

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
27 December 2002 (27.12.2002)

PCT

(10) International Publication Number  
WO 02/103996 A3

(51) International Patent Classification<sup>7</sup>: H04N 7/20, 7/173

(21) International Application Number: PCT/US02/18768

(22) International Filing Date: 14 June 2002 (14.06.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/297,791 14 June 2001 (14.06.2001) US  
10/172,175 13 June 2002 (13.06.2002) US

(71) Applicant (for all designated States except US): **VIDEOLOCITY TECHNOLOGIES, INC.** [US/US]; 1762 A Prospector Ave, Park City, UT 84060 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KASAL, Alpay, O.**

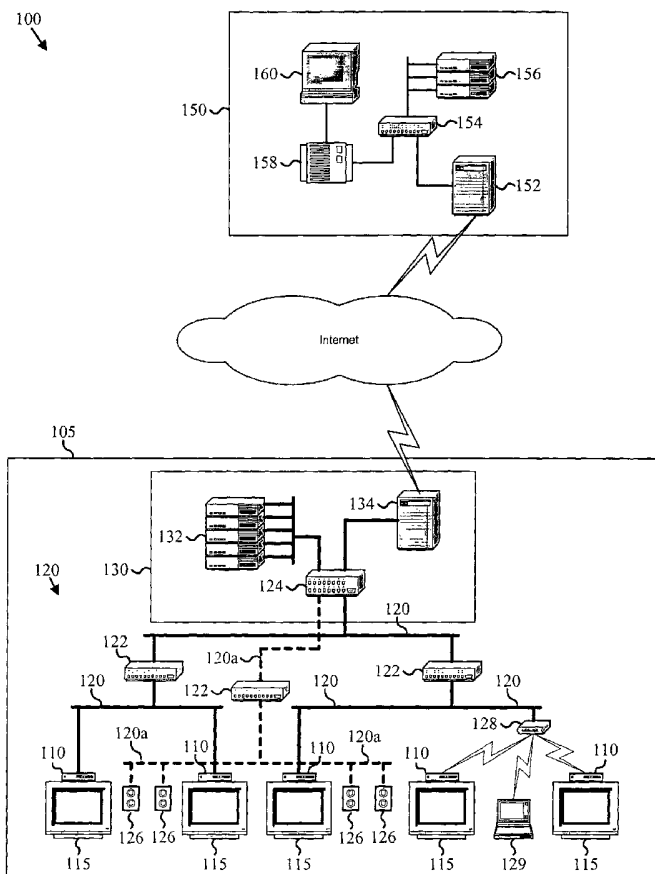
[TR/US]; 1916 Avenue K, 1A, Brooklyn, NY 11230 (US). **SENN, Martin, P.** [US/US]; 9050 North Sackett Drive, Park City, UT 84098 (US). **LEE, Wilford, T.** [US/US]; 412 South 800 West, Orem, UT 84058 (US). **HAMER, Joshua, L.** [US/US]; 904 Williamstown Court, Park City, UT 84098 (US). **OSORIO, Daniel** [US/US]; 525 Cove Canyon Drive, Park City, UT 84098 (US). **SMITH, Aaron, W.** [US/US]; 1306 West 1200 South, Woods Cross, UT 84087 (US).

(74) Agent: **KUNZLER, Brian, C.**; Kunzler & Associates, 10 West 100 South, Suite 425, Salt Lake City, UT 84101 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: DIGITAL ENTERTAINMENT SOLUTION



(57) Abstract: A digital entertainment solution includes a system for treating digital content, transmitting the digital content over a network (120) to a viewing station (110) where the digital content is presented to a viewer. A network-booting set-top box (110) built from computer desktop technologies supports gaming, web browsing, e-mail, music listening, movie viewing and the like. A scan converter (570) within the set-top box converts monitor resolution images to formats used by standard television sets (115). A browser within the set-top box (110) substitutes fonts optimized for television viewing for stand fonts designed for computer monitors. Multiple set-top boxes (110) are combined in a network (120) and isolated from data-only devices to ensure service quality and to prevent unauthorized copying of digital content. The reach of the network is extended with wireless segments (120a) that use a variety of mechanisms to ensure security and service quality.



WO 02/103996 A3



**(84) Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**(88) Date of publication of the international search report:**  
27 March 2003

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *with international search report*

**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/US02/18768

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC(7) : H04N 7/20, 7/173  
 US CL : 725/70,71,98,118,127  
 According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**  
 Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 725/70,71,98,118,127

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 East: pre-filtering, set top box, font substitution, MPEG4, boot, run time, image file, network, scan converter

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,579,239 A (FREEMAN et al) 26 November 1996 (26.11.1996), Column 3, Lines 36-41; Column 4, Lines 8-12; Column 9, Lines 25-37; Column 11, Lines 62-67; Column 12, Lines 1-8, 12-27, 52-60;	1
Y	US 5,805,804 A (LAURSEN et al) 08 September 1998 (08.09.1998), Column 2, Lines 31-38; Column 3, Lines 20-25; Column 5, Lines 62-64; Column 6, Lines 8-14; Column 17, Lines 33-36; Column 18, Lines 18-28, 43-49	2, 5-22, 25-26, 34-46, 53-55
Y	US 5,959,679 A (KAWAMURA) 28 September 1999 (28.09.1999), Column 2, Lines 22-29	2, 5-9, 10-22, 25, 36, 38, 46
Y	US 6,011,579 A (NEWLIN) 04 January 2000 (04.01.2000), Column 18, Lines 6-27; Figure 11	26, 34-35, 37, 39-45, 53-55
Y	US 5,587,928 A (JONES et al) 24 December 1996 (24.12.1996), Column 8, Lines 33-49; Column 9, Lines 9-19; Column 9, Lines 23-47	8, 53
Y	US 4,057,836 A (MUNSEY) 08 November 1977 (08.11.1977), Column 8, Lines 6-17	9, 54

Further documents are listed in the continuation of Box C.  See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"B" earlier application or patent published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 31 October 2002 (31.10.2002)	Date of mailing of the international search report <b>05 DEC 2002</b>
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Andrew Faile <i>K. Higemio Zogan</i> Telephone No. (703) 308-9048