

(12) **United States Patent**
Tasler

(10) **Patent No.:** **US 9,189,437 B2**
(45) **Date of Patent:** ***Nov. 17, 2015**

(54) **ANALOG DATA GENERATING AND PROCESSING DEVICE HAVING A MULTI-USE AUTOMATIC PROCESSOR**

(75) Inventor: **Michael Tasler**, Würzburg (DE)

(73) Assignee: **Papst Licensing GmbH & Co. KG**, St. Georgen (DE)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 755 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **11/467,092**

(22) Filed: **Aug. 24, 2006**

(65) **Prior Publication Data**

US 2006/0288148 A1 Dec. 21, 2006

Related U.S. Application Data

(60) Continuation of application No. 11/078,778, filed on Mar. 11, 2005, now abandoned, which is a continuation of application No. 10/219,105, filed on Aug. 15, 2002, now Pat. No. 6,895,449, which is a division of application No. 09/331,002, filed on Jun. 14, 1999, now Pat. No. 6,470,399.

(30) **Foreign Application Priority Data**

Mar. 4, 1997 (DE) 197 08 755
Mar. 3, 1998 (WO) PCT/EP98/01187

(51) **Int. Cl.**
G06F 13/28 (2006.01)
G06F 13/12 (2006.01)
(Continued)

(52) **U.S. Cl.**
CPC **G06F 13/385** (2013.01); **G06F 3/0605** (2013.01); **G06F 3/0607** (2013.01);
(Continued)

(58) **Field of Classification Search**

CPC ... G06F 3/0605; G06F 3/0613; G06F 3/0664; G06F 13/385; G06F 3/0607; G06F 13/387; G06F 3/0676; G06F 3/0661
USPC 710/1, 15, 63
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,714,635 A 1/1973 Hamilton et al.
3,805,245 A 4/1974 Brooks et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CA 2013 446 10/1990
DE 3624373 A1 1/1987

(Continued)

OTHER PUBLICATIONS

“OpenHCI Specification for USB” by Compaq, Microsoft, National Semiconductor, Oct. 10, 1996, Release V1.0a, pp. 1-146.*

(Continued)

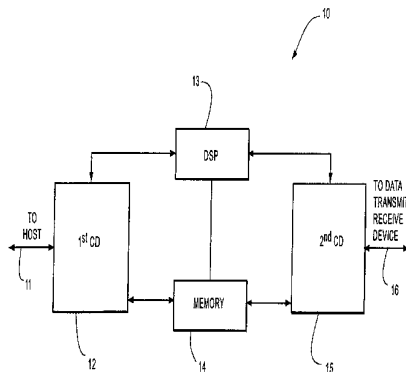
Primary Examiner — Chun-Kuan Lee

(74) *Attorney, Agent, or Firm* — The Meola Firm, PLLC

(57) **ABSTRACT**

An interface device (10) provides fast data communication between a host device with input/output interfaces and a data transmit/receive device, wherein the interface device (10) comprises a processor means (13), a memory means (14), a first connecting device (12) for interfacing the host device with the interface device, and a second connecting device (15) for interfacing the interface device (10) with the data transmit/receive device. The interface device (10) is configured by the processor means (13) and the memory means (14) in such a way that, when receiving an inquiry from the host device via the first connecting device (12) as to the type of a device attached to the host device, regardless of the type of the data transmit/receive device, the interface device sends a signal to the host device via the first connecting device (12) which signals to the host device that it is communicating with an input/output device.

45 Claims, 2 Drawing Sheets



(51)	Int. Cl. <i>G06F 13/38</i> (2006.01) <i>G06F 3/06</i> (2006.01)	5,576,757 A * 11/1996 Roberts et al. 348/220.1 5,579,529 A 11/1996 Terrell et al. 5,581,741 A 12/1996 Clark et al. 5,596,628 A 1/1997 Klein 5,614,344 A 3/1997 Kawakami et al. 5,614,670 A 3/1997 Nazarian et al. 5,614,948 A * 3/1997 Hannah 348/255 5,619,659 A 4/1997 Kikinis et al. 5,625,800 A 4/1997 Brayton et al. 5,625,840 A 4/1997 Numata et al. 5,628,030 A 5/1997 Tuckner 5,630,164 A 5/1997 Williams et al. 5,634,075 A * 5/1997 Smith et al. 710/9 5,638,299 A 6/1997 Miller 5,639,606 A 6/1997 Willey 5,640,204 A 6/1997 Tsutsui 5,663,901 A 9/1997 Wallace et al. 5,668,976 A 9/1997 Zook 5,689,710 A 11/1997 Stanley et al. 5,692,134 A * 11/1997 Wang et al. 710/104 5,692,159 A 11/1997 Shand 5,696,970 A 12/1997 Sandage et al. 5,703,584 A 12/1997 Hill 5,712,682 A 1/1998 Hannah 5,724,155 A 3/1998 Saito 5,724,574 A 3/1998 Stratigos et al. 5,742,934 A * 4/1998 Shinohara 711/103 5,748,924 A 5/1998 Llorens et al. 5,754,227 A 5/1998 Fukuoka 5,764,546 A 6/1998 Bryant et al. 5,765,027 A 6/1998 Wang et al. 5,778,205 A 7/1998 Orimoto 5,778,384 A 7/1998 Provino et al. 5,784,581 A 7/1998 Hannah 5,790,193 A 8/1998 Ohmori 5,794,032 A 8/1998 Leyda 5,802,325 A 9/1998 Le Roux 5,802,385 A 9/1998 Densham et al. 5,806,072 A 9/1998 Kuba et al. 5,812,879 A 9/1998 Moro 5,815,201 A 9/1998 Hashimoto 5,815,205 A 9/1998 Hashimoto et al. 5,822,614 A 10/1998 Kenton et al. 5,841,471 A 11/1998 Endsley et al. 5,844,961 A 12/1998 McEvoy et al. 5,845,094 A 12/1998 Beauchamp et al. 5,848,420 A 12/1998 Xu 5,854,905 A 12/1998 Garney 5,854,949 A 12/1998 Furukawa et al. 5,871,368 A 2/1999 Erdner et al. 5,875,415 A 2/1999 Lieb et al. 5,877,975 A 3/1999 Jigour et al. 5,878,248 A 3/1999 Tehranian et al. 5,881,366 A 3/1999 Bodenmann et al. 5,884,103 A 3/1999 Terho et al. 5,892,939 A 4/1999 Call et al. 5,914,748 A * 6/1999 Parulski et al. 348/239 5,915,106 A 6/1999 Ard 5,917,545 A 6/1999 Kowno et al. 5,920,709 A 7/1999 Hartung et al. 5,923,193 A 7/1999 Bloch et al. 5,926,208 A 7/1999 Noonen et al. 5,928,347 A 7/1999 Jones et al. 5,929,903 A 7/1999 Kiesow 5,930,480 A 7/1999 Staats 5,935,224 A 8/1999 Svancarek et al. 5,937,423 A 8/1999 Robinson 5,946,386 A 8/1999 Rogers et al. 5,948,091 A * 9/1999 Kerigan et al. 710/10 5,969,750 A * 10/1999 Hsieh et al. 348/14.1 5,974,161 A 10/1999 York 5,991,530 A 11/1999 Okada et al. 5,995,080 A 11/1999 Biro et al. 6,005,613 A 12/1999 Endsley et al. 6,012,113 A 1/2000 Tuckner 6,014,430 A 1/2000 Gosney et al. 6,023,292 A 2/2000 Wakui 6,026,217 A 2/2000 Adiletta
(52)	U.S. Cl. CPC <i>G06F3/0613</i> (2013.01); <i>G06F 3/0661</i> (2013.01); <i>G06F 3/0664</i> (2013.01); <i>G06F 3/0676</i> (2013.01); <i>G06F 13/387</i> (2013.01)	
(56)	References Cited U.S. PATENT DOCUMENTS 3,976,979 A 8/1976 Parkinson et al. 4,041,473 A 8/1977 Bardotti et al. 4,420,773 A 12/1983 Toyoda et al. 4,466,573 A 8/1984 Camboulives et al. 4,509,113 A 4/1985 Heath 4,642,759 A 2/1987 Foster 4,652,928 A * 3/1987 Endo et al. 348/219.1 4,680,732 A 7/1987 DiCenzo 4,787,027 A 11/1988 Prugh et al. 4,888,680 A 12/1989 Sander et al. 4,896,262 A 1/1990 Wayama et al. 4,901,275 A 2/1990 Hardie et al. 4,972,470 A 11/1990 Farago 5,014,186 A 5/1991 Chisholm 5,034,598 A 7/1991 Poland 5,070,474 A 12/1991 Tuma et al. 5,088,033 A 2/1992 Binkley et al. 5,129,036 A 7/1992 Dean et al. 5,131,089 A 7/1992 Cole 5,197,128 A 3/1993 Campbell et al. 5,214,761 A 5/1993 Barrett et al. 5,214,785 A 5/1993 Fairweather 5,226,168 A 7/1993 Kobayashi et al. 5,230,065 A 7/1993 Curley et al. 5,231,501 A 7/1993 Sakai 5,275,327 A 1/1994 Watkins et al. 5,291,584 A 3/1994 Challa et al. 5,291,611 A 3/1994 Davis et al. 5,296,611 A 3/1994 Solladie et al. 5,297,124 A 3/1994 Plotkin et al. 5,303,326 A 4/1994 Dean et al. 5,369,484 A 11/1994 Haugen 5,371,885 A 12/1994 Letwin 5,379,382 A 1/1995 Work et al. 5,386,518 A 1/1995 Reagle et al. 5,402,170 A 3/1995 Parulski et al. 5,428,357 A 6/1995 Haab et al. 5,430,855 A 7/1995 Walsh et al. 5,440,699 A 8/1995 Farrand et al. 5,444,644 A 8/1995 Divjak 5,457,784 A 10/1995 Wells et al. 5,457,785 A 10/1995 Kikinis et al. 5,463,772 A 10/1995 Thompson et al. 5,465,106 A 11/1995 Keech et al. 5,473,765 A 12/1995 Gibbons et al. 5,475,441 A 12/1995 Parulski et al. 5,479,206 A 12/1995 Ueno et al. 5,487,154 A 1/1996 Gunji 5,493,335 A 2/1996 Parulski et al. 5,499,378 A 3/1996 McNeill, Jr. et al. 5,506,617 A 4/1996 Parulski et al. 5,506,692 A 4/1996 Murata 5,508,821 A 4/1996 Murata 5,510,774 A 4/1996 Phillips 5,515,474 A 5/1996 Deacon et al. 5,524,047 A 6/1996 Brown et al. 5,528,765 A 6/1996 Milligan 5,530,858 A 6/1996 Stanley et al. 5,532,825 A 7/1996 Lim et al. 5,537,597 A 7/1996 Sandage 5,539,535 A 7/1996 Aizawa et al. 5,548,782 A 8/1996 Michael et al. 5,548,783 A 8/1996 Jones et al. 5,570,146 A 10/1996 Collette	

(56)

References Cited

U.S. PATENT DOCUMENTS

6,067,584 A 5/2000 Hayles et al.
 6,081,856 A 6/2000 Comer
 6,086,430 A 7/2000 Amoni et al.
 6,088,532 A 7/2000 Yamamoto et al.
 6,094,219 A 7/2000 Roberts et al.
 6,098,116 A 8/2000 Nixon et al.
 6,101,276 A 8/2000 Adiletta et al.
 6,104,430 A 8/2000 Fukuoka
 6,111,604 A * 8/2000 Hashimoto et al. 348/220.1
 6,119,180 A 9/2000 Terho et al.
 6,131,125 A 10/2000 Rostoker et al.
 6,147,703 A 11/2000 Miller et al.
 6,149,316 A 11/2000 Harari et al.
 6,163,344 A 12/2000 Kawamura et al.
 6,182,145 B1 1/2001 Schuman et al.
 6,188,675 B1 2/2001 Casper et al.
 6,256,319 B1 7/2001 Apgar et al.
 6,256,452 B1 7/2001 Yamamoto
 6,260,102 B1 7/2001 Robinson
 6,286,073 B1 9/2001 Vegter
 6,292,589 B1 9/2001 Chow et al.
 6,298,388 B1 10/2001 Taguchi
 6,344,875 B1 2/2002 Hashimoto et al.
 6,424,809 B1 7/2002 Yamamoto et al.
 6,441,854 B2 8/2002 Fellegara et al.
 6,470,399 B1 10/2002 Tasler
 6,654,050 B2 11/2003 Karube et al.
 6,670,985 B2 12/2003 Karube et al.
 6,895,449 B2 5/2005 Tasler
 7,046,276 B2 5/2006 Hashimoto et al.
 2001/0050711 A1 12/2001 Karube et al.

FOREIGN PATENT DOCUMENTS

DE 88 G 3559 3/1989
 DE 390 332 B 4/1990
 DE 41 37 928 A1 5/1992
 DE 195 28 889 A1 8/1995
 DE 296 07 724 U 4/1996
 DE 195 28 889 A1 2/1997
 EP 0 03 044 4/1984
 EP 0 229 700 7/1987
 EP 0 259 786 A1 9/1987
 EP 0 391 157 A2 3/1990
 EP 0 685 799 A1 5/1995
 EP 0685 799 A1 12/1995
 EP 0 705 037 A2 3/1996
 JP 53145535 A 12/1978
 JP 61034652 A 2/1986
 JP 61060164 A 3/1986
 JP 63-133204 6/1988
 JP 01303554 A 7/1989
 JP 01293404 A 11/1989
 JP 02-051727 2/1990
 JP 02114351 A 4/1990
 JP 03-246654 11/1991
 JP 04-133152 5/1992
 JP 04-213715 8/1992
 JP 04-309156 10/1992
 JP 06-052087 2/1994
 JP 06-067815 3/1994
 JP 06-83917 3/1994
 JP 06-090423 3/1994
 JP 06-301607 10/1994
 JP 6-301607 10/1994
 JP 07-044290 2/1995
 JP 07-177406 7/1995
 JP 07-202982 8/1995
 JP 08-110883 4/1996
 JP 8-110883 4/1996
 JP 08-130702 5/1996
 JP H8-130702 5/1996
 JP 08-191375 7/1996

JP 08-191412 7/1996
 JP 08-223341 8/1996
 JP 08-328990 12/1996
 JP 09016506 A 1/1997
 JP 09-091237 4/1997
 JP 10-177535 6/1998
 WO WO 91/02212 2/1991
 WO WO 94/19746 9/1994
 WO WO 94/27223 11/1994
 WO WO 96/27159 9/1996

OTHER PUBLICATIONS

Robert Ristelhueber, "Plug and play is almost here. (automatic configuration of PCs and peripherals)," May 1994, Electronic Business Buyer, v20 , n5 , pp. 43-45.*
 IEEE Standard for a High Performance Serial Bus, 1996. 392 pp. (IEEE Std 1394-1995).
 Digidesign 882/20 I/O Audio Interface Installation Guide, 14 pp.
 Information Technology—Serial Bus Protocol 2 (SBP-2), T10 Project 1155D, Revision 4, May 19, 1998, 107 pp.
 An American National Standard, IEEE Standard for a Simple 32-Bit Backplane Bus: NuBus; 1998, 51 pp. (ANSI/IEEE 1196-1987).
 Polaroid Digital Camera PDC-2000 User Guide for Macintosh or Windows applications (142 pp.).
 apple-history.com, Macintosh Quadra 650 (with NuBus Slots), Apple Computer, Inc., (produce introduced Oct. 1993) Nov. 29, 2005, 2 pp.
 Wang, James www.sims.berkeley.edu Third Party NuBus AV (Audio-Video) Cards, 1993-1996 1 pg.
 Accredited Standards Committee X3, Information Technolgy, John Lohmeyer, X3T10/96-202r1, Agenda and Results of Meeting, X3T10 SCSI Working Group Meeting, Jul. 24, 1996 (6 pp.).
 Intel Corporation, Universal Host Controller Interface Design Guide (UHCI), Revision 1.1, Mar. 1996 (47 pp.).
 Twain Working Group Committee, Twain Toolkit Release V1.6, Twain Specification Release, Feb. 5, 1996 (367 pp.).
 Digidesign Website, www.digidesign.com, Tabular cross-reference "Pro Tools 4.0.1 NuBus Systems compatibility" as supported by Digidesign, Inc., Palo Alto, CA, 3 pp.
 Twain Working Group, www.twain.org, About Twain, 4 pp.
 Pournelle Alex, Jetsend Technology Allows Device connectivity with No Servers, Drivers, or Code, Computer Technology Review, Jul. 1999, vol. 19, Iss. 7, p. 22, 4 pp.
 Business Editors/Technology Writers, Salutation Port-of-Entry Software Lets Application Developers Control Network Peripherals from the Windows Desktop, Business Wire, Jul. 13, 1998, p. 1 (3 pp.).
 Wire Feed, HP Introduces JetSend for Pocket PC JetSend Solutions Now Compatible with Complete Range of Microsoft Windows CE- and Pocket PC-based Products, M2 Presswire, Apr. 26, 2000, p. 1 (3 pp.).
 Stedman, John HP and TROY Group Extend JetSend Protocol to Simplify Printing Over Networks and the Internet; JetSend Protocol Expands Cutting-edge Capabilities to Non-HP Printers, HP Deskjet Printers, Legacy HP LaserJet Printers and Future Products, M2 Presswire, Feb. 10, 2000, p. 1 (2 pp.).
 Business Editors, An Industry First, 'TROY Group's NetSend Makes Up to 9 Million HP Legacy Printers Internet-Ready, Business Wire, Nov. 16, 1999, p. 1 (3 pp.).
 Keele, Richard Designing Control Units that Interface Peripherals to the IBM I/O Channel, Computer Technology Review, Fall 1988; vol. 8, Iss. 13, p. 71 (1 page).
 Lang, Michael Optical Server Uses Network Protocol for Plug-and Play Integration, Computer Technology Review, Dec. 1993, vol. 13, Iss. 15, p. 85 (3 pp.).
 Bursky, Dave Inter-System Communication Standard to Ease Clustered System Implementation, Electronic Design, Oct. 13, 1997, vol. 45, Iss. 22, p. 32 (3 pp.).
 Hadden, Thomas H., Tape Drive Without Backup Software? Wait No More, Computer Technology Review Los Angeles, Oct. 1995, vol. 15 Iss. 10, p. 34 (4 pp.).
 Ferelli, Mark, 12-inch WORM becomes the key to document image processing Computer Technology Review Los Angeles, Mar. 1994,

(56)

References Cited

OTHER PUBLICATIONS

- Nelson, Andy Catching a Direct Bus. InfoWorld, Jun. 17, 1996, vol. 18, Iss. 25, p. 129 (2 pp.).
- DeMonker, Judy 120 Moves Into Clustering, Storage Arenas, InfoWorld, Dec. 9, 1996, vol. 18, Iss. 50, p. 37 (2 pp.).
- Krause, Reinhardt I/O Driver Spec to be Unveiled, Electronic News, Jan. 29, 1996, vol. 42, Iss. 2101, p. 1 (3 pp.).
- Microsoft Windows 95 README for MS-DOS Device Drivers, Aug. 1995, p. 1 (2 pp.).
- Lang, Michael Optical server uses network protocols for plug-and-play integration, Computer Technology Review: Special Fall Issue, Los Angeles, Dec. 1993, vol. 13, Iss. 15 p. 85 (6 pp.).
- Printouts made in 2007 from three web pages that concern commercial information about the Nikon Coolpix 100 camera. (English).
- Manual for Nikon Coolpix 100 camera that was downloaded from Nikon's web site in 2007. (English).
- Photocopies of materials that came with a used Nikon Coolpix 100 camera that was purchased in 2007 in Europe. (German and English).
- A printout showing the file directory structure of the files contained in a CD-ROM that came with a used Nikon Coolpix 100 camera that was purchased in Europe in 2007. (English).
- A file called "COOL110S.PDF" that is stored in the CD-ROM that came with the used Nikon Coolpix camera that was purchased in Europe in 2007, the document contained in this file being entitled "Nikon Camara Digital Coolpix 100 Manual del Usuario." (Spanish).
- Pictures of a used Nikon Coolpix 100 camera that was purchased in the United States in 2007, one of the pictures showing the camera in a disassembled state.
- A Nikon Coolpix 100 camera manual that was purchased in 2007 in the United States. (English).
- Colloquium on "PC-Based Instrumentation" Martin, Steve; Digest No. 1990/025, The Institution of Electrical Engineers, London (4 pages).
- High Speed PC-based Data Acquisition Systems, Payne, Jeffrey R, Bradford A. Menz, et al.; 1995 IEEE, pp. 2140-2145.
- Implementing Remote Procedure Calls, Birrell, Andrew D. and Nelson, Bruce Jay; Xerox Palo Alto Research Center, ACM Transactions on Computer Systems, vol. 2, No. 1, Feb. 1984, pp. 39-59.
- QV-10 Digital Camera—News Release Nov. 14, 1994 (Feb. 1995 correction) Portable Image Information Equipment of Multimedia Age—Liquid Crystal Digital Camera of Compact Size (Jun. 7, 2007) CAP-020276 (internet web pages) 4 pages.
- It's the Most Effective, Cost-Sensitive Way to Publish Your Inventions; IBM Technical Disclosure Bulletin, vol. 38, No. 5, May 1995 (4 pages) CAP-020280.
- Casio's QV-10: Portable Presentations (Oct. 1995) (2 pages).
- About.com: Inventors—History of the Digital Camera, Bellis, Mary, 2 pages.
- Wikipedia: Digital Camera (13 pages).
- A Brief Info on Kodak DCS-Series Digital Still SLR Cameras (10 pages).
- A Brief Info on Kodak DCS-Series Digital Still SLR Cameras Part II—DCS-400 Series with Nikon N90(s)/F90(x) Body Chassis (10 pages).
- Card Information Structure of Nikon Coolpix 100 Memory.
- Manual for Sony Digital Still Camera DSC-F 1 (60 pages).
- Sony PC Connecting Kit—Operating Instructions (127 pages).
- Sony DSC-F1 Digital Still Camera (2 page).
- Manual for Canon EOS-DCS 3C Digital Camera (314 pages).
- Spec Sheet for Canon EOS-DCS 3C Digital Camera (2 pages).
- Spec Sheet for Canon PS600 Digital Camera (1 page).
- Information Regarding Olympus Camedia C-800L Digital Camera.
- Kodak DC20 Camera Manual (37 pages).
- Kodak DC 25 Camera Manual (47 pages).
- Kodak Picture Easy Software (1 page).
- Kodak Picture Works Software (2 pages).
- Universal Serial Bus Specification, 1.0 Final Draft Revision, Nov. 13, 1996.
- Brochure for Nikon Coolpix 100 camera (English translation provided) (8 pages).
- Nikon COOLPIX 100 Specification (4 pages).
- Technical Specs—QV-10A—QV Series—Cameras—Products—CASIO (1 page).
- QV-LINK Version 2.0 for Window (QVLINK-README.TXT) (5 pages).
- Qv-10B Owner's Manual (Casio) (23 pages).
- Information Technology—Serial Bus Protocol 2 (SBP -2), T10 Project 1155D, Revision 4, May 19, 1998, 107 pp.
- Accredited Standards Committee X3, Information Technology, John Lohmeyer, X3T10/96-202r1, Agenda and Results of Meeting, X3T10 SCSI Working Group Meeting, Jul. 24, 1996 (6 pp.).
- Business Editors, An Industry First, TROY Group's NetSend Makes Up to 9 Million HP Legacy Printers Internet-Ready, Business Wire, Nov. 16, 1999, p. 1 (3 pp.).
- Bursky, Dave Inter-System Communication Standard to Ease Clustered System Implementation, Electronic Design, Oct. 13, 1997, vol. 45, Iss. 22, p. 32(3 pp.).
- Hadden, Thomas H., Tape Drive Without Backup Software? Wait No More, Computer Technology Review Los Angeles, Oct. 1995, vol. 15, Iss. 10, p. 34 (4 pp.).
- USB: A Neat Package With A Fee Loose Ends; Author: Richard A. Quinell; pp. 38-52; EDN Date: Oct. 24, 1996.
- The SCSI Bus and IDE Interface Book; Author: Friedhelm Schmidt; Publication Date: Jun. 17, 1995 (German version published in 1993).
- "Device Class Definition for Human Interface Devices (HID)" version 1.0—Final; Publication Date: Jun. 21, 1997.
- "Derived Virtual Devices: A Secure Distributed File System Mechanism"; Publication Date: Sep. 17, 1996.
- Camera Manufacturers Invalidit Contentions; Jun. 18, 2008.
- Exhibit A to Reference No. 22.
- Case 1:07-mc-00493-RMC; Document 160; Filed Jun. 30, 2008.
- Case 1:07-mc-00493-RMC; Document 160-2; Filed Jun. 30, 2008.
- Case 1:07-mc-00493-RMC; Document 160-3; Filed Jun. 30, 2008.
- Data Disasters: What Not To Do; Author; Michael Lang; Date: Dec. 1993.
- PC-based Data Acquisition in an Industrial Environment; Author: Steve Martin; Date: 1990.
- Jul. 1996 Apple article on SCSI drivers; Date: Jul. 3, 1996.
- Designing Control Units; Author: Richard Keele; Date: Jan. 31, 1989.
- Exhibit A40—Case 1:07-mc-00493-RMC; Document 139-42; Filed Jun. 18, 2008; p. 1 of 16.
- Exhibit A41—Case 1:07-mc-00493-RMC; Document 139-43; Filed Jun. 18, 2008; p. 1 of 16.
- Exhibit A42—Case 1:07-mc-00493-RMC; Document 139-44; Filed Jun. 18, 2008; p. 1 of 16.
- Exhibit A43—Case 1:07 mc-00493-RMC; Document 139-45; Filed Jun. 18, 2008; p. 1 of 16.
- Exhibit A44—Case 1:07-mc-00493-RMC; Document 139-46; Filed Jun. 18, 2008; p. 1 of 16.
- Exhibit A45—Case 1:07-mc-00493-RMC; Document 139-47; Filed Jun. 18, 2008; p. 1 of 16.
- Exhibit A46—Case 1:07 mc-00493-RMC; Document 139-48; Filed Jun. 18, 2008; p. 1 of 16.
- Exhibit A47—Case 1:07-mc-00493-RMC; Document 139-49; Filed Jun. 18, 2008; p. 1 of 6.
- Article: Search The European Classification; Physics: Computing; Calculating and Counting.
- "About the SCSI Manager," Developer Connection—Inside Macintosh: Devices / Chapter 3-SCSI Manager (6 pgs), © Apple Computer, Inc., Jul. 3, 1996.
- Clarifications to Plug and Play ISA Specification, Version 1.0a.
- "Digital Video Camera Recorder—Digital Handycam DCR-VX1000," © 1995 by Sony Corporation.
- "LK-12S for Windows 95—Connection Kit for the Casio LCD Digital Camera," QV-Link, Version 2.6 Owner's Manual.
- "Plug and Play ISA Specification," Version 1.0a, © 1993,1994 by Intel Corporation and Microsoft Corporation.
- "Plug and Play SCSI Specification," Version 1.0, © 1994 by Adaptec, AT&T Global Information Solutions, Digital Equip. Corp., Future

(56)

References Cited

OTHER PUBLICATIONS

- "Salutation Port-of-Entry Software Lets Application Developers Control Network Peripherals from the Windows Desktop," Desktop Business Wire, Inc., San Jose, CA, Jul. 13, 1998.
- "The SCSI Bus and IDE Interface," Addison-Wesley, Sect. 14.2-25.2, pp. 183-301.
- "Universal Serial Bus," http://www.homestayfinder.com/Dictionary.aspx?q=Universal_Serial_Bus.
- "Universal Serial Bus," Wikipedia, <http://www.en.wikipedia.org/wiki/USB>.
- Agrawal, Prathima, et al., "A Testbed for Mobile Networked Computing," AT&T Bell Laboratories, Murray Hill, NJ.
- Annamalai et al., "Emerging High-Speed Local-Area Networks and Wide-Area Networks," Proceedings, SPIE (International Society for Optical Engineering), vol. 2608, Oct. 24-26, 1995 (Philadelphia, PA).
- Apple Computer, Inc, Macintosh Quadra 700, Developer Technical Publications (1991).
- Apple Computer, Inc., Chapter 1, "Hardware," Macintosh PowerBook 160 and Macintosh PowerBook 180 (2000).
- Apple Computer, Inc., excerpt, "Devices," *Inside Macintosh* (1994).
- Apple Technical Library, Chapters 1 and 2, "Introduction to File Management" and "File Manager," *Inside Macintosh* (1992).
- Bowen, Jonathan, "A User-Friendly Interface Adapter" Computing Laboratory, Oxford University (Oxford, UK).
- Business Wire, "HP Receives Industry's First Windows 95 Flatbed-Scanner Certification; HP ScanJet 4c and 4p Scanners Now Provide Easy Installation," Published Nov. 11, 1996.
- Casio, Owner's Manual for QV-10 B liquid crystal digital camera.
- Chan et al. "A Mega-Pixel Resolution PC Digital Still Camera," *SPIE*, 2654:164-172 (1996).
- Chapter 6, "Power Manager Reference".
- Clarke, P., "Two European Vendors Roll Peripheral ICs," *Electronic Engineering Times*, No. 928 (Nov. 18, 1996).
- Compaq, Intel, Microsoft, and NEC, "Universal Serial Bus Specification," Revision 1.1 (Sep. 23, 1998).
- Correll, K., and Ulichney, R., "The J300 Family of Video and Audio Adapters: Architecture and Hardware Design," *Digital Technical Journal*, vol. 7, No. 4 (1995).
- Davis, T., "The Path to a Custom Lab is Through a PC and an External Interface," *Research & Development* (Apr. 1985).
- DiNucci, Darcy, et al., excerpt, "SCSI ID," *Macintosh Bible* (5th Edition) translated to Japanese (1995).
- Eastman Kodak User's Manual for "Kodak Professional DCS 200 Digital Camera" (1993).
- Eastman Kodak User's Manual for EOS DCS 1, EOS DCS 3 and EOS DCS 5 digital cameras (1997).
- Excerpt of chapter 6, Macintosh "SCSI ID" (1994).
- Gadre, D., "Using the Parallel Adapter as a Host Interface Port: New Uses for Old Tools," *Dr. Dobbs' Journal* (Apr. 1996).
- Gallagher, Paul, "A MegaPixel Camera With SCSI Interface" (International Robots and Vision Automation Conference, May 9-11, 1995, Detroit, MI).
- Gallant, John, "Advancing the Art of Industrial Video Imaging: CCD Cameras and Frame Grabbers," EDN Access, <http://www.edn.com/archives/1996/011896/<http://www.edn.com/archives/201996%20/011896/>02df2.htm>.
- Heiman, E., "Maximize Computer Storage with an IPI Controller: Integrate a High Data-Transfer Rate Disk Controller Into Your Computer System" (Apr. 13, 1989).
- HighBeam Research, "1997 Technology Forecast," Published in Business New on Jan. 6, 1997.
- Himowitz, M. J., "Digital Watching/Infotech/Technology Monitor," *Time, Inc.* (Feb. 17, 1997).
- Hitoshi et al., "High Definition Image Capturing Camera HC-1000," vol. 17, No. 16 (Mar. 4, 1993).
- Hoffman, Gary, "A/V Digital Interface of Choice," IEEE 1394 (Jan. 1996).
- HP Photosmart Digital Camera—How the HP PhotoSmart Digital Camera Works.
- HP PhotoSmart Digital Camera—Product Specifications (Model No. C5340A).
- HP PhotoSmart Digital Camera C20/C30/C200 Series—TWAIN Technology Overview.
- HP website, HP Photosmart digital camera—Accessories, Parts, Supplies, and Manuals.
- HP website, HP Photosmart Digital Camera—What Ships in the Box. HpNOW, "PhotoSmart System" (Mar. 18, 1997).
- Isoyama et al., "ISDN Basic Interface for Sumistation," Sumitomo Electric Technical Review, No. 31 (Jan. 1991).
- Jones, Douglas W., "Disk Interfaces," University of Iowa, Department of Computer Science (Fall 1996).
- Kleiman, S., Vnodes: An Architecture for Multiple file System Types in Sun UNIX (Sun Microsystems).
- Kodak DCS-Digital Still SLR camera, "A brief info on Kodak DCS-Series Digital Still SLR cameras" (Oct. 30, 2006).
- Kodak Professional DCS 200 Digital Camera (in Japanese language).
- Kodak TIB4234, DCS 200 AC Power Adapter, Kodak Technical Information Bulletin (Jun. 2000).
- Kodak User's Guide for DC25 Digital Camera.
- Lang, Michael, "Optical Server Uses Network Protocols for Plug-and-Play Integration," *Computer Technology Review* (Special Fall Issue, Dec. 1993).
- Moore, D.J., "Multimedia Presentation Development Using the Audio Visual Connection," *IBM Systems Journal*, vol. 29, No. 4 (1990).
- Müller, H., et al., "The CHI, a New Fastbus Interface and Processor," *IEEE Transaction on Nuclear Science*, vol. 37, No. 2.
- Nikon F-801s—N8008s Repair Manual, Nikon Corporation.
- Nikon N8008s AF Instruction Manual.
- Note, S., et al. "Rapid prototyping of DSP systems: requirements and solutions," pp. 88-96, 1074-6005/95 © 1995 IEEE.
- Oda, K., et al., "The Development of Digital Still Camera Using 1.3M-Pixel VT-CCD Image Sensor," ITE Technical Report, vol. 19, No. 60 (Nov. 15, 1995).
- Okuda, K., chapter from book, "MacRecorder," translated to Japanese (Jul. 20, 1992).
- Pournelle, A., "JetSend Technology Allows Device Connectivity With No Servers, Drivers, or Code—Company Business and Marketing," *Computer Technology Review* (Jul. 1999).
- Quinnell, R., "The Mighty Morphin' PCI Bus," *EDN* (Apr. 25, 1996).
- Rieg, E., "Improved design avoids bottlenecks," *Elektronik*, Sep. 29, 1989; 38(20); pp. 52-56, (German) English translation.
- Sawert, B., "The Advanced SCSI Programming Interface," *Dr. Dobbs' Journal* (Mar. 1994).
- Schmidt, F., "SCSI-Bus und IDE-Schnittstelle," Sect. 3.5-3.17.3, pp. 174-316.
- Schmidt, F., "The SCSI Bus and IDE Interface—Protocols, Applications and Programming," translated (English) from the German edition SCSI-Bus und IDE-Schnittstelle, Addison-Wesley (Deutschland) GmbH.
- Section 5, "Using the DCS 200 Camera with a PC," of Kodak User's Manual.
- Section 8, "Reference-Kodak Driver for Aldus PhotoStyler Software," of Kodak User's Manual.
- Sheppard et al., "Engineering Advances: New Opportunities for Biomedical Engineers," Proceedings of the 16th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, vol. 16 (11/3-6/94).
- Simpson, R. W., "High Performance, Dual Speed CCD Camera System for Scientific Imaging," *SPIE*, vol. 2654 (Jan. 31, 1996).
- Slater, M., "Universal Serial Bus to Simplify PC/IO: New Interface to Service Keyboards, Mice, Telecom, and More," *Microprocessor Report*, vol. 9, No. 5 (Apr. 17, 1995).
- Sony Semiconductor, "New Interface of Digital Network Age," IEEE 1394.
- Spragens, J., "Kodak DCS 420 Takes Photographers Out of the Dark-room and Onto Disk," *InfoWorld* (Feb. 13, 1995).
- SystemSoft® Corporation and Intel Corporation®, "Universal Serial Bus Common Class Specification" (Dec. 16, 1997).
- Tatkow, M., et al. "New techniques for high-speed data acquisition,"

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.