

Yealink

***Yealink (USA) Network Technology Co., Ltd., and
Yealink Network Technology Co., Ltd.***

***v.
Barco NV***

Petitioner's Demonstratives \\ IPR2024-01436–01439

IPR2024-01436

U.S. Pat. No. 10,762,002

Summary and Key Arguments

- **Ground 1:** Kaplan, Ahmed and Deforche – PO argues no motivation to combine, and that Deforche’s teaching of using pre-installed generic drivers is incompatible with Kaplan and Ahmed, which require custom software installation.
- **Ground 2:** Maeda, Ahmed and Deforche – PO made similar arguments that Maeda also requires custom software, allegedly undermining Deforche’s “zero-footprint” approach.



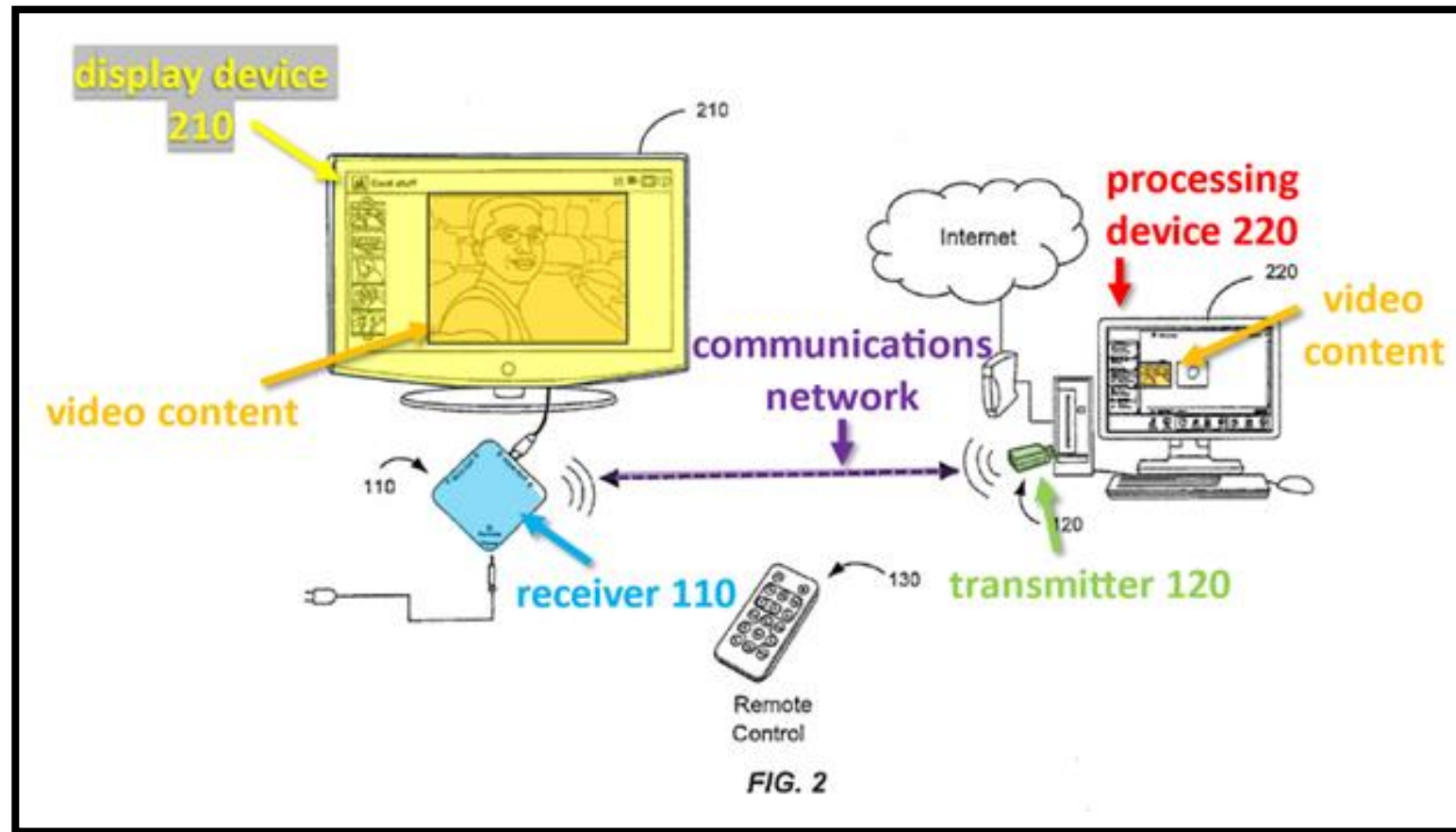
Ground 1

**Ono and Corbett Render Obvious
Claims 1-4, 6-11 and 13-21**



Ground 1

Kaplan Essentially Teaches the Claimed Features; Ahmed and Deforche Provide Obvious Implementation Details



Kaplan (Ex-1027), FIG. 2.

Ground 1

The Combination of Kaplan, Ahmed, and Deforche Would Have been Obvious

Complementary Driver Approaches (“How”)

Using Ahmed’s and Deforche’s generic-driver method would be a simple substitution of a known technique to Kaplan’s system to achieve the predictable result of using pre-installed generic audio driver in Kaplan’s system.

Pet. 26–28.



Ground 1

The Combination of Kaplan, Ahmed, and Deforche Would Have been Obvious

Motivation to Combine Solutions (“*Why*”)

Ahmed teaches using two drivers is “preferred.”
(EX-1014, 18:26-19:21, *see also* 27:1-27; EX-1002, ¶94).

Avoiding Need for a Specific Driver (“*Why*”)

Deforche teaches that using such drivers “has the advantage that the need for a specific driver for the communication between the wireless modem device and the computer device can be avoided.”
(EX-1030, abstract, ¶¶9; EX-1002, ¶95).

Pet. 26–28.



Whether Kaplan Uses Custom Software Is Irrelevant

The '002 patent also discloses, for example, “[T]he present invention use software stored on the peripheral device which allows screen scraping when run on the processing device.” Ex-1001, 6:23-25. And Barco’s system, which allegedly practices the invention, installs a special-purpose driver permanently on the computer. Ex-1070, 20:2-24:23; *see also* Ex-1001, 22:40-42 (’002 patent explaining special-purposes software is “copied temporarily into an execution context on the client processing device.”)

Pet. Rply., 4.

Whether Kaplan Uses Custom Software Is Irrelevant

Second, Barco's main argument, that it would not be obvious to combine Kaplan and Ahmed with Deforche's zero-footprint solution is largely irrelevant. Only unchallenged dependent claims 6 and 16, reciting a "*portable application*" arguably invoke this idea. There is no reason why it would not have been obvious to use Deforche's ubiquitous "*pre-installed generic drivers*" to implement a solution based on the combination of Kaplan, Ahmed, and Deforche.

Pet. Rply., 4.

Whether Kaplan Uses Custom Software Is Irrelevant

Third, Deforche also teaches a preference to use a zero-footprint application that involves the “use of existing USB class drivers.” Ex-1030, ¶¶29-43, 50-51, and FIG. 4a. It also teaches that the zero-footprint application can be any type of application. *Id.*, ¶¶14; *see also* Ex-1072, 6:11-24 (Dr. Brogioli testifying that he did not analyze what “Ono may or may not look like for a zero-footprint software solution”). There is nothing prohibiting implementing Kaplan’s application as a zero-footprint application. The only evidence Barco identifies is Kaplan’s and Ahmed’s use of the word “install,” which according to Barco, means that installation is “required.” POR, 27-29. Moreover, Dr. Brogioli testified that installing some software would still meet the claim limitations. Ex-1070, 20:11-24:23 (testifying that Barco’s software is zero-footprint despite driver installation); *see also* Ex-1083, ¶¶4-11. Barco’s “rigid formula,” apparently requiring all limitations to be in a single

Pet. Rply., 4–5.

The Combination of Kaplan, Ahmed and Deforche Renders Obvious the “*Setting Up...*” Limitation

b) setting up, by means of a first pre-installed generic audio driver of the operating system, a means for audio communication between the peripheral device and the processing device and by means of a second pre-installed generic driver of the operating system, a means for data communication between the peripheral device and the processing device;

'002 patent (Ex-1001), claim 1.

The Combination of Kaplan, Ahmed and Deforche Renders Obvious the “*Setting Up...*” Limitation

- c. *b) setting up, by means of a first pre-installed generic audio driver of the operating system, a means for audio communication between the peripheral device and the processing device and*

Kaplan discloses “*setting up ... a means for audio communication between the peripheral device and the processing device*” (to transmit audio data, e.g., “video footage may be transmitted from the computer 220 through the transmitter 120”). (EX-1027, ¶28, FIG. 6; *see also id.*, ¶¶8, 17 (“[D]ata may include video **and audio data** for display on the display device.”), 22, 26, 47-52, 58; EX-1002, ¶¶103, 134).

Pet., 32.

The Combination of Kaplan, Ahmed and Deforche Renders Obvious the “*Setting Up...*” Limitation

Ahmed discloses sending the audio portion of an audio stream using “*a first ... audio driver*”:

a virtual audio driver, referred to as a virtual audio cable (VAC), is installed as a normal audio driver that can be selected as a default playback and/or recording device. A feature of VAC is that, by default, it routes all the audio going to its audio output pin to its input pin (EX-1014, 18:26-19:15 (emphasis added)).

Pet., 32–33.

The Combination of Kaplan, Ahmed and Deforche Renders Obvious the “*Setting Up...*” Limitation

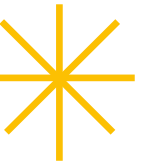
Deforche has discloses this limitation nearly *verbatim*.

(b) setting up, by means of a pre-installed generic driver of the operating system on the computer device, a modem/host communication interface (6) for communication between the wireless modem device and the computer device;

Ex-1030, abstract; see *also*, claim 1; Pet., 33; Pet. Rply., 6.

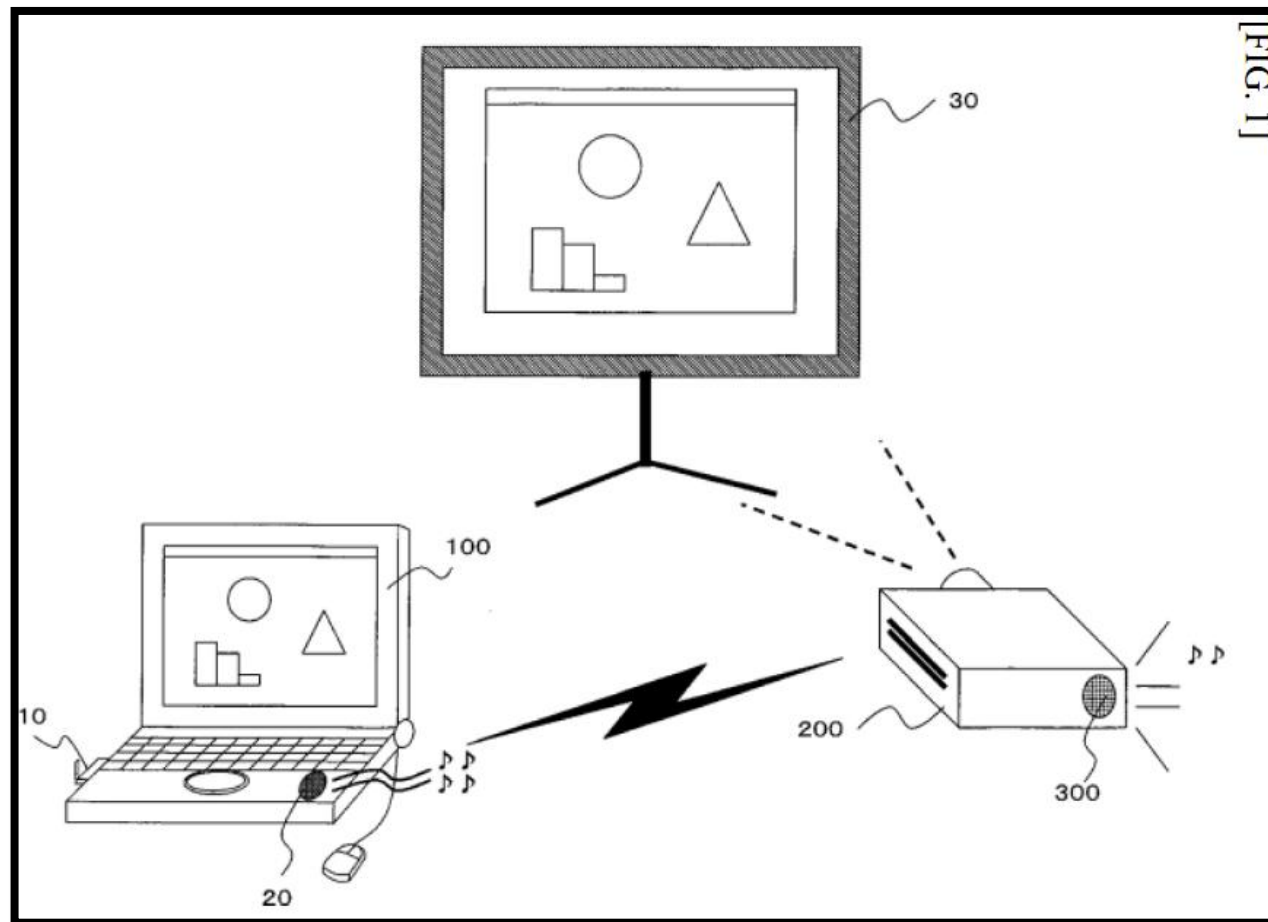
Ground 2

**Maeda, Ahmed, Deforche, and the
Knowledge of the Person of Ordinary Skill
Renders Obvious
Claims 1-2, 9-11, 19, and 21-22**



Ground 2

Maeda Teaches the Claimed Invention, Ahmed and Deforche Provide Obvious Implementation Details



Maeda (Ex-1031), FIG. 1

IPR2024-01437

U.S. Pat. No. 11,403,237

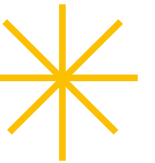
Summary and Key Arguments

- **Ground 1:** Kaplan and Mardiks – PO argues that neither reference teaches communicating audio or display data via a human interface device (HID), and there is no motivation to combine. PO also argues that Mardiks is not analogous art.
- **Ground 2:** Maeda and Deforche – PO argues that the technologies are too disparate, and there is no reason or expectation of success in combining them. The references do not disclose the claimed communication via HID.



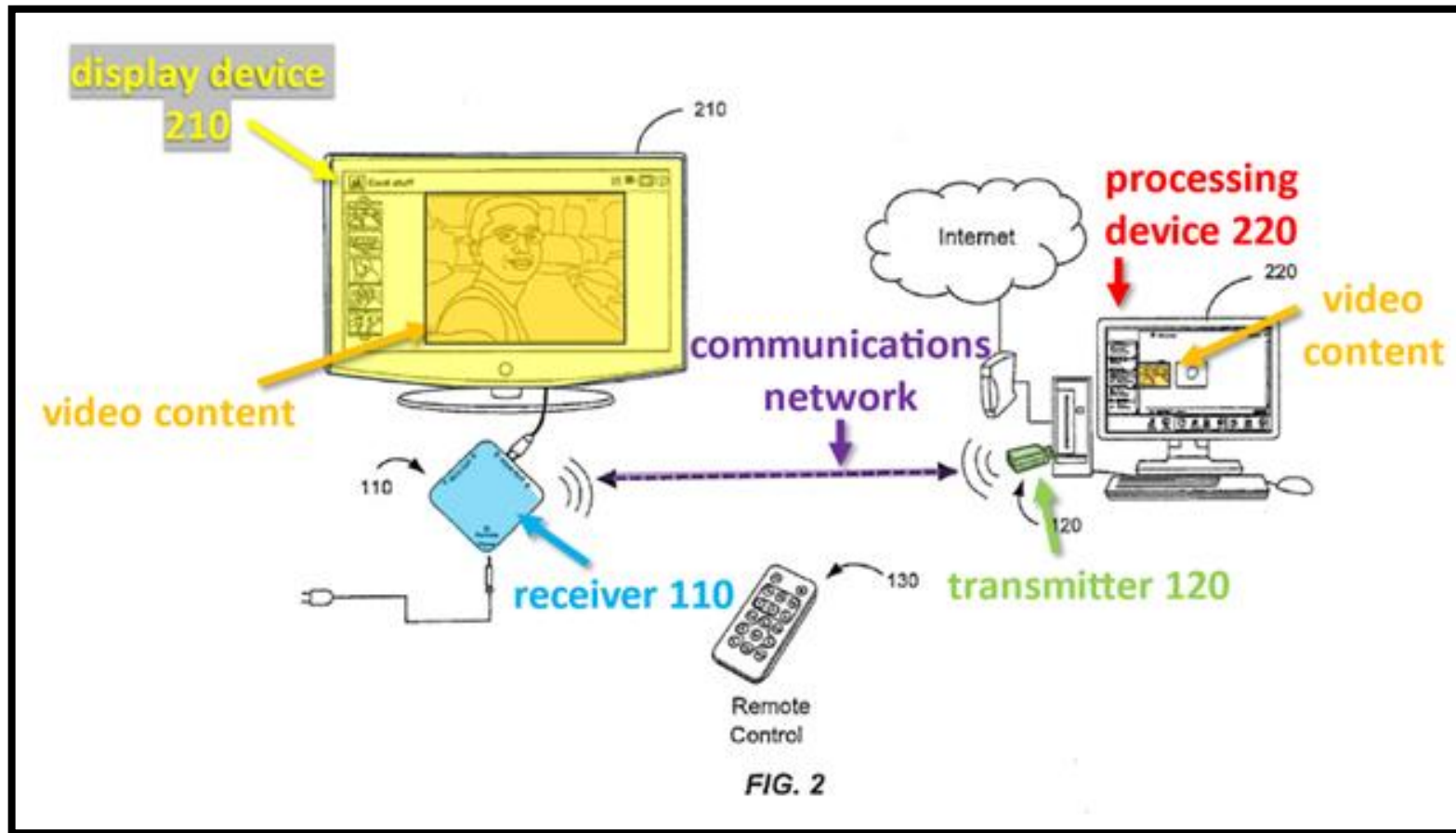
Ground 1

Kaplan and Mardiks Render Claims 1, 3, 9, 18, and 19 Obvious



Ground 1

Kaplan Teaches the Claimed Invention, Mardiks Provides Obvious Implementation Details



Kaplan (Ex-1027), FIG. 2.

Ground 1

The Combination of Kaplan And Mardiks Would Have Been Obvious

Complementary Driver Approaches (“How”)

It would have been obvious to combine Kaplan with the teachings of Mardiks because it was a simple application of known techniques to apply Mardiks’ presenting the peripheral device as a human interface device to achieve Kaplan’s method and system of transmission of audio/video data to a wireless network. (Ex-1002, ¶87). Additionally, the modification would achieve the predictable result to automatically launch a stored application on the peripheral device to launch Kaplan’s remote audio/visual data transmission to the wireless network. (Ex-1002, ¶87).

Pet. 21—22.



Ground 1

The Combination of Kaplan And Mardiks Would Have Been Obvious

Motivation to Combine Solutions (“*Why*”)

Mardiks discloses that a peripheral device presents itself as a human interface device (HID) and is capable of, through its presentation to the computing device as a human interface device (HID), launching an application residing in its memory upon connection to a host computing device automatically without a user’s input or direction. (Ex-1026, ¶¶6, 8, 27-30; Ex-1002, ¶87).

Pet. 21—22.



Ground 1

The Combination of Kaplan and Mardiks Renders Obvious the “*Communicating [A/V] Data*” Limitation

Kaplan discloses *communicating at least one of audio data and display data from the processing device to the “external peripheral device (See, e.g., Ex-1027, ¶¶17 (“[T]he transmitter 120 includes a wireless transceiver 450 that is operable to transmit data from the computer to the receiver 110. For example, the data may include video and audio data for display on the display device”), 28 (“[T]he user may select a video to be played and the selected video footage may be transmitted from the computer 220 through the transmitter 120 to the receiver 110 and then displayed on the display device 210”); Ex-1002, ¶101; see also Ex-1034, ¶¶90, 93).*

Pet., 30.

Ground 1

The Combination of Kaplan and Mardiks Renders Obvious the “*Communicating [A/V] Data*” Limitation

By presenting itself as a keyboard (HID), the USB peripheral device can provide commands to launch a file in a mass storage peripheral device, where “the host uses its USB keyboard driver for communications with the USB peripheral device.” (Ex-1026, ¶28; Ex-1002, ¶97). A keyboard is a type of human interface device (HID) class. (Ex-1026, ¶3; Ex-1002, ¶97).

Pet., 28, 30.

Ground 1

Mardiks Is Analogous Art

The facts in this case are much closer to other Board decisions finding references were analogous. For example, in *Ex Parte Edwin*, Appeal No. 2016-004920, Dec., 8 (PTAB April 28, 2017), the Board rejected the applicant's narrow definition of the field of invention limited to note-taking for virtual meetings as opposed to virtual meetings in general. Similarly, in *Google LLC v. Innovations*, IPR2024-00215, Paper 43, 11-15 (PTAB May 16, 2025), the Board rejected the Patent Owner's arguments that the prior art, though different, still addressed secure data handling. Here, too, both the '237 patent and Mardiks address peripheral devices containing applications.

Pet. Reply, 5.

Ground 2

**Maeda and Deforche Render Obvious
Claims 1, 3, 9, 18, and 19**



Ground 2

The Combination of Maeda and Deforche Would Have Been Obvious

Complementary Driver Approaches (“How”)

It would have, thus, been obvious to combine Deforche with the teachings of Maeda because it was a simple application of known techniques to apply Deforche’s presenting the peripheral device as a human interface device to achieve Maeda’s method and system of transmission of audio/video data. (Ex-1002, ¶130). Additionally, the modification of Maeda with Deforche would achieve the predictable result of transmitting audio/visual data through a peripheral device attached to the computing device and presented as a human interface device, and on to a wireless network, without user installation or configuration of a separate driver or setting: (Ex-1002, ¶130).

Pet. 41—42.



Ground 2

The Combination of Maeda and Deforche Would Have Been Obvious

Motivation to Combine Solutions (“*Why*”)

From Deforche’s recognition of problems in the art, Deforche discloses a method of connecting a host computing device to a wireless communication network in a way that avoids the additional steps of installation of separate drivers or applications, for example, by “setting up, by means of a pre-installed generic driver of an operating system on the computer device, a modem/host communication interface [] for communication between the wireless modem device and the computer device.” (Ex-1031, ¶¶2-6, 28-30, abstract; Ex-1002, ¶130).

Pet. 41—42.



Ground 2

The Combination of Maeda and Deforche Renders Obvious the “*Communicating [A/V] Data*” Limitation

Kaplan discloses *communicating at least one of audio data and display data from the processing device to the “external peripheral device (See, e.g., Ex-1027, ¶¶17 (“[T]he transmitter 120 includes a wireless transceiver 450 that is operable to transmit data from the computer to the receiver 110. For example, the data may include video and audio data for display on the display device”), 28 (“[T]he user may select a video to be played and the selected video footage may be transmitted from the computer 220 through the transmitter 120 to the receiver 110 and then displayed on the display device 210”); Ex-1002, ¶101; see also Ex-1034, ¶¶90, 93).*

Pet., 30.

Ground 2

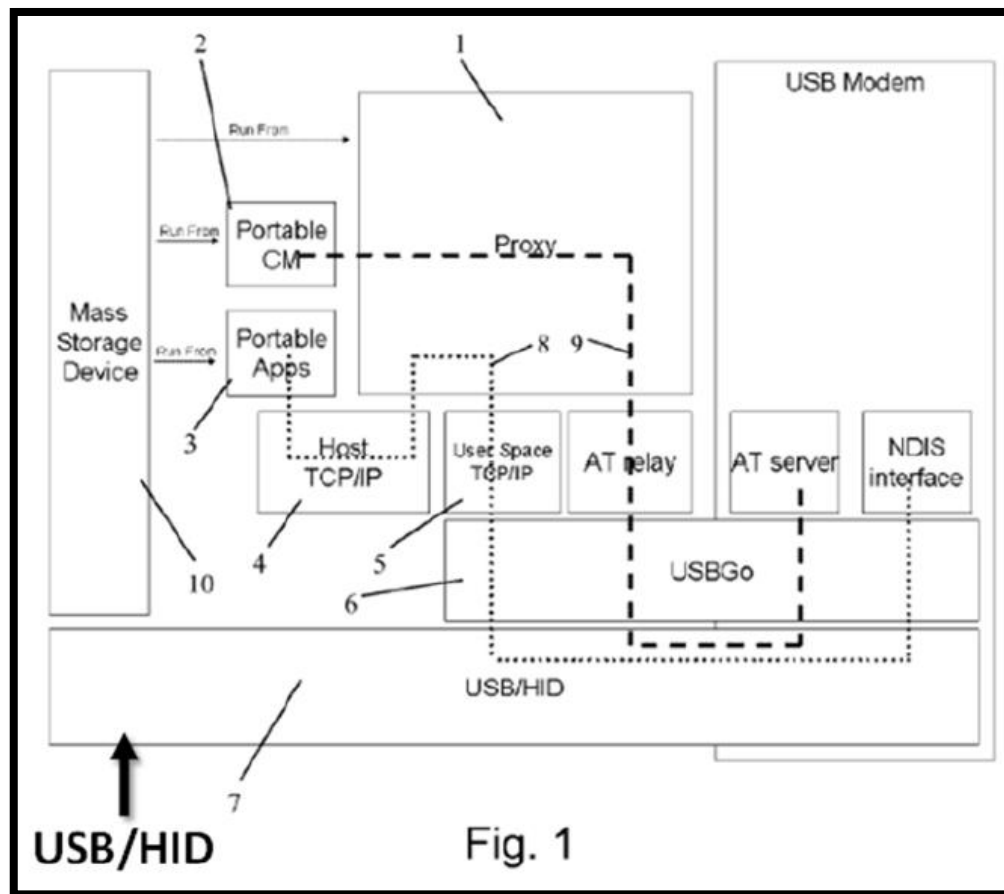
The Combination of Maeda and Deforche Renders Obvious the “*Communicating [A/V] Data*” Limitation

Deforche’s wireless modem device presents itself to the host computer as a human interface device or other generic device. (See, e.g., Ex-1030, ¶¶10, 33-36, 43-45, 51-52, claim 2, FIG. 1 (USB interface 7 exposed to a host computer as a human interface device (HID)); Ex-1002, ¶143). By doing so, Deforche’s system avoids the need for a user to install a driver for the peripheral wireless modem device. (See, e.g., Ex-1030, ¶¶10, 32-39, 0043-46, 51-52; Ex-1002, ¶144). Instead, the computer utilizes its given drivers for human interface devices to establish a channel of communication with the wireless device. (*Id.*; Ex-1002, ¶144).

Pet., 50–52.

Ground 2

The Combination of Maeda and Deforche Renders Obvious the “*Communicating [A/V] Data*” Limitation



Pet., 50–52.

IPR2024-01438

U.S. Pat. No. 11,258,676

Summary and Key Arguments

- **Ground 1:** Ono and Deforche – PO argues that Ono requires installation of custom drivers and applications, which is incompatible with Deforche’s “zero-footprint” approach. PO also argues there is no motivation to combine.
 - PO argues that the references do not disclose 1) “*setting up*” communication with pre-installed generic drivers or 2) “*triggering*” data transfer with an input device.
- **Grounds 2–5:** Similar arguments are made regarding other combinations (Ono-Grimshaw, Uchida-Deforche, Uchida-Grimshaw, Grimshaw-Uchida).



Ground 1

**Ono and Deforche Render Obvious
Claims 1, 5, 8, 18, and 20**



Ground 1

The Combination of Ono and Deforche Would Have Been Obvious

Complementary Driver Approaches (“How”)

It would have been obvious to modify Ono’s similar device using the well-known method of using the pre-installed generic Windows drivers, as disclosed by Deforche, to communicate information to Ono’s USB peripheral devices. A person of ordinary skill in the art likely would have used the pre-installed Windows drivers, and Deforche demonstrates that.

Pet. 15.



Ground 1

The Combination of Ono and Deforche Would Have Been Obvious

Motivation to Combine Solutions (“*Why*”)

The combination of Ono and Deforche would have created the predictable result of a PC communicating with a peripheral device using an operating system’s pre-installed generic drivers.

Pet. 15.



Ground 1

The Combination of Ono and Deforche Renders Obvious the “*Setting Up ...*” Limitation

b) setting up, by means of the pre-installed generic driver of the operating system, a means for communication between the peripheral device and the processing device;

'676 Patent (Ex-1001), claim 1.

Ground 1

The Combination of Ono and Deforche Renders Obvious the “*Setting Up ...*” Limitation

Neither *Ono* Nor *Deforche*, Alone Or In Combination, Disclose “setting up, by means of a pre-installed generic driver of the operating system, a means for communication between the peripheral device and the processing device”

PO Sur-Rply., 10.

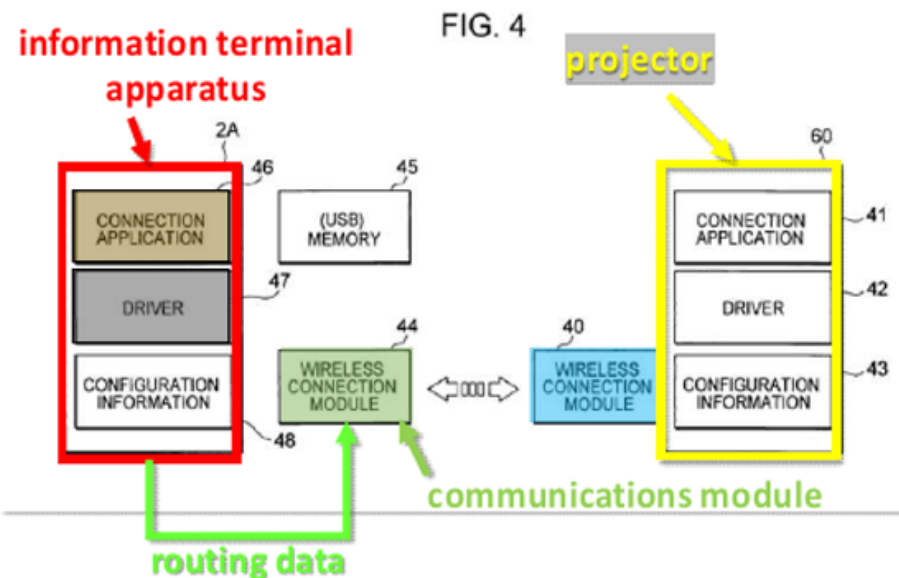
(b) setting up, by means of a pre-installed generic driver of the operating system on the computer device, a modem/host communication interface (6) for communication between the wireless modem device and the computer device;

Deforche (Ex-1030), abstract.

Ground 1

The Combination of Ono and Deforche Renders Obvious the “*Means for Communication*” Limitation

The means for communication includes one or more of the installer on USB memory 45, connection application 46, driver 47, configuration information 48, and wireless connection module 44.

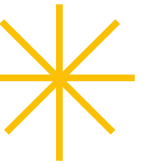


(EX-1005, FIG. 4)

Pet., 22–23; see also Deforche (Ex-1030), ¶¶9, 30.

Ground 2

**Ono in View of Applicant-Admitted Prior
Art Renders Obvious
Claim 14**



Ground 2

The New “*User Device*” Argument Fails

14. A method for providing communication connectivity from a processing device, **the processing device being a user device** of a participant in a meeting with a plurality of participants, the method comprising the following steps: receiving media content from the communications network at the base node and displaying the media content on a display in accordance with a set of rules, one of the rules being a forcing rule, whereby the forcing rule determines that the displaying of media content on the display is obtained by **a user action on any one of the user devices involved in the meeting**, without requiring the agreement of another participant, the media content from **the any one of the user devices** overriding or replacing any data displayed on the display by the same or another participant of the meeting.

Ex-1001, claim 14.

Ground 2

The New “*User Device*” Argument Fails

Some examples for activation of the actuator which can be used with any of the embodiments of the present invention:

Sound activated (hand clap, voice recognition, computer sound, music, . . .)

Remote controlled via wireless connected device (IR, Bluetooth, WiFi, . . .)

Ex-1001, 31:42–45.

Ground 3

**Ono, Deforche, and Grimshaw Render Obvious
Claims 4, 16, and 19**



Ground 3

The Combination of Ono, Deforche, and Grimshaw Would Have Been Obvious

Complementary Driver Approaches (“How”)

It would have been obvious to modify Uchida’s similar device using the well-known method of using the pre-installed generic Windows drivers, as disclosed by Deforche, to communicate information to Uchida’s USB peripheral devices. ... The combination of Uchida and Deforche would have created the predictable result of a PC communicating with a peripheral device using an operating system’s pre-installed generic drivers.

Grimshaw teaches using a known technique to improve a similar device in the same way. Grimshaw explains that this known method is beneficial because each user can activate their device and take control of the presentation. (Id., ¶¶4-6, 28, 37). The combination would achieve the predictable result of actuators on Uchida’s peripheral devices. (EX-1002, ¶¶198-99).

Pet. 38—39.



Ground 3

The Combination of Ono, Deforche, and Grimshaw Would Have Been Obvious

Motivation to Combine Solutions (“*Why*”)

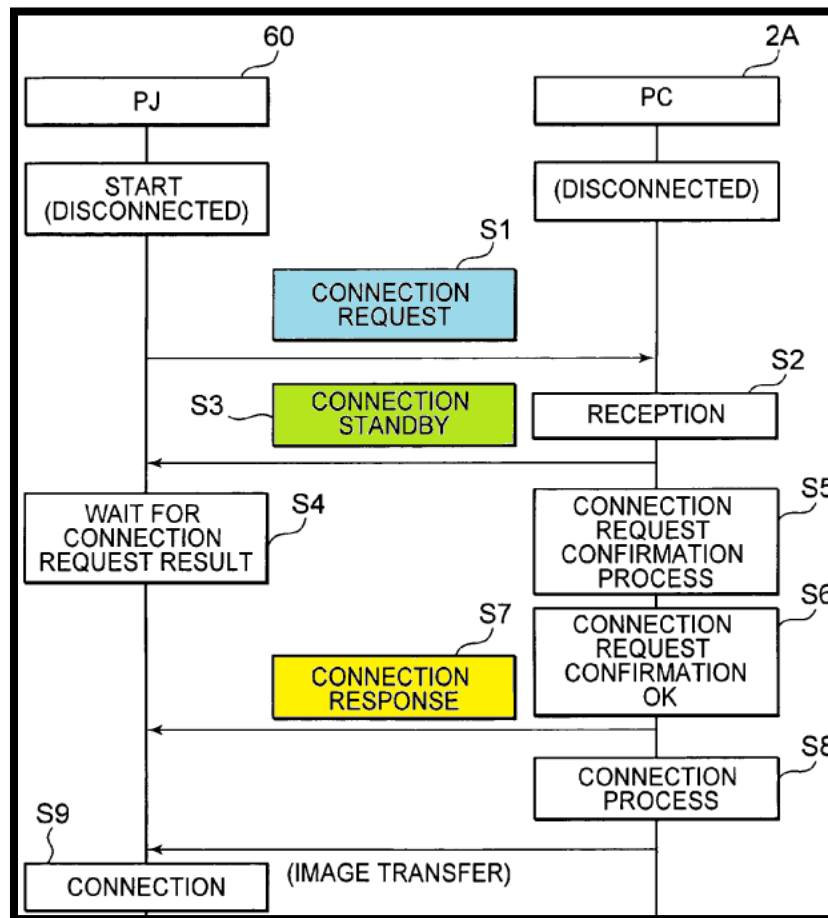
Grimshaw explains that this known method is beneficial because each user can activate their device and take control of the presentation. (Id., ¶¶4-6, 28, 37 EX-1002, ¶¶163-64). The combination would achieve the predictable result of actuators on Ono’s peripheral devices.

Pet. 38—39.



Ground 3

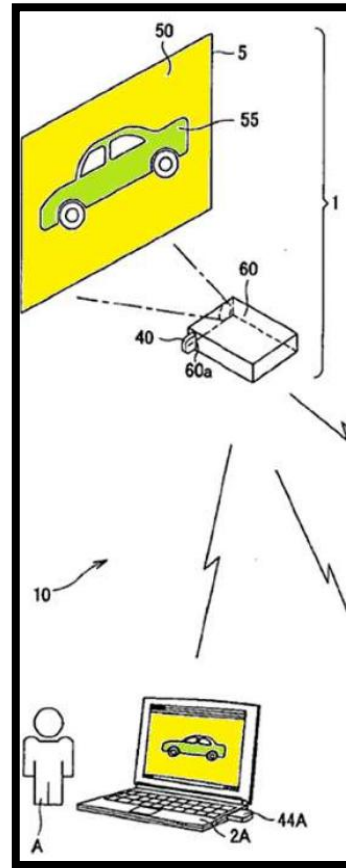
The Combination Renders Obvious “*an Input Device ...that Triggers Transfer ...*”



Pet., 30.

Ground 3

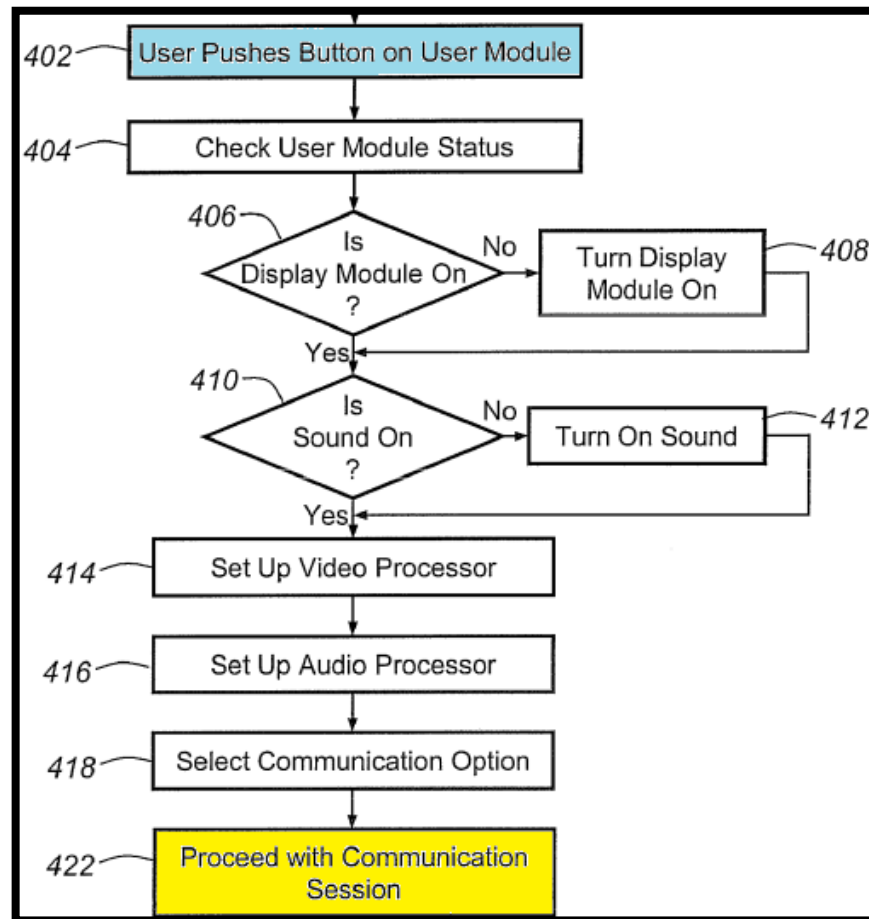
The Combination Renders Obvious “*an Input Device ...that Triggers Transfer ...*”



Ex-1005, FIG. 1; see *also*, Pet., 24-25 (citing Ex-1033); Ex-1083, ¶¶18-20.

Ground 3

The Combination Renders Obvious “*an Input Device ...that Triggers Transfer ...*”



Ex-1008, FIG. 4; see *also*, Pet. 40–41; Pet. Rply., 20–21.

Ground 3

The Combination of Ono, Deforche, and Grimshaw Renders Obvious the “*Does Not Require Installation*” Limitation

Deforche discloses *running said program does not require installation of the program or configuration of the processing device. (See, e.g., EX-1030, ¶¶15 (“the wireless modem device stores at least one application and is provided for launching said application as a portable application, meaning that the application keeps its data (cache) in the memory of the wireless modem device and no traces are left on the computer device.”), see also 18, 26-27, 30-31, 47; EX-1002, ¶150).*

Pet., 33.

Ground 4
Uchida, Deforche and Grimshaw Render
Obvious
Claims 1, 4-5, 8, 16, and 18-20



Ground 4

The Combination of Uchida, Deforche And Grimshaw Would Have Been Obvious

Complementary Driver Approaches (“*How*”)

It would have been obvious to modify Uchida’s similar device using the well-known method of using the pre-installed generic Window’s drivers, as disclosed by Deforche, to communicate information to Uchida’s USB peripheral devices. (Ex-1002, ¶198).

Grimshaw teaches using a known technique to improve a similar device in the same way. The combination would achieve the predictable result of actuators on Uchida’s peripheral devices. (Ex-1002, ¶199).

Pet. 50—51.



Ground 4

The Combination of Uchida, Deforche And Grimshaw Would Have Been Obvious

Motivation to Combine Solutions (“*Why*”)

A person of ordinary skill in the art likely would have used the pre-installed Windows drivers, and Deforche demonstrates that the combination of Uchida and Deforche would have created the predictable result of a PC communicating with a peripheral device using an operating system’s pre-installed generic drivers. (Ex-1002, ¶198).

Grimshaw explains that this known method is beneficial because each user can activate their device and take control of the presentation. (Ex-1004, ¶¶4-6, 28, 37).

Pet. 50—51.



Ground 4

The Combination of Uchida and Deforche Renders Obvious the “*Setting Up ...*” Limitation

b) setting up, by means of the pre-installed generic driver of the operating system, a means for communication between the peripheral device and the processing device;

'676 Patent (Ex-1001), claim 1.

Ground 4

The Combination of Uchida and Deforche Renders Obvious the “*Setting Up ...*” Limitation

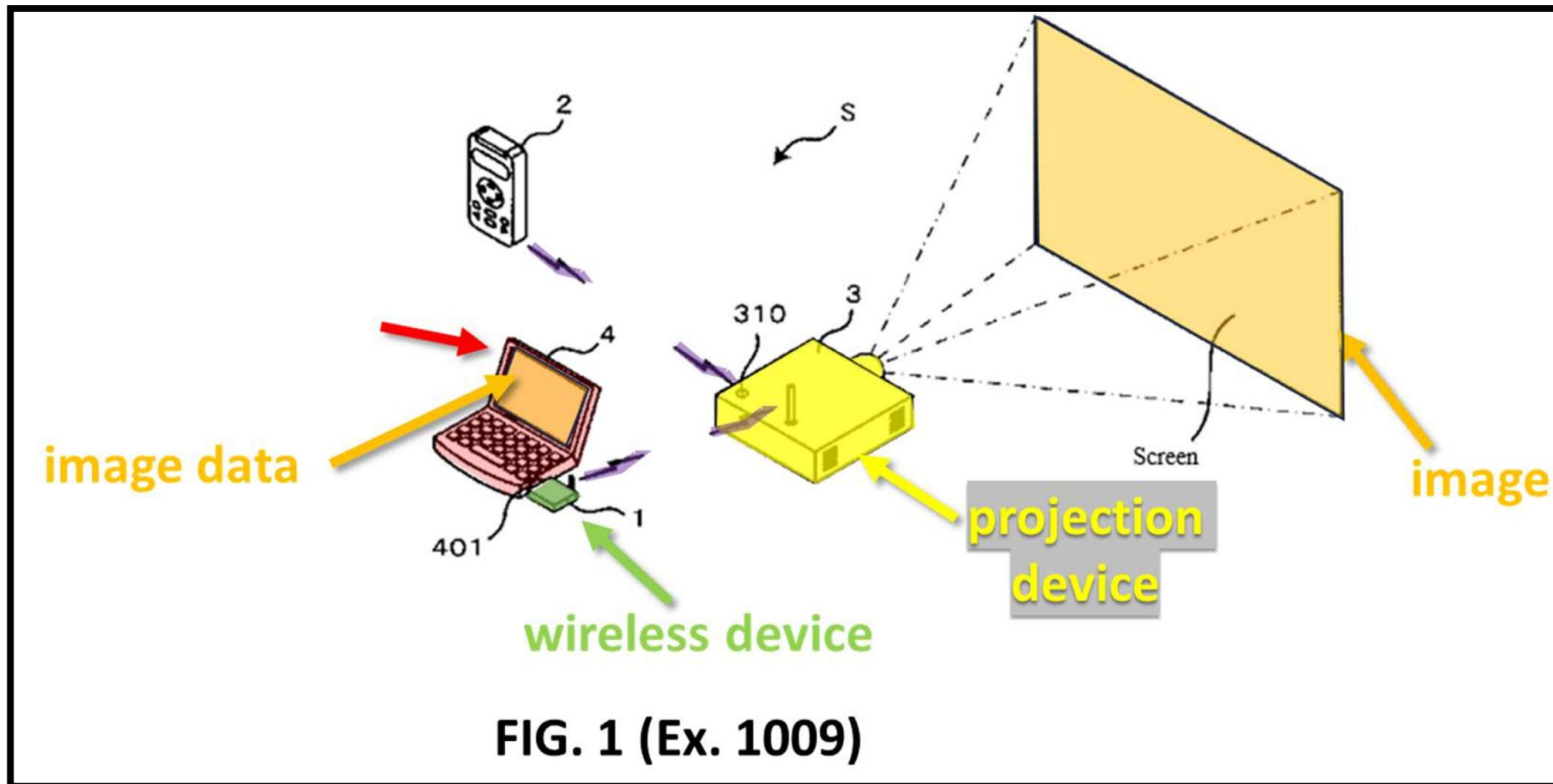
Deforche has discloses this limitation nearly *verbatim*.

(b) setting up, by means of a pre-installed generic driver of the operating system on the computer device, a modem/host communication interface (6) for communication between the wireless modem device and the computer device;

Deforche (Ex-1030), abstract; see *also*, claim 1; Pet., 57; Pet. Rply., 22–23.

Ground 4

The Combination of Uchida and Deforche Renders Obvious the “*Setting Up ...*” Limitation



Ground 4

The Combination of Uchida and Deforche Renders Obvious the “*Setting Up ...*” Limitation

When the USB connector 105 of the wireless device 1 is connected to the USB connector 401 of the computer device 4, the computer device 4 installs a device driver program (hereinafter abbreviated as “device driver”), a wireless setting application program (hereinafter abbreviated as “wireless setting application”), and an image transfer application program (hereinafter abbreviated as “image transfer application”) stored in the program storage unit of the wireless device 1.

Ex-1009, ¶48; see *also*, Pet., 57–60; Pet. Rply., 22–23.

Ground 4

The Combination of Uchida and Deforche Renders Obvious the “Setting Up ...” Limitation

The *Uchida-Deforche-Grimshaw* Combination Does Not Teach Setting Up Communications With A Pre-installed Generic Driver

PO Sur-Rply., 22.

(b) setting up, by means of a pre-installed generic driver of the operating system on the computer device, a modem/host communication interface (6) for communication between the wireless modem device and the computer device;

Deforche (Ex-1030), abstract.

Ground 5

Uchida and Grimshaw Render Obvious

Claim 14



Ground 2

The New “*User Device*” Argument Fails

14. A method for providing communication connectivity from a processing device, **the processing device being a user device** of a participant in a meeting with a plurality of participants, the method comprising the following steps: receiving media content from the communications network at the base node and displaying the media content on a display in accordance with a set of rules, one of the rules being a forcing rule, whereby the forcing rule determines that the displaying of media content on the display is obtained by **a user action on any one of the user devices involved in the meeting**, without requiring the agreement of another participant, the media content from **the any one of the user devices** overriding or replacing any data displayed on the display by the same or another participant of the meeting.

Ex-1001, claim 14.

Ground 2

The New “*User Device*” Argument Fails

Some examples for activation of the actuator which can be used with any of the embodiments of the present invention:

Sound activated (hand clap, voice recognition, computer sound, music, . . .)

Remote controlled via wireless connected device (IR, Bluetooth, WiFi, . . .)

Ex-1001, 31:42–45.

IPR2024-01439

U.S. Pat. No. 11,422,951

Summary and Key Arguments

- **Ground 1:** Ono and Corbett – PO argues that Ono's system is designed to avoid the need for user-triggered input devices, and modifying it as proposed would undermine its objectives. PO also argues there is no motivation to combine, and the references do not disclose the claimed input device that triggers transfer of user-selected media content.
- **Ground 2:** Uchida and Grimshaw – PO argues that Uchida's remote control device already manages user control, and the proposed modification is unnecessary and unsupported.
- **Ground 3:** Ichieda – PO argues that the proposed modifications are not supported by the references and do not disclose the claimed input device or base node integration.



Ground 1

**Ono and Corbett Render Obvious
Claims 1-10 and 14-21**



Ground 1

It Would Have Been Obvious to Modify the Location of Ono's Input Device

Complementary Approaches (“*How*”)

Combining Ono's user input device (remote controller) with Ono's peripheral device (wireless communications module) could have been accomplished according to known methods (e.g., physically joining remote controller and communications module). (EX-1002, ¶¶86-91). In the proposed combination, each component would have performed the same function as it did separately—namely wireless transmission/reception by the communication module and PC selection by the remote controller. (Id.).

Pet. 18-21.



Ground 1

It Would Have Been Obvious to Modify the Location of Ono's Input Device

Motivation to Combine Solutions (“*Why*”)

Grimshaw and Uchida both illustrate this desirability in the art and thus provide a specific design incentive to make the proposed modification to Ono's wireless communications module. (Id.). Specifically, each describe an input device located on a peripheral device, where the input device is a physical actuator that triggers transmission of the user's computer screen content to a shared display, and thus provide a function like Ono's remote controller. (EX-1002, ¶¶87-91).

Pet. 18-21.



Ground 1

The Combination of Ono and Corbett Would Have Been Obvious

Complementary Approaches (“*How*”)

Corbett illustrates that the particular placement of the input device would have been an obvious matter of design choice within the skill of the art. (EX-1002, ¶¶92-100). For example, analogous art such as Corbett illustrates similar functionality of a user input device to trigger transmission on a similar wireless peripheral device. (EX-1007, ¶¶22-23; EX-1002, ¶93).

Pet. 18-21.



Ground 1

The Combination of Ono and Corbett Would Have Been Obvious

Motivation to Combine Solutions (“*Why*”)

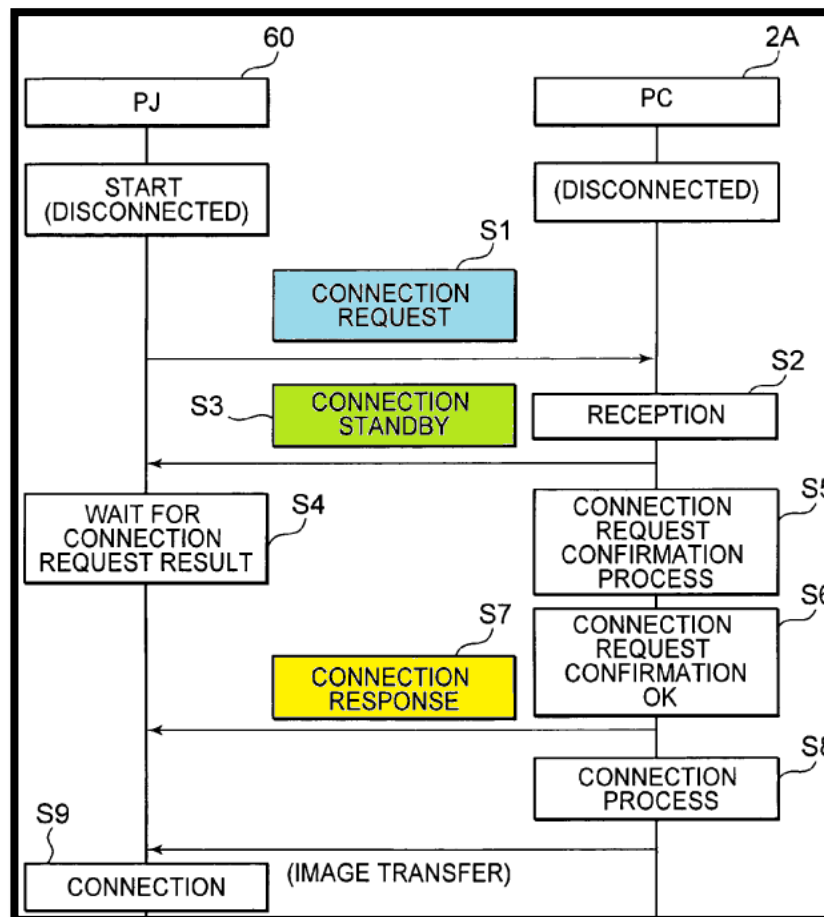
Corbett describes one known design option in implementing a similar input device on a similar USB peripheral device. (EX-1002, ¶¶92-97).

Pet. 18-21.



Ground 1

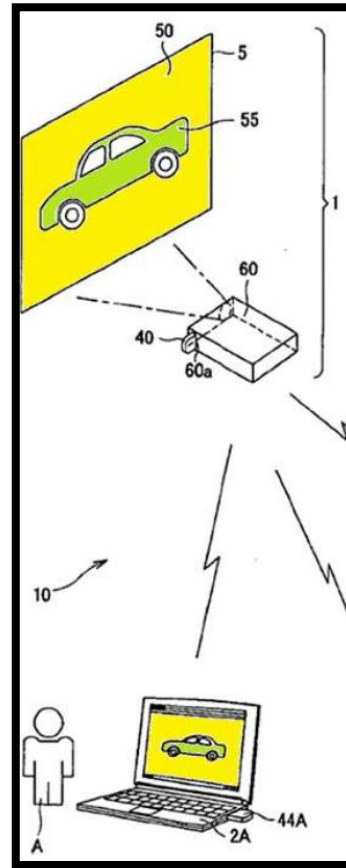
The Combination Renders Obvious “*an Input Device ...that Triggers Transfer ...*”



Pet., 30.

Ground 1

The Combination Renders Obvious “*an Input Device ...that Triggers Transfer ...*”



Ex-1005, FIG. 1; see also, Pet., 24-25 (citing Ex-1033); Ex-1083, ¶¶18-20.

Ground 1

The Combination Renders Obvious “*an input device ...that triggers transfer ...*”

The display node 36 is coupled to and adapted to allow display of media on some kind of display 44. The display node is in embodiments of the present invention a base node of the communications network 50. The display 44 may be a projector and screen, the projector being coupled to the base node 36. A whiteboard 45 can optionally be provided

Ex-1001, 14:36-39.

Referring to FIGS. 1a and 1b embodiments of the present invention comprise a base or display node 36 being a processing device, e.g. a host computer adapted to receive user selected arbitrary media content, the base node 36 being coupled to a central display 44 which can be a fixed format display or a projector or similar. The arbitrary media content

Ex-1001, 14:66-15:4; see also, Pet. 30.

Ground 2

**Uchida and Grimshaw Render Obvious
Claims 1-10 and 14-21**



Ground 2

The Combination of Uchida and Grimshaw Would Have Been Obvious

Complementary Driver Approaches (“How”)

A POSITA would have found it obvious to implement a wireless device (like that of Uchida) with a physical actuator (input device) that triggers transfer of media content from a wireless device to an image projection device through the wireless communications network, as recited in claims 1, 9, 16, and 21. (EX-1002, ¶¶164-168). Such a modification would have been desirable to address the scenario where multiple users wish to take control of a shared display to present image data from their computer (i.e., share their screen with the group). (Id).

Pet., 46-49.



Ground 2

The Combination of Uchida and Grimshaw Would Have Been Obvious

Motivation to Combine Solutions (“*Why*”)

Grimshaw recognizes the desire for attendees at a meeting to have individual control over sharing the content from their laptop and to present it on the shared display, by pushing a button on their user module to trigger transmission of the image data from the laptop to the display. (EX-1008, ¶¶19-20; EX-1012, 5:8-6:17; see also EX-1008, ¶¶27-28, FIGS. 1-3; EX-1012, 8:29-9:20, FIGS. 1-3; EX-1002, ¶¶164-166).

Pet., 46—49.



Ground 2

The Combination of Uchida and Grimshaw Renders Obvious “*an Input Device ...that Triggers Transfer ...*”

Q. And then what happens when it gets turned to "off"?

A. I discuss this in Paragraph 67. When that switch or the toggle is turned -- when the toggle is turned back to "off," the image data coming from the wireless device is projected again. So it switches from sending the stream that it had been sending to when the switch goes on. It sends a black image, the switch goes off, it resumes sending the screen.

Ex-1072, 72:3-12; Pet., 77; Pet. Reply; 23–24.

Ground 2

The Combination of Uchida and Grimshaw Renders Obvious “*an Input Device ...that Triggers Transfer ...*”

Secondly, Uchida teaches that after activating “image transfer stop switch 140” the client computer “executes an image transfer application and transmits a request to the image projection device 3 ... to project a specific image ... on the image projection 50 device 3.” Pet., 57–58 (citing, Ex-1009, ¶71). Grimshaw also shows that a user can push a button on a user module to trigger transmission of image data. Pet., 58-59. The presence of other device components in the data transfer pathway does not change that Grimshaw indisputably discloses to trigger transmission with buttons:

Pet. Rply., 17; see also, Pet., 57–58.

Ground 3

**Ichieda and Knowledge of the Person of
Ordinary Skill Render Obvious**

Claims 1-2, 6-10, 13, 15-17, and 19-21



Ground 3

It Would Have Been Obvious to Combine Ichieda's First and Third Embodiments

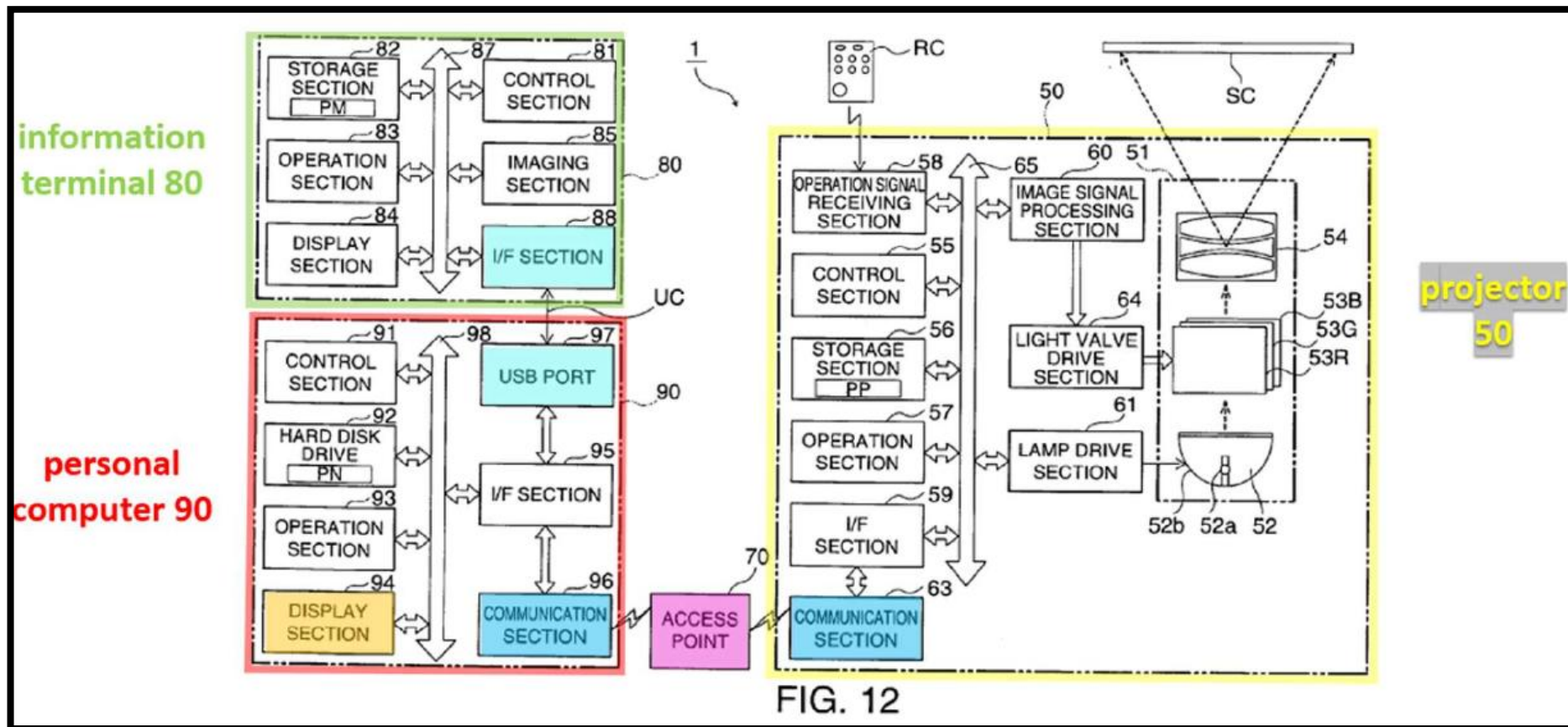


FIG. 12

Pet. 67-71; Ex-1006, FIG. 12.

Ground 3

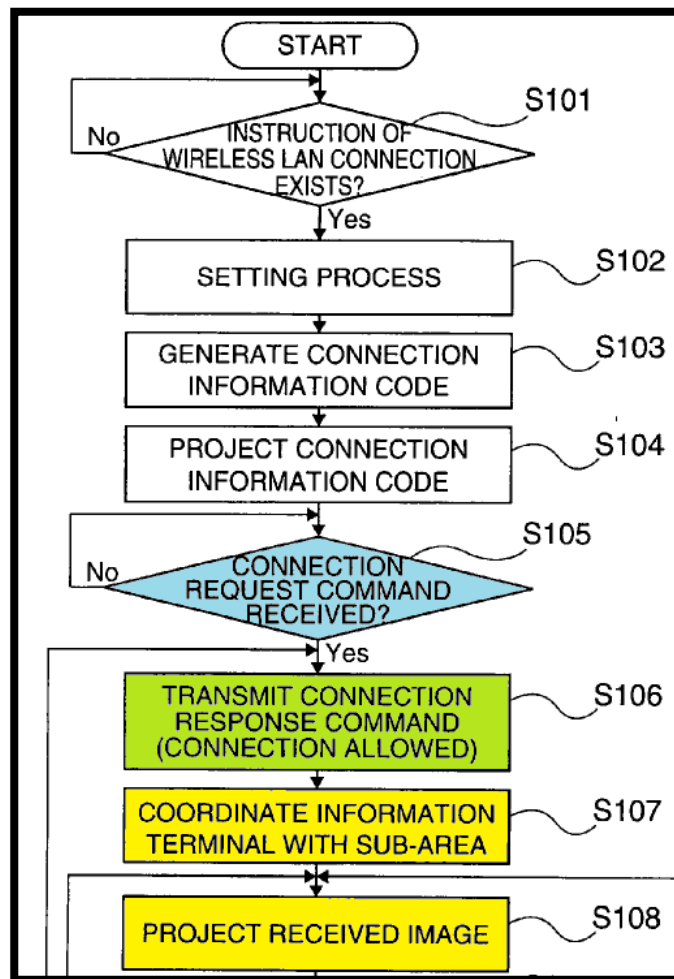
It Would Have Been Obvious to Combine Ichieda's First and Third Embodiments

However, Ichieda is not limited to this option for the routing image data to the projector 50 via the communication section 96 of the PC 90. Instead, Ichieda provides a limited number of obvious variations, such as sending data to information terminal 80 via USB port 97 to the interface section 88, and that communication section 86 can be used to transfer data to the projector 50. Ex-1006, ¶¶ 44, 72, 104, 136-137, FIG. 2 (reproduced below). As such, a POSA would have recognized that it would have been obvious to employ this known option when faced with a design need, such as the example of freeing the network card of the laptop PC 90 from use described in the Petition. Pet. 71.

Pet. Rply., 22.

Ground 3

Ichieda Renders Obvious “*an Input Device ... that Triggers Transfer ...*”



Ex-1006, FIG. 3; Pet., 77; Pet. Reply; 23–24.

Ground 3

Ichieda Renders Obvious “*an Input Device ... that Triggers Transfer ...*”

[0107] Although omitted in the flowcharts shown in FIGS. 3 and 7, if the user operates the display switching button while transmitting the image signal, the control section 81 of the information terminal 80 transmits a display switching command to the protector 50. Further, if the control section 55 of the projector 50 receives the display switching command from the information terminal 80, which is transmitting the image signal, while projecting the received image, the control, section 55 specifies the information terminal 80 by the IP address of the source of the transmission added to the command, and at the same time, instructs the image signal processing section 60 to generate the image data with which the received data from the information terminal 80 is displayed in the whole area of the projection area PA, and to output the image data to the light valve drive section 64.

Ex-1006, ¶107; Pet., 77; Pet. Reply; 23–24.

Barco Failed to Demonstrate Nexus for Secondary Considerations

Barco's Product Is Not Coextensive

- Barco base unit sold without dongles and works with Teams and Zoom. Ex-1076.
- Barco instructions for using a base unit without a dongle. Ex-1077.

Barco's Product Is Not Coextensive

- Mr. Ludke of Crestron testified that he was “surprised” that anyone would want to use a dongle because, “as you can just join a Teams meeting from your laptop without using” a dongle. Ex-1090, 100:25-101:20.
- Dr. Brogioli could not even recall ever using a dongle to share content prior to this case. Ex-1084, 91:14-23.

Barco's Product Is Not Coextensive

- Several patents cover Barco's products.
- Barco's Technology & Innovation Director testified that each patent is independently valuable, suggesting that the '002 patent is at most one of many reasons for Barco's revenue. Ex-1078, 141:20-143:18.

No Nexus to Commercial Success

- No showing that Crestron's products embody claimed inventions. *Teva Pharms. Int'l GmbH v. Eli Lilly & Co.*, 8 F.4th 1349, 1364 (Fed. Cir. 2021).
- Barco's damages expert, when addressing the same license, testified that the agreement [REDACTED]
[REDACTED]
[REDACTED] Ex. 1091, 73:7-74:3, 105:8-106:1.

No Nexus to Commercial Success

- Crestron's Mr. Ludke likewise testified that [REDACTED]
[REDACTED]
[REDACTED] Ex-1090, 58:7-12.
- The Crestron license included [REDACTED]
[REDACTED]
[REDACTED] See Ex-2011, 15.