



US008046369B2

(12) **United States Patent**
Martin et al.

(10) **Patent No.:** **US 8,046,369 B2**
(45) **Date of Patent:** **Oct. 25, 2011**

(54) **MEDIA ASSET RATING SYSTEM**
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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 256 days.

5,504,852 A 4/1996 Thompson-Rohrlich
5,559,945 A 9/1996 Beaudet et al.
5,561,604 A 10/1996 Buckley et al.
5,566,353 A 10/1996 Cho et al.
5,583,993 A 12/1996 Foster et al.
5,587,404 A 12/1996 Kroner et al.
5,616,876 A 4/1997 Cluts
5,633,839 A 5/1997 Alexander et al.
5,640,566 A 6/1997 Victor et al.
5,666,530 A 9/1997 Clark et al.
5,710,922 A 1/1998 Alley et al.
5,714,971 A 2/1998 Shalit et al.
5,721,949 A 2/1998 Smith et al.
5,726,909 A 3/1998 Krikorian
5,727,202 A 3/1998 Kucala
5,734,823 A 3/1998 Saigh et al.
5,739,451 A 4/1998 Winsky et al.

(21) Appl. No.: **11/849,995**
(22) Filed: **Sep. 4, 2007**

(65) **Prior Publication Data**
US 2009/0063543 A1 Mar. 5, 2009

(51) **Int. Cl.**
G06F 700/2006 (2006.01)
(52) **U.S. Cl.** **707/748**
(58) **Field of Classification Search** None
See application file for complete search history.

FOREIGN PATENT DOCUMENTS
EP 0 917 077 5/1999
(Continued)

OTHER PUBLICATIONS
"Apple Announces iTunes 2," Press Release, Apple Computer, Inc., Oct. 23, 2001.

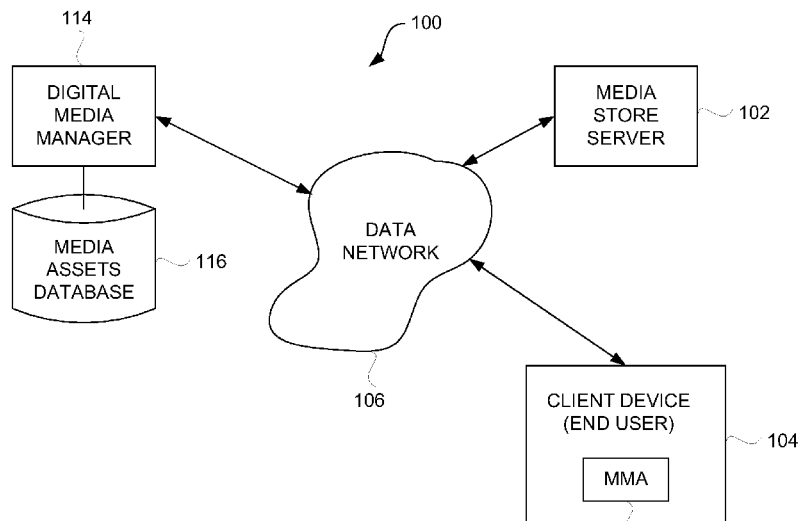
(56) **References Cited**
U.S. PATENT DOCUMENTS

3,990,710 A 11/1976 Hughes
4,528,643 A 7/1985 Freeny, Jr.
4,851,931 A 7/1989 Parker et al.
5,168,481 A 12/1992 Culbertson et al.
5,181,107 A 1/1993 Rhoades
5,191,573 A 3/1993 Hair
5,341,350 A 8/1994 Frank et al.
5,355,302 A 10/1994 Martin et al.
5,418,713 A 5/1995 Allen
5,428,735 A 6/1995 Kahl et al.
5,459,824 A 10/1995 Kashiwazaki
5,481,509 A 1/1996 Knowles

(Continued)
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(57) **ABSTRACT**
Improved techniques for assigning ratings to media assets are disclosed. A rating for a media asset collection can, for example, be determined by examining the ratings of all user-rated media assets in that media asset collection. Additionally or alternately, a rating for media assets in a group of media assets can, for example, be determined by examining the rating of the group of media assets.

13 Claims, 4 Drawing Sheets



U.S. PATENT DOCUMENTS						
			7,209,633	B1	4/2007	Novak et al.
5,740,134	A	4/1998	Peterson			
5,819,160	A	10/1998	Foladare et al.		6/2007	Raines
5,835,721	A	11/1998	Donahue et al.		9/2007	Mirouze et al.
5,835,732	A	11/1998	Kikinis et al.		7,478,323	B2
5,845,282	A	12/1998	Alley et al.		1/2009	Dowdy
5,864,868	A	1/1999	Contois		7,502,626	B1
5,875,110	A	2/1999	Jacobs		3/2009	Lemilainen
5,897,642	A	4/1999	Capossela et al.		7,797,446	B2
5,918,213	A	6/1999	Bernard et al.		9/2010	Heller et al.
5,918,303	A	6/1999	Yamaura et al.		2001/0004310	A1
5,923,757	A	7/1999	Hocker et al.		6/2001	Kono
5,925,843	A	7/1999	Miller et al.		2001/0011308	A1
5,926,819	A	7/1999	Doo et al.		8/2001	Clark et al.
5,963,916	A	10/1999	Kaplan		2001/0021053	A1
5,969,283	A	10/1999	Looney et al.		9/2001	Colbourne et al.
5,983,069	A	11/1999	Cho et al.		2001/0041021	A1
5,995,098	A	11/1999	Okada et al.		11/2001	Boyle et al.
6,000,000	A	12/1999	Hawkins et al.		2001/0044835	A1
6,006,274	A	12/1999	Hawkins et al.		2001/0048642	A1
6,038,199	A	3/2000	Pawlowski et al.		11/2001	Schober et al.
6,041,023	A	3/2000	Lakhansingh		12/2001	Berhan
6,052,797	A	4/2000	Ofek et al.		2001/0052123	A1
6,061,306	A	5/2000	Buchheim		12/2001	Kawai
6,125,369	A	9/2000	Wu et al.		2002/0002413	A1
6,172,948	B1	1/2001	Keller et al.		1/2002	Tokue
6,208,044	B1	3/2001	Viswanadham et al.		2002/0010788	A1
6,216,131	B1	4/2001	Liu et al.		1/2002	Nathan et al.
6,243,328	B1	6/2001	Fenner et al.		2002/0013784	A1
6,243,725	B1	6/2001	Hempleman et al.		1/2002	Swanson
6,247,135	B1	6/2001	Feague		2002/0015161	A1
6,248,946	B1	6/2001	Dwek		2/2002	Haneda et al.
6,255,961	B1	7/2001	Van Rzin et al.		2002/0016968	A1
6,272,545	B1	8/2001	Flanagin et al.		2/2002	Nathan et al.
6,283,764	B2	9/2001	Kajiyama et al.		2002/0027561	A1
6,295,541	B1	9/2001	Bodnar et al.		3/2002	Wu
6,332,175	B1	12/2001	Birrell et al.		2002/0046315	A1
6,341,316	B1	1/2002	Kloba et al.		4/2002	Miller et al.
6,356,971	B1	3/2002	Katz et al.		5/2002	Russel
6,380,947	B1	4/2002	Stead		2002/0055934	A1
6,389,467	B1	5/2002	Eyal		5/2002	Lipscomb et al.
6,407,750	B1	6/2002	Gioscia et al.		6/2002	Powell et al.
6,434,680	B2	8/2002	Belknap et al.		2002/0080180	A1
6,446,080	B1	9/2002	Van Ryzin et al.		6/2002	Mander et al.
6,452,609	B1	9/2002	Katinsky et al.		2002/0116082	A1
6,453,281	B1	9/2002	Walters et al.		8/2002	Gudorf
6,490,432	B1	12/2002	Wegener et al.		8/2002	Middleton et al.
6,493,758	B1	12/2002	McLain		2002/0133515	A1
6,523,124	B1	2/2003	Lunsford et al.		9/2002	Kagle et al.
6,529,804	B1	3/2003	Draggon et al.		9/2002	Robison
6,563,769	B1	5/2003	Van Der Meulen		2002/0138606	A1
6,587,403	B1	7/2003	Keller et al.		10/2002	Pontenzone et al.
6,587,404	B1	7/2003	Keller et al.		10/2002	Nguyen
6,621,768	B1	9/2003	Keller et al.		2002/0174269	A1
6,636,873	B1	10/2003	Carini et al.		11/2002	Spurgat et al.
6,664,981	B2	12/2003	Ashe et al.		12/2002	Qian et al.
6,665,803	B2	12/2003	Lunsford et al.		12/2002	Fenton et al. 707/104.1
6,718,348	B1	4/2004	Novak et al.		12/2002	Carter et al.
6,721,489	B1	4/2004	Benyamin et al.		1/2003	Irimajiri et al.
6,731,312	B2	5/2004	Robbin		1/2003	Stumphauzer
6,760,721	B1	7/2004	Chasen et al.		2/2003	Seaman et al.
6,763,345	B1	7/2004	Hempleman et al.		2/2003	Fischer et al.
6,779,019	B1	8/2004	Mousseau et al.		3/2003	Flanagin et al.
6,785,542	B1	8/2004	Blight et al.		3/2003	Walsh et al.
6,794,566	B2	9/2004	Pachet		3/2003	English
6,801,964	B1	10/2004	Mahdavi		4/2003	Kluth
6,874,037	B1	3/2005	Abram et al.		4/2003	Robbin et al.
6,928,433	B2	8/2005	Goodman et al.		5/2003	Kallahalla et al.
6,933,433	B1	8/2005	Porteus et al.		5/2003	Krystek et al.
6,941,324	B2	9/2005	Plastina et al.		5/2003	Makinen
6,978,127	B1	12/2005	Bulthuis et al.		6/2003	Samuelson
6,987,221	B2	1/2006	Platt		6/2003	Irimajiri
7,003,495	B1	2/2006	Burger et al.		8/2003	Abbosh et al.
7,043,477	B2	5/2006	Mercer et al.		9/2003	Robbin et al.
7,055,165	B2	5/2006	Connelly		9/2003	Turpin et al.
7,111,009	B1	9/2006	Gupta et al.		9/2003	Plastina et al.
7,117,516	B2	10/2006	Khoo et al.		10/2003	Oh
					11/2003	Ly
					11/2003	Yogeshwar et al.
					12/2003	Platt
					1/2004	Keller et al.
					1/2004	Keller et al.
					1/2004	Cowgill
					2/2004	Kudo
					3/2004	Footo et al.
					3/2004	Robbin et al.
					4/2004	McCarthy et al.
					4/2004	Keller
					4/2004	Dodge
					5/2004	Vanska et al.
					5/2004	Nelson
					6/2004	Ohtsuki et al.
					6/2004	McKibben
					7/2004	Kim
					7/2004	Mander et al.
					7/2004	White et al.
					7/2004	Singh et al.
					8/2004	Rose
					10/2004	Verosub et al.
					11/2004	Morohashi
					11/2004	Poo

2005/0055718	A1	3/2005	Stone	
2005/0060264	A1	3/2005	Schrock et al.	
2005/0080915	A1	4/2005	Shoemaker	
2005/0141771	A1	6/2005	Yamakado et al.	
2005/0149392	A1	7/2005	Gold et al.	
2005/0235015	A1	10/2005	Abanami et al.	
2005/0240494	A1	10/2005	Cue et al.	
2005/0240661	A1	10/2005	Heller et al.	
2005/0249080	A1	11/2005	Foote et al.	
2005/0262528	A1	11/2005	Herley	
2005/0267803	A1	12/2005	Patel et al.	
2005/0278377	A1	12/2005	Mirrashidi et al.	
2006/0015378	A1*	1/2006	Mirrashidi et al.	705/7
2006/0036567	A1	2/2006	Tan	
2006/0066627	A1	3/2006	Gerhard et al.	
2006/0089949	A1	4/2006	Robbin	
2006/0100978	A1	5/2006	Heller et al.	
2006/0156236	A1	7/2006	Heller et al.	
2006/0156239	A1	7/2006	Jobs	
2006/0163358	A1	7/2006	Biderman	
2006/0168340	A1	7/2006	Heller et al.	
2006/0247980	A1*	11/2006	Mirrashidi et al.	705/26
2008/0256378	A1	10/2008	Guillorit	
2009/0063496	A1*	3/2009	Cunningham et al.	707/10

FOREIGN PATENT DOCUMENTS

EP	0 982 732	3/2000
EP	1 028 425	8/2000
EP	1 548 740	6/2005
JP	2000-339917	12/2000
JP	2001-76465	3/2001
JP	2001-93226	4/2001
JP	2001-117800	4/2001
JP	2001/291365 A	10/2001
JP	2002/74909 A	3/2002
WO	WO 95/16950	6/1995
WO	WO 01/33569	5/2001
WO	WO 01/67753	9/2001
WO	WO 02/25610	3/2002
WO	WO 02/25935	3/2002
WO	WO 03/023786	3/2003
WO	WO 2004-004338	1/2004
WO	WO 2004/084413	9/2004
WO	2005073856 A2	8/2005

OTHER PUBLICATIONS

"Apple Introduces iTunes—World's Best and Easiest To Use Jukebox Software," Macworld Expo, San Francisco, Jan. 9, 2001.

"Apple's iPod Available in Stores Tomorrow," Press Release, Apple Computer, Inc., Nov. 9, 2001.

"Hewlett Packard Jornada 525 Color Pocket PC," downloaded Jan. 25, 2002, http://www.pc4d.com/electronics/products/56/jornada_525_color_pocket_pc.shtml.

"Nomad Jukebox," User Guide, Creative Technology Ltd., Version 1, Aug. 2000.

"Replay Gain—A proposed standard," Oct. 7, 2001, from <http://replaygain.hydrogenaudio.org/index.html> and <http://replaygain.hydrogenaudio.org/outline.html>.

"SoundJam MP Plus Manual, version 2.0"—MP3 Player and Encoder for Macintosh by Jeffrey Robbin, Bill Kincaid and Dave Heller, manual by Tom Negrino, published by Casady & Greene, Inc., 2000.

"About MusicMatch Jukebox," MusicMatch Jukebox v4 Help, 1999, pp. 1-4.

"iTunes Celebrates Its First Anniversary; Over 70 Million Songs Purchased," Apr. 28, 2004, <http://www.apple.com/pr/library/2004/apr/28itunes.html>.

"Rio Portable Music Player," Independent Web Review, downloaded Jan. 25, 2002, <http://www.webreviews.com/9901/rio.html>.

Birrell, Andrew, "Personal Jukebox (PJB)," Oct. 13, 2000, <http://birrell.org/andrew/talks/pjb-overview.ppt>.

Breen, Christopher, "iMixing it Up: Sharing Your Sounds," Sep. 17, 2004, <http://playlistmag.com/help/2004/09/imixhowto/index.php>.

Bridgman, "Windows XP Expert Zone Community Columnist",

Butler, Travis, "Archos Jukebox 6000 Challenges Nomad Jukebox," Aug. 13, 2001, <http://db.tidbits.com/getbits.acgi?tbart=06521>.

Butler, Travis, "Portable MP3: The Nomad Jukebox," Jan. 8, 2001, <http://db.tidbits.com/getbits.acgi?tbart=06261>.

Compaq Computer Corp., copyright 1991, Personal Jukebox User Manual, pp. 1-29.

Compaq, "Personal Jukebox," Jan. 24, 2001, <http://research.compaq.com/SRC/pjb/>.

De Herrera, Chris, "Microsoft ActiveSync 3.1," Version 1.02, Oct. 13, 2000.

Engst, Adam C., "SoundJam Keeps on Jammin'," Jun. 19, 2000, <http://db.tidbits.com/getbits.acgi?tbart=05988>.

Fleishman, Glenn, "Handheld iPod joins MP3 band a bit late, but is standout player," Nov. 6, 2001, http://seattletimes.nwsource.com/html/business/technology/134361811_ptmacc040.html.

Handbook for Palm™ m500 Series Handhelds, User Manual, copyright 1998-2001.

IEEE 1394—Wikipedia, 1995, <http://www.wikipedia.org/wiki/Firewire>.

iTunes 2, Playlist Related Help Screens, iTunes v2.0, Apple Computer, Inc., Oct. 23, 2001.

iTunes, Digital Music for your Mac, Apple Computer, Inc., downloaded Oct. 22, 2001, <http://www.apple.com/itunes/>.

iTunes, Playlist Related Help Screens, iTunes v1.0, Apple Computer, Inc., Jan. 2001.

Kawamoto et al., "On 1st Birthday, iTunes Unwraps New Features," Apr. 28, 2004, http://news.com.com/On+1st+birthday,+iTunes+unwraps+new+features/2100-1027_3-5201598.html.

Lindauer, Andy, "What's in your Pocket?," Edgereview, downloaded Jan. 25, 2002, <http://www.edgereview.com/print.cfm?type=aag&ID=286>.

Lyra, Personal Digital Player, RCA, Product Box, (2003).

Miniman, "Applian Software's Replay Radio and Player v1.02," Product review, pocketnow.com, <http://www.pocketnow.com/reviews/replay/replay.htm>, Jul. 31, 2001.

Musicmatch, "Musicmatch and Xing Technology Introduce Musicmatch Jukebox," May 18, 1998, <http://www.musicmatch.com/info/company/press/releases/?year=1998&release=2>.

RCA Lyra User's Guide, RD2201/2202/2204, www.lyrazone.com, (1999) pp. 1-37.

RealJukebox Plus Manual, Real Networks, Inc., copyright 1999, pp. 1-83.

RealJukebox, Real Networks, Inc., webpages downloaded Oct. 27, 2005 http://www.real.com/Jukebox/release_notes.html#.

Sinitzyn, "A Synchronization Framework for Personal Mobile Servers," Proceedings of the Second IEEE Annual Conference on Pervasive Computing and Communications Workshops, Piscataway, NJ, Mar. 14, 2004, pp. 1-4.

SoundJam MP Plus, Representative Screens, published by Casady & Greene, Inc., Salinas, CA, 2000.

Specification Sheet, iTunes 2, Apple Computer, Inc., Oct. 31, 2001.

Steinberg, "Sonicblue Rio Car," Product Review, Dec. 12, 2000, <http://electronics.cnet.com/electronics/0-6342420-1304-4098389.html>.

TuneBase 100 User Guide, A CD Library Management System, Escient, Inc. copyright 1999.

TuneBase Pro Mk-II User's Guide, Escient, Inc. (1999).

Vetro et al., "Media Conversions to Support Mobile Users," IEEE Canadian Conference on Electrical and Computer Engineering, Piscataway, NJ, May 13, 2001, pp. 607-612.

Window's Media Player 6.4, Microsoft Corp., copyright 1999, software available at <http://www.oldversion.com/program.php?n=wmp> See also Windows Media Player 6.4 Software Official website at <http://www.microsoft.com/windows/windowsmedia/player/version64/default.aspx>.

Zheng et al., "MobiGATE: a mobile gateway proxy for the active deployment of transport entities," Proceedings of the 2004 International Conference on Parallel Processing, Piscataway, NJ, Aug. 15, 2004.

- Wave Station Digital Audio Automation System, Instruction & Operations Manual Broadcast Software International, pp. 1-113, Feb. 4, 1997.
- Nielsen et al., "Comparative Design Review: An Exercise in Parallel Design", Interchi '93, pp. 414-417 Apr. 24-29, 1993.
- Lowery Daryl, "Random-Access Digital Audio—Recording Systems", pp. 68-71, Jun. 1992.
- Sadie Master System, Product Brochure, Studio audio Digital Equipment Inc., 2 pgs., Jan. 1995.
- RCS Works-Cart Wall User's Guide and Reference Manual, pp. 1-83, Feb. 7, 1993.
- "Digital Audio Just Got Easier!", CartWorks Digital Audio Systems, dbm Systems, Inc., Jun. 26, 1996.
- "CartWorks File Utilities User's Manual", dbm Systems, Inc., pp. 1-8, Jul. 1998.
- "CartWorks MHD Music-on-Hard-Drive QuickSchedule User's Manual", dbm Systems, Inc., pp. 1-8, Feb. 8, 1998.
- "CartWorks MHD Music-on-Hard-Drive User's Manual V6.8", dbm Systems, Inc., pp. 1-11, Feb. 1998.
- "CartWorks On-Demand Editor User's Manual", dbm Systems, Inc., pp. 1-7, Feb. 1998.
- "CartWorks Script Editor User's Manual v3.12", dbm Systems, Inc., pp. 1-26, Feb. 1998.
- "CartWorks Spot Set Editor User's Manual", dbm Systems, Inc., pp. 1-11, Feb. 1998.
- "The DADpro Digital Audio Delivery System Operation Manual Version 1.0", IBM Corp., pp. 1-424, Aug. 30, 1996.
- "Virtual Recorder—Basic Operations", ASC Audio Video Corporation, pp. 1-94, Sep. 9, 1996.
- "Broadcast Tools: SpotBase, Playlist & TapeBase", ASC Audio Video Corporation, pp. 1-2, Mar. 1998.
- "VR 300 Advanced Broadcast Video Server", ASC Audio Video Corporation, pp. 1-9, Mar. 1998.
- "VR300 Video Server User Manual, Version 1.0", ASC Audio Video Corporation, pp. 1-40, Mar. 20, 1998.
- "Gravis WinDecks Version 1.12", screen shots, Gravis Computer Technology Ltd., pp. 1-10, Jan. 1990.
- WinDecks, User Instructions, Gravis Computer Technology Ltd., pp. 1-14, Jan. 1990.
- Iriver, "PMP140/120", Sep. 13, 2004, 1-2 pgs.
- MG-25, Portable MPEG4 Player (MG-25), Jul. 29, 2004, 1-3 pgs.
- Windows XP Service Pack 2, Figures 1-2 and "How to obtain the latest Windows XP service pack," Aug. 25, 2004.
- "Color Terminology," Carnright Design, 2004, downloaded from www.carnrightdesign.com/color4business/speaking_color.htm on Jan. 13, 2005.
- "Color Wheel," downloaded from <http://hort.ifas.ufl.edu/TEACH/floral/color.htm> on Jan. 13, 2005.
- "Complimentary Chromatic Colors," downloaded from www.smartpixel.net/chromoweb/uks/indexgb.html on Nov. 22, 2004.
- "Color and Vision Questions and Answers," Color Vision FAQ, downloaded from www.cis.rit.edu/mcsl/faq/faq1.shtml on Nov. 22, 2004.
- Miser et al., iPod + iTunes Starter Kit, Publisher, Que, Pub Date: Dec. 1, 2004, pp. 1-12.
- Chopde, Avinash, CD/DVD Inserts and Envelopes, Nov. 2003, cdlablegens, version, 3.0.0, pp. 1-5.
- Obrador, Pere, Automatic Color Scheme Picker for Document Templates based on Image Analysis and Dual Problem, Jan. 19, 2006, Hewlett-Packard Laboratories, pp. 1-10.
- Mabini. MemMaid Review. Pocket PC Dubai, Jul. 23, 2004[online], [retrieved on Mar. 26, 2008]. Retrieved from the Internet <URL: http://www.pocketpcdubai.com/DinarSoft/memmaid_review.html>.
- Torrone, Phillip, How-To: Getting Podcasts on a Portable Media Center (and other Windows Media Devices, Oct. 2004.
- Personal Jukebox (PJB), "System Research Center and PAAD", Compaq Computer Corp., Oct. 13, 2000, <http://research.compaq.com/SRC/pjb/>.
- Etchison, "Accelerated Discrete Adjustment of the Parameters of a Process", IBM Technical Disclosure Bulletin, vol. 15, No. 5, Oct. 1, 1972, 2 pgs.
- Chakarova et al., "Digital Still Cameras—Downloading Images to a Computer," Multi-Media Reporting and Convergence, 2 pgs, Jan. 8, 2006.
- Moretti, et al., "Tools for the Selection of Colour Palettes," Institute of Information Sciences and Technology Massey University, New Zealand, Jul. 11-12, 2002.
- Half-life—Wikipedia, the free encyclopedia, <http://en.wikipedia.org/wiki/Halfe-life>, Feb. 22, 2009.

* cited by examiner

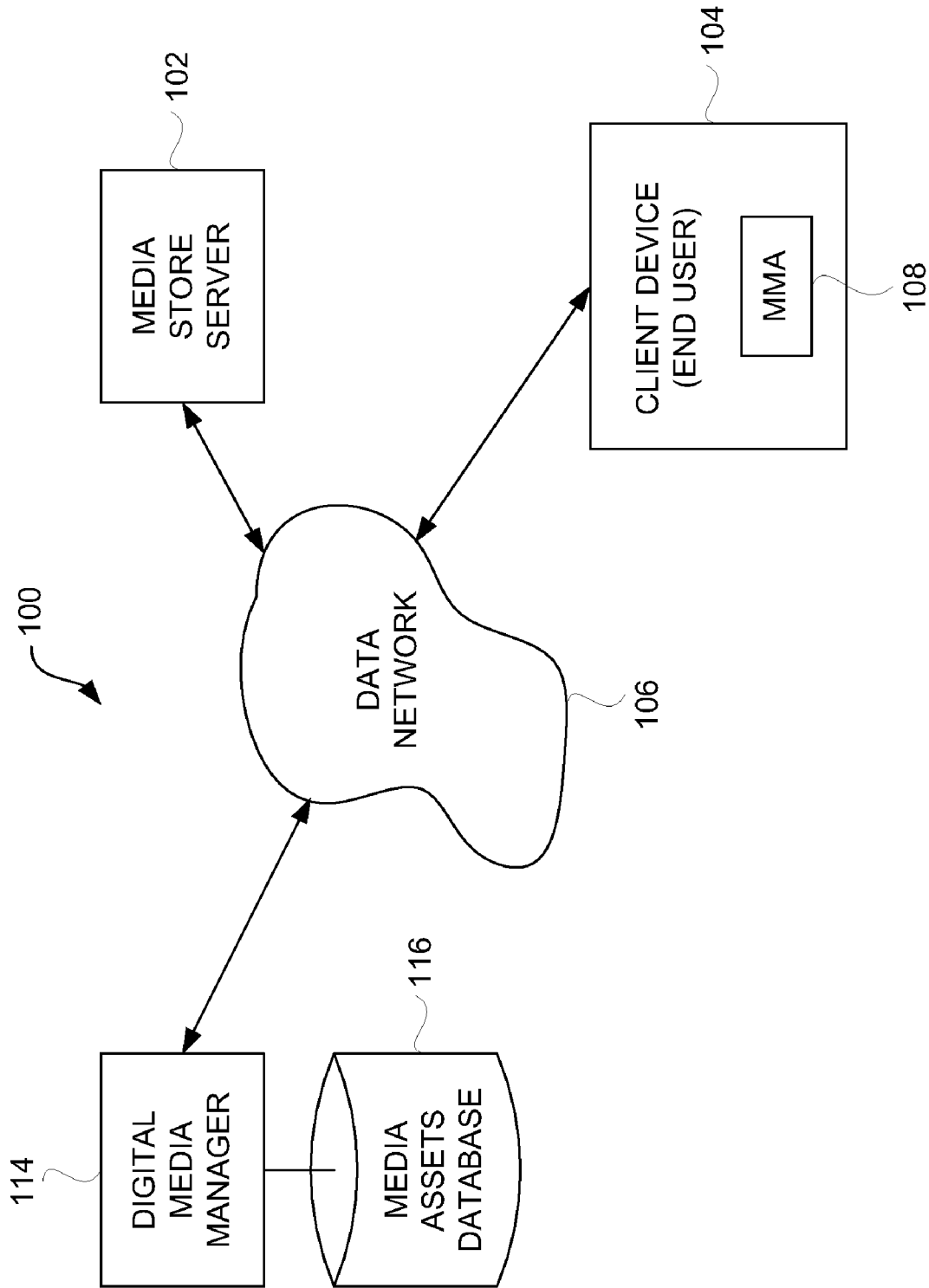


FIG. 1

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