

**TCL'S INVALIDITY CONTENTIONS FOR U.S. 8,713,206**  
**Exhibit E6: U.S. Patent No. 8,078,766 ("Takenaka")**

As demonstrated in the claim charts below, the claims of U.S. Patent No. 8,713,206 ("the '206 patent") are invalid under more sections of 35 U.S.C. § 102 as anticipated by Takenaka and (b) under 35 U.S.C. § 103(a) as obvious over Takenaka alone and as set forth herein, and/or combined with the knowledge of a person of ordinary skill in the art, Applicant's Prior Art ("AAPA"), and/or the additional prior art references discussed in Exhibits E1-E14, and O5, the contents of which are incorporated by reference into this chart. One of ordinary skill in the art, as of the alleged priority date of the '206 patent, would have known to combine the prior art elements disclosed by the foregoing references using known methods, and to use them according to their established functions in order to achieve a known and predictable result.

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

'206 Claim	Claim Element	Prior Art: U.S. Pat. No. 8,078,766 ("Takenaka")
1.pre	A display control apparatus comprising:	Takenaka discloses a display control apparatus. <i>See, e.g.</i> , elements 1.a – 1.c.
1.a	a communication unit configured to communicate with an external device; and	Takenaka discloses a communication unit configured to communicate with an external device.  For example, Takenaka discloses:  4:35-40 ("The image changeover unit 131 is connected to an external input terminal 130 through which an external device transmits any image signal VSc such as a composite signal, high definition multimedia interface (HDMI) signal, digital visual interface (DVI) signal, and the like. The image changeover unit 131.")  6:20-31 ("A USB interface unit 153 is also connected to the bus 154. The USB interface unit 153 is constituted of a USB transceiver for executing any serial communication with an external device, serial interface engine (SIE) for executing communication control process according to the USB protocol, and the like. The control unit 151 communicates the USB interface unit 153, detecting that an external device connects the USB interface unit 153, the control unit 151 sets a configuration setting to read out address setting of the connected external device and reads out pieces of information stored in the connected external device."); <i>see also</i> 6:42-52.

<p>1.b</p>	<p>a display control unit configured to display, on a display unit, an image received from the external device via the communication unit, and if communication with the external device is disconnected, to stop the display of the image received from the external device,</p>	<p>Takenaka discloses a display control unit configured to display, on a display unit, from the external device via the communication unit, and if communication with the external device is disconnected, to stop the display of the image received from the external device.</p> <p>For example, Takenaka discloses:</p> <p>5:20-24 (“The image-output-processing unit 135 is connected to an image display unit 136, which is constituted of any display device such as liquid crystal display (LCD), plasma display panel (PDP), electro luminescence (EL), and cathode ray tube. The image-output-processing unit 135 outputs the image output signal DRv for driving the display device based on the image output signal DRv. The image-output-processing unit 135 supplies the display drive signal DRv to the image display unit 136. This enables the image display unit 136 to display an image. The image-output-processing unit 135 outputs the image output signal VSg as an output signal Vout having any format corresponding to an external device. When the image-output-processing unit 135 supplies an image signal to the external device, the image-output-processing unit 135 supplies an image signal to the external device.”)</p> <p>5:28-33 (“The image-output-processing unit 135 outputs the image output signal Vout having any format corresponding to an external device, not shown, when the image-output-processing unit 135 supplies an image signal to the external device.”)</p> <p>6:26-38 (“The control unit 151 communicates the USB interface unit 153 and when the external device connects the USB interface unit 153, the control unit 151 executes the operation of setting to read out address setting of the connected external device and various kinds of information stored in the connected external device. When detecting that an external device that can correspond to the apparatus of displaying the image (the television receiver 100) connects the read information, the control unit 151 communicates this external device to read out the read information VSusb out of the external device and supply it to the image changeover unit 131, to display the image stored in the external device to be displayed on the image display unit 136.”)</p> <p>6:42-52 (“At step ST1, the control unit 151 determines whether or not the television receiver 100 connects an external device. When the control unit 151 determines that the television receiver 100 connects the external device, the operation goes to step ST2. When the control unit 151 determines that the television receiver 100 connects no external device, the operation goes back to step ST1. It is to be noted that the control unit 151 may determine whether or not the television receiver 100 connects an external device based on facts whether or not a D+terminal or a D-terminal is connected to the connector provided in the USB interface unit 153 has a predetermined voltage level.”)</p>
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		<p>8:25-29 (“At the step ST7, the control unit 151 determines whether or not the external device is included in the image class. If the class checked at the step ST5 is included in the image class, the operation goes to step ST8. If the class checked at the step ST5 is not included in the image class, the operation goes to step ST9. If the class code is “00h” and its interface class code is “06h”, the operation goes to step ST8.</p> <p>8:61-9:4 (“At the step ST11, the control unit 151 determines whether or not the connection of the external device has been released. If the external device keeps on connecting the television receiver 100, the operation goes back to the step ST11 where the message PM3 keeps on displaying the notice. If the connection of the external device has been released, for example, a USB cable has been disconnected from a USB connector in the USB interface unit 153 or a USB connector in the external device, the operation goes to step ST15 where the control unit 151 finishes displaying the notice. If the connection of the external device has been released, the operation then goes back to the step ST1.”); <i>see also</i> FIGs. 1, 2, 4, 6</p> <p>10:6-18 (“At the step ST16, the television receiver 100 displays any noncorresponding message on its image display unit 101, for example, a message PM5 as shown in FIG. 3F to notice the user that the external device is not USB device that can correspond to the apparatus of displaying the notice on the television receiver 100). At the step ST17, the control unit 151 determines whether or not the connection of the external device has been released. If the external device keeps on connecting the television receiver 100, the operation goes back to the step ST17. If the connection of the external device has been released, the operation goes to step ST18. At the step ST18, the control unit 151 finishes displaying the notice.”)</p> <p>10:39-45 (“When the class of the external device is not changeable and a set class of the external device is different from the previously specified class of the apparatus of displaying the notice on the television receiver 100), the television receiver 100 displays on its image display unit 101 a message PM6 as shown in FIG. 3G, noticing that the television receiver 100 does not correspond to the connected external device.”)</p> <p>To the extent that Plaintiff alleges that Takenaka does not explicitly disclose this limitation is inherent and/or it would have been obvious in view of the knowledge of one skilled in the art, AAPA, and/or in view of the references identified in Exhibit 1, the limitation is inherent and/or it would have been obvious in view of the knowledge of one skilled in the art, AAPA, and/or in view of the references identified in Exhibit 1.</p> <p>To the extent 35 U.S.C. § 112, ¶6 applies, Takenaka also discloses the corresponding function(s) claimed or their equivalents, as shown above, or renders them obvious to one skilled in the art.</p>
1.c	wherein the display control unit varies a period of time from the disconnection to the stopping of the display of the	<p>Takenaka discloses that the display control unit varies a period of time from the disconnection to the stopping of the display of the image depending on a type of the external device.</p> <p><i>See, e.g.</i>, element 1.b.</p> <p>In addition, Takenaka discloses:</p>

	<p>image depending on a type of the external device.</p>	<p>2:15-41 (“According to an embodiment of the present invention, there is provided displaying an image that connects an external device by using USB connection. The displaying an image contains a display unit and a control unit that reads device information from the connected external device and performs display control on the display unit based on the device information. Under control of the control unit, the display unit displays a message corresponding to the class of the external device to a class previously specified in the apparatus of displaying the image when the class of the external device is changeable and it is determined based on the device information that the set class of the external device is different from the class previously specified in the apparatus of displaying the image. According to another embodiment of the present invention, there is provided a method of displaying an image in an apparatus of displaying an image that connects an external device by using USB connection. The method contains the steps of reading device information out of the external device, and displaying a message that is used for changing the class of the external device to a class previously specified in the apparatus of displaying the image when the class of the external device is changeable and it is determined based on the device information that the set class of the external device is different from the class previously specified in the apparatus of displaying the image.”)</p> <p>To the extent that Plaintiff alleges that Takenaka does not explicitly disclose this limitation is inherent and/or it would have been obvious in view of the knowledge of one skilled in the art, AAPA, and/or in view of the references identified in Exhibit A, the limitation is inherent and/or it would have been obvious in view of the knowledge of one skilled in the art, AAPA, and/or in view of the references identified in Exhibit A.</p> <p>To the extent 35 U.S.C. § 112, ¶6 applies, Takenaka also discloses the corresponding function(s) claimed or their equivalents, as shown above, or renders them obvious to one skilled in the art.</p>
<p>2.pre</p>	<p>The display control apparatus according to claim 1,</p>	<p>Defendants incorporate by reference their contentions relating to claim 1, as if fully set forth herein.</p>
<p>2.a</p>	<p>wherein the display control unit stops the display of the image immediately or after a specific period of time elapses from the disconnection depending on a type of the external device.</p>	<p>Takenaka discloses that the display control unit stops the display of the image immediately or after a specific period of time elapses from the disconnection depending on a type of the external device.</p> <p>For example, Takenaka discloses:</p> <p>5:28-33 (“The image-output-processing unit 135 outputs the image output signal Vout having any format corresponding to an external device, not shown, when the image-output-processing unit 135 supplies an image signal to the external device.”)</p> <p>5:64-6:19 (“The control unit 151 also connects the above-mentioned various units. The control unit 151 generates the control signal CT based on the manipulation signal from the user interface unit 152 and supplies the control signal CT to the above-mentioned display control unit 130.”)</p>

		<p>units through a bus 154, which enables the television receiver 100 to operate correctly according to the user's manipulations. For example, when the manipulation signal PS received from the user's manipulation unit 152 indicates that the user manipulates any signal changeover such as channel changeover, broadcast changeover, or input changeover, the control unit 151 controls the tuning unit 112 for satellite broadcasting and the tuning/demodulation unit 114 for terrestrial broadcasting to select a desired channel thereof or controls the demultiplexer 121, the image changeover unit 140, the audio changeover unit 141 to perform their changeover operations, in order to present the presented image and/or audio of the desired channel or the desired broadcast system or the audio received from an external device. The control unit 151 further generates a control signal for displaying EPG or the like based on the broadcast data DTd received from the demultiplexer 121 and supplies such the control signal to the signal-generating unit 133.”)</p> <p>8:8-14 (“At the step ST6, the control unit 151 determines whether or not the external device is in the mass storage class. If the class checked at the step ST5 is included in the mass storage class, the operation goes to step ST7. If the device class code is “00h” and its interface class code is “08h”, the operation goes to step ST7. If the class checked at the step ST5 is not included in the mass storage class, the operation goes to step ST7.”)</p> <p>8:61-9:4 (“At the step ST11, the control unit 151 determines whether or not the external device has been released. If the external device keeps on connecting the television receiver 100, the operation goes back to the step ST11 where the message PM3 keeps on displaying. If the connection of the external device has been released, for example, a USB cable has been disconnected, a USB connector in the USB interface unit 153 or a USB connector in the external device has been disconnected, the operation goes to step ST15 where the control unit 151 finishes displaying the image and the operation then goes back to the step ST1.”)</p> <p>9:30-35 (“At the step ST12, the control unit 151 determines whether or not the external device is in the vendor specific class. If the class checked at the step ST5 is included in the vendor specific class, the operation goes to step ST13. If the class checked at the step ST5 is not included in the vendor specific class, the operation goes to step ST16.”)</p> <p>9:51-57 (“Thus, when the user performs class changeover on the external device by selecting the connection-setting change indication display to set its class to the mass storage class, the television receiver 100 connects the external device to the television receiver 100, the television receiver 100 displays that the connected external device is USB device that can correspond to the television receiver 100. This enables the USB device and the apparatus of displaying the image (the television receiver 100) to be connected to each other in the mass storage class.”)</p>
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