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(54) **PROVIDING USER COMMUNICATION**

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(58) **Field of Classification Search**

USPC 725/61, 112, 141

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,565,909	A	10/1996	Thibadeau et al.
5,583,560	A	12/1996	Florin et al.
5,808,662	A	9/1998	Kinney et al.
5,812,123	A	9/1998	Rowe et al.
5,818,439	A	10/1998	Nagasaka et al.
5,861,906	A	1/1999	Dunn et al.
6,144,375	A	11/2000	Jain et al.
6,188,398	B1	2/2001	Collins-Rector et al.

(Continued)

FOREIGN PATENT DOCUMENTS

JP 2002218428 A * 8/2002 ..... H04N 7/173

OTHER PUBLICATIONS

Copending U.S. Appl. No. 12/545,099, filed Aug. 21, 2009 entitled "Providing a Video User Interface".

(Continued)

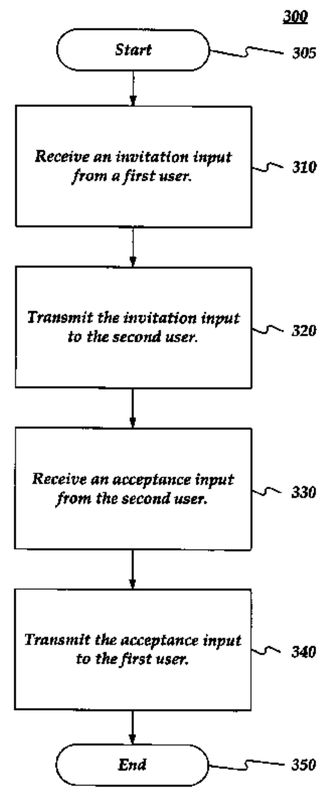
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(57) **ABSTRACT**

Systems and methods are disclosed for providing user communication. First an invitation input may be received from a first user. The invitation input may comprise a recommendation to a second user to take an action regarding content to be delivered over a content delivery system. Then, the invitation input may be transmitted to the second user. Next, an acceptance input may be received from the second user. The acceptance input may comprise an acceptance to the invitation input. The acceptance input may then be transmitted to the first user in response to receiving the acceptance input.

19 Claims, 4 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

6,282,713	B1	8/2001	Kitsukawa et al.	
6,438,579	B1	8/2002	Hosken	
6,615,248	B1	9/2003	Smith	709/217
6,754,904	B1	6/2004	Cooper et al.	
6,934,963	B1	8/2005	Reynolds et al.	725/39
6,968,364	B1	11/2005	Wong et al.	
6,983,426	B1	1/2006	Kobayashi et al.	
7,017,173	B1	3/2006	Armstrong et al.	
7,080,139	B1 *	7/2006	Briggs et al.	709/224
7,228,305	B1	6/2007	Eyal et al.	
7,246,367	B2	7/2007	Livonen	
7,249,366	B1	7/2007	Flavin	
7,272,844	B1	9/2007	Bankers et al.	
7,290,211	B2	10/2007	Goodwin et al.	
7,363,644	B2	4/2008	Wugofski	
7,584,214	B2	9/2009	Narahara et al.	707/104.1
7,596,761	B2	9/2009	Lemay et al.	715/779
7,669,219	B2	2/2010	Scott, III	
7,673,315	B1	3/2010	Wong et al.	
7,685,204	B2	3/2010	Rogers	
7,698,263	B2	4/2010	Pickelsimer et al.	
7,716,376	B1 *	5/2010	Price et al.	709/248
7,877,293	B2	1/2011	Biebesheimer et al.	
7,886,327	B2	2/2011	Stevens	
7,895,625	B1	2/2011	Bryan et al.	
7,904,924	B1	3/2011	de Heer et al.	
7,933,789	B2	4/2011	Boland et al.	
7,992,163	B1	8/2011	Jerding et al.	
8,090,606	B2	1/2012	Svendsen	
8,091,032	B2	1/2012	Fischer	
8,220,021	B1	7/2012	Look et al.	
8,296,660	B2	10/2012	Macadaan et al.	
8,296,803	B2	10/2012	Yamaoka et al.	
8,364,013	B2	1/2013	Nijim	
8,418,204	B2	4/2013	Pickelsimer et al.	
8,789,102	B2	7/2014	Pickelsimer et al.	
8,789,117	B2	7/2014	Nijim	
8,806,532	B2	8/2014	Pickelsimer et al.	
8,832,749	B2	9/2014	Pickelsimer et al.	
8,869,191	B2	10/2014	Pickelsimer et al.	
2001/0001160	A1	5/2001	Shoff et al.	
2001/0037367	A1	11/2001	Iyer	
2002/0007485	A1	1/2002	Rodriguez et al.	
2002/0056123	A1	5/2002	Liwerant et al.	
2002/0057297	A1	5/2002	Grimes et al.	
2002/0069218	A1	6/2002	Sull et al.	
2002/0087982	A1	7/2002	Stuart	725/539
2002/0120757	A1	8/2002	Sutherland et al.	
2002/0124252	A1	9/2002	Schaefer et al.	
2002/0128831	A1	9/2002	Ju et al.	
2002/0144273	A1	10/2002	Reto	
2002/0156852	A1 *	10/2002	Hughes et al.	709/206
2002/0174430	A1	11/2002	Ellis et al.	
2002/0194195	A1	12/2002	Fenton et al.	707/104.1
2002/0199188	A1	12/2002	Sie et al.	
2003/0002849	A1	1/2003	Lord	
2003/0021582	A1	1/2003	Sawada	
2003/0084449	A1	5/2003	Chane et al.	
2003/0093790	A1 *	5/2003	Logan et al.	725/38
2003/0093806	A1 *	5/2003	Dureau et al.	725/107
2003/0112467	A1	6/2003	McCollum et al.	
2003/0115592	A1	6/2003	Johnson	
2003/0154477	A1	8/2003	Hassell et al.	
2003/0156827	A1	8/2003	Janevski	
2003/0177497	A1	9/2003	Macrae et al.	
2003/0206710	A1	11/2003	Ferman et al.	
2003/0208763	A1	11/2003	McElhatten et al.	
2003/0220100	A1	11/2003	McElhatten et al.	
2003/0225846	A1 *	12/2003	Heikes et al.	709/207
2003/0229900	A1	12/2003	Reisman	
2004/0034867	A1	2/2004	Rashkovskiy et al.	725/40
2004/0060063	A1	3/2004	Russ et al.	
2004/0064835	A1	4/2004	Bellwood et al.	
2004/0078807	A1	4/2004	Fries et al.	
2004/0078814	A1	4/2004	Allen	
2004/0103167	A1	5/2004	Grooters et al.	
2004/0117786	A1	6/2004	Kellerman et al.	
2004/0210928	A1	10/2004	Hamzy et al.	
2004/0255336	A1	12/2004	Logan et al.	725/135
2004/0255340	A1	12/2004	Logan	
2004/0268386	A1	12/2004	Logan et al.	
2005/0022241	A1	1/2005	Griggs	
2005/0028208	A1	2/2005	Ellis et al.	
2005/0044565	A1	2/2005	Jerding et al.	
2005/0055710	A1	3/2005	Aoki et al.	
2005/0076363	A1	4/2005	Dukes et al.	
2005/0091316	A1	4/2005	Ponce et al.	
2005/0149880	A1	7/2005	Postrel	
2005/0210145	A1	9/2005	Kim et al.	
2005/0246739	A1	11/2005	Davidson	
2005/0251820	A1	11/2005	Stefanik et al.	
2005/0262542	A1	11/2005	DeWeese et al.	
2005/0278443	A1	12/2005	Winner et al.	
2005/0278740	A1	12/2005	Helms	725/41
2005/0278761	A1	12/2005	Gonder et al.	
2005/0283813	A1	12/2005	Jamail et al.	
2006/0005207	A1	1/2006	Louch et al.	
2006/0020904	A1	1/2006	Aaltonen et al.	
2006/0031882	A1	2/2006	Swix et al.	
2006/0041927	A1	2/2006	Stark et al.	725/139
2006/0059514	A1	3/2006	Hsiao et al.	
2006/0059526	A1	3/2006	Poslinski	
2006/0075019	A1	4/2006	Donovan et al.	
2006/0080408	A1	4/2006	Istvan et al.	709/219
2006/0090183	A1	4/2006	Zito et al.	
2006/0112325	A1	5/2006	Ducheneaut et al.	
2006/0130093	A1	6/2006	Feng et al.	
2006/0143236	A1	6/2006	Wu	
2006/0161950	A1 *	7/2006	Imai et al.	725/46
2006/0174277	A1	8/2006	Sezan et al.	
2006/0184972	A1	8/2006	Rafey et al.	
2006/0190966	A1	8/2006	McKissick et al.	
2006/0195479	A1	8/2006	Spiegelman et al.	
2006/0248557	A1	11/2006	Stark et al.	725/37
2006/0253874	A1	11/2006	Stark et al.	725/62
2006/0259926	A1	11/2006	Scheelke et al.	
2006/0271959	A1	11/2006	Jacoby et al.	
2006/0282856	A1	12/2006	Errico et al.	
2007/0033533	A1	2/2007	Sull	
2007/0061835	A1	3/2007	Klein et al.	
2007/0106627	A1	5/2007	Srivastava et al.	
2007/0123353	A1	5/2007	Smith	
2007/0124795	A1	5/2007	McKissick et al.	
2007/0150918	A1	6/2007	Carpenter et al.	
2007/0186180	A1	8/2007	Morgan	
2007/0186231	A1	8/2007	Haeuser et al.	
2007/0186243	A1	8/2007	Pettit et al.	
2007/0198532	A1 *	8/2007	Krikorian et al.	707/10
2007/0204238	A1	8/2007	Hua et al.	
2007/0214473	A1	9/2007	Barton et al.	
2007/0220552	A1	9/2007	Juster et al.	
2007/0220566	A1	9/2007	Ahmad-Taylor	
2007/0245367	A1	10/2007	Ogawa	
2007/0256103	A1	11/2007	Knudson	
2007/0271338	A1 *	11/2007	Anschutz	709/204
2007/0277205	A1	11/2007	Grannan	
2007/0282949	A1	12/2007	Fischer et al.	
2007/0294726	A1	12/2007	Drazin	
2007/0298401	A1	12/2007	Mohanty et al.	
2008/0010153	A1	1/2008	Pugh-O'Connor et al.	
2008/0022320	A1	1/2008	Ver Steeg	
2008/0036917	A1	2/2008	Pascarella et al.	
2008/0040370	A1	2/2008	Bosworth et al.	
2008/0052371	A1	2/2008	Partovi et al.	
2008/0065758	A1 *	3/2008	Narayanaswami	709/224
2008/0066111	A1	3/2008	Ellis et al.	
2008/0066114	A1 *	3/2008	Carlson et al.	725/61
2008/0082606	A1	4/2008	Gupta et al.	
2008/0086456	A1	4/2008	Rasanen et al.	
2008/0092168	A1	4/2008	Logan et al.	
2008/0098323	A1	4/2008	Vallone et al.	
2008/0114861	A1	5/2008	Gildred	
2008/0126936	A1	5/2008	Williams	715/17
2008/0155600	A1	6/2008	Klappert et al.	725/44

(56) **References Cited**

U.S. PATENT DOCUMENTS

2008/0163307	A1	7/2008	Coburn et al.	725/61
2008/0168515	A1	7/2008	Benson et al.	
2008/0177727	A1	7/2008	Pickelsimer	
2008/0178218	A1	7/2008	Pickelsimer	
2008/0235733	A1	9/2008	Heie et al.	
2008/0247730	A1	10/2008	Barton et al.	
2008/0263595	A1	10/2008	Sumiyoshi et al.	725/39
2008/0276278	A1	11/2008	Krieger et al.	725/40
2008/0288596	A1	11/2008	Smith et al.	
2008/0313541	A1	12/2008	Shafton et al.	
2008/0320139	A1	12/2008	Fukuda et al.	
2009/0019374	A1*	1/2009	Logan et al.	715/753
2009/0044216	A1	2/2009	McNicoll	
2009/0049098	A1	2/2009	Pickelsimer et al.	
2009/0049118	A1	2/2009	Stevens	
2009/0049473	A1	2/2009	Pickelsimer et al.	
2009/0055743	A1	2/2009	Pickelsimer et al.	
2009/0055868	A1	2/2009	Wehmeyer et al.	
2009/0063994	A1	3/2009	Pickelsimer et al.	
2009/0094643	A1	4/2009	Pickelsimer et al.	
2009/0100469	A1	4/2009	Conradt et al.	
2009/0125843	A1	5/2009	Billmaier et al.	
2009/0172127	A1	7/2009	Srikanth et al.	
2009/0172543	A1	7/2009	Cronin et al.	
2009/0178081	A1	7/2009	Goldenberg et al.	
2009/0199242	A1	8/2009	Johnson et al.	
2009/0307719	A1	12/2009	Clark et al.	
2009/0310933	A1	12/2009	Lee	
2009/0313664	A1	12/2009	Patil et al.	
2010/0042746	A1	2/2010	Keum et al.	
2010/0064320	A1	3/2010	Angiolillo et al.	
2010/0107194	A1	4/2010	McKissick et al.	
2010/0175084	A1*	7/2010	Ellis et al.	725/32
2010/0192173	A1	7/2010	Mizuki et al.	
2011/0010744	A1	1/2011	Stecyk et al.	
2011/0013885	A1*	1/2011	Wong et al.	386/297
2011/0072455	A1	3/2011	Pickelsimer et al.	
2011/0090402	A1	4/2011	Huntington et al.	
2011/0107389	A1	5/2011	Chakarapani	
2011/0131600	A1	6/2011	Howcroft et al.	
2011/0138423	A1	6/2011	Pickelsimer et al.	
2011/0202945	A1	8/2011	Pickelsimer et al.	
2011/0283313	A1	11/2011	Gathen et al.	
2012/0051717	A1	3/2012	Nijim	
2012/0054808	A1	3/2012	Nijim	
2012/0054810	A1	3/2012	Nijim	
2012/0222056	A1	8/2012	Donoghue et al.	
2012/0284744	A1	11/2012	Kumar	
2013/0167168	A1	6/2013	Ellis et al.	

OTHER PUBLICATIONS

U.S. Final Office Action dated Dec. 30, 2009 cited in U.S. Appl. No. 11/787,732.

U.S. Appl. No. 11/787,732, filed Apr. 17, 2007 entitled "Providing a Video User Interface".

U.S. Appl. No. 11/787,733, filed Apr. 17, 2007 entitled "Providing a Lateral Search".

U.S. Appl. No. 12/126,025, filed May 23, 2008 entitled "Providing a Video User Interface".

U.S. Appl. No. 12/126,060, filed May 23, 2008 entitled "Providing a Social Network".

U.S. Appl. No. 12/126,126, filed May 23, 2008 entitled "Providing a User Interface".

U.S. Office Action dated Jun. 22, 2009 cited in U.S. Appl. No. 11/787,732.

J. Bouwen et al., "Communication Meets Entertainment: Community Television," Technology White Paper, Alcatel Telecommunications Review, 1st Quarter 2005, pp. 1-8, http://www.alcatel.com/doctypes/articlepaperlibrary/pdf/ATR2005Q1/T0503-Community_TV-EN.pdf.

U.S. Appl. No. 12/126,096, filed May 23, 2008 entitled "Providing a Content Mark".

U.S. Appl. No. 12/126,165, filed May 23, 2008 entitled "Providing a Customized User Interface".

U.S. Office Action dated Apr. 28, 2009 cited in U.S. Appl. No. 11/787,733.

Copending U.S. Appl. No. 12/ 868,801, filed Aug. 26, 2010 entitled "Content Library".

Copending U.S. Appl. No. 12/868,824, filed Aug. 26, 2010 entitled "Playlist Bookmarking".

Copending U.S. Appl. No. 12/868,838, filed Aug. 26, 2010 entitled "Content Bookmarking".

U.S. Office Action dated Sep. 14, 2010 cited in U.S. Appl. No. 11/787,732.

U.S. Office Action dated Sep. 30, 2010 cited in U.S. Appl. No. 12/126,165.

U.S. Office Action dated Oct. 5, 2010 cited in U.S. Appl. No. 12/126,096.

Copending U.S. Appl. No. 12/959,731, filed Dec. 3, 2010 entitled "Providing a Media Guide Including Parental Information".

Copending U.S. Appl. No. 12/959,665, filed Dec. 3, 2010 entitled "Content Recommendations".

Copending U.S. Appl. No. 12/959,793, filed Dec. 3, 2010 entitled "Personalizing TV Content".

U.S. Final Office Action dated Jan. 14, 2011 cited in U.S. Appl. No. 12/126,096.

U.S. Office Action dated Feb. 14, 2011 cited in U.S. Appl. No. 12/126,025.

U.S. Office Action dated Feb. 17, 2011 cited in U.S. Appl. No. 12/126,060.

U.S. Office Action dated Feb. 18, 2011 cited in U.S. Appl. No. 12/545,099.

U.S. Final Office Action dated Mar. 2, 2011 cited in U.S. Appl. No. 11/787,732.

U.S. Final Office Action dated Mar. 2, 2011 cited in U.S. Appl. No. 12/126,165.

U.S. Office Action dated Apr. 26, 2011 cited in U.S. Appl. No. 12/126,096.

U.S. Final Office Action dated Jun. 13, 2011 cited in U.S. Appl. No. 12/126,060.

U.S. Final Office Action dated Jun. 21, 2011 cited in U.S. Appl. No. 12/126,025.

U.S. Appl. No. 13/221,151, filed Aug. 30, 2011 entitled "Sharing Digitally Recorded Content".

U.S. Final Office Action dated Sep. 29, 2011 cited in U.S. Appl. No. 12/126,096.

U.S. Office Action dated Dec. 28, 2011 cited in U.S. Appl. No. 12/545,099, 13 pgs.

U.S. Office Action dated Jan. 5, 2012 cited in U.S. Appl. No. 12/126,096, 20 pgs.

U.S. Final Office Action dated Aug. 5, 2011 cited in U.S. Appl. No. 12/545,099.

U.S. Office Action dated Jan. 18, 2012 cited in U.S. Appl. No. 12/126,025, 27 pgs.

U.S. Office Action dated Jan. 19, 2012 cited in U.S. Appl. No. 12/126,165, 20 pgs.

U.S. Office Action dated Mar. 26, 2012 cited in U.S. Appl. No. 12/126,060, 26 pgs.

U.S. Final Office Action dated May 31, 2012 cited in U.S. Appl. No. 12/126,165, 23 pgs.

U.S. Office Action dated Jun. 5, 2012 cited in U.S. Appl. No. 12/126,126, 40 pgs.

U.S. Office Action dated Jun. 20, 2012 cited in U.S. Appl. No. 12/959,731, 30 pgs.

U.S. Final Office Action dated Aug. 15, 2012 cited in U.S. Appl. No. 12/126,025, 33 pgs.

U.S. Final Office Action dated Aug. 23, 2012 cited in U.S. Appl. No. 12/126,060, 30 pgs.

U.S. Final Office Action dated Aug. 29, 2012 cited in U.S. Appl. No. 12/868,838, 7 pgs.

U.S. Final Office Action dated Apr. 20, 2012 cited in U.S. Appl. No. 12/126,096, 25 pgs.

U.S. Final Office Action dated Apr. 25, 2012 cited in U.S. Appl. No. 12/545,099, 16 pgs.

(56) **References Cited**

OTHER PUBLICATIONS

U.S. Office Action dated May 21, 2012 cited in U.S. Appl. No. 12/868,838, 22 pgs.
U.S. Office Action dated Nov. 5, 2012 cited in U.S. Appl. No. 12/126,096, 23 pgs.
U.S. Office Action dated Nov. 20, 2012 cited in U.S. Appl. No. 13/221,151, 29 pgs.
U.S. Office Action dated Nov. 29, 2012 cited in U.S. Appl. No. 12/868,824, 33 pgs.
U.S. Office Action dated Dec. 19, 2012 cited in U.S. Appl. No. 12/126,025, 30 pgs.
U.S. Final Office Action dated Dec. 28, 2012 cited in U.S. Appl. No. 12/126,126, 24 pgs.
U.S. Office Action dated Oct. 4, 2012 cited in U.S. Appl. No. 12/868,801, 27 pgs.
U.S. Office Action dated Oct. 5, 2012 cited in U.S. Appl. No. 12/959,793, 31 pgs.
U.S. Office Action dated Oct. 9, 2012 cited in U.S. Appl. No. 12/545,099, 21 pgs.
U.S. Final Office Action dated Oct. 9, 2012 cited in U.S. Appl. No. 12/959,731, 19 pgs.
U.S. Office Action dated Oct. 24, 2012 cited in U.S. Appl. No. 12/126,165, 25 pgs.
U.S. Final Office Action dated Mar. 1, 2013 cited in U.S. Appl. No. 13/221,151, 15 pgs.
U.S. Final Office Action dated Mar. 27, 2013 cited in U.S. Appl. No. 12/126,096, 25 pgs.
U.S. Office Action dated Apr. 3, 2013 cited in U.S. Appl. No. 12/959,665, 45 pgs.
U.S. Final Office Action dated Apr. 10, 2013 cited in U.S. Appl. No. 12/959,793, 23 pgs.
U.S. Office Action dated Apr. 11, 2013 cited in U.S. Appl. No. 12/959,731, 22 pgs.
U.S. Final Office Action dated Apr. 11, 2013 cited in U.S. Appl. No. 12/126,025, 28 pgs.
U.S. Final Office Action dated Apr. 25, 2013 cited in U.S. Appl. No. 12/126,165, 26 pgs.
U.S. Final Office Action dated Apr. 30, 2013 cited in U.S. Appl. No. 12/868,801, 13 pgs.
U.S. Final Office Action dated May 3, 2013 cited in U.S. Appl. No. 12/545,099, 20 pgs.
U.S. Office Action dated May 14, 2013 cited in U.S. Appl. No. 12/868,824, 12 pgs.
U.S. Office Action dated Aug. 21, 2013 cited in U.S. Appl. No. 12/126,096, 23 pgs.
U.S. Office Action dated Sep. 9, 2013 cited in U.S. Appl. No. 13/221,151, 16 pgs.
U.S. Office Action dated Jun. 20, 2013 cited in U.S. Appl. No. 12/126,126, 27 pgs.
U.S. Final Office Action dated Aug. 1, 2013 cited in U.S. Appl. No. 12/959,731, 23 pgs.
U.S. Final Office Action dated Aug. 14, 2013 cited in U.S. Appl. No. 12/959,665, 30 pgs.
U.S. Office Action dated Aug. 16, 2013 cited in U.S. Appl. No. 12/868,801, 13 pgs.
U.S. Office Action dated Oct. 4, 2013 cited in U.S. Appl. No. 12/126,165, 28 pgs.
U.S. Office Action dated Oct. 7, 2013 cited in U.S. Appl. No. 12/959,793, 27 pgs.
U.S. Final Office Action dated Oct. 10, 2013 cited in U.S. Appl. No. 12/126,126, 23 pgs.
U.S. Office Action dated Oct. 29, 2013 cited in U.S. Appl. No. 12/126,060, 27 pgs.
U.S. Final Office Action dated Nov. 1, 2013 cited in U.S. Appl. No. 12/868,824, 15 pgs.
U.S. Final Office Action dated Dec. 24, 2013 cited in U.S. Appl. No. 13/221,151, 17 pgs.
U.S. Final Office Action dated Jan. 9, 2014 cited in U.S. Appl. No. 12/126,096, 26 pgs.
U.S. Final Office Action dated Apr. 3, 2014 cited in U.S. Appl. No. 12/126,060, 18 pgs.
U.S. Office Action dated May 20, 2014 cited in U.S. Appl. No. 12/126,096, 19 pgs.
U.S. Office Action dated May 21, 2014 cited in U.S. Appl. No. 13/221,151, 18 pgs.
U.S. Office Action dated Mar. 6, 2014 cited in U.S. Appl. No. 12/959,731, 16 pgs.
U.S. Office Action dated Mar. 21, 2014 cited in U.S. Appl. No. 12/868,824, 12 pgs.
U.S. Office Action dated Aug. 5, 2014 cited in U.S. Appl. No. 12/126,060, 23 pgs.
U.S. Final Office Action dated Aug. 27, 2014 cited in U.S. Appl. No. 12/126,096, 38 pgs.
U.S. Final Office Action dated Sep. 3, 2014 cited in U.S. Appl. No. 13/221,151, 31 pgs.
U.S. Final Office Action dated Sep. 24, 2014 cited in U.S. Appl. No. 12/868,824, 28 pgs.

* cited by examiner

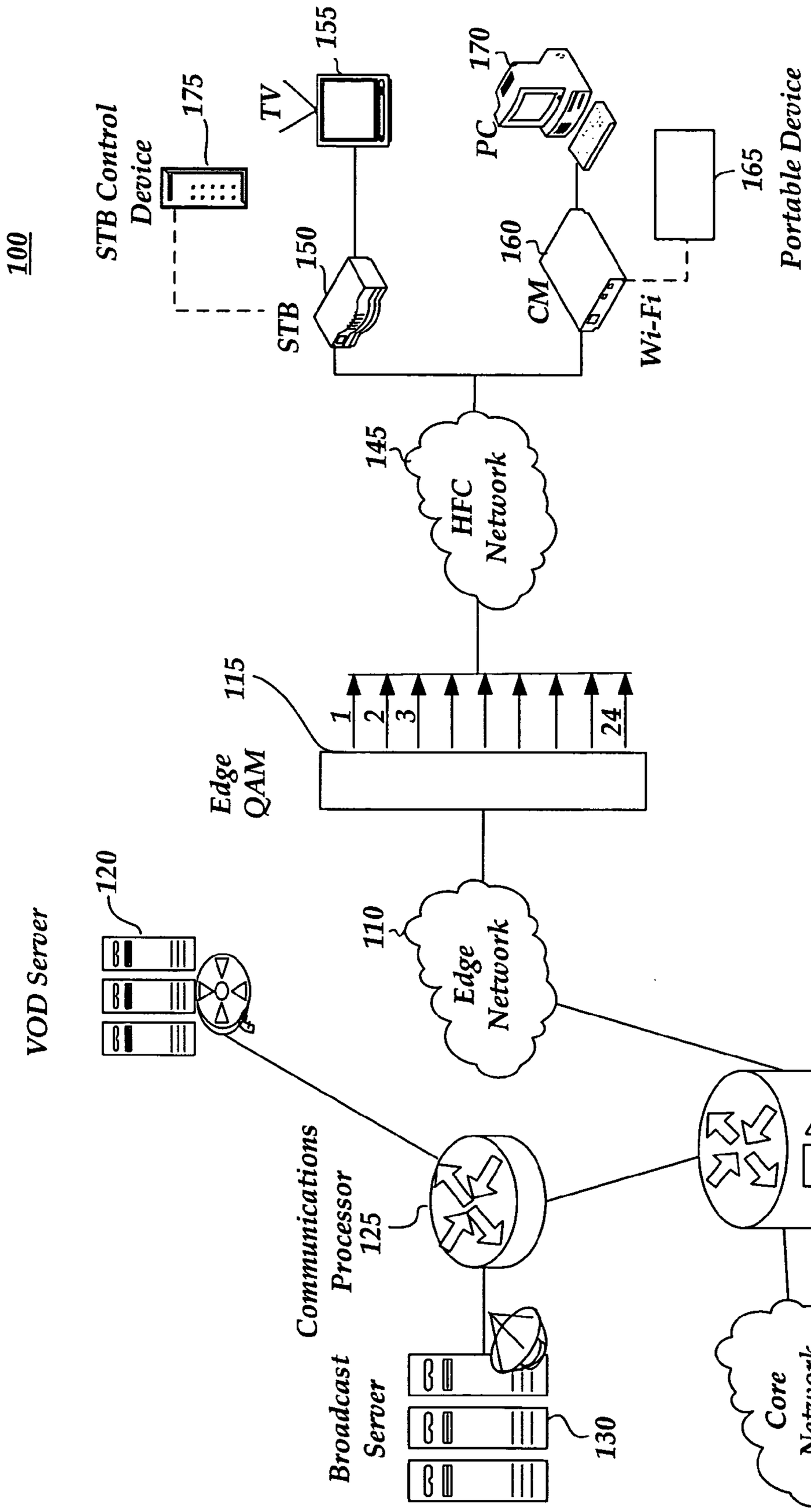

100
STB Control Device
175
TV
155
PC
170
165
Portable Device
160
CM
Wi-Fi
150
STB
145
HFC Network
115
Edge QAM
1
2
3
24
110
Edge Network
120
VOD Server
Communications Processor
125
Broadcast Server
130
135
M-CMTS Core
Core Network
140

Fig. 1

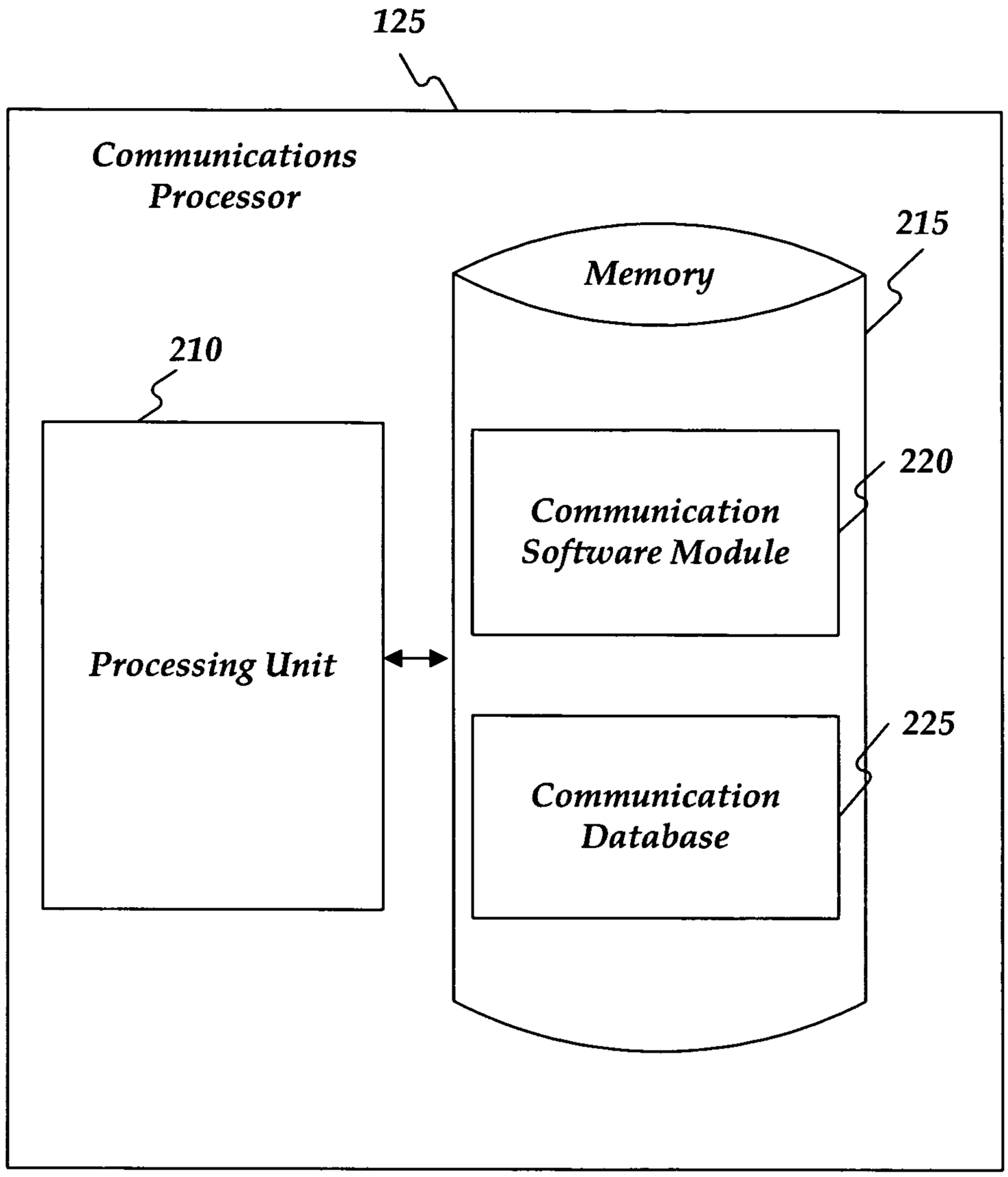

125
Communications Processor
215
Memory
210
220
Communication Software Module
Processing Unit
225
Communication Database

Fig. 2

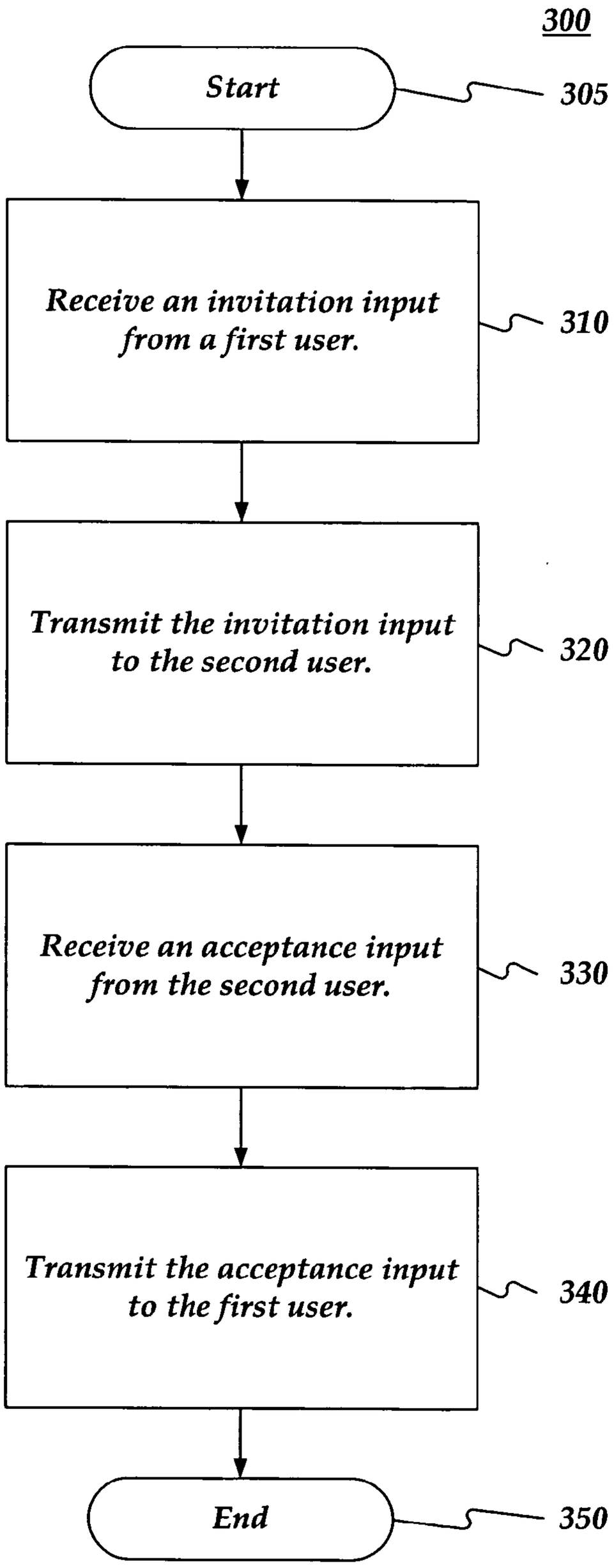

300
Start
305
Receive an invitation input from a first user.
310
Transmit the invitation input to the second user.
320
Receive an acceptance input from the second user.
330
Transmit the acceptance input to the first user.
340
End
350

Fig. 3

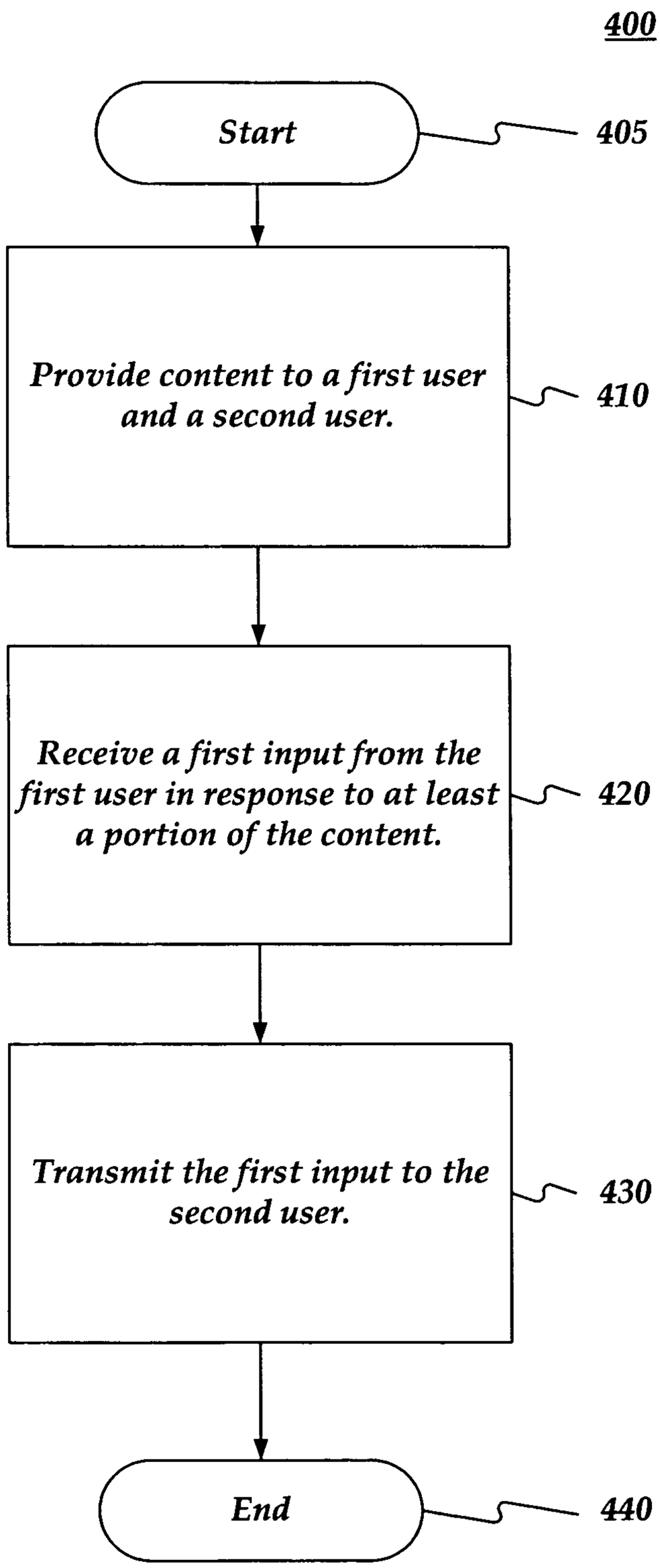

400
Start
405
Provide content to a first user and a second user.
410
Receive a first input from the first user in response to at least a portion of the content.
420
Transmit the first input to the second user.
430
End
440

Fig. 4

PROVIDING USER COMMUNICATION

BACKGROUND

Service providers may deliver content to a user over a content delivery system. For example, conventional content delivery systems distribute the content to a first user and a second user independently. In other words, the first user may watch a sports program while the second user may simultaneously watch a video-on-demand program. Independent content use, however, does not create a socialized entertainment sense with the users. Consequently, the first user may be socially detached and isolated from the second user. Stated another way, the conventional content delivery system may present an impersonal and unsocial user experience.

SUMMARY OF THE INVENTION

Consistent with embodiments of the present invention, systems and methods are disclosed for providing user communication. First an invitation input may be received from a first user. The invitation input may comprise a recommendation to a second user to take an action regarding content to be delivered over a content delivery system. Then, the invitation input may be transmitted to the second user. Next, an acceptance input may be received from the second user. The acceptance input may comprise an acceptance to the invitation input. The acceptance input may then be transmitted to the first user in response to receiving the acceptance input.

Both the foregoing general description and the following detailed description are examples and explanatory only, and should not be considered to restrict the invention's scope, as described and claimed. Further, features and/or variations may be provided in addition to those set forth herein. For example, embodiments of the invention may be directed to various feature combinations and sub-combinations described in the detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute a part of this disclosure, illustrate various embodiments of the present invention. In the drawings:

FIG. **1** is a block diagram of an operating environment including an application server;

FIG. **2** is a block diagram of the communications processor;

FIG. **3** is a flow chart of a method for providing user communication; and

FIG. **4** is a flow chart of another method for providing user communication.

DETAILED DESCRIPTION

The following detailed description refers to the accompanying drawings. Wherever possible, the same reference numbers are used in the drawings and the following description to refer to the same or similar elements. While embodiments of the invention may be described, modifications, adaptations, and other implementations are possible. For example, substitutions, additions, or modifications may be made to the elements illustrated in the drawings, and the methods described herein may be modified by substituting, reordering, or adding stages to the disclosed methods. Accordingly, the following detailed description does not limit the invention. Instead, the proper scope of the invention is defined by the appended claims.

Service providers may deliver content to users over a content delivery system independently. For example, a first user may receive a sports program from the content delivery system while a second user may simultaneously receive a video-on-demand program from the content delivery system. Independent content use by the users, however, does not create a socialized entertainment experience. Consistent with embodiments of the invention, an invitation input may be received from the first user. The invitation input may comprise a recommendation to the second user to take an action regarding content to be delivered over the content delivery system. Then, the invitation input may be transmitted to the second user. Next, an acceptance input may be received from the second user. The acceptance input may comprise an acceptance to the invitation input. The acceptance input may then be transmitted to the first user in response to receiving the acceptance input. Consequently, the first user may be socially engaged with the second user providing a personalized experience for both the first and second users.

FIG. **1** is a block diagram of a content delivery system **100**. Consistent with embodiments of the present invention, system **100** may comprise an edge network **110**, an edge quadrature amplitude modulation (QAM) device **115**, a video-on-demand (VOD) server **120**, a communications processor **125**, a broadcast server **130**, a modular cable modem termination system (M-CMTS) core **135**, and a core network **140**. In addition, system **100** may comprise, a hybrid fiber-coax (HFC) network **145**, a set-top-box (STB) **150**, a television (TV) **155**, a cable modem (CM) **160**, a portable device **165**, a personal computer (PC) **170**, and a STB control device **175**. Communications processor **125** will be discussed in greater detail below with respect to FIG. **2**.

Edge network **110** may comprise, a network providing, for example, full-duplex, two-way broadband services including broadband video and audio, cable television services, or telecommunications services. Edge network **110** may provide data by utilizing network data formats including, for example, i) Internet protocol (IP); ii) Ethernet; iii) digital subscriber line (DSL); iv) asynchronous transfer mode (ATM); and v) virtual private network (VPN). Edge network **110** may utilize managed network services. Edge network **110** may comprise various components including, for example, i) servers; ii) switches; iii) routers; iv) gateways; v) hubs; vi) fiber optic cable; vii) copper cable; and viii) terminations. The aforementioned are examples and edge network **110** may comprise other configurations for broadband service delivery and data switching over system **100**.

Edge QAM **115** may provide modulation for various encoding formats (e.g. for data, audio, and video) and may distribute the signal down multiple broadband channels. Edge QAM **115** may modulate signals in, for example, multi-channel quadrature amplitude modulation. Edge QAM **115** may support broadcast and narrowcast with multi-program transport stream (MPTS) pass-through and single-program transport stream (SPTS) to MPTS multiplexing. Edge QAM **115** may meet data-over-cable service interface specification (DOCSIS) and downstream radio frequency interface (DRFI) performance specifications. Furthermore, edge QAM **115** may provide video over internet protocol and moving pictures expert group (MPEG) video simultaneously. Edge QAM **115** may provide various data switching functions and enable two-way, full-duplex communication within the broadband network. Edge QAM **115** may modulate and distribute broadcast multimedia services including, for example, i) a broadcast multi-media service; ii) a high-definition multimedia service; iii) a digital television multimedia service; iv) an analog multimedia service; v) a VOD service; vi) a streaming

video service; vii) a multimedia messaging service; viii) a voice-over-internet protocol service (VoIP); ix) an interactive multimedia service; and x) an e-mail service. The aforementioned are examples and edge QAM **115** may comprise other configurations for different broadband and data services.

VOD server **120** may perform processes for providing video entertainment on demand. VOD server **120** may take MPEG compressed video off a hard disk or a networked service, format it into MPEG-TS packets inside a user datagram protocol (UDP) packet, and send it into edge network **110**. Edge QAM **115** may receive the UDP packets, where Internet protocol (IP) encapsulation may be removed. The MPEG packets may be forwarded down one QAM channel on edge QAM **115** and onto HFC network **145**.

Broadcast server **130** may perform processes for providing broadcast services. Broadcast server **130** may use a broadcast signal and a narrowcast signal to deliver broadcast services to a broadcast system. Broadcast server **130** may receive video, audio, and data from fiber optic input, wireless input, recorded tape, recorded digital video disc, or satellite input. Broadcast server **130** may utilize digital signal formats and analog signal formats. Furthermore, broadcast server **130** may comprise a specialized receiver and data switching equipment for broadband distribution. In addition, broadcast server **130** may provide broadband multimedia services including, for example, i) the broadcast multi-media service; ii) the high-definition multimedia service; iii) the digital television multimedia service; iv) the analog multimedia service; v) the VOD service; vi) the streaming video service; vii) the multimedia messaging service; viii) the voice-over-internet protocol service (VoIP); ix) the interactive multimedia service; and x) the e-mail service. The aforementioned are examples and broadcast server **130** may comprise other components and systems for providing broadcast services in system **100**.

M-CMTS core **135** may receive IP datagrams from core network **140**. M-CMTS core **135** may then forward these IP datagrams to either a single QAM channel within edge QAM **115** with traditional DOCSIS encapsulation, or may forward the IP datagrams to multiple QAM channels within edge QAM **115**, for example, using DOCSIS bonding. M-CMTS core **135** may support DOCSIS features and end-to-end IP within a next generation network architecture (NGNA), for example.

Core network **140** may comprise any data or broadband network that may provide data and services to edge network **110**, communications processor **125**, broadcast server **130**, or M-CMTS core **135**. For example, core network **140** may comprise the Internet. In addition, core network **140** may comprise various components including, for example, i) servers; ii) switches; iii) routers; iv) gateways; v) hubs; vi) fiber optic cable; vii) copper cable; and viii) terminations. The aforementioned are examples and core network **140** may comprise other components and may supply other services using various other formats.

HFC network **145** may comprise a communications network (e.g. a cable TV network) that uses optical fiber, coaxial cable, or an optical fiber coaxial cable combination. Fiber in HFC network **120** may provide a high-speed backbone for broadband services. Coaxial cable may connect end users in HFC network **120** to the backbone. Such networks may use, for example, matching DOCSIS cable modems at a head end and at an end user's premises. Such a configuration may provide bi-directional paths and Internet access.

STB **150** may comprise a single component or a multi-component system for receiving broadband services. STB **150** may comprise a service consumer system combining several components including, for example, a set top box, cable modem **160**, a network interface unit, a residential gateway, a terminal unit, a scrambler/descrambler, a digital storage media unit, an input/output port, a display device, a keyboard, and a mouse. STB **150** may encode and decode digital and analog signals, and provide interface capability for other components. STB **150** may utilize various operating systems and other software components. The end user's premises may contain STB **150**. STB **150** may include all the functionality provided by a cable modem, such as CM **160**, in one component and attach to TV **155**, for example.

TV **155** may comprise an end use device for displaying delivered broadband services. TV **155** may comprise, for example, a television, a high definition television, a liquid crystal display unit (LCD), a video projection unit, or PC **170**. The aforementioned are examples and TV **155** may comprise other display devices for delivered broadband services.

CM **160** may comprise, for example, a cable modem, a network server, a wireless fidelity data switch, or an Ethernet switch. CM **160** may provide data services to the user by accessing DOCSIS services from system **100**. CM **160** may provide Internet access, video, or telephone services. The aforementioned are examples and CM **160** may comprise other data delivery devices.

Portable device **165** or PC **170** may comprise any personal computer, network switch, wireless switch, network hub, server, personal digital assistant, and home computing device. Portable device **165** or PC **170** may serve as user devices for data access from system **100**. Portable device **165** and PC **170** may transmit and receive data and services from system **100**.

STB control device **175** may comprise any input and output device for interfacing with STB **150**. For example, STB control device **175** may be a remote control for using STB **150**. STB control device **175**, after proper programming, may interface with STB **150**.

Embodiments consistent with the invention may comprise a system for providing user communication. The system may comprise a memory storage and a processing unit coupled to the memory storage. The processing unit may be operative to receive an invitation input from a first user. The invitation input may comprise a recommendation to a second user to take an action regarding delivered content, delivered over a content delivery system. Furthermore, the processing unit may be operative to transmit the invitation input to the second user.

Consistent with embodiments of the present invention, the aforementioned memory, processing unit, and other components may be implemented in a content delivery system, such as system **100** of FIG. **1**. Any suitable combination of hardware, software, and/or firmware may be used to implement the memory, processing unit, or other components. By way of example, the memory, processing unit, or other components may be implemented with communications processor **125**, in combination with system **100**. The aforementioned system and processors are examples and other systems and processors may comprise the aforementioned memory, processing unit, or other components, consistent with embodiments of the present invention.

FIG. **2** shows communications processor **125** of FIG. **1** in more detail. As shown in FIG. **2**, communications processor **125** may include a processing unit **210** and a memory unit **215**. Memory **215** may include a communication software module **220** and a communication database **225**. While executing on processing unit **210**, communication software module **220** may perform processes for providing user communication, including, for example, one or more stages

included in method **300** or method **400** described below with respect to FIG. **3** and FIG. **4**. Furthermore, any communication software module **220** and communication database **225** may be executed on or reside in any element shown in FIG. **1**.

Communications processor **125** ("the processor") may be implemented using a personal computer, a network computer, a mainframe, or other similar microcomputer-based workstation. The processor may comprise any computer operating environment, such as hand-held devices, multiprocessor systems, microprocessor-based or programmable sender electronic devices, minicomputers, mainframe computers, and the like. The processor may also be practiced in distributed computing environments where tasks are performed by remote processing devices. Furthermore, the processor may comprise a mobile terminal, such as a smart phone, a cellular telephone, a cellular telephone utilizing wireless application protocol (WAP), personal digital assistant (PDA), intelligent pager, portable computer, a hand held computer, a conventional telephone, a wireless fidelity (Wi-Fi) access point, or a facsimile machine. The aforementioned systems and devices are examples and the processor may comprise other systems or devices.

FIG. **3** is a flowchart setting forth the general stages involved in a method **300** consistent with an embodiment of the invention for providing user communication. Method **300** may be implemented using communications processor **125**, as described above with respect to FIG. **2**. Ways to implement the stages of method **300** will be described in greater detail below. Method **300** may begin at starting block **305** and proceed to stage **310** where communications processor **125** may receive an invitation input from a first user. The invitation input may comprise a recommendation to a second user to take an action regarding content to be delivered over content delivery system **100**. For example, the invitation input may be created by the first user using a first user device. The first user device may comprise STB **150**, CM **160**, portable device **165**, PC **170**, or STB control device **175**. When creating the invitation input, the first user may include, for example, an address identifying the second user. For example, the invitation input may include a second user's username, a second user's control device identification, a second user's account number, or a second user's e-mail address. The aforementioned are examples and the address identifying the second user may comprise other information and the first user device may comprise other elements.

Furthermore, as stated above, the invitation input may comprise the recommendation to the second user to take the action regarding the content to be delivered over a content delivery system **100**. For example, the first user may include a recommendation to the second user to view a program. In addition, the recommendation may comprise a recommendation to jump to the program, a recommendation to record the program, or a reminder regarding the program. The first user may also include an attachment with the invitation input. The attachment may contain, for example, a portion of the content, a text message, a user content rating, related program information, a pointer to a specific location within content stored or to be stored at a memory location in VOD server **120**, set-top **150**, television **155**, cable modem **160**, personal computer **170**, or portable device **165**, or a computer file. Moreover, the invitation input may comprise instructions for handling the message including, for example, a date to send the invitation input or a time to send the invitation input.

From stage **310**, where communications processor **125** receives the invitation input from the first user, method **300** may advance to stage **320** where communications processor **125** may transmit the invitation input to the second user. For example, communications processor **125** may parse the invitation input for the address for the second user or may obtain the address for the second user in any manner. Once communications processor **125** has the address for the second user, communications processor **125** may transmit the invitation input to the second user through system **100**. Communications processor **125** may store the invitation input for later retrieval. Furthermore, communications processor **125** may redirect the invitation input to another system, for example, an Ethernet data system or the Internet.

Communications processor **125** may transmit the invitation input to the second user device. For example, the address for the second user may correspond to the second user device, a memory location in the second user device, or a file storage folder within the second user device. The second user device may comprise STB **150**, CM **160**, portable device **165**, PC **170**, or STB control device **175**. Communications processor **125** may perform processing on the invitation input, including aggregating with other invitation inputs, system data, and data from other system users. The invitation input may be viewed on the second user device by the second user. The second user may choose to ignore the invitation input, may delay responding to the invitation input, or may immediately respond to the invitation input.

From stage **320**, where communications processor **125** transmits the invitation input to the second user, method **300** may advance to stage **330** where communications processor **125** may receive an acceptance input from the second user. For example, in response to receiving the invitation input, the second user may consider the invitation input and enter the acceptance input into the second user device. The acceptance input may be in response to the invitation input. For example, the second user may respond to the invitation input by rejecting the invitation input, postponing the invitation input, storing the invitation input for later retrieval, or sending a different content recommendation to the first user. The acceptance input may be transmitted from the second user device through system **100** or any other system. The acceptance input from the second user may not necessarily be a function of system **100**. System **100** may be built so that the second user may receive the invitation input and take autonomous action on any recommendation or other element attached to the invitation input without notification being given to the first user.

From stage **330**, where communications processor **125** receives the acceptance input from the second user, method **300** may advance to stage **340** where communications processor **125** may transmit the acceptance input to the first user. For example, communications processor **125** may transmit the acceptance input to the first user through system **100** or any other system. The first user may receive the acceptance input on the first user device. For example, the first user may receive the acceptance input on the first user device while viewing content on the first user device. In response to the acceptance input, the first user may have the option, for example, to accept a different content recommendation, reject a different content recommendation, or join in a shared viewing session with the second user.

FIG. **4** is a flowchart setting forth the general stages involved in a method **400** consistent with embodiments of the invention for providing user communication. Method **400** may be implemented using communications processor **125**, as described above in more detail with respect to FIG. **2**. Ways to implement method **400**'s stages will be described in greater detail below. Method **400** may begin at starting block **405** and proceed to stage **410** where system **100** may provide content to a first user and a second user. The first user and the second user may receive and view the content on, for example, STB

150, CM 160, portable device 165, PC 170, or STB control device 175. The first user and the second user may view the same content substantially simultaneously and remotely.

From stage 410, where system 100 provides content to the first user and the second user, method 400 may advance to stage 420 where communications processor 125 may receive (e.g. over system 100) a first input from the first user in response to at least a portion of the content. The first input may be selected from an input set. The first user may define the input set using a portion of a plurality of selectable elements. Furthermore, the first input may include, for example, a login name, password and a username. The first user may assign a key from, for example, the keys on the first user device (e.g. STB control device 175) to elements within the input set. This may allow the first user to select from the input set. The input set may include, for example, a personal expression. The personal expression may be an alphanumeric input entered using keys from the first user device. The keys may have multiple alphanumeric meanings. Furthermore, the input set may include emotional icons, alphanumeric shorthand text, avatars, sound bites, video clips, or text words. In addition, the first user may input new text words for the first user's input set. The first user or communications processor 125 may input the username in as an element of the input set. The first user may transmit the first input by selecting the appropriately assigned key from STB control device 175.

Furthermore, the first input may comprise an invitation input to the second user for the second user to interact contemporaneously with the first user regarding at least a portion of the content. The invitation input may include an address of the second user. The address may comprise a username of the second user, a service location of the second user, a system identification of the second user, an e-mail address of the second user, or an account number of the second user. Furthermore, the invitation input may include a request to allow the first user to add the second user to the first user's input set. In addition, the invitation input may include a content recommendation, a content tuning instruction, a selected portion of the content, a pointer to a specific location within content stored or to be stored at a memory location in VOD server 120, set-top 150, television 155, cable modem 160, personal computer 170, or portable device 165, a computer file, a message to the second user, or a content recording instruction.

For example, the first user, after selecting the first user's username to enter the system, may enter the second user's account number to send the invitation input to the second user. Furthermore, the first user may select a content recommendation selection. The invitation input may be transmitted over system 100 to communications processor 125. Communications processor 125 may direct the invitation input to the second user.

From stage 420, where communications processor 125 receives the first input from the first user, method 400 may advance to stage 430 where communications processor 125 may transmit the first input to the second user. For example, the first input may be transmitted to the second user device over system 100 or any other system. Furthermore, communications processor 125 may store the first input for later transmission if, for example, the second user is not available or has temporarily blocked transmission of the first input. For example, if the second user has a block future input selection selected, communications processor 125 may store the first input and try to transmit later.

The second user may receive the first input where the first input may include the invitation input. The second user may receive the invitation input while viewing content different from the first user's viewed content. The invitation input may display on TV 155, for example, or any other device. The second user may accept the invitation input, deny the invitation input, send an instruction to ignore the invitation input, send the instruction to block future invitation input from the first user, store the invitation input for later retrieval, or send a text message to the first user regarding the invitation input. The second user may use the second user device to respond to the invitation input. For example, while watching a football game, the second user may receive, for example, the invitation input with a request to watch a movie from the first user. The second user may then accept the invitation by pressing a button on STB control device 175. By accepting the invitation, the second user's content may change to the content recommendation sent by the first user.

Upon accepting the invitation input, the second user may transmit an acceptance input to the first user. The acceptance input may include information about the second user's selections regarding the invitation input. The acceptance input may include input from the second user's input set. For example, after accepting the invitation, STB 150 of the second user may transmit an acceptance input. The acceptance input may include a confirmation that the second user's content matches the first user's content. In addition, the second user may select to include a text message and a representative avatar from the second user's input set as an attachment.

The first user may receive the acceptance input, the attached confirmation, and the text message. The first user may select a representative avatar from the first user's input set and transmit the selection to the second user. Once communications processor 125 transmits the first input to the second user in stage 430, method 400 may then end at stage 440.

Embodiments of the invention, for example, may be implemented as a computer process (method), a computing system, or as an article of manufacture, such as a computer program product or computer readable media. The computer program product may be a computer storage media readable by a computer system and encoding a computer program of instructions for executing a computer process. The computer program product may also be a propagated signal on a carrier readable by a computing system and encoding a computer program of instructions for executing a computer process. Accordingly, the present invention may be embodied in hardware and/or in software (including firmware, resident software, micro-code, etc.). In other words, embodiments of the present invention may take the form of a computer program product on a computer-usable or computer-readable storage medium having computer-usable or computer-readable program code embodied in the medium for use by or in connection with an instruction execution system. A computer-usable or computer-readable medium may be any medium that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

The computer-usable or computer-readable medium may be, for example but not limited to, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, device, or propagation medium. More specific computer-readable medium examples (a non-exhaustive list), the computer-readable medium may include the following: an electrical connection having one or more wires, a portable computer diskette, a random access memory (RAM), a read-only memory (ROM), an erasable programmable read-only memory (EPROM or Flash memory), an optical fiber, and a portable compact disc read-only memory (CD-ROM). Note that the computer-usable or computer-readable medium could even be paper or another suitable medium upon which

the program is printed, as the program can be electronically captured, via, for instance, optical scanning of the paper or other medium, then compiled, interpreted, or otherwise processed in a suitable manner, if necessary, and then stored in a computer memory.

Embodiments of the present invention, for example, are described above with reference to block diagrams and/or operational illustrations of methods, systems, and computer program products according to embodiments of the invention. The functions/acts noted in the blocks may occur out of the order as shown in any flowchart. For example, two blocks shown in succession may in fact be executed substantially concurrently or the blocks may sometimes be executed in the reverse order, depending upon the functionality/acts involved.

While certain embodiments of the invention have been described, other embodiments may exist. Furthermore, although embodiments of the present invention have been described as being associated with data stored in memory and other storage mediums, data can also be stored on or read from other types of computer-readable media, such as secondary storage devices, like hard disks, floppy disks, or a CD-ROM, a carrier wave from the Internet, or other forms of RAM or ROM. Further, the disclosed methods' stages may be modified in any manner, including by reordering stages and/or inserting or deleting stages, without departing from the invention.

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While the specification includes examples, the invention's scope is indicated by the following claims. Furthermore, while the specification has been described in language specific to structural features and/or methodological acts, the claims are not limited to the features or acts described above. Rather, the specific features and acts described above are disclosed as example for embodiments of the invention.

What is claimed is:

1. A method for providing user communication, the method comprising:

receiving, at a communication processor, in response to a selection of a key on a remote control device associated with the first user, one of a set of commands for transmitting an invitation input from the first user to a second user, wherein the set of commands is defined by the first user using a portion of a plurality of selectable elements, wherein each of the set of commands is assigned an unique key on the remote control device, wherein the invitation input comprising a recommendation to a second user to take an action regarding content being provided to the first user, the recommendation comprising an attachment having a portion of the content and a pointer to a specific location within the content, wherein the invitation input further comprising instructions for the communication processor for processing the invitation input, the instructions comprising an address and a date and a time to deliver the invitation input to the second user;

processing, by the communication processor, the invitation input, wherein processing the invitation input comprises:

storing the invitation input for later retrieval, at the communication processor, based on the date and time to deliver the invitation input, and

determining a status of the second user, wherein determining the status comprises determining whether the second user is available to receive the invitation input; wherein determining whether the second user is available to receive the invitation input comprises determining whether the second user has blocked the first user, and storing the invitation input, in response to the second user blocking the first user, for later retrieval; and

transmitting the invitation input to the second user based on the determined status.

2. The method of claim **1**, wherein receiving the invitation input comprises receiving the invitation input over a content delivery system.

3. The method of claim **1**, wherein receiving the invitation input comprises receiving the invitation input from a first user device comprising one of the following: a network interface unit, a residential gateway, a set-top box, a terminal unit, a scrambler/descrambler, a digital storage media unit, a control device, a television, an LCD screen, a cable modem, a computer, and a projection unit.

4. The method of claim **1**, wherein receiving the invitation input from the first user, the invitation input comprising the recommendation, comprises receiving the invitation input from the first user, the invitation input comprising the recommendation comprising at least one of the following: a recommendation to view a program, a recommendation to jump to the program, a recommendation to record the program, and a reminder regarding the program.

5. The method of claim **1**, wherein receiving the invitation input from the first user, the invitation input comprising the recommendation to the second user to take the action regarding the content to be delivered, comprises receiving the invitation input from the first user, the invitation input comprising the recommendation to the second user to take the action regarding the content to be delivered over a content delivery system comprising one of the following: a full-duplex, two-way broadband network, a hybrid fiber-coax (HFC) network, a data network, the internet, cable television network, and a telecommunications network.

6. The method of claim **1**, wherein receiving the invitation input from the first user, the invitation input comprising the recommendation to the second user to take the action regarding the content to be delivered, comprises receiving the invitation input from the first user, the invitation input comprising the recommendation to the second user to take the action regarding the content comprising one of the following: a broadcast multimedia service, a high-definition multimedia service, a digital television multimedia service, an analog multimedia service, a Video-on-Demand service, a streaming video, a multimedia messaging service, a voice over IP service, an interactive multimedia service, and an e-mail service.

7. The method of claim **1**, wherein transmitting the invitation input comprises transmitting the invitation input over a content delivery system.

8. The method of claim **1**, wherein transmitting the invitation input comprises transmitting the invitation input from a second user device.

9. The method of claim **1**, wherein transmitting the invitation input comprises transmitting the invitation input to a second user device comprising one of the following: a network interface unit, a residential gateway, a set-top box, a terminal unit, a scrambler/descrambler, a digital storage media unit, a control device, a television, an LCD screen, a cable modem, a computer, and a projection unit.

10. The method of claim **1**, wherein transmitting the invitation input comprises transmitting the invitation input to a

second user device configured to store the invitation input in a database associated with the second user.

11. The method of claim **1**, further comprising:

receiving an acceptance input from the second user, the acceptance input comprising an acceptance to the invitation input; and

transmitting the acceptance input to the first user in response to receiving the acceptance input.

12. The method of claim **1**, wherein determining whether the second user is available to receive the invitation input comprises determining whether the second user is not available to accept the invitation input, and wherein transmitting the invitation input comprises transmitting the invitation input, in response to the second user not being available, to an alternate address associated with the second user.

13. A method for providing user communication, the method comprising:

providing content to a first user and a second user;

receiving a first input from the first user, the first input being selected by the first user from a button on a remote control, the button on the remote control being configured to trigger one of a set of commands for transmitting an invitation input to a second user, the set of commands being predefined by the first user using a portion of a plurality of selectable elements, the set of commands associated with communicating information regarding the content being provided to the first user at a time the first input is received from the first user, wherein each one of the set of commands is assigned an unique key on the remote control device, wherein receiving the invitation input from the first user comprises receiving an attachment with the invitation input, and wherein the attachment comprises a portion of the content and a pointer to a specific location within the content, wherein the invitation input further comprising instructions for a communication processor for handling the invitation input, the instructions comprising an address for the second user, and a date and a time to deliver the invitation input to the second user;

processing, by the communication processor, the invitation input, wherein processing the invitation input comprises:

storing the invitation input for later retrieval, at the communication processor, based on the date and time to deliver the invitation input, and determining a status of the second user, wherein determining the status comprises determining whether the second user is available to receive the invitation input; wherein determining whether the second user is available to receive the invitation input comprises determining whether the second user has blocked the first user, and storing the invitation input, in response to the second user blocking the first user, for later retrieval; and

requesting permission from the second user to add the second user to the first user's input set.

14. The method of claim **13**, further comprising:

receiving the invitation input from the first user, the invitation input comprising an invitation from the first user to the second user for the second user to interact contemporaneously with the first user in response to at least the portion of the content;

transmitting the invitation input to the second user;

receiving an acceptance input from the second user, the acceptance input comprising an acceptance to the invitation; and

transmitting the acceptance input to the first user in response to receiving the acceptance input.

15. The method of claim **14**, wherein receiving the invitation input from the first user, the invitation input comprising the invitation, further comprises receiving the invitation input from the first user wherein the invitation comprises at least one of the following: a username of the second user, a service location of the second user, a system identification of the second user, an e-mail address of the second user, and an account number of the second user.

16. The method of claim **14**, wherein receiving the invitation input from the first user further comprises receiving the invitation input comprising at least one of the following: a request to the second user for the second user to be added to the first user's input set, a content recommendation, a content tuning instruction, a message, and a content recording instruction.

17. The method of claim **13**, wherein receiving the first input comprises receiving the first input wherein at least one of the plurality of selectable elements corresponds to a personal expression.

18. The method of claim **13**, wherein receiving the first input comprises receiving the first input wherein the at least one of the plurality of selectable elements comprises at least one of the following: an emotional icon, an alphanumeric shorthand text, and an avatar.

19. A system for providing user communication, the system comprising:

a memory storage; and

a processing unit coupled to the memory storage, wherein the processing unit is operative to:

provide content to a first user;

receive an input from the first user, the input being associated with a button on a remote control, the button being configured to activate one of a plurality of input commands for transmitting an invitation input to a second user, the plurality of input commands defined by the first user using a portion of a plurality of selectable elements, the plurality of input commands being associated with transmitting information associated with the content provided to the first user at a time the input from the first user is received, wherein each of the plurality of input commands is assigned an unique key on the remote control device;

activate, in response to receiving the first input, an input set associated with transmitting the invitation input from the first user to a second user defined by the input set, the input set comprising an input of a username, a password, a message, and at least one recipient, the invitation input comprising a recommendation to a second user to take an action regarding the content to be delivered over a content delivery system, the recommendation comprising an attachment having a portion of the content and a pointer to a specific location within the content;

process the invitation input, wherein processing the invitation input comprises:

storing the invitation input for later retrieval, at the communication unit, based on the date and time to deliver the invitation input, and

determining a status of the second user, wherein determining the status comprises determining whether the second user is available to receive the invitation input; wherein determining whether the second user is available to receive the invitation input comprises determining whether the second user has blocked the first user, and storing the invitation input, in response to the second user blocking the first user, for later retrieval;

attach the content to be delivered to the invitation input; and

transmit a request for permission from the second user to add the second user as contact of the first user's input set.

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