TCL'S INVALIDITY CONTENTIONS FOR U.S. 8,713,206 Exhibit O5: Prior Art References Under 35 U.S.C. § 103

To the extent that Plaintiff asserts that any reference charted in these Invalidity Contentions does not disclose a give element, it would have been obvious to combine such reference with the knowledge of a person of ordinary skill in references identified herein as disclosing the element, Applicant's Admitted Prior Art, and/or the additional prior at Exhibits E1-E14, the contents of which are hereby incorporated by reference into this chart. One of ordinary skill is been motivated to, and would have understood how to, combine any of these disclosures based on the background person of ordinary skill in the art and the teachings from these references, as well as the exemplary motivations idenvalidity Contentions.

To the extent 35 U.S.C. § 112, ¶6 applies to any of the claim limitations of the Asserted Claims, the art cited herein corresponding structure(s) and function(s) claimed or their equivalents, as shown below, or renders them obvious is knowledge of one skilled in the art.

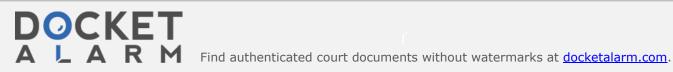
| '206 Claim | Claim Element | Obviousness Combinations ¹² |
|---------------|---|--|
| 1.pre | A display control apparatus comprising: | To the extent that the preamble is construed as a limitation, this element was well-priority date of the '206 patent. |
| | | See, element 1.pre in Exhibits E1-E14 |
| | | See, e.g., elements $1.a - 1.c.$ |
| 1.a | a communication unit configured to communicate with an external device; and | This element was well-known as of the priority date of the '986 patent. |
| | | See, element 1.a in Exhibits E1-E14. |
| | | <u>U.S. Patent No. 7,577,766 ("Ono"):</u> |
| | | 3:33-37 ("FIG. 1 shows a configuration of an essential part of the inkjet recording to the embodiment of the present invention. In FIG. 1, the inkjet recording apparation body 101 and a CPU (central processing unit) 102 controlling the inkjet recording |

¹ Defendants incorporate herein any related work performed by or on behalf of an author or an inventor in the United States under 35 U.S in this case is ongoing and, accordingly, this invalidity chart is not to be considered final. Defendants reserve the right to supplement and on further investigation and ongoing discovery.

² Except where specifically noted otherwise, this chart may apply the apparent interpretations of claim language as used by Plaintiff in its contentions. Such use, however, does not imply that Defendants adopt or agree with Plaintiff's interpretations in any way. Additionally, contentions for claim preamble elements, Defendants do not take a position on whether the preamble is a claim limitation.



| Obviousness Combinations ¹² |
|---|
| troller 105 operates as a USB host and communionnector (type-A) 108 so as to transmit/receive da |
| 301 and the USB memory 401 are shown as exa connector 108. |
| of performing direct printing from this type of dig ass may be provided for a path between the USB co |
| FIG. 1 |
| RAM 104 ROM 105 USB HOST CONTROLLER 106 USB DEVICE CONTROLLER 109 PC PC PC PC PC PC PC PC PC P |
| |



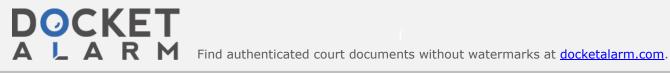
| '206 Claim | Claim Element | Obviousness Combinations ¹² |
|---------------|---------------|---|
| | | ¶[0025] ("The projector 10 includes an interface unit 140 including a termina 30 is connected, a connection determination unit 110 that determines whether the connected to the terminal, and whether an image signal or the like is input via the determination result of the input determination unit 120 and the connection determining whether or not, and when the determination result of the connection 110 is true and the determination result of the input determination unit 120 is fals unit 130 that performs different notifications.") |
| | | ¶[0042] ("As such a cable 30, for example, a cable having a D-SUB connector, a D connector, a USB cable, an IEEE 1394 cable, or the like can be adopted.") |
| | | U.S. Patent No. 7,760,232 ("Takashima"): |
| | | 7:50-55 ("A communication connector 117 is a connector of connecting a USI |
| | | control section 118 is means of controlling the connection state and the comme the USB cable, and is controlled by the system controlling means 115. In practice section 118 is embodied in a dedicated semiconductor chip or the like.") |
| | | <u>U.S. Patent Pub. No. 2006/0248192 ("Morris"):</u> |
| | | ¶[0011] ("Referring to the drawings, FIG. 1 shows a digital <u>display 1 having a low whereby the display is capable of storing a plurality of digital images and assets."</u> |
| | | so that the images can be sequentially displayed in a predetermined order. T |
| | | may be any suitable device with storage and internet compatibility such as that so MEMORY FRAME by Pacific Digital Corporation of Irvine, Calif. By way of expression of the storage with a storage with |
| | | images, such as photographs, may be prepared and uploaded to display 1 from by way of a USB or ethernet link 12. The digital display 1 may be conveniently table, or similar stand, in a home or office to display the stored digital images one preprogrammed rate. In this case, the digital images are displayed as slides 3, 5, 7 continuously running slide show.") |
| | | ¶[0015] ("The foregoing dynamic method is accomplished by the digital display least one remote web server 14 at an internet connection so that the digital d to retrieve digital images from across the internet. That is, more than the single shown in FIG. 1 may be utilized herein.") |
| | | <u>U.S. Patent No. 7,134,077 ("Sellen"):</u> |



| '206 Claim | Claim Element | Obviousness Combinations ¹² |
|---------------|---------------|--|
| | | 3:10-14 ("Both the computing and <u>auxiliary screen unit 10, 20 include input/or enable operable interconnection between. This interconnection may be by m USB, by wireless connection such as "Bluetooth", or IEEE802.11 Wireless E</u> |
| | | <u>U.S. Patent Pub. No. 2006/0242362 ("Hanes"):</u> |
| | | ¶[0017] ("The chipset 14 is coupled to the I/O bus 24. The I/O bus 24 serves a pathway for signals from the chipset 14 to I/O devices 26, 27, 28, 30, 32, and 26, 27, 28, 30, 32, and 34 include external data storage devices, such as an ex |
| | | drive 26, an external data storage device 27, or a flash memory drive 28, as v devices, such as a mouse 30, a video display 32, or a keyboard 34. The externa 27 may comprise any suitable type of external data storage device, such as a cam |
| | | memory card reader, that can be coupled to the computer system 10."); see also F ¶[0018] ("In one embodiment, the I/O bus 24 employs any one of a number of |
| | | protocols to communicate with the I/O devices 26, 27, 28, 30, 32, and 34. Extendevices communicate with the computer using an interface protocol. These is |
| | | permit the computer to exchange information with the external data storage communication protocols include, but are not limited to, universal serial bus serial advanced technology attachment ("S-ATA"), IEEE-1394, small computer to exchange information with the external data storage communication protocols include, but are not limited to, universal serial bus serial advanced technology attachment ("S-ATA"), IEEE-1394, small computer to exchange information with the external data storage communication protocols include, but are not limited to, universal serial bus serial advanced technology attachment ("S-ATA"), IEEE-1394, small computer to exchange information with the external data storage communication protocols include, but are not limited to, universal serial bus serial advanced technology attachment ("S-ATA"), IEEE-1394, small computer to exchange information with the external data storage communication protocols include, but are not limited to, universal serial bus serial advanced technology attachment ("S-ATA"), IEEE-1394, small computer to exchange information in the external data storage information with the external data storage communication in the external data storage information with the external data storage information in the external data storage in the external data storage information in the external data storage in the external data sto |
| | | ("SCSI"), integrated drive electronics ("IDE"), fiber channel, gigabit Ethern Various types of communication protocols can be implemented in the computer s alternate embodiment, the I/O bus 24 is integrated into the chipset 14."); see also [0023]. |
| | | High-Definition Multimedia Interface Specification Version 1.3a ("HDMI SI |
| | | 1 ("This document constitutes the specification for the High-Definition Multimed version 1.3a. The High-Definition Multimedia Interface is provided for trans television audiovisual signals from DVD players, set-top boxes and other audiovisual signals." |
| | | television sets, projectors and other video displays. HDMI can carry high qual audio data and can carry all standard and highdefinition consumer electronics vid protection technology is available. HDMI can also carry control and status inform directions.") |



| '206 Claim | Claim Element | Obviousness Combinations ¹² |
|---------------|---------------|--|
| | | 8 ("HDMI carries a VESA DDC channel. The DDC is used for configuration and between a single Source and a single Sink. The optional CEC protocol provides h functions between all of the various audiovisual products in a user's environment |
| | | 10 ("A device's external HDMI connection shall be presented via one of the three |
| | | connectors, Type A, Type B or Type C. This connector can be attached directly to attached via a cable adapter that is shipped with the device.") |
| | | <u>U.S. Patent no. 9,110,624 ("Herz '624"):</u> |
| | | 2:40-48 ("In one embodiment, the present invention is implemented as a method output to a display device (e.g., LCD display, projection TV display, plasma display method includes detecting a display device connection change (e.g., connection) |
| | | disconnection) on an output connector (e.g., HDMI, DVI, and the like) and in settings (e.g., resolution and/or refresh rate) are changed to a compatible out |
| | | NTSC standard 480i, etc.) on the connected output connector."); see also 7:4- |
| | | <u>U.S. Patent No. 5,027,269 ("Grant")</u> : |
| | | 4:35-42 ("In the communication services component 30, a session control block (memory 34 for recording the session state information are maintained. Address sprecovery (alternate) instance for Lux. The connection labeled 22 in FIG. 1A depid appearance in address space 10 when processing is proceeding normally."); see a 1B. |
| | | 4:52-59 ("Depending on the type of recovery, address space 20 can be viewed as Lux in address space 10, as another address space that contains a local alternate, of another host system. In the latter case, the connection between the communication address space that contained the active logical unit requires a communication according to the property of the communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires a communication according to the contained the active logical unit requires according to the contained the active logical unit requires according to the contained the contain |
| | | <u>U.S. Patent No. 6,442573 ("Schiller"):</u> |
| | | 8:45-50 ("For example, each frame device is programmed to automatically config obtaining input form the user. So long as the frame device is connected to a powe communication source it may remain operational without obtaining input from the 9:13-29. |



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