



US008640183B2

(12) **United States Patent**
Reisman

(10) **Patent No.:** **US 8,640,183 B2**
(45) **Date of Patent:** **Jan. 28, 2014**

(54) **METHOD AND APPARATUS FOR BROWSING USING ALTERNATIVE LINKBASES**

(56) **References Cited**

(71) Applicant: **Richard Reisman**, New York, NY (US)

(72) Inventor: **Richard Reisman**, New York, NY (US)

(73) Assignee: **Convergent Media Solutions, LLC**, Plano, TX (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **13/662,213**

(22) Filed: **Oct. 26, 2012**

(65) **Prior Publication Data**

US 2013/0061273 A1 Mar. 7, 2013

Related U.S. Application Data

(63) Continuation of application No. 13/094,505, filed on Apr. 26, 2011, which is a continuation of application No. 10/434,032, filed on May 8, 2003, now Pat. No. 7,987,491.

(60) Provisional application No. 60/379,635, filed on May 10, 2002, provisional application No. 60/408,605, filed on Sep. 6, 2002, provisional application No. 60/455,433, filed on Mar. 17, 2003.

(51) **Int. Cl.**
H04N 7/173 (2011.01)
H04N 7/16 (2011.01)

(52) **U.S. Cl.**
USPC **725/133; 725/110; 725/113; 725/141; 725/153**

(58) **Field of Classification Search**
USPC 725/110, 112-113, 133, 141, 153
See application file for complete search history.

U.S. PATENT DOCUMENTS

4,706,121	A	11/1987	Young
4,807,031	A	2/1989	Broughton et al.
4,843,562	A	6/1989	Kenyon et al.
5,343,239	A	8/1994	Lappington et al.
5,355,480	A	10/1994	Smith et al.
5,396,546	A	3/1995	Remillard
5,404,393	A	4/1995	Remillard
5,410,326	A	4/1995	Goldstein
5,479,268	A	12/1995	Young et al.

(Continued)

FOREIGN PATENT DOCUMENTS

EP	1061490	A2	12/2000
GB	2348587	A	10/2000

(Continued)

OTHER PUBLICATIONS

Bacon, Location-Oriented Multimedia, IEEE Personal Communications, Oct. 1997, pp. 48-57.

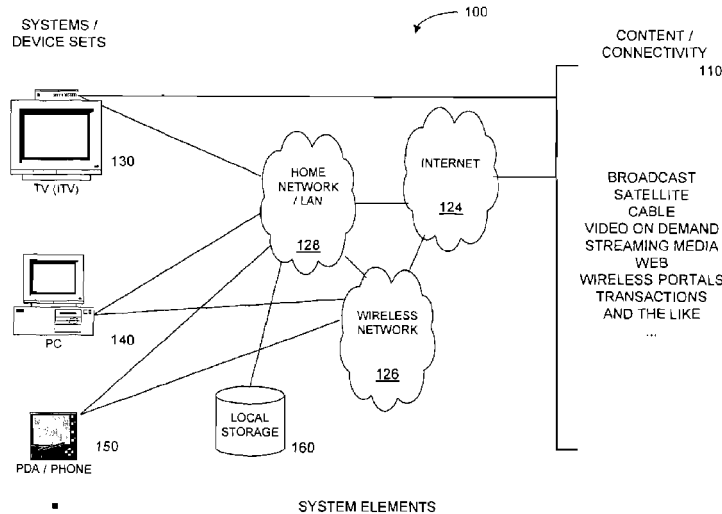
(Continued)

Primary Examiner — Jason J Chung
Assistant Examiner — Sumaiya A Chowdhury

(57) **ABSTRACT**

Systems and methods for navigating hypermedia using multiple coordinated input/output device sets. Disclosed systems and methods allow a user and/or an author to control what resources are presented on which device sets (whether they are integrated or not), and provide for coordinating browsing activities to enable such a user interface to be employed across multiple independent systems. Disclosed systems and methods also support new and enriched aspects and applications of hypermedia browsing and related business activities.

61 Claims, 10 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,648,824 A 7/1997 Dunn et al.
 5,689,353 A 11/1997 Darbee et al.
 5,699,526 A 12/1997 Siefert
 5,721,906 A 2/1998 Siefert
 5,761,606 A 6/1998 Wolzien
 5,774,664 A 6/1998 Hidary et al.
 5,778,181 A 7/1998 Hidary et al.
 5,778,256 A 7/1998 Darbee
 5,790,423 A 8/1998 Lau
 5,809,204 A 9/1998 Young et al.
 5,831,664 A 11/1998 Wharton et al.
 5,832,496 A 11/1998 Anand et al.
 5,850,340 A 12/1998 York
 5,861,881 A 1/1999 Freeman et al.
 5,872,712 A 2/1999 Brennehan
 5,887,243 A 3/1999 Harvey et al.
 5,892,536 A 4/1999 Logan et al.
 5,905,865 A 5/1999 Palmer et al.
 5,907,322 A 5/1999 Kelly et al.
 5,949,437 A 9/1999 Clark
 5,951,643 A 9/1999 Shelton et al.
 5,954,798 A 9/1999 Shelton et al.
 5,961,603 A 10/1999 Kunkel et al.
 5,986,692 A 11/1999 Logan et al.
 5,990,883 A 11/1999 Byrne et al.
 5,991,791 A 11/1999 Siefert
 6,008,777 A 12/1999 Yiu
 6,018,768 A 1/2000 Ullman et al.
 6,025,837 A 2/2000 Matthews, III et al.
 6,026,403 A 2/2000 Siefert
 6,037,933 A 3/2000 Blonstein et al.
 6,049,539 A 4/2000 Lee et al.
 6,064,377 A 5/2000 Hoarty et al.
 6,073,119 A 6/2000 Bornemisz-Wahr et al.
 6,078,348 A 6/2000 Klosterman et al.
 6,085,223 A 7/2000 Carino, Jr. et al.
 6,085,247 A 7/2000 Parsons, Jr. et al.
 6,097,441 A 8/2000 Allport
 6,104,334 A 8/2000 Allport
 6,118,492 A 9/2000 Milnes et al.
 6,130,726 A 10/2000 Darbee et al.
 6,141,003 A 10/2000 Chor et al.
 6,151,601 A 11/2000 Papierniak et al.
 6,157,319 A 12/2000 Johns et al.
 6,161,142 A 12/2000 Wolfe et al.
 6,166,732 A 12/2000 Mitchell et al.
 6,169,997 B1 1/2001 Papierniak et al.
 6,182,094 B1 1/2001 Humpleman et al.
 6,209,028 B1 3/2001 Walker et al.
 6,215,526 B1 4/2001 Barton et al.
 6,216,129 B1 4/2001 Eldering
 6,219,109 B1 4/2001 Raynesford et al.
 6,219,839 B1 4/2001 Sampsell
 6,233,389 B1 5/2001 Barton et al.
 6,240,555 B1 5/2001 Shoff et al.
 6,253,203 B1 6/2001 O'Flaherty et al.
 6,253,238 B1 6/2001 Lauder et al.
 6,256,019 B1 7/2001 Allport
 6,263,503 B1 7/2001 Margulis
 6,278,499 B1* 8/2001 Darbee et al. 348/734
 6,308,327 B1 10/2001 Liu et al.
 6,317,885 B1 11/2001 Fries
 6,323,911 B1 11/2001 Schein et al.
 6,324,338 B1 11/2001 Wood et al.
 6,330,593 B1 12/2001 Roberts et al.
 6,360,053 B1 3/2002 Wood et al.
 6,377,986 B1 4/2002 Philyaw et al.
 6,388,714 B1 5/2002 Schein et al.
 6,389,472 B1 5/2002 Hughes et al.
 6,425,131 B2* 7/2002 Crandall et al. 725/106
 6,469,753 B1 10/2002 Klosterman et al.
 6,486,892 B1 11/2002 Stern
 6,513,069 B1 1/2003 Abato et al.

6,567,011 B1 5/2003 Young et al.
 6,637,028 B1 10/2003 Voyticky et al.
 6,732,369 B1 5/2004 Schein et al.
 6,754,904 B1 6/2004 Cooper et al.
 6,901,429 B2 5/2005 Dowling
 6,931,656 B1 8/2005 Eshelman et al.
 6,973,669 B2* 12/2005 Daniels 725/112
 6,983,312 B1 1/2006 O'Neil
 7,069,575 B1 6/2006 Goode et al.
 7,191,233 B2 3/2007 Miller
 7,218,921 B2 5/2007 Mendiola et al.
 7,284,202 B1 10/2007 Zenith
 7,444,659 B2 10/2008 Lemmons
 7,853,438 B2 12/2010 Caruso et al.
 7,917,645 B2 3/2011 Ikezoye et al.
 2001/0018771 A1 8/2001 Walker et al.
 2001/0030644 A1 10/2001 Allport
 2002/0004839 A1 1/2002 Wine et al.
 2002/0010652 A1 1/2002 Deguchi
 2002/0010928 A1 1/2002 Sahota
 2002/0010932 A1 1/2002 Nguyen et al.
 2002/0019984 A1 2/2002 Rakib
 2002/0032698 A1 3/2002 Cox
 2002/0072982 A1 6/2002 Barton et al.
 2002/0078144 A1 6/2002 Lamkin et al.
 2002/0083060 A1 6/2002 Wang et al.
 2002/0083464 A1 6/2002 Tomson et al.
 2002/0088011 A1 7/2002 Lamkin et al.
 2002/0104090 A1 8/2002 Stettner
 2002/0162120 A1* 10/2002 Mitchell 725/135
 2002/0162121 A1 10/2002 Mitchell
 2003/0018980 A1 1/2003 Gorbatov et al.
 2003/0093802 A1 5/2003 Cho et al.
 2003/0154242 A1 8/2003 Hayes
 2003/0154398 A1 8/2003 Eaton et al.
 2003/0159153 A1 8/2003 Falvo et al.
 2003/0182429 A1 9/2003 Jagels
 2003/0188322 A1* 10/2003 Bontempi 725/139
 2005/0262542 A1 11/2005 DeWeese et al.

FOREIGN PATENT DOCUMENTS

WO WO 99/10822 3/1999
 WO WO 00/04707 1/2000
 WO WO 00/07372 2/2000
 WO WO 01/06361 A2 1/2001
 WO WO 01/06365 A2 1/2001
 WO WO 01/09714 A2 2/2001
 WO WO 01/65832 A1 9/2001
 WO WO 01/89207 A1 11/2001
 WO WO 02/07013 A2 1/2002
 WO WO 02/19716 A1 3/2002
 WO WO 02/21841 A1 3/2002
 WO WO 02/28102 A1 4/2002
 WO WO 02/37297 A1 5/2002
 WO WO 03/007189 A1 1/2003
 WO WO 03/107196 A1 12/2003

OTHER PUBLICATIONS

Baldus, WWICE—An Architecture for In-Hoime Digital Networks, Multimedia Computing and Networking 2000, vol. 3969, SPIE—The International Society for Optical Engineering, San Jose, CA, Jan. 24, 2000-Jan. 26, 2000, pp. 196-203.
 Hong, A Networking Architecture for Mobility Services Using Mobile Agent Approach, Global Convergence of Telecommunications and Distributed Object Computing Conference, 1997, pp. 297-307.
 Huang, Making Computers Disappear: Appliance Data Services, ACM Sigmobility, Rome, Italy, Jul. 2001, pp. 108-121.
 Kristoffersen, Mediate: Video as First-order Datatype, Group 97, Phoenix, Arizona, pp. 395-404.
 Phan, A New TWIST on Mobile Computing: Two-Way Interactive Session Transfer, Internet Applications, 2001, WIAPP 2001, San Jose, CA, 2001, pp. 2-11.
 Phan, A Scalable, Distributed Middleware Service Architecture to

(56)

References Cited

OTHER PUBLICATIONS

Phan, Handoff of Application Sessions Across Time and Space, IEEE International Conference on Communications, 2001, vol. 5, pp. 1367-1372.

Pinto, TINA-based Environment for Mobile Multimedia Services, IEEE, 1999, pp. 54-65.

Richardson, Teleporting in an X Window System Environment, IEEE Personal Communications, Third Quarter, 1994, pp. 6-12.

Wang, Mobility Support in Unified Communications Networks, (WoWMoM '00 The Third ACM International Workshop on Wireless Mobile Multimedia Conference) Boston, MA, Aug. 11, 2000, pp. 95-102.

Welling, Session Mobility Support for Multimedia Applications, Multimedia Computing and Networking 1999, vol. 3654, SPIE—The International Society for Optical Engineering, San Jose, CA, Jan. 25, 1999-Jan. 27, 1999, pp. 52-63.

Zou, Mobile ID Protocol: A Badge-Activated Application Level Handoff of a Multimedia Streaming to Support User Mobility, Thesis, B. S. Nankai University, Urbana, IL, 2000.

Prototypes, field tryouts proceed for enhanced TV, by Steve Behrens, <http://www.current.org/dtv/dtv013e.html>, printed Jun. 30, 2004 (document states Jul. 27, 2000).

PBS ventures into cable's interactive 'walled gardens', by Steve Behrens, <http://www.current.org/tech/tech021cable.html>, printed Jun. 30, 2004 (document states Nov. 13, 2000).

ETV Cookbook: System Reference: Transports, <http://etvcookbook.org/system/transports.html>, printed Jul. 1, 2001 (document states Jun. 25, 2001).

ETV Cookbook: System Reference: Platforms, <http://etvcookbook.org/system/platform.html>, printed Jul. 1, 2001 (document states Jun. 25, 2001).

ETV Cookbook: System Reference: Localization, <http://etvcookbook.org/system/localization.html>, printed Jul. 1, 2001 (document states Jun. 25, 2001).

ETV Cookbook: System Reference: Middleware, <http://etvcookbook.org/system/middleware.html>, printed Jul. 1, 2001 (document states Jun. 25, 2001).

ETV Cookbook: System Reference: Storage, <http://etvcookbook.org/system/storage.html>, printed Jul. 1, 2001 (document states Jun. 25, 2001).

ETV Cookbook: System Reference: Application Services, <http://etvcookbook.org/system/application.html>, printed Jul. 1, 2001 (document states Jun. 25, 2001).

ETV Cookbook: System Reference: Authoring Tools, <http://etvcookbook.org/system/authoring.html>, printed Jul. 1, 2001 (document states Jun. 26, 2001).

Intel's E-home Vision, Press Backgrounder, Apr. 2000.

Turn on Audiences with Enhanced Programming, Intel, 1999.

Intel Interact Viewer 2.0: Broadcaster's Guide, downloaded Aug. 14, 2000 (document states May 1998).

IAL Digital Entertainment Initiative: Media Appliances, <http://developer.intel.com/ial/home/digentertain/media.htm>, printed Aug. 14, 2000 (document states 2000).

Intel's Barrett Charts Course for "Extended PC Era" at Consumer Electronics Show, <http://appzone.intel.com/pressroom/PrintPressRelease.asp?file=http://www.intel.com/pressroom/arc...>, printed Jul. 1, 2004 (document states Jan. 5, 2001).

2001 International CES Pre-Event Kickoff Keynote, Craig R. Barrett, Jan. 5, 2001.

And the Synchronized Telewebber Oscar Goes to ABC, <http://rue1.net/top/box.news.abc.oscars.enhanced.tv.20010325.htm>, printed Jul. 1, 2004 (document states Mar. 25, 2001).

ETV Cookbook: Consumer Electronics Show Jan. 5-Jan. 9, 2001, Las Vegas, <http://etvcookbook.org/extra/ces01.html>, printed Jul. 1, 2001 (document states Jun. 26, 2001).

What is Enhanced TV?, <http://heavy.abc.go.com/etvHome/etvfootball/what.html>, printed Sep. 18, 2000.

Welcome to Enhanced TV—Tour, <http://heavy.abc.go.com/etvHome/mil/site/tour.html>, printed Jan. 2, 2001.

ABC's Dual-Screen Millionaire Experiment, Jupiter Communications, Apr. 12, 2000.

No PC for Enhanced TV, by Brad King, <http://www.wired.com/news/print/0,1294,36239,00.html>, printed Jul. 1, 2004 (document states May 9, 2000).

Do Touch That Dial, Bill Syken, Time Digital, Sep. 2000.

Serving Up Data for Enhanced DTV Programs, Gomer Thomas, downloaded Jul. 1, 2001 (document states Oct. 18-Oct. 21, 2000).

ETV Cookbook: Recipes: PVR Record Triggers, http://etvcookbook.org/appetizers/pvr_triggers.html, printed Jan. 15, 2003 (document states Oct. 16, 2002).

QVC Program Guide, Select Time Zone, http://www.qvc.com/guidelpgaide_main.asp?productlisting=yes&date=, printed Jul. 25, 2002 (document states 1995-2002).

Interactive Television Industry Botmdarics Map, <http://www.itvalliance.org/indexprgiTV.htm>, downloaded Jun. 10, 2002 (document states 2002).

ICTV HeadendWare Overview, www.ictv.com, downloaded Aug. 30, 2002 (document states 2002).

ICTV HeadendWare Datasheet, www.ictv.com, downloaded Aug. 30, 2002 (document states 2002).

ICTV HeadendWare Scalability, www.ictv.com, downloaded Aug. 30, 2002 (document states 2002).

ICTV HeadendWare Maximum ROI, www.ictv.com, downloaded Aug. 30, 2002 (document states 2002).

ICTV HeadendWare Minimum Risk, www.ictv.com, doWriIciaded Aug. 30, 2002 (document states 2002).

ICTV HeadendWare Platform diagram, http://www.ictv.com/main/products/platform_simple.html, printed Aug. 30, 2002.

ICTV I leadendWare STX and DigiMux service subsequent requests, http://www.ictv.com/main/products/platform_detail.html, printed Aug. 30, 2002.

ISeeTV: More Than Just a Pretty Face, http://gigaweb.com/content_display/print_friendly/0,2482,260677,00.html, printed Feb. 1, 2003 (document states May 10, 2002).

Go Ahead, Kill Your Television. NBC Is Ready, by Randall Rothenberg, http://www.wired.com/wiredarchive/6.12/nbc_prltml, printed Jul. 1, 2004 (document states Dec. 1998).

MetaTV: Universal Portal Platform, <http://1.vww.metatv.com/solutions/uupihm>, printed Jul. 1, 2001 (document states 2001).

MetaTV: Universal Portal Platform, http://www.metatv.com/solutions/uup_clepylitiin, printed Jul. 1, 2001 (document states 2001).

MetaTV: Universal Portal Platform, http://www.wimmetatv.com/solutionsluup_design.htm, printed Jul. 1, 2001 (document states 2001).

MetaTV: Universal Portal Platform, http://www.metatv.com/solutionsititip_manage.htm, printed Jul. 1, 2001 (document states 2001).

MetaTV: TV services, http://www.metatv.com/solutions/TV_services.htm, printed Jul. 1, 2001 (document states 2001).

MetaTV: Network, http://vww.metatv.com/solutions/meta_netihm, printed Jul. 1, 2001 (document states 2001).

MetaTV Solutions for eBusinesses & Merchants, http://www.metatv.com/solutions/ebus_merch.htm, printed Jul. 1, 2001 (document states 2001).

Eonline Navigation, screenshot image of non-printable page from www.metatv.com, printed Jul. 1, 2001.

Eonline Readability, screenshot image of non-printable page from www.metatv.com, printed Jul. 1, 2001.

MetaTV Solutions for eBusinesses, www.metatv.com, printed Jul. 1, 2001 (document states 2000).

Sorceron Technology, <http://www.sorceron.com/corporatelstech.html>, printed Jul. 16, 2001 (document states 2001).

Sorceron Products, <http://www.sorceron.com/corporate/prodserv.html>, printed Jul. 16, 2001 (document states 2001).

Tools, <http://www.spiderdance.net/spiderdance/toolsfragmentml>, printed Sep. 26, 2002 (document states 1999-2002).

TruSync System, http://www.spiderdance.net/spiderdance/technology_right.html, printed Sep. 26, 2002 (document states 1999-2002).

(56)

References Cited

OTHER PUBLICATIONS

- Company, http://www.spiderdance.net/spiderdance/company_right.html, printed Sep. 26, 2002 (documents states 1999-2002).
- Two Way TV (US)—Technology, <http://vv'ww'.1.wovv aytvus.cornitechnology.html>, printed Sep. 25, 2002 (document states 2002).
- Two Way TV: 4.0 Patents Map, http://www.twowaytv.com/version4/patent_map.asp, printed Sep. 25, 2002.
- RespondTV Products, <http://www.respondtv.com/products.html>, printed Apr. 3, 2002.
- RespondTV, <http://www.respondtv.com/whyrespond.html>, printed Feb. 15, 2001.
- RespondTV, <http://www.respondtv.com/looks.html>, printed Feb. 15, 2001.
- An Open Interface to a DTV Data Server, Dinkar Bhat, Dave Catapano, Brad Holcombe, Ilya Shnayder, Gomel-Thomas, NAB2001 Broadcast Engineering Conference, Las Vegas, Apr. 21-26, 2001.
- TargetTV, <http://sciall.com/developers/TargetTV.ltrm>, printed Mar. 27, 2002 (document states 2002).
- VeonStudio FAQs, http://www.vcom.com/corporate/cicyloper/studio_faq.html, printed Jan. 12, 2000.
- VeonPlayer, VeonStudio, VconServer, <http://www.veon.com/corporate/prothicts/middleproducts.html>, printed Jan. 12, 2000.
- Creation, Deploying and Serving, Reporting, http://www.veon.com/corporate/products/middle_services.html, printed Jan. 12, 2000.
- Q&A with Joanna Shields, CEO of Veon, by Jose Alvear, <http://www.streamingmedia.com/article.asp?id=6230>, printed Jul. 1, 2004 (document states Sep. 26, 2000).
- Making Streaming Interactive, by Andrew W. Davis, http://www.wainhouse.com/articles/article_d.html, printed Feb. 22, 2002.
- Interactive TV Today, White Paper, HyperVideo and SML, <http://www.itvt.com/etvwhitepaper-6.html>, printed Feb. 22, 2002.
- Veon—Interactive Media Applications, <http://www.w3.org/Architecture/1998/06/Workshop/paper33/>, printed Feb. 22, 2002.
- What is ITV?, MetaTV, downloaded Dec. 7, 2001 (document states 2001).
- OpenTV Solutions for Interactive Television, http://www.opentv.com/industry/tvexperts/s_itvpaper.html, printed Feb. 15, 2001.
- PRAJA Products: Technology, <http://www.praja.com/products/technology.html>, printed Sep. 11, 2000.
- The PRAJA Event Suite: Event Experience System, http://www.praja.com/products/event_exp_sys.html, printed Sep. 11, 2000 (document states 2000).
- The PRAJA Event Suite: Event Management System, http://www.praja.com/products/event_mgmnt_sys.html, printed Sep. 11, 2000 (document states 2000).
- The PRAJA Event Suite: Event Experience System: Detail, http://www.praja.com/products/ees_detail.html, printed Sep. 11, 2000 (document states 2000).
- The PRAJA Event Suite: Event Management System, http://www.praja.com/products/ems_detail.html, printed Sep. 11, 2000 (document states 2000).
- EMS Frequently Asked Questions, http://www.praja.com/support/ems_faq.html, printed Sep. 11, 2000.
- Features, <http://www.praja.com/tracker/WebHelp/Features.htm>, printed Sep. 11, 2000.
- Preferences, <http://www.praja.com/tracker/WebHelp/Preferences.htm>, printed Sep. 11, 2000.
- Interactive Video Technologies Leads the Convergence of Multimedia and the Internet, Press Release, http://videotechnologies.com/about_us/pr/pr_01170livop.htm, printed Jul. 1, 2004 (document states Jan. 17, 2001).
- Interactive Video Technologies: Internet Video Operating Platform, http://videotechnologies.com/solutions/operating_platform.htm, printed Feb. 5, 2001.
- Hotel Guests to Experience Interactive Television Services from InnMedia and MetaTV, <http://www.thetimesharebeat.com/archives/>
- MbTV Content/Advertising Manager, <http://www.mbtv.com/technology/admanager.htm>, printed Sep. 8, 2001.
- SkyScraper Interactive: Interactive Broadcast System, Triveni Digital, PDF file properties “created” dated May 22, 2001.
- Time Warner Cable mailing: iwink, Time Warner Cable, 1999.
- Interactive Television and Its Impact on the Wireless Industry, Scott Newnam, *Wireless Business & Technology*, Nov. 2002.
- Ops Eye Set-Tops to Track Viewing, by Linda Moss, http://www.eff.org/Privacy/GII_NII/settop_box_monitoring_960520.article, printed Jul. 2, 2004 (document states May 20, 1996).
- The Webification of TV is happening, by Kevin Werbach, <http://news.com.com/2010-1071-281523.html>, printed Jul. 2, 2004 (document states Jul. 26, 2001).
- An Interactive TV Reality Check, by Ken Freed, http://www.broadbandweek.com/news/0009/print/0009_news_08.htm, printed Jul. 2, 2004 (document states Sep. 2000).
- Skip-the-Ads TV Had Madison Ave. Upset, by Amy Harmon, <http://limbo.ime.usp.br/educar2002/index.php?SkipTheAds>, printed Jul. 2, 2004 (document states May 23, 2002).
- Standard Handbook of Video and Television Engineering, (Update) Chapter 17.3 Consumer Video and Networking Issues, tvhandbook.com, downloaded May 4, 2002 (document states “[p]ortions of this chapter were adapted from: Pizzi, Skip: ‘Internet and TV Convergence,’ in *Interactive TV Survival Guide*, Jerry C. Whitaker ed., McGraw-Hill, New York, N.Y., 2001”).
- Maybe TVs Should Just Stay Dumb, Robert La Franco, *Red Herring*, Aug. 2000.
- Interactive TV Revisited, Howard Wolinsky, *Upside*, Aug. 2000.
- The Status of Interactive Television, <http://www.gigaweb.com/Content/GIB/RIB-032000-00307.html>, printed Aug. 22, 2000 (document status Mar. 27, 2000).
- iTV Production Standards White Paper, Apr. 8, 2002.
- iTV Production Standards Draft Specification v1.1 (pp. 1-28, 56-57), itvstandards.org, downloaded Dec. 5, 2002 (document states Nov. 2002).
- iTV Production Standards Specification v1.0, itvstandards.org, downloaded May 16, 2002 (document states May 2002).
- Jini to the rescue, Morgan, S.; *IEEE Spectrum*, Apr. 2000.
- Flash graphics land prime time on TV, by Stefanie Olsen, http://zdnet.com.com/2100-11_2-258319.html, printed Jul. 9, 2004 (document states May 25, 2001).
- Television Futures—Java TV Technology Looms Large, by Michael Meloan, <http://developer.java.sun.com/servlet/PrintPageServlet>, printed Dec. 27, 2000.
- Enhanced Content Specification, Advanced Television Enhancement Forum (ATVEF), ATVEF Specification v1.1 r 26, http://atvef.com/library/spec1_1a.html, downloaded Aug. 14, 2000 (document states 1998, 1999).
- NewsML—enabling a standards-led revolution in news publishing, A. Allday, *EBU Technical Review*—Jun. 2001.
- DVB-HTML—an optional declarative language within MHP 1.1, *EBU Technical Review*—Sep. 2001.
- Standard Handbook of Video and Television Engineering, (Update) Chapter 13.7 Interactive Television, tvhandbook.com, downloaded Jul. 2, 2001.
- Overview of the MPEG-7 Standard, Sections 1-3, <http://www.cse.it/mpeg/standards/mpeg-7/mpeg-7.htm>, printed Aug. 11, 2000 (document states May/June 2000).
- Post Phase One Definition, Features & Scenarios, tv-anytime.org, downloaded May 2, 2002.
- The TV-Anytime Forum, Specification Series: S-2 System Description, WD455, tv-anytime.org, downloaded May 2, 2002 (document states Dec. 7, 2001).
- Battle over DTV standards goes global, by Junko Yoshida, <http://www.eetimes.com/article/showArticle.jhtml?articleID=18304239>, printed Jul. 10, 2004 (document states Jun. 9, 2000).
- Displaying TV Broadcasts in Web Pages, <http://developer.msntv.com/Developer/displaytv.asp>, printed Mar. 4, 2002 (document states 2001).
- Welcome to Everstream, Campaign Director, [!\[\]\(4c660a3c4ce1da3313488b7854f55083_img.jpg\)](http://www.</p>
</div>
<div data-bbox=)

(56)

References Cited

OTHER PUBLICATIONS

Welcome to Everstream, Campaign Decision Engine, <http://www.everstream.com/cde.htm>, printed Jul. 12, 2002 (document states 2002).

Welcome to Everstream, Benefits, <http://www.everstream.com/benefits.htm>, printed Jul. 12, 2002 (document states 2002).

Ad Enabling the Next Generation of iTV & Broadband, downloaded Jul. 12, 2002.

Navic Network Services, <http://navic.tv/servicesbody.html>, printed Jul. 13, 2002 (document states 2001).

Click to Web Ads From TV Video Programming, <http://www.adage.com/news.cms?newsId=33590>, printed Jul. 12, 2002 (document states Dec. 10, 2001).

Coming Soon: Commercials on Demand, Alan Breznick, Cable Sales Professional, Spring 2002.

Install WebTV for Windows 98, <http://www.zdnet.com/filters/printerfriendly/0,6061,2227443-77,00.html>, printed Dec. 31, 2000 (document states Mar. 17, 1999).

W3C Workshop on Web Device Independent Authoring: Position Statements and Papers, <http://www.w3.org/2000/10/DIAWorkshop/statements.html>, printed Dec. 15, 2004 (document states Sep. 29, 2000).

Developing TV Applications Using Internet Technology, <http://www.w3.org/2000/10/DIAWorkshop/hayes/text.html>, printed Aug. 6, 2004, target of "Developing TV Applications using Internet Technology" link in W3C Workshop on Web Device Independent Authoring: Position Statements and Papers (W3C Workshop on Web Device Independent Authoring: Position Statements and Papers states date of Sep. 29, 2000).

TV Platform Technology Acquired for Basic Set-Tops, Dominic Gates, <http://www.redcomm.com/sample/DOMIS/update/2000/04apr/0400tptafb.htm>, printed Dec. 26, 2000.

WebTV for Windows, <http://www.microsoft.com/windows98/usingwindows/fun/articles/811Nov/foundation3.asp>, printed Aug. 14, 2000 (document states May 5, 1999).

What do you want to see today?, <http://broadcast.microsoft.com/>, printed Aug. 14, 2000.

System Software Components, http://msdn.microsoft.com/library/psdk/bpc/intro_6wvvn.htm, printed Aug. 14, 2000 (document states Jan. 5, 2000).

AOLTV, Frequently Asked Questions, <http://www.aoltv.com/anywhere/aoltv/faq.html>, printed Jul. 1, 2001.

Sony, AOL in PlayStation 2 Alliance, http://dailynews.yahoo.com/hx/nm/20010515/bs/tech_sony_aol_dc_1.html, printed May 15, 2001 (document states May 15, 2001).

Microsoft's X-Box Changes the Desktop Landscape, <http://www.gigaweb.com/Content/PA/RPA-032000-00020.html>, printed Dec. 21, 2000 (document states Mar. 20, 2000).

TiVo's new Home Media Option, <http://www.tivo.com/5.3.1.1.asp?article=162>, printed Apr. 3, 2003 (document states Jan. 9, 2003).

FAQs: TiVo Home Media Option, <http://www.tivo.com/4.9.1.asp>, printed Apr. 3, 2003).

Industry briefs: Viant, Interactions (ACM), vol. 8, Issue 2 (Mar./Apr. 2001).

Sony Vs. Microsoft: The Fight for Interactive Television, Victoria Murphy, http://forbes.com/2003/01/10/cz_vm_0110tv_print.html, printed Sep. 9, 2004 (document states Jan. 10, 2003).

The Inevitability of the Media Center and Media Gateway, by Michael Collette, http://www.ucentric.com/dl/Ucentric_MediaCenterWhitePaper_030803.pdf, (archive.org states archive date of Mar. 30, 2003).

www.POSM.tv: the Project for Open Source Media, <http://posm.tv>, printed Oct. 29, 2004 (document states Aug. 1, 2004).

White Paper: A Strategy for New Television, <http://interactive.wgbh.org/etv/NEW-TELEVISION.html>, printed Sep. 9, 2004, target of "White Paper: A Strategy for New Television" link in www.POSM.tv: the Project for Open Source Media (www.POSM.tv: the Project

Microsoft Debuts Concept Home, <http://www.microsoft.com/presspass/press/2000/Jan00/HomeDebutCESPr.asp>, printed Sep. 9, 2004 (document states Jan. 6, 2000).

WebTV Networks Takes the Lead in Personal TV Services, <http://www.microsoft.com/presspass/press/2000/Jan00/PersonalTVpr.asp>, printed Sep. 9, 2004 (document states Jan. 6, 2000).

Remarks by Bill Gates, CES International 2000, <http://www.microsoft.com/billgates/speeches/01-05ces.asp>, printed Sep. 9, 2004 (document states Jan. 5, 2000).

Microsoft's Craig Mundie Discusses Microsoft's Vision for Making Technology More Personal and Useful for Consumers, <http://www.microsoft.com/presspass/features/2000/01-06mundieqa.asp>, printed Sep. 9, 2004 (document states Jan. 6, 2000).

Home networks connect everything (really!), by Patrick Houston, http://reviews-zdnet.com.com/4520-7298_16-4207809.html, printed Aug. 6, 2004 (document states Jan. 10, 2003).

Displays get some smarts, by Patrick Houston, http://reviews-zdnet.com.com/4520-6033_16-4207808.html, printed Aug. 6, 2004 (document states Jan. 8, 2003).

Remarks by Bill Gates, 2002 International Consumer Electronics Show; <http://www.microsoft.com/billgates/speeches/2002/01-07ces.asp>, printed Aug. 6, 2004 (document states Jan. 7, 2002).

Remarks by Bill Gates, 2003 International Consumer Electronics Show; <http://www.microsoft.com/billgates/speeches/2003/01-08ces.asp>, printed Aug. 10, 2004 (document states Jan. 8, 2003).

Connection Configuration in Terminal Server (Q186566), <http://support.microsoft.com/default.aspx?scid=kb;EN-US;q186566>, printed Jan. 21, 2002 (document states Dec. 11, 2001).

Session-to-Session Activation with a Session Moniker, http://msdn.microsoft.com/library/en-us/termserv/tsovr_9tbm.asp?frame=true, printed Jan. 21, 2002 (document states 2002).

Joe Belfiore Talks Windows XP Media Center Edition, http://www.winsupersite.com/showcase/freestyle_joeb.asp, printed Aug. 10, 2004 (document states Sep. 9, 2002).

Windows Embedded for Thin Clients, downloaded Jan. 21, 2002 (document states 2001).

The X Protocol, http://www.x.org/about_x.htm, printed Apr. 15, 2002.

A Brief Intro to CoKinetic's Player, I₃ML and how they work, cokinetic.com, downloaded Mar. 4, 2002.

Microsoft Unveils New Home PC Experiences With "Freestyle" and "Mira", <http://www.microsoft.com/presspass/press/2002/jan02/01-07FreestyleMiraPR.asp>, printed Aug. 10, 2004 (document states Jan. 7, 2002).

Microsoft Launches Windows CE .NET, <http://www.microsoft.com/presspass/press/2002/jan02/01-07CENetLaunchPR.asp>, printed Aug. 10, 2004 (document states Jan. 7, 2002).

Industry Leaders Announce Plans to Power Smart Devices With Windows CE .NET, <http://www.microsoft.com/presspass/press/2002/jan02/01-07CustCommitPR.asp>, printed Aug. 10, 2004 (document states Jan. 7, 2002).

Telescript: General Magic Active Web Tools Roadmap Version 1.0 Pre-release (chapters "Introduction" and "The view from 10,000 feet"), General Magic, 1996.

Commercialization of Personal IT Television "airboard", <http://www.sony.net/SonyInfo/News/Press/200009/00-044/>, printed Aug. 11, 2004 (document states Sep. 28, 2000).

Meta Pad: IBM's Prototype Modular Computer, <http://domino.research.ibm.com/Comm/bios.nsf/pages/metapad.html>, printed May 1, 2002 (document states Feb. 6, 2002).

Modular Computing: The Next Generation of Personal Computing, http://www.gigaweb.com/content_display/print_friendly/0,2482,260474,00.html, printed Apr. 17, 2002 (document states Apr. 16, 2002).

Bringing Affordable Digital Television and the Next Generation of High Bandwidth Connectivity to the Home, <http://www.pcdtv.org/PCDTV/press/>, printed Dec. 31, 2000 (document states Aug. 21, 2000).

PCDTV Frequently Asked Questions, http://www.pcdtv.org/PCDTV/more_info/, printed Dec. 31, 2000 (document states 2000).

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.