hard-failure objectives (assuring only content owned by respective users can be accessed) needn't apply to the combination. Furthermore, as *Olaiya* does not disclose encrypting user content, there would be no mechanism to prevent a determined user from playing back locally stored content.

162. Finally, as I discussed in Section XI.A.11.d, POSITAs would have recognized that the *Kirkland-Olaiya-Kang-Hasegawa* combination had previously downloaded the content.

163. Thus, POSITAs would have recognized that *Kirkland-Olaiya-Kang-Hasegawa* discloses this element.

- f. **[11e] “responsive to the user service information being recognized by the playback device:”**

164. I discussed the manner in which *Kirkland* discloses how its playback device recognizes user service information in Section XI.A.11.e.

165. Thus, POSITAs would have recognized that *Kirkland-Olaiya-Kang-Hasegawa* discloses this element.

- g. **[11f] “responsive to the playback device not being connected to a network, playing back the content from the connected flash memory media device; and”**

166. *Olaiya* discloses that that locally stored content is played when the “network connection to the one or more of the peer servers 18-2 through 18-N streaming the original media content item fails or is otherwise unavailable.” *Olaiya*, ¶[0026].

167. Thus, POSITAs would have recognized that *Kirkland-Olaiya-Kang-Hasegawa* discloses this element.

- h. **[11g] “responsive to the playback device being connected to a network, accessing the account based digital media content streaming service using the user service information, by:”**

168. See Section XI.A.1.f.

- i. **[11h] “responsive to a speed of the connection not meeting a threshold for streaming digital content, playing back the content from the connected flash memory media device; and”**

169. See Section XI.A.1.h.

- j. **[11i] “responsive to the speed of the connection meeting the threshold for streaming digital content, streaming the content from the account based digital media content streaming service”**

170. See Section XI.A.1.f.

- k. **[11i] “wherein streaming the content from the account based digital media content streaming service comprises streaming the content in high definition, and wherein the content on the flash memory media device is standard definition.”**

171. See Section XI.A.1.g.

172. In sum, POSITAs would have understood that *Kirkland-Olaiya-Kang-Hasegawa* render claim 11 obvious. POSITAs would have been motivated combine these references for the reasons I discussed in Section XI.A.1.i.

- 12. **Claim 12 “The method of claim 11, wherein accessing the account based digital media content streaming service using the user service information comprises automatically logging the user into the account based digital media content streaming service.”**

173. *Kirkland* discloses that “[t]he digital certificate located on the smart card or removable media may be accessed via the reader and sent to the user's on-demand media streaming server for authentication.” *Kirkland* ¶[0016]. Nothing in

Kirkland indicates that the user must take a manual step for the digital certificate to be transmitted to the server, and in fact, in my opinion POSITAs would have understood that digital certificates typically act in the background and are automatically read to grant access.⁴

174. *Kirkland* further discloses that it can authenticate using solely a digital certificate. *See id.* ¶[0103] (“authentication information may include, for example, a user ID/password and/or a digital certificate or other authentication data readable from a removable security media.”). Because of this, POSITAs would therefore have also understood that *Kirkland* automatically logs the user into their respective account, just as claimed.

13. Claim 13 “The method of claim 11, wherein the threshold is a lower limit on speed consistent with avoiding service interruptions.”

175. *Olaiya* discloses that “[t]he network monitoring function 34 may monitor the quality of the network connection by monitoring a status of the buffer 30, . . . [and] may monitor the status of the network connections . . . using any known

⁴ A well-known example of this is the ubiquitous utility of Transport Layer Security (TLS), which is used globally to secure client-server communications over the Internet. Each actor (client and server) automatically provides their respective digital certificate information to the other to initiate a communications session.

technique such as, for example, link quality, bandwidth, availability, speed, or the like.” *Olaiya* ¶[0025]. *Olaiya* further discloses that it may switch from streaming to the download if “speed of the network connection . . . falls below a predetermined threshold.” *Id.* ¶[0026]. *Olaiya* further discloses that the purpose of the threshold is so “the playback experience . . . is not interrupted.” *Id.* ¶[0018].

176. Thus, POSITAs would have understood that *Olaiya* teaches that the threshold is one “consistent with avoiding service interruptions.” Indeed, POSITAs would have understood that the threshold would be set at a lower limit to avoid interruptions.

177. Thus, POSITAs would have understood that *Kirkland-Olaiya-Kang-Hasegawa* renders this claim obvious.

B. Ground 2: *Kirkland-Olaiya-Kang-Hasegawa* or *Kirkland-Olaiya-Kang-Hasegawa* in View of *Mavrakakis* Renders Claim 4 Obvious

1. Claim 4: “The method of claim 1, wherein the content transfer can occur without removing the flash memory media device from a device containing the flash memory media device.”

178. The “content transfer” recited in claim 4 refers to element [1a], which requires that the “content transfer” be from the kiosk to the flash memory media device. The ’803 patent teaches that kiosk 130 has a writer module 136. ’803 patent, Fig. 1A and 4:43-52.

179. POSITAs would have understood that write module 136 can correspond to the claimed “a device containing the flash memory media device.”

180. In the *Kirkland-Olaiya-Kang-Hasegawa* combination, to download content, *Kang* discloses that a user “insert[s] the portable storage medium 24 to the kiosk 25 (operation 81)...” *Kang*, ¶[0067]. See also *Kang*, ¶[0043] (“For example, the kiosk 25 may receive contents data from the contents providing server 21, and transmit the contents data to the portable storage medium 24 that is inserted or connected to or communicating with the kiosk 25.”).

181. POSITAs would have understood that *Kang*’s kiosk 25 has a writer module for writing data to portable storage medium 24, just as described in the ’803 patent. *Kang* further discloses that movie data from kiosk 25 “may be stored in the portable storage medium 24 (e.g., by the memory controller 235) (operation 85).” *Kang*, ¶[0071].

182. Thus, *Kang* discloses that content can be transferred from kiosk 25 without removing it from the kiosk’s writer module, meaning that *Kirkland-Olaiya-Kang-Hasegawa* renders claim 4 obvious.

183. I note that PO may argue that the claim requires that the “device containing the flash memory media device” must be something other than a writer device in a kiosk, e.g., a client device. I do not think this would be correct, but even if it were, the claim is still obvious. While *Kirkland-Olaiya-Kang-Hasegawa* does

not explicitly disclose that the content transfer step occurs without removing the flash memory media device from a client device, *Mavrakakis* discloses this feature. *Mavrakakis* discloses that communication between a kiosk and a playback device may be via a “wireless interface” including “Wi-Fi” and “Bluetooth.” In a *Kirkland-Olaiya-Kang-Hasegawa-Mavrakakis* combined system, *Mavrakakis*’s “Wi-Fi” and “Bluetooth” capabilities would allow content transfer to occur “without removing the flash memory media device from a device containing the flash memory media device.”

184. POSITAs would have been motivated to combine *Mavrakakis*’s “Wi-Fi” and “Bluetooth” features with *Kirkland-Olaiya-Kang-Hasegawa* because *Mavrakakis* teaches specific methods to advantageously wirelessly connect a playback device to a kiosk to prevent “excessive wear and failure” of physical connectors. *Mavrakakis*, ¶[0006]. Indeed, *Kang* contemplates such connections. See *Kang* ¶[[0043] (describing wired/wireless networks).

185. POSITAs would have understood that *Mavrakakis*’s disclosures further suggest connecting the flash memory media device within a device to the kiosk indirectly via a “network” which would require that the flash memory media device be within a device capable of interfacing with the network by any known methods at the time.

C. Ground 3: *Kirkland-Olaiya-Kang-Hasegawa* or *Kirkland-Olaiya-Kang-Hasegawa-Hodecker* Renders Claim 10 Obvious

1. Claim 10: “The method of claim 1, wherein users may update user service information via the kiosk.”

186. As I discussed in Section XI.A.9, *Kirkland* discloses that a user can register for the streaming service at *Kirkland’s* on-demand media streaming server 400 kiosk. POSITAs would have understood that if a user can register at the kiosk, users could also update their user service information at the kiosk, meaning claim 10 is rendered obvious by *Kirkland-Olaiya-Kang-Hasegawa*.

187. Regardless, even if the *Kirkland-Olaiya-Kang-Hasegawa* combination does not disclose/suggest updating user service information, *Hodecker* discloses such a feature, as it discloses allowing a client of a streaming service to change its password. *Hodecker* ¶[0151].

188. POSITAs would have been motivated to incorporate a feature that would allow users to change their passwords to heighten account security as well as for user convenience, and POSITAs, especially in view of *Hodecker*, would have understood that such feature could be added according to well-known methods.

D. Ground 4: *Kirkland-Olaiya-Kang-Hasegawa* in View of *Takano* Renders Claim 14 Obvious

1. Claim 14: “The method of claim 11, wherein a flash memory media device can be transferred between playback devices.”

189. In the *Kirkland-Olaiya-Kang-Hasegawa* combination, *Kirkland* and *Kang* disclose a flash memory media device as a “removable media,” and further disclose that such removable media can be standardized media such as smart cards (*Kirkland*, ¶¶[0014]-[0016]) as well as SD cards, multimedia cards and compact flash cards (*Kang*, ¶[0044]).

190. POSITAs would have understood that such standard memory cards would be compatible with multiple devices. This is reinforced by *Kirkland*’s disclosure of validating a “device identifier,” implying that the removable media may move from device to device, requiring authentication of the particular device the media is inserted into. *Kirkland* ¶¶[0014], [0103], as well as description of architectures having multiple client devices (see e.g., Figs. 1 and 8A).

191. Neither *Kirkland* nor *Kang* explicitly describe that their flash memory media cards can be transferred between playback devices. As I discussed in Section IX.G, *Takano* discloses a portable storage device/iVDR that allows playback of media on two different televisions. *Takano*, ¶¶[0022], [0029]. *Takano*, when combined with *Kirkland-Olaiya-Kang-Hasegawa*, results in a system that allows

users to transfer their flash memory media devices between different playback devices.

192. POSITAs would have been motivated to incorporate *Takano's* teachings into *Kirkland-Olaiya-Kang-Hasegawa* to improve the utility of the system, as users having more than one playback device would want to be able to play their content on the playback device of their choice, especially in view of *Kirkland's* suggestion of having multiple clients.

E. Ground 5: *Olaiya* in View of *Raja* and *Hasegawa* Renders Claims 1-4, 8-14 Obvious

1. Claim 1

a. [1pre] “A method of delivering content by integrating a kiosk delivery system with a streaming service”

193. As I have discussed throughout this declaration, *Olaiya* discloses methods for streaming digital media to a media player. In particular, using a playback device, a user “selects a media content item for playback.” *Olaiya*, ¶[0018]. In response to this selection, a playback agent in the user’s playback device downloads the illustrative media content item from central authority 14, and also “initiates streaming from one or more of the peer servers 18-2 through 18-N hosting the media content item.” *Id.* Thus, POSITAs would have understood that *Olaiya* discloses a “streaming service.”

194. To the extent a “streaming service” is required to recognize a recipient device (e.g., via a user having an account or the like), *Raja* discloses this. *Raja* discloses that user credentials are provided via the client device, which are the “means by which the identification of the user of the client node can be obtained and submitted for authentication. The server responding to the client node can authenticate the user based on the user credentials.” *Raja*, ¶[0157]. Thus POSITAs would have understood that the *Olaiya-Raja* combination also discloses a “streaming service.”

195. I have been informed that in the concurrent district court litigation between Petitioners and PO, PO has construed “kiosk” to read on “at least portions of the Samsung operating system and/or the [Netflix/Amazon Prime Video] Application running on a Samsung device that allow users to browse and/or select content to be viewed.” See *EX1013*, pp. 4 and 55. Under this construction, POSITAs would have understood that *Olaiya* discloses a “kiosk,” as it discloses software on the playback device that allows the user to “select[] a media content item for playback.” *Olaiya*, ¶[0018].

196. Indeed, *Olaiya* discloses a “playback agent” that “downloads the corresponding illustrative media content item from, in this embodiment, the central authority 14 and initiates streaming from one or more of the peer servers 18-2 through 18-N hosting the media content item.” *Id.* POSITAs would have

understood that under PO's district court construction, *Olaiya*'s "playback agent" corresponds to the claimed "kiosk." Thus, POSITAs would have understood that the *Olaiya-Raja* combination discloses the preamble.

b. [1a] "transferring content from a kiosk to a flash memory media device"

197. *Olaiya* discloses a central authority server 14 that hosts illustration media content 24 that can be transferred to various playback devices 12-1-12-N:

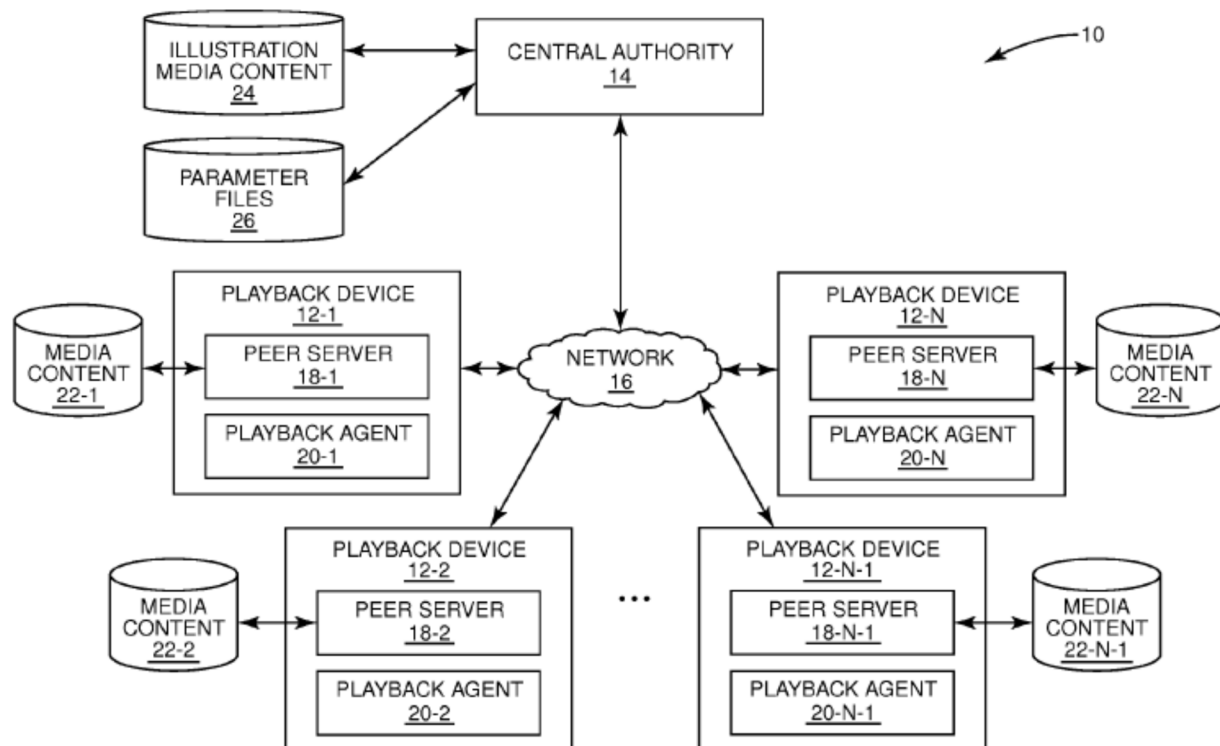


FIG. 1

Olaiya, Fig. 6 and ¶¶[0015]-[0016]. As is seen in this figure, each of *Olaiya*'s playback devices contains a playback agent (e.g., playback agent 20-1), which, as I discussed above, is a kiosk under PO's district court construction. *Olaiya*'s

illustration media content 24, “may be a low or reduced quality version of a media content item...” *Id.*, ¶[0016].

198. POSITAs would have recognized that *Olaiya*’s “low or reduced quality version of a media content item” corresponds to the claimed “content,” as the claim puts no restrictions on the quality of content transferred to the flash memory media device, and indeed, as will be discussed with respect to elements [1e]-[1f], the ’803 patent claims that the content stored on the flash memory media device is of lower quality than that the streamed version of the same content.

199. *Olaiya* discloses that its playback agent “**downloads the corresponding illustrative media content item**” from, in this embodiment, the central authority 14...” *Olaiya*, ¶[0018]. *Olaiya* further discloses that illustrative media content is stored “locally” (*Id.*, ¶[0022]), and that its playback devices have “digital storage devices 42” that can be “removable memory units, or the like.” *Id.*, ¶[0038].

200. POSITAs would have understood that such removable memory units could be “flash memory media devices,” just as claimed.

c. [1b] “wherein the flash memory media device is configured to be connected to a playback device; and”

201. An *Olaiya* playback device is illustrated in Fig. 6 (annotated):

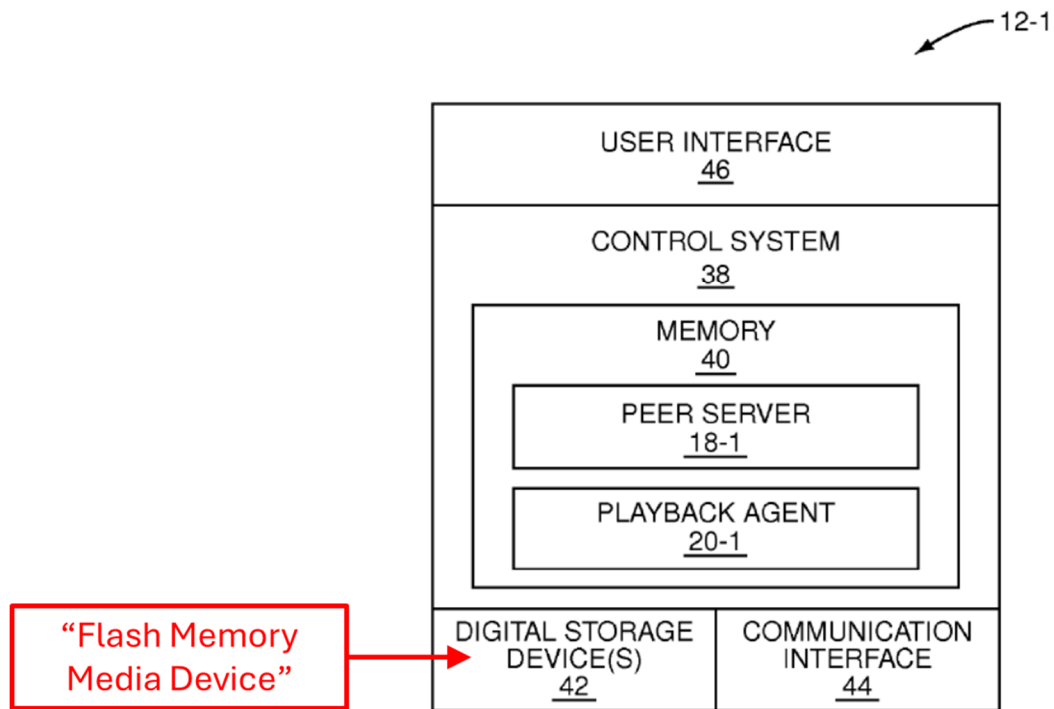


FIG. 6

Olaiya, ¶[0038]. As can be seen, digital storage device 42, i.e., the claimed “flash memory media device,” is “connected to a playback device,” just as claimed.

202. Thus, *Olaiya* discloses this element.

- d. [1c] “transferring user service information, including user account information for one or more account based digital content streaming services, from the kiosk to the flash memory media device,”

203. *Olaiya* does not disclose transferring user service information from its playback agent (“kiosk”) to its playback device’s digital storage device (“flash memory media device”). However, *Raja* contains such a disclosure. *Raja* discloses a client-server arrangement, shown, for example, in Fig. 1A:

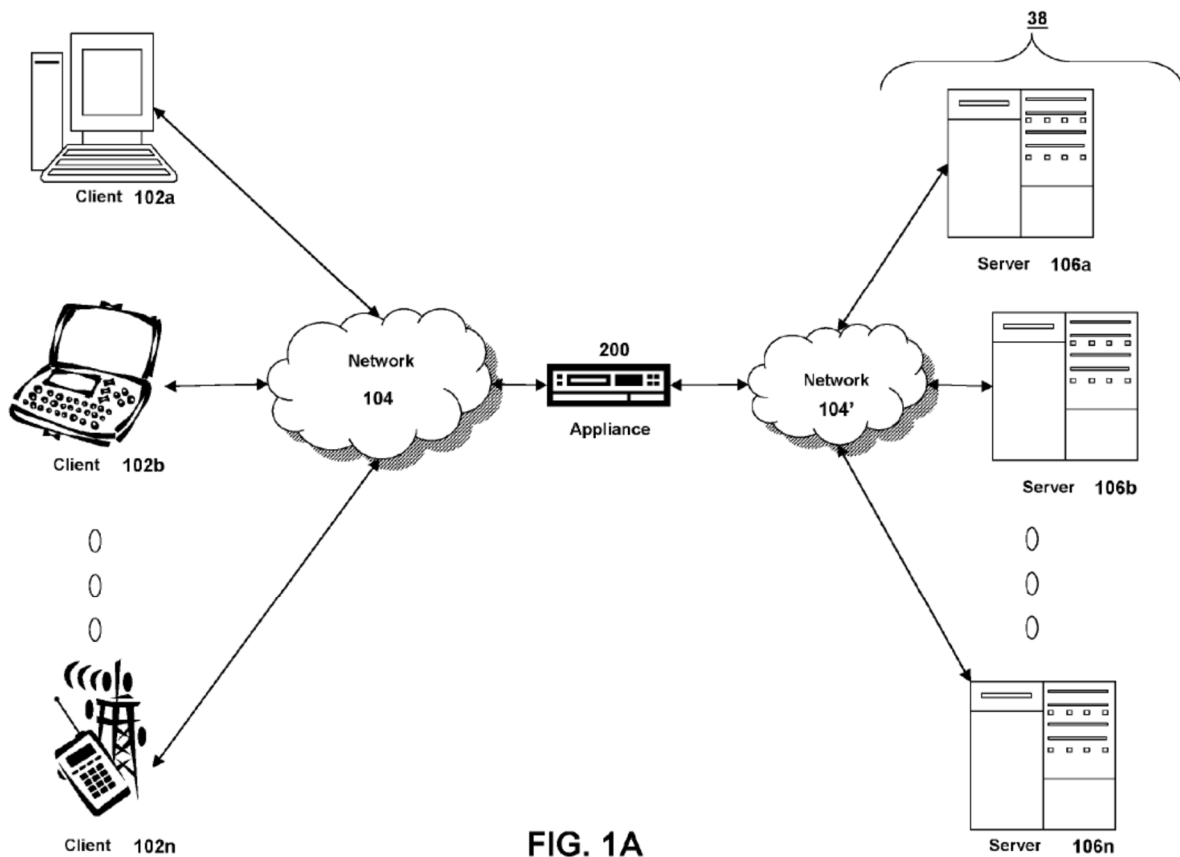


FIG. 1A

204. *Raja* discloses that its system includes clients 102a-102n that can execute applications that can communicate with servers 106a-106n. *Raja*, ¶¶[0050]-[0055]. *Raja* further discloses that such applications include “applications for streaming video and/or audio.” *Raja*, ¶[0070]. *Raja* further discloses that to access applications (e.g., a streaming application), the user may be required to provide authentication information, including a password and user credentials. *Raja*, ¶[0157]. *Raja* also discloses that authentication may be via a web browser. *Raja*, ¶¶[0163].

205. When *Raja* is combined with *Olaiya*, *Raja*'s web authentication feature is implemented in *Olaiya* and forms part of the *Olaiya*'s playback agent ("kiosk"). *Raja* discloses that a client node "provides user credentials" including a username and password when it logs onto a network ("user account information").

206. After authentication, *Raja* discloses that "[a]uthenticated user credentials of the client node 102N may be stored at the client node 102N in a per-session cookie." *Raja* ¶¶[0157], [0164]. POSITAs would have understood that the "per-session cookie" would be stored in the "internal or removable memory units" of *Olaiya* ("flash memory media device"). Thus, *Raja* discloses that the software ("kiosk") transfers user credentials "user account information") to local storage ("flash memory media device") after authentication. POSITAs would have been motivated to combine *Olaiya* and *Raja* for the reasons I discussed in Section XI.E.1.i

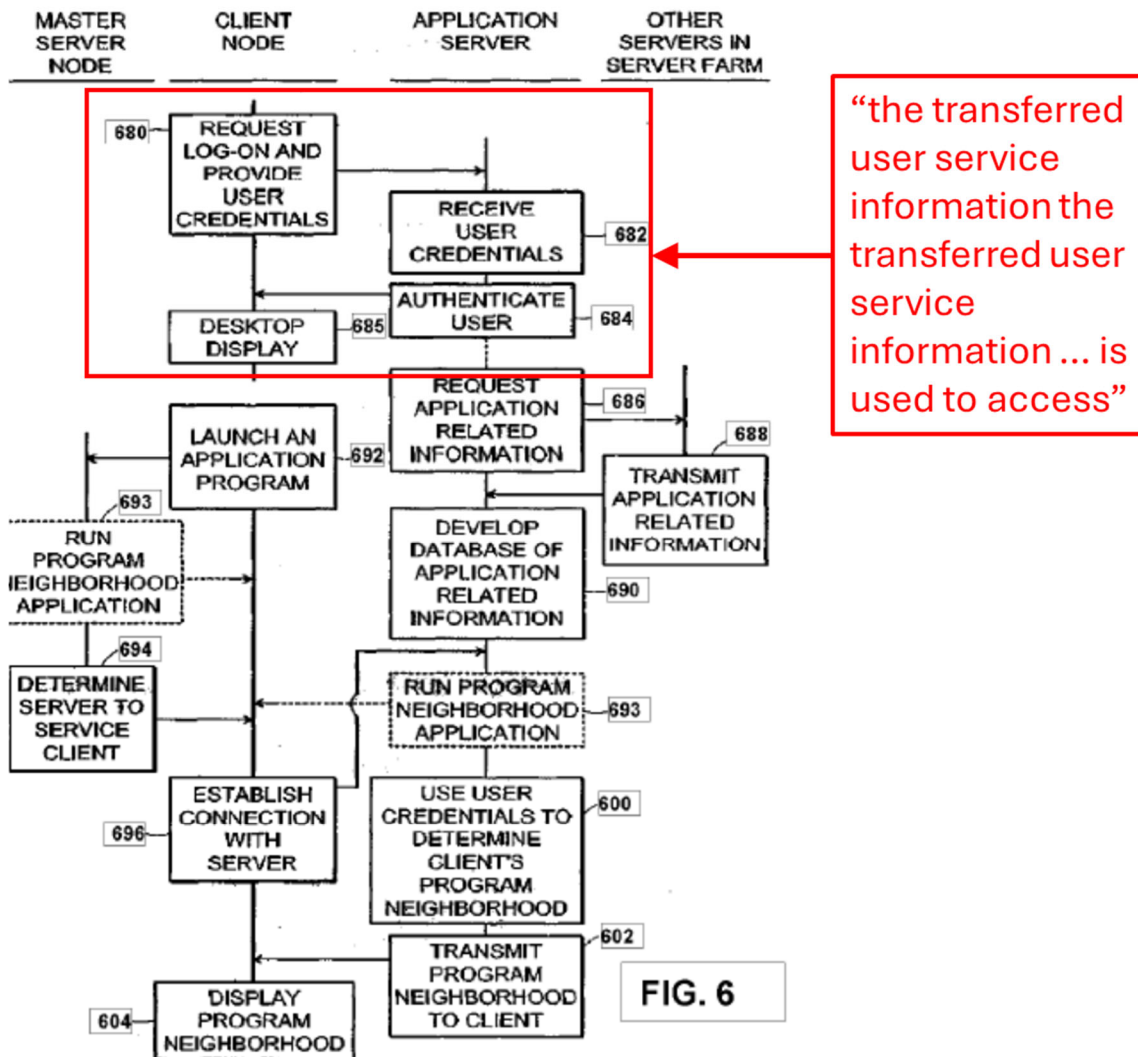
e. [1d] "wherein, responsive to the flash memory media device being connected to the playback device:"

207. As I discussed in Section XI.E.1.b, *Olaiya* discloses use of removable memory. *Olaiya*, ¶[0038]. Thus, in the *Olaiya-Raja-Hasegawa* combination, POSITAs would have understood that to playback content either via streaming or via the removable memory, the removable memory must be connected to a playback device. Thus, *Olaiya Raja-Hasegawa* discloses this element.

- f. [1e] “if the playback device is connected to a network via a network connection having a speed that meets a threshold for streaming digital content, the transferred user service information from the connected flash memory media device is used to access at least one of the one or more account based digital streaming services to stream a higher quality version of the content to the connected playback device for playback”

208. As I discussed in Section XI.A.1.f, *Olaiya* discloses that “if the playback device is connected to a network via a network connection having a speed that meets a threshold for streaming digital content,” then *Olaiya*’s streaming service “stream[s] a higher quality version of the content to the connected playback device for playback.”

209. The *Olaiya-Raja-Hasegawa* combination determines whether the account information is recognized, as *Raja* discloses that the user’s “user credentials” (“user account information”) must be verified by a server before access is provided. *Raja*, ¶¶[00163]-[0164], [0216]. See also Fig. 6 (annotated):



210. In *Olaiya-Raja-Hasegawa*, Raja's "user credentials" ("user account information") are verified by the server before the system allows the user device to "establish the connection." *Raja* ¶[0216]. Thus, POSITAs would have understood that *Olaiya-Raja-Hasegawa* discloses this element.

- g. [1f] “wherein the higher quality version of the content is a high definition version of standard definition content transferred from the kiosk to the flash memory media device,”**

211. See Section XI.A.1.g.

- h. [1g] “otherwise, the content stored on the connected flash memory media device is used for playback of the content.”**

212. See Section XI.A.1.h.

- i. POSITAs Would Have Been Motivated To Combine *Olaiya*, *Raja* And *Hasegawa***

213. POSITAs would have been motivated to augment *Olaiya*’s streaming service with *Raja*’s authentication features. Both references are directed to information distribution systems that include streaming media (*see, e.g., Olaiya*, ¶[0001] and *Raja*, ¶[0075]), where such media can be streaming video and/or audio. *See, e.g., Olaiya*, ¶[0014] and *Raja*, ¶[0070]. *Olaiya*’s preferred embodiment “is a P2P Video-on-Demand (VOD) delivery system.” *Olaiya*, ¶[00134]. As of the January 2010 priority date POSITAs would have recognized that a VOD streaming media system that had no ability to provide controlled access to video/audio content or to process user/user device identification (i.e., *Olaiya*) would be advantageously improved by augmenting said system to include such features. In particular, POSITAs would have been motivated to implement *Raja*’s web browser authentication feature into *Olaiya*’s VOD content streaming service to identify the

users that wish to gain access to *Olaiya*'s peer-to-peer system. *Raja*'s access control capability would provide many benefits to *Olaiya*'s VOD content streaming service that were well-known to POSITAs.

214. First, implementing user authentication allows peer-to-peer networks to provide only certain controlled functionality to selected users, which *Raja* teaches may be a desirable limitation on media distribution. *Raja*, ¶[0068]. Second, implementing user authentication in peer-to-peer networks enables commercial transactions that are not possible without access control. *See* US 2009/0288138 (“*Kalofonos*”) ¶¶[0006]-[0009]. For example, licensing transactions in which a user is licensed to stream media (or proves their ownership of a license). *See also, e.g., Kirkland*, ¶[0009].

215. Moreover, implementing user authentication would have allowed the network to monitor and control “free-riders,” a well-known challenge in peer-to-peer networks where some users may consume content without hosting content for other users. *See* Feldman, *Overcoming Free-Riding Behavior in Peer-to-Peer Systems*, ACM SIGecom Exchanges, Vol. 5, No. 4, July 2005, Pages 41–50.

216. POSITAs would have understood that *Raja*'s teachings were compatible with *Olaiya* because *Raja* discloses that its teachings are compatible with peer-to-peer networks like those disclosed in *Olaiya*. *Raja*, ¶[0054]. Additionally, like *Olaiya*, *Raja* teaches that applications such as streaming video may require

minimum capabilities of the client node before establishing a connection (*Raja*, ¶[0156]), and that its system's monitoring agent includes network monitoring features such as measuring network latency/delay and bandwidth utilization, such as volume per user-session. *Raja*, ¶[0075] and ¶[0078].

217. Finally, POSITAs would have been motivated to incorporate *Hasegawa's* teachings into *Olaiya-Raja* for the same reasons I discussed in Section XI.A.1.i.

2. Claim 2 “The method of claim 1, wherein the user account information for each account based digital streaming service comprises an account identifier and login information.”

218. As I discussed in Section XI.E.1.d, *Raja* discloses that user credentials may include “the username of the client node, the password of the user, and the domain name for which the user is authorized.” *Raja*, ¶[0157]. POSITAs would have understood that in *Raja*, the password identifies the account (the “account identifier”) and the “username” and “domain name” are “login information.” These items may be “necessary to authenticate a user” and thus would also be “information necessary to access a digital streaming service for delivery of content over a network.” *Id.*

219. Thus, POSITAs would have recognized that *Raja* discloses claim 2.

- 3. Claim 3 “The method of claim 1, wherein user service information includes information necessary to access a digital streaming service for delivery of content over a network.”**

220. Given that claim 1 recites that “user service information” includes “user account information,” POSITAs would have found claim 3 obvious for the same reasons as claim 2.

- 4. Claim 4 “The method of claim 1, wherein the content transfer can occur without removing the flash memory media device from a device containing the flash memory media device.”**

221. As I discussed, *Olaiya*’s playback device (“device containing the flash memory media device”) contains the “one or more internal or removable memory units” (“flash memory media device”) as shown in *Olaiya*’s Fig. 6. Content transfer occurs when *Olaiya* downloads “illustration media content” via the internet and stores it in local storage. *Olaiya* ¶[0018]. POSITAs would have recognized that this process would not require removing *Olaiya*’s “one or more internal or removable memory units” from the playback device. Thus, *Olaiya-Raja-Hasegawa* renders this claim obvious.

- 5. Claim 6 “The method of claim 1, wherein the user service information is received from a user device.”**

222. See Section XI.G.1.

- 6. Claim 7 “The method of claim 1, wherein the user service information is received through a website.”**

223. See Section XI.G.2.

7. **Claim 8 “The method of claim 1, wherein the user service information is received from a data feed from a provider of the streaming service.”**

224. See Section XI.G.3.

8. **Claim 9 “The method of claim 1, wherein users can register for the streaming service at the kiosk.”**

225. As I discussed in Section XI.E.1.d, *Raja* discloses a system that uses authentication information, including a password and user credentials. *Raja*, ¶[0157]. *Raja* does not explicitly disclose a registration process, but does disclose that a web service may allow “guest users, i.e., users that do not have assigned user credentials” to access the service. *Raja*, ¶¶[0163]-[0164]. Guest users may access the service through a mechanism on the “authentication page” that allows “a client node 102N to identify that it is a guest user, such as a button or menu selection.” *Id.*

226. Because the kiosk in *Olaiya-Raja-Hasegawa* includes authentication software on the user device, POSITAs would have understood that these guest accounts are registered through the kiosk.

9. **Claim 10: “The method of claim 1, wherein users may update user service information via the kiosk.”**

227. See Section XI.H.

10. Claim 11

- a. [11pre] “A method of operating a playback device to automatically play back content from either a flash memory media device or a digital streaming service depending upon playback circumstances, the method comprising:”**

228. As I discussed in Sections XI.A.1.a, XI.A.1.f and XI.A.1.h, *Olaiya-Kang-Hasegawa* discloses playing back content either via streaming or locally inserted flash memory media devices, depending on circumstances (e.g., network speed). Thus, *Olaiya-Raja-Hasegawa* discloses the preamble.

- b. [11a] “receiving, from a connected flash memory media device, user service information, including user account information for an account based digital media content streaming service,”**

229. The *Olaiya-Raja-Hasegawa* incorporates *Raja*’s authentication process, in which authentication information in the form of a password and user credentials is used. *Raja*, ¶[0157]. *Raja* further discloses that “[w]hen a client node logs onto the network 104, the user of the client node provides user credentials.” *Raja* further teaches that this information “may be obtained from smart cards...” *Id.* Similarly, *Olaiya* also discloses use of removable memory for storing its illustration media content. *Olaiya*, ¶[0038]. POSITAs would have recognized that when *Raja* is combined with *Olaiya*, *Olaiya*’s removable memory (the claimed “flash memory media device”) will have *Raja*’s authentication information stored therein (as

suggested by *Raja*), which will then be provided to an authentication device to determine whether the user has rights to stream content from *Olaiya*'s streaming service.

230. Thus, POSITAs would have understood that *Olaiya-Raja-Hasegawa* discloses this element.

- c. **[11b] “wherein the user service information enables access to the account based digital media content streaming service; and”**

231. As I discussed in Section XI.E.1.d, when *Raja*'s web authentication feature is implemented in *Olaiya*, it forms part of *Raja*'s playback agent (“kiosk”). *Raja* discloses that a client node “provides user credentials” including a username and password when it logs onto a network (“user account information”). POSITAs would have understood that in the *Olaiya-Raja-Hasegawa* combination, *Raja*'s authentication information would be used in *Olaiya* to permit an *Olaiya* playback device to access *Olaiya*'s streaming service. Thus, POSITAs would have understood that *Olaiya-Raja-Hasegawa* discloses this element.

- d. **[11c] “wherein the connected flash memory media device previously has received content from a kiosk delivery system including the user service information that includes user account information for one or more account based digital streaming services;”**

232. As I discussed in Section XI.E.1.b, *Olaiya* discloses that its digital storage device 42 (the claimed “flash memory media device”) stores content

received from its playback agent (“kiosk”). As also discussed, *Raja* discloses that a client node “provides user credentials” including a username and password when it logs onto a network (“user account information”).

233. After authentication, *Raja* discloses that “[a]uthenticated user credentials of the client node 102N may be stored **at the client node 102N** in a per-session cookie.” *Raja* ¶¶[0157], [0164]. POSITAs would have understood that the “per-session cookie” would be stored in *Olaiya*’s “internal or removable memory units” (“flash memory media device”).

234. I also note that this element requires that recited flash memory media device “previously” receive content and user service information. POSITAs would have recognized that this is obvious in view of the *Olaiya-Raja-Hasegawa* combination since for the content stored on the flash memory media device to be played back, both the content and the user service information had to be previously stored thereon.

- e. **[11d] “responsive to the user service information being unrecognized by the playback device, playing back the content from the connected flash memory media device, the content previously received from the kiosk delivery system; and”**

235. In the *Olaiya-Raja-Hasegawa* combination, *Olaiya*’s playback agent in its playback device, using *Raja*’s authentication teachings, determines whether a user is entitled to utilize the streaming service. As I discussed in Section XI.E.1.f

and XI.A.1.h, the *Olaiya-Raja-Hasegawa* combination includes *Olaiya's* (and *Hasegawa's*) disclosure to play locally stored content when network speed does not meet a speed threshold necessary for streaming. *Olaiya* further discloses that that locally stored content is played when the “network connection to the one or more of the peer servers 18-2 through 18-N **streaming the original media content item fails or is otherwise unavailable.**” *Olaiya*, ¶[0026].

236. When combined with *Raja*, POSITAs would have understood that the playback device's inability to recognize user service information (e.g., *Raja's* authentication information in the form of password and user credentials or a cookie (*Raja*, ¶[0157])) is an example of the streamed “original media content” being “unavailable.”

237. POSITAs would have further recognized that in such a situation the *Olaiya-Raja-Hasegawa* combination would revert to playing back the version of the content (*Olaiya's* “illustration media content”) stored on *Olaiya's* digital storage device (the claimed “flash memory media device”). *Raja* invites this, disclosing that “the Program Neighborhood application may report all applications hosted by the application servers 106A, 106B, and 106N to the user of a client node, without identifying which applications the client node 102A, 102N is authorized or unauthorized to execute. Authorization may be subsequently determined when the client node 102A, 102N attempts to run one of those applications.” *Raja*, ¶[0159].

238. In light of this teaching, POSITAs would have been motivated to revert to playing *Olaya*'s "illustration media content," because in the case where authorization was determined to be unavailable, it would have been obvious to playback the lower quality content, which was already locally available. POSITAs would have also been so motivated for the reasons discussed in Section XI.E.1.i and also because POSITAs would have recognized that inability to play back locally stored content when the playback device was unable to verify user service information would create significant user frustration, which POSITAs would have sought to avoid by allowing playback of a lower quality version of the user's content until the playback device could verify the user's rights. Furthermore, as *Olaiya* does not disclose encrypting user content, there would be no mechanism to prevent a determined user from playing back locally stored content.

239. Finally, as discussed in Section XI.E.10.d, POSITAs would have recognized that the *Olaiya-Raja-Hasegawa* combination had previously downloaded the content.

f. [11e] "responsive to the user service information being recognized by the playback device:"

240. I discuss the manner in which the playback device in *Olaiya-Raja-Hasegawa* recognizes user service information in Section XI.E.10.e.

- g. [11f] “responsive to the playback device not being connected to a network, playing back the content from the connected flash memory media device; and”**

241. See Section XI.A.11.g.

- h. [11g] “responsive to the playback device being connected to a network, accessing the account based digital media content streaming service using the user service information, by:”**

242. See Section XI.A.1.f.

- i. [11h] “responsive to a speed of the connection not meeting a threshold for streaming digital content, playing back the content from the connected flash memory media device; and”**

243. See Section XI.A.1.h.

- j. [11i] “responsive to the speed of the connection meeting the threshold for streaming digital content, streaming the content from the account based digital media content streaming service”**

244. See Section XI.A.1.f.

- k. [11i] “wherein streaming the content from the account based digital media content streaming service comprises streaming the content in high definition, and wherein the content on the flash memory media device is standard definition.”**

245. See Section XI.A.1.g.

246. Thus POSITAs would have found that *Olaiya-Raja-Hasegawa* renders claim 11 obvious. POSITAs would have been motivated combine these references for the reasons I discussed in Section XI.E.1.i.

- 11. Claim 12 “The method of claim 11, wherein accessing the account based digital media content streaming service using the user service information comprises automatically logging the user into the account based digital media content streaming service.”**

247. *Raja* discloses that “[a]uthenticated user credentials of the client node 102N may be stored at the client node 102N in a per-session cookie.” *Raja*, ¶[0164].

248. POSITAs would have understood that the purpose of a session cookie is to automatically authenticate the user when they visit a webpage because cookies are automatically provided to websites that a user visits. Thus, this claim would have been obvious to a POSITA.

- 12. Claim 13 “The method of claim 11, wherein the threshold is a lower limit on speed consistent with avoiding service interruptions.”**

249. See Section XI.A.13.

F. Ground 6: *Olaiya-Raja-Hasegawa-Takano* Renders Claims 5 and 14 Obvious

- 1. Claim 5: “The method of claim 1, wherein the content transfer can occur by removing the flash memory media device from a device containing the flash memory media device.”**

250. As I discussed in Section XI.E.1.b, *Olaiya* disclosed use of removable memory devices. *Olaiya*, ¶[0038]. Neither *Olaiya*, *Raja* nor *Hasegawa*, however, disclose removing the flash memory media device from a device to transfer content thereto. However, POSITAs would have found this feature obvious in view of

Takano. As I discussed, *Takano* discloses that a “portable storage device”/”iVDR” (FMMD) may be disconnected/removed from a TV in one room of the user’s residence (a device containing the flash memory media device) before it can be connected to a TV in another room of the user’s residence to enable that television to record content (content transfer). *Takano* ¶¶[0030], [0031], Fig. 5.

251. In other words, when *Takano* is combined with *Olaiya-Raja-Hasegawa*, a user would remove the flash memory media device inserted in one playback device, insert it into another playback device, and then *Olaiya*’s playback agent (“kiosk”) in the playback device in which the flash media memory device was inserted will transfer content thereon.

2. Claim 14: “The method of claim 11, wherein a flash memory media device can be transferred between playback devices.”

252. As I previously discussed, *Olaiya* discloses that its digital storage device 42 can be removable. *Olaiya*, ¶[0038]. POSITAs would have understood that because digital storage device 42 may be “removable,” they should be compatible with multiple similar devices. *See, e.g., Raja*, ¶[0087] (discussing compatibility of “USB Flash Drive”). Indeed, POSITAs would have recognized that a benefit of using such removable memory devices is that they can be used in multiple different systems.

253. *Olaiya* does not explicitly disclose that its digital storage device 42 can be transferred between playback devices. However, as I discussed in Sections IX.G and XI.F.1, *Takano* discloses a portable storage device/iVDR that allows playback of media on two different televisions. *Takano*, ¶¶[0022], [0029]. *Takano*, when combined with *Olaiya-Raja-Hasegawa*, results in a system that allows users to transfer their flash memory media devices between different playback devices.

3. Motivation to Combine

254. POSITAs would have been motivated to combine *Takano*'s disclosure of transferring the FMMD between playback devices so that a user of the modified *Olaiya* system with multiple playback devices without large internal storage (as *Takano* contemplates w/r/t televisions) would not need to purchase removable storage for each playback device, but could instead transfer a single removable media between playback devices to enable the downloading of content. Because *Olaiya* already contemplates that digital storage device 42 is "removable" (*Olaiya*, ¶[0038]), this would be a straightforward and predictable improvement of *Olaiya*.

255. POSITAs would have been further motivated to incorporate *Takano*'s teachings into *Olaiya-Raja-Hasegawa* to improve the utility of the system, as users having more than one playback device would want to be able to play their content on the playback device of their choice, especially in view of *Olaiya*'s architecture having multiple clients.

G. Ground 7: *Olaiya-Raja-Hasegawa* or *Olaiya-Raja-Hasegawa-Kirkland* Renders Claims 6-8 Obvious

1. Claim 6 “The method of claim 1, wherein the user service information is received from a user device.”

256. As I discussed in Section XI.A.6, this claim language is ambiguous as to what component receives the user service information or when in the method of claim 1 this receiving occurs. As further noted there, I am construing the claim to be consistent with the specification, i.e., that user service information is provided to the server system before the user can connect to the streaming service. ’803 patent, 8:5-25.

257. *Raja* does not explicitly disclose a registration process, but does disclose that a web service may allow “guest users, i.e., users that do not have assigned user credentials” to access the service. *Raja*, ¶[0164]. Guest users may access the service through a mechanism on the “authentication page” (“through a website,” as in claim 7), which POSITAs would have understood would be running on a “user device,” just as claimed. POSITAs would have also recognized that this allows “a client node 102N to identify that it is a guest user, such as a button or menu selection.” *Id.* The website is disclosed to be accessed via a client node (“user device”). *Id.*

258. Thus, POSITAs would have understood that this claim is disclosed by *Raja*, and thus rendered obvious by *Olaiya-Raja-Hasegawa*.

259. PO may argue that because *Raja* does not explicitly disclose a registration process, *Olaiya-Raja-Hasegawa* does not render it obvious. However, as I discussed in Sections XI.A.6-XI.A.8, *Kirkland* suggests such a feature. Specifically, *Kirkland* discloses registering a user via a user device and through a website (claim 7), and also receiving a certificate from a “security module 650” (“data feed,” as recited in claim 8). *Kirkland* ¶¶ [0051], [0060], and [0081].

260. POSITAs would have been motivated to incorporate *Kirkland*’s explicit disclosures into *Raja*’s authentication system to implement user registration and certificate generation functions that are necessary to give effect to *Raja*’s teachings.

2. Claim 7 “The method of claim 1, wherein the user service information is received through a website.”

See Section XI.G.1.

3. Claim 8 “The method of claim 1, wherein the user service information is received from a data feed from a provider of the streaming service.”

261. *Raja* also discloses that “Authenticated user credentials of the client node 102N may be stored at the client node 102N in a per-session cookie.” *Id.* POSITAs would have understood that this cookie would be generated by a server-side authentication mechanism, such as the disclosed “authenticating server run[ning] the UNIX operating system,” and is therefore “a data feed from a provider of the streaming service”). *Raja*, ¶¶ [0163]-[0164].

262. To the extent PO and/or its expert argues the feature recited in claim 8 is not disclosed *Olaiya-Raja-Hasegawa*, *Kirkland* discloses/suggests this feature. As I discussed in Section XI.A.8, *Kirkland* discloses a “security module 650” (“data feed”) in the “streaming server” (“a provider of the streaming service”) that may generate “a digital certificate or other authentication data.” *Kirkland*, ¶[0081] and Fig. 6. Thus, POSITAs would have found this claim obvious in view of *Olaiya-Raja-Hasegawa-Kirkland*.

H. Ground 8: *Olaiya-Raja-Hasegawa* or *Olaiya-Raja-Hasegawa-Hodecker* Renders Claim 10 Obvious

1. Claim 10: “The method of claim 1, wherein users may update user service information via the kiosk.”

263. While *Raja* does not expressly disclose that a user may update user service information, POSITAs would have known that users must be provided the capability to change their password in any account-based IT system. Thus, claim 10 would have been obvious to POSITAs. Thus, *Olaiya-Raja-Hasegawa* renders this claim obvious.

264. To the extent PO or the Board disagrees, and as I discussed in Section XI.C, *Hodecker* discloses allowing a client of a streaming service to change its password. *Hodecker*, ¶[0016] and ¶[0151]. POSITAs would have been motivated to incorporate a feature that would allow users to change their passwords to heighten account security according to well-known methods, as evidenced by *Hodecker*.

Moreover, because in this ground, the recited “kiosk” is located on *Olaiya’s* playback device, POSITAs would have further recognized that it would be obvious that users could change their passwords on the playback device, and that such a feature would have been not just well-known, but also that consumers would expect such a feature.

XII. SECONDARY CONSIDERATIONS

265. I have seen no evidence in either the ’803 patent’s prosecution history or elsewhere supporting any secondary considerations arguments, or evidence of nexus of such alleged evidence to the challenged claims. To the extent patent owner or its expert asserts the existence of any secondary considerations in its responses, I reserve the right to address any such evidence.

XIII. CONCLUSION

266. The findings and opinions set forth in this declaration are based on my work and examinations to date.

267. I may continue my examinations. I may also receive additional documentation and other factual evidence over the course of this IPR that will allow me to supplement and/or refine my opinions. I reserve the right to add to, alter, or delete my opinions and my declaration upon discovery of any additional information. I reserve the right to make such changes as may be deemed necessary.

268. In signing this declaration, I recognize that the declaration will be filed as evidence in an IPR before the PTAB. I also recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required of me, I will appear for cross-examination within the United States during the time allotted for cross-examination.

269. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Date: September 24, 2024



Anthony Wechselberger