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Christensen et al.

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(54) **SYSTEMS, METHODS, AND DEVICES FOR SCANNING BROADCASTS**
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CPC **H04H 60/37** (2013.01); **H04N 21/84** (2013.01); **H04N 21/278** (2013.01); **H04H 20/22** (2013.01); **H04N 21/235** (2013.01); **H04N 21/26603** (2013.01); **H04N 21/4345** (2013.01); **H04H 20/14** (2013.01); **H04N 7/16** (2013.01); **H04H 20/24** (2013.01); **H04N**

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USPC **725/61**
(58) **Field of Classification Search**
CPC H04N 21/4722
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See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
4,926,255 A 5/1990 Von Kohorn
5,134,719 A 7/1992 Mankovitz
(Continued)

FOREIGN PATENT DOCUMENTS

CA 2 316 925 7/1999
DE 44 27 046 2/1996
(Continued)

OTHER PUBLICATIONS

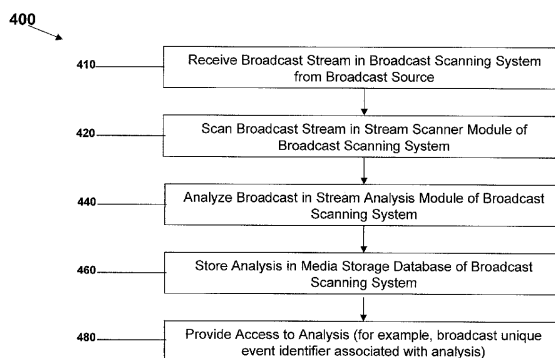
U.S. Appl. No. 10/806,084, filed Mar. 22, 2004, Christensen et al.

(Continued)

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(57) **ABSTRACT**
The various embodiments disclosed herein provide methods, systems, and devices for capturing broadcast streams, analyzing the broadcast streams to obtain information about the media content transmitted in the broadcast streams, obtaining additional information about the media content if available, and assigning a unique event identifier specific to the instance of broadcast of the broadcast stream and/or media segment transmitted in the broadcast stream. In other embodiments, the unique event identifier is broadcasted to broadcast receiving devices. With the unique event identifier, broadcast receiving devices can access the obtained information associated with the media content.

2 Claims, 12 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,303,393 A 4/1994 Noreen et al.
 5,438,355 A 8/1995 Palmer
 5,444,769 A 8/1995 Koen et al.
 5,539,635 A 7/1996 Larson, Jr.
 5,548,828 A 8/1996 Kozaki et al.
 5,557,541 A 9/1996 Schulhof et al.
 5,579,537 A 11/1996 Takahisa
 5,661,787 A 8/1997 Pocock
 5,708,478 A 1/1998 Tognazzini
 5,752,159 A 5/1998 Faust et al.
 5,857,156 A 1/1999 Anderson
 5,872,589 A 2/1999 Morales
 5,905,865 A 5/1999 Palmer et al.
 5,907,793 A 5/1999 Reams
 5,991,601 A 11/1999 Anderson
 5,991,737 A 11/1999 Chen
 6,035,177 A * 3/2000 Moses et al. 725/22
 6,036,086 A 3/2000 Sizer, II et al.
 6,098,106 A 8/2000 Philyaw et al.
 6,202,210 B1 3/2001 Ludtke
 6,286,140 B1 9/2001 Ivanyi
 6,446,262 B1 9/2002 Malaure et al.
 6,463,469 B1 10/2002 Yavitz
 6,473,792 B1 10/2002 Yavitz et al.
 6,507,727 B1 1/2003 Henrick
 6,578,047 B1 6/2003 Deguchi
 6,611,201 B1 8/2003 Bishop et al.
 6,658,232 B1 12/2003 Johnson
 6,725,022 B1 4/2004 Clayton et al.
 6,829,486 B2 12/2004 McKenna et al.
 6,888,457 B2 5/2005 Wilkinson et al.
 6,928,423 B1 8/2005 Yamanaka
 6,941,154 B1 9/2005 Ritter
 6,957,041 B2 10/2005 Christensen et al.
 6,987,734 B2 1/2006 Hundemer
 6,990,312 B1 1/2006 Giosecia et al.
 7,054,653 B2 5/2006 Järvi et al.
 7,088,950 B2 8/2006 Tassberg et al.
 7,110,714 B1 9/2006 Kay et al.
 7,149,541 B2 12/2006 Rautila
 7,158,753 B2 1/2007 Kagan et al.
 7,190,971 B1 3/2007 Kawamoto
 7,194,235 B2 3/2007 Nykanen et al.
 7,260,842 B2 8/2007 Hirayama
 7,266,343 B1 9/2007 Yli-juuti et al.
 7,299,194 B1 11/2007 Manganaris et al.
 7,313,359 B2 12/2007 Steelberg et al.
 7,313,360 B2 12/2007 Steelberg et al.
 7,415,430 B2 8/2008 Christensen et al.
 7,415,526 B2 * 8/2008 Hirayama 709/231
 7,500,256 B1 3/2009 Ohmae et al.
 7,647,609 B2 1/2010 Wachtfogel et al.
 7,773,939 B2 8/2010 Christensen et al.
 2001/0031013 A1 10/2001 Stetzler et al.
 2002/0026474 A1 2/2002 Wang et al.
 2002/0046407 A1 4/2002 Franco
 2002/0133824 A1 9/2002 Mensch
 2002/0178441 A1 11/2002 Hashimoto
 2003/0077065 A1 * 4/2003 Scholten et al. 386/46
 2003/0086694 A1 5/2003 Davidsson
 2003/0097338 A1 5/2003 Mankovich et al.

2003/0200543 A1 10/2003 Burns
 2004/0205810 A1 10/2004 Matheny et al.
 2004/0260682 A1 * 12/2004 Herley et al. 707/3
 2005/0020223 A1 * 1/2005 Ellis et al. 455/186.1
 2005/0021744 A1 1/2005 Haituka
 2005/0287972 A1 * 12/2005 Christensen et al. 455/186.1
 2006/0174261 A1 8/2006 Cline, Jr. et al.
 2006/0184960 A1 8/2006 Horton et al.
 2007/0155311 A1 7/2007 Christensen et al.
 2007/0198353 A1 8/2007 Behringer et al.
 2007/0226146 A1 9/2007 Ruul
 2008/0049704 A1 2/2008 Witteman et al.
 2009/0104870 A1 4/2009 Christensen et al.
 2009/0104872 A1 4/2009 Christensen et al.
 2009/0177736 A1 7/2009 Christensen et al.
 2009/0183208 A1 7/2009 Christensen et al.
 2009/0204640 A1 8/2009 Christensen et al.

FOREIGN PATENT DOCUMENTS

DE 196 27 308 1/1998
 EP 0713335 5/1996
 EP 2250749 11/2010
 JP 08-139624 5/1996
 JP 10-135855 5/1998
 JP 2000292182 10/2000
 KR 10-1996-0033096 9/1996
 KR 10-1998-0078248 11/1998
 WO WO 90/00847 1/1990
 WO WO 92/14222 8/1992
 WO WO 94/02909 2/1994
 WO WO 97/21291 6/1997
 WO WO 97/42724 11/1997
 WO WO 97/45814 12/1997
 WO WO 99/18518 4/1999
 WO WO 99/35771 7/1999
 WO WO 99/35809 7/1999
 WO WO 99/43109 8/1999
 WO WO 00/19662 4/2000
 WO WO 00/78050 12/2000
 WO WO 01/01331 1/2001
 WO WO 01/57759 8/2001
 WO WO 01/77779 10/2001
 WO WO 02/23773 3/2002
 WO WO 2006/122028 11/2006
 WO WO 2008/002000 1/2008

OTHER PUBLICATIONS

U.S. Appl. No. 12/897,509, filed Oct. 4, 2010, Christensen et al.
 "Bookmark Your World", 1999-2000 Xenote, www.xenote.com.
 "Sirus to Add 'Instant Buy' Button," Mar. 13, 2000, Twice, V 15, n 7,
 p. 28.
 Jan. 25, 2000, Showcase 2000—Xenote Press Release re Xenote
 iTag, www.xenote.com/html/press/releases.html.
 International Search Report and Written Opinion for International
 Application No. PCT/US2009/033256, Notification mailed Nov. 6,
 2009.
 Office Action in European Application No. 09709324.9 mailed on
 Sep. 25, 2010.
 Response to Sep. 25, 2010 European Office Action filed on Oct. 25,
 2010.

* cited by examiner

100 →

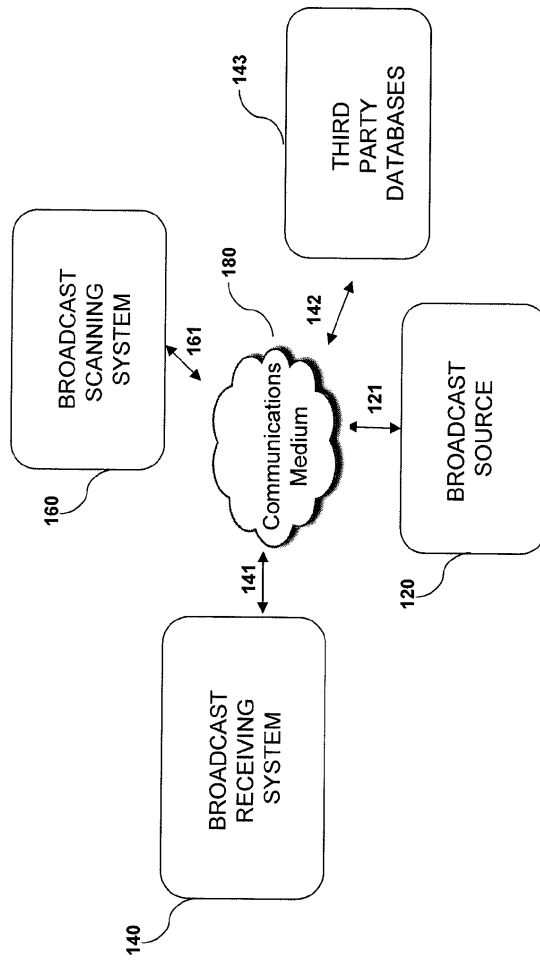


FIG. 1

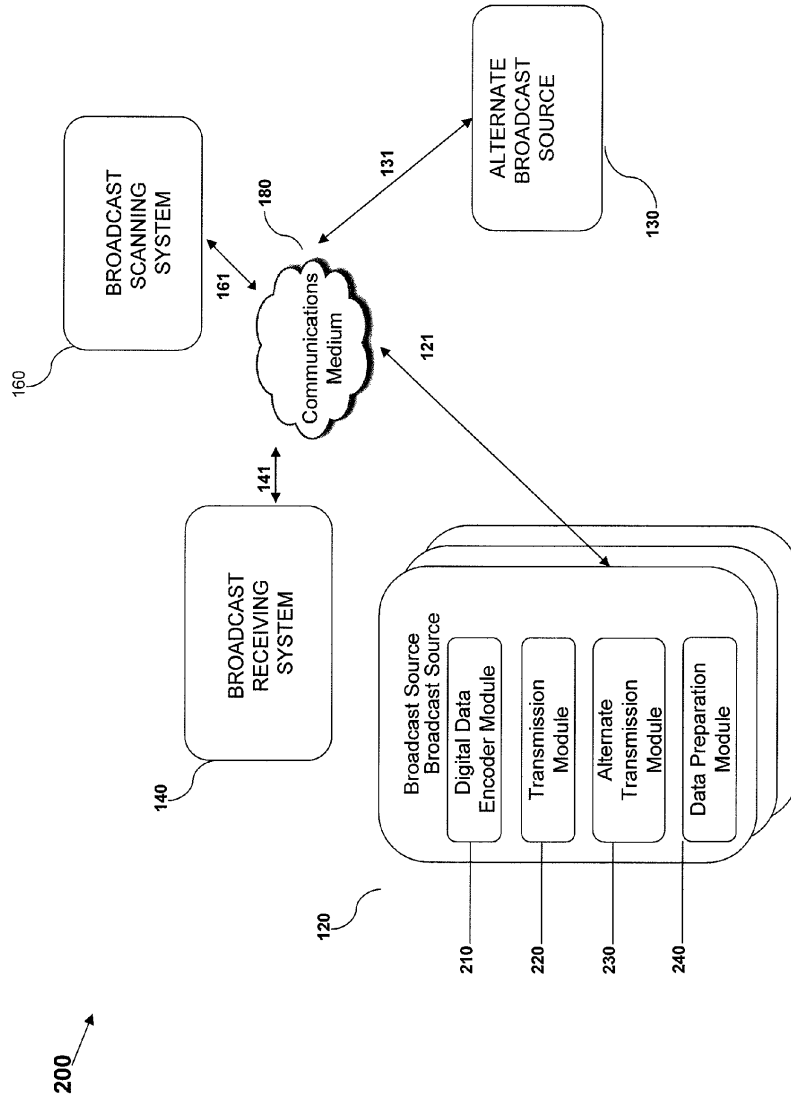


FIG. 2

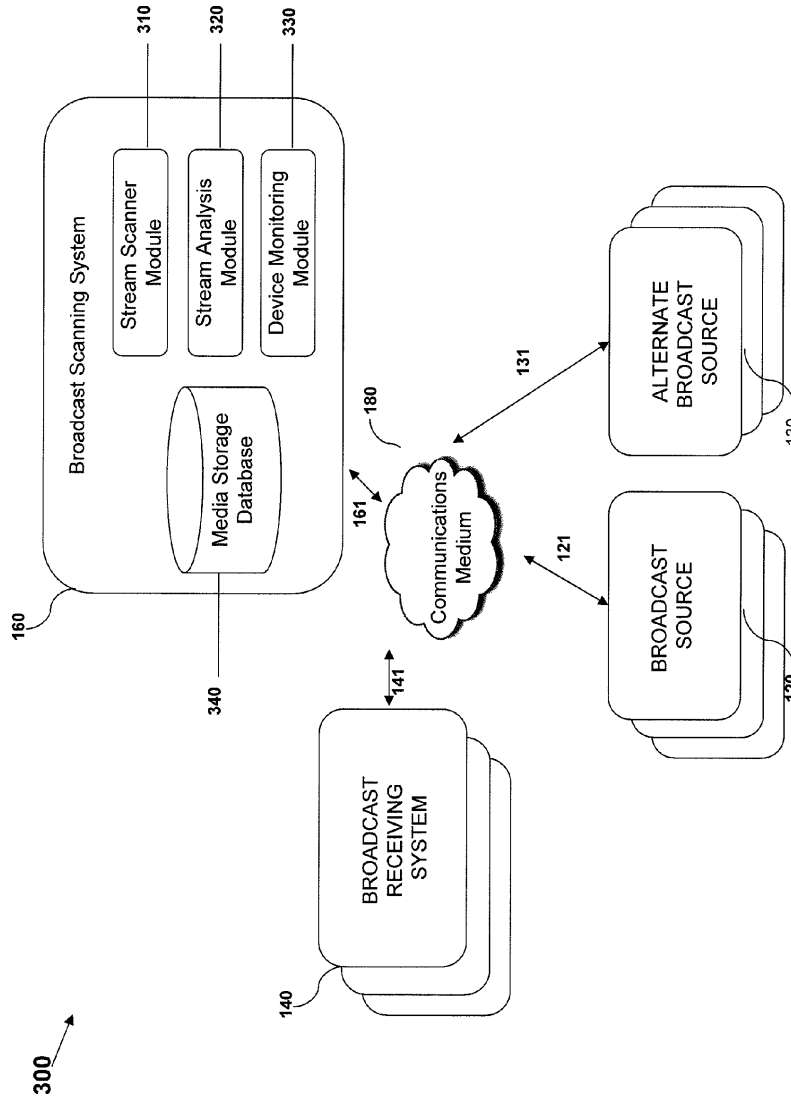


FIG. 3

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