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Request for *Ex Parte* Reexamination of U.S. Patent No. 11,258,676

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1. CLAIM 1: *ONE OF THE RULES BEING A FORCING RULE, WHEREIN THE FORCING RULE IS THAT DISPLAY ON THE ONE OR MORE FIRST DISPLAYS OF NEW SCREEN SCRAPED DATA IS OBTAINED BY THE ACTION OF ONLY ONE PARTICIPANT INVOLVED IN THE MEETING, WITHOUT REQUIRING THE AGREEMENT OF ANOTHER PARTICIPANT, THE NEW SCREEN SCRAPED DATA OF ANY PARTICIPANT FOR DISPLAY OVERRIDES OR REPLACES ANY DATA DISPLAYED ON THE ONE OR MORE FIRST DISPLAYS FROM THE SAME OR ANOTHER PARTICIPANT OF THE MEETING* 43

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3. CLAIM 3: *THE METHOD OF CLAIM 2, WHEREIN THE SERVER PROGRAM IS A PORTABLE APPLICATION ADAPTED TO BE LOADED ONTO THE BASE NODE AND TO BE RUN ON AN OPERATING SYSTEM OF THE BASE NODE.* 46

B. SNQ NO. 2 – ONO IN VIEW OF APPLICANT-ADMITTED PRIOR ART RENDERS OBVIOUS CLAIM 15 OF THE '676 PATENT UNDER 35 U.S.C. § 103. 47

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2. CLAIM 15: *WHEREIN THE BASE NODE HAS ONE OR MORE DISPLAYS,*

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C. SNQ NO. 3 – ONO COMBINED WITH DEFORCHE, GRIMSHAW, AND BANERJEE RENDERS OBVIOUS CLAIMS 6, 7, 11, AND 13 OF THE '676 PATENT UNDER 35 U.S.C. § 103. 48

1. CLAIM 6: 48

a) *The method of claim 1, wherein the peripheral device comprises: a base, a connector, and a flexible connection between the base and the connector for transferring data signals and power, and* 48

b) *wherein the actuator is on the base and* 49

c) *the base has electronics comprising a processing engine, a transceiver and a visual indicator* 50

d) *connecting the connector to a plug and play port of the processing device and actuating a signal with the actuator and transferring the signal to the connector for transfer to the port.* 51

2. CLAIM 7: *THE METHOD OF CLAIM 6, WHEREIN THE PERIPHERAL DEVICE COMPRISES PERMANENT STORAGE FOR STORING THE CLIENT APPLICATION.* 51

3. CLAIM 11 52

a) *The method of claim 7, further comprising pairing of the peripheral device to the base node before communication starts.* 52

4. CLAIM 13: *THE METHOD OF CLAIM 7, WHEREIN THE PRE-INSTALLED GENERIC DRIVERS DRIVE DIFFERENT DEVICE INTERFACES INDEPENDENTLY.* 53

D. SNQ NO. 4 – ONO COMBINED WITH DEFORCHE, GRIMSHAW, AUSTIN, AND BANERJEE RENDERS OBVIOUS CLAIM 12 OF THE '676 PATENT UNDER 35 U.S.C. § 103. 53

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THAT IS PRE-INSTALLED ON THE PROCESSING DEVICE, THE DAEMON PROVIDING A PERMANENTLY RUNNING SERVICE THAT CONTINUOUSLY MONITORS IF A PERIPHERAL DEVICE HAS BEEN OFFERED UP FOR CONNECTION TO THE PROCESSING DEVICE. 54

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2. CLAIM 9: *THE METHOD OF CLAIM 8 FOR USE BY A PLURALITY OF USERS IN A MEETING, THERE BEING CLIENT PROCESSING DEVICES EACH FOR COUPLING TO A PERIPHERAL DEVICE FOR EVERY USER IN THE MEETING, A FIRST USER ACTION CONNECTING A PROCESSING DEVICE TO THE BASE NODE, AND A SECOND USER ACTION COMPRISING ACTIVATING AN ACTUATOR LOCATED ON AN INPUT DEVICE COUPLED TO THE PERIPHERAL DEVICE WHICH THEN STARTS A PROCESS OF OBTAINING THE DATA FOR DISPLAY BY SCREEN SCRAPING DATA FROM THE PROCESSING DEVICE AND TRANSMITTING SCREEN SCRAPED DATA TO THE BASE NODE, THE BASE NODE CARRYING OUT GRAPHICAL COMMANDS SENT FROM THE PROCESSING DEVICE.* 55

1. CLAIM 16: *WHEREBY THE FORCING RULE IS THAT THE DISPLAY ON THE ONE OR MORE FIRST DISPLAYS IS OBTAINED BY THE ACTION OF ONLY ONE PARTICIPANT INVOLVED IN THE MEETING, WITHOUT REQUIRING THE AGREEMENT OF ANOTHER PARTICIPANT, THE DATA OF ANY PARTICIPANT FOR DISPLAY OVERRIDING OR REPLACING ANY DATA DISPLAYED ON THE ONE OR MORE FIRST DISPLAYS BY THE SAME OR ANOTHER PARTICIPANT OF THE MEETING.* 57

2. CLAIM 17: *THE ELECTRONIC MEETING TOOL OF CLAIM 16 CONFIGURED FOR USE BY A PLURALITY OF USERS IN A MEETING, THERE BEING PROCESSING DEVICES EACH FOR COUPLING TO A PERIPHERAL DEVICE FOR EVERY USER IN THE MEETING, WHEREBY THE ELECTRONIC MEETING TOOL IS CONFIGURED TO ALLOW A FIRST USER ACTION TO CONNECT A CLIENT PROCESSING DEVICE TO THE BASE UNIT, AND A SECOND USER ACTION COMPRISING ACTIVATING THE ACTUATOR ON THE INPUT DEVICE WHICH IS COUPLED TO THE PERIPHERAL DEVICE WHICH THEN STARTS A PROCESS OF OBTAINING THE USER SELECTED ARBITRARY MEDIA CONTENT BY SCREEN SCRAPING DATA FROM THE PROCESSING DEVICE AND TRANSMITTING SCREEN SCRAPED DATA FOR DISPLAY TO THE BASE UNIT, WHEREBY THE BASE UNIT IS CONFIGURED TO CARRY OUT GRAPHICAL COMMANDS SENT FROM THE PROCESSING DEVICE.* 58

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G. SNQ NO. 7 – UCHIDA COMBINED WITH DEFORCHE, GRIMSHAW, AND OPTIONALLY BANERJEE RENDERS OBVIOUS CLAIMS 2–3, 6–7, 9–13, 15, AND 17, OF THE '676 PATENT UNDER 35 U.S.C. § 103. 60

1. CLAIM 1: *ONE OF THE RULES BEING A FORCING RULE, WHEREIN THE FORCING RULE IS THAT DISPLAY ON THE ONE OR MORE FIRST DISPLAYS OF NEW SCREEN SCRAPED DATA IS OBTAINED BY THE ACTION OF ONLY ONE PARTICIPANT INVOLVED IN THE MEETING, WITHOUT REQUIRING THE AGREEMENT OF ANOTHER PARTICIPANT, THE NEW SCREEN SCRAPED DATA OF ANY PARTICIPANT FOR DISPLAY OVERRIDES OR REPLACES ANY DATA DISPLAYED ON THE ONE OR MORE FIRST DISPLAYS FROM THE SAME OR ANOTHER PARTICIPANT OF THE MEETING* 60

2. CLAIM 2: *THE METHOD OF CLAIM 1 FURTHER COMPRISING LOADING A SERVER PROGRAM ONTO THE BASE NODE, THE SERVER PROGRAM RECEIVING SCREEN SCRAPED DATA FROM ONE OR A PLURALITY OF CLIENT PROCESSING DEVICES, AND DISPLAYING THE SCREEN SCRAPED DATA ON ONE OR MORE FIRST DISPLAYS, THE SERVER PROGRAM ALLOWING DISPLAY IN ACCORDANCE WITH ONE OR MORE RULES OF WHICH ONE IS A FORCING RULE, WHEREIN THE FORCING RULE IS THAT THE DISPLAY ON THE ONE OR MORE FIRST DISPLAYS IS OBTAINED BY THE ACTION OF ONLY ONE PARTICIPANT INVOLVED IN THE MEETING, WITHOUT REQUIRING THE AGREEMENT OF ANOTHER PARTICIPANT, NEW SCREEN SCRAPED DATA OF ANY PARTICIPANT FOR DISPLAY OVERRIDES OR REPLACES ANY DATA DISPLAYED ON THE ONE OR MORE FIRST DISPLAYS FROM THE SAME OR ANOTHER PARTICIPANT OF THE MEETING.* 63

3. CLAIM 3: *THE METHOD OF CLAIM 2, WHEREIN THE SERVER PROGRAM IS A PORTABLE APPLICATION ADAPTED TO BE LOADED ONTO THE BASE NODE AND TO BE RUN ON AN OPERATING SYSTEM OF THE BASE NODE.* 64

4. CLAIM 6*:* 65

a) *The method of claim 1, wherein the peripheral device comprises: a base, a connector, and a flexible connection between the base and the connector for transferring data signals and power, and* 65

b) *wherein the actuator is on the base and* 66

c) *the base has electronics comprising a processing engine, a transceiver and a visual indicator* 66

d) *the method further comprising: connecting the connector to a plug and play port of the processing device and actuating a signal with the actuator and transferring the signal to the connector for transfer to the port.* 67

5. CLAIM 7: *THE METHOD OF CLAIM 6, WHEREIN THE PERIPHERAL DEVICE*

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6. CLAIM 8: *THE METHOD OF CLAIM 1, WHEREIN THE TRANSFERRING OF THE DATA FOR DISPLAY IS TO A DEFINED NETWORK NODE WITHOUT USER ENTRY OF CONFIGURATION DETAILS.* 68

7. CLAIM 9: *THE METHOD OF CLAIM 8 FOR USE BY A PLURALITY OF USERS IN A MEETING, THERE BEING CLIENT PROCESSING DEVICES EACH FOR COUPLING TO A PERIPHERAL DEVICE FOR EVERY USER IN THE MEETING, A FIRST USER ACTION CONNECTING A PROCESSING DEVICE TO THE BASE NODE, AND A SECOND USER ACTION COMPRISING ACTIVATING AN ACTUATOR LOCATED ON AN INPUT DEVICE COUPLED TO THE PERIPHERAL DEVICE WHICH THEN STARTS A PROCESS OF OBTAINING THE DATA FOR DISPLAY BY SCREEN SCRAPING DATA FROM THE PROCESSING DEVICE AND TRANSMITTING SCREEN SCRAPED DATA TO THE BASE NODE, THE BASE NODE CARRYING OUT GRAPHICAL COMMANDS SENT FROM THE PROCESSING DEVICE.* 68

8. CLAIM 10: *THE METHOD OF CLAIM 8, WHEREIN, WHEN THE BASE NODE RECEIVES THE SCREEN SCRAPED DATA, FURTHER COMPRISING THE STEP OF PROVIDING AUTO COMPOSITION OF THE SCREEN SCRAPED DATA ON THE FIRST DISPLAY CONNECTED TO THE BASE NODE.* 71

9. CLAIM 11: *THE METHOD OF CLAIM 7, FURTHER COMPRISING PAIRING OF THE PERIPHERAL DEVICE TO THE BASE NODE BEFORE COMMUNICATION STARTS.* 71

10. CLAIM 12: *THE METHOD OF CLAIM 7, WHEREIN A DAEMON IS PROVIDED THAT IS PRE-INSTALLED ON THE PROCESSING DEVICE, THE DAEMON PROVIDING A PERMANENTLY RUNNING SERVICE THAT CONTINUOUSLY MONITORS IF A PERIPHERAL DEVICE HAS BEEN OFFERED UP FOR CONNECTION TO THE PROCESSING DEVICE.* 72

11. CLAIM 13: *THE METHOD OF CLAIM 7, WHEREIN THE PRE-INSTALLED GENERIC DRIVERS DRIVE DIFFERENT DEVICE INTERFACES INDEPENDENTLY.* 73

12. CLAIM 15: *THE METHOD OF CLAIM 14, WHEREIN THE BASE NODE HAS ONE OR MORE DISPLAYS, FURTHER COMPRISING LOADING A SERVER PROGRAM ONTO THE BASE NODE, THE SERVER PROGRAM RECEIVING SCREEN SCRAPED DATA FROM ONE OR A PLURALITY OF CLIENT PROCESSING DEVICES, AND DISPLAYING THE SCREEN SCRAPED DATA ON THE ONE OR MORE DISPLAYS, THE SERVER PROGRAM ALLOWING DISPLAY IN ACCORDANCE WITH ONE OR MORE RULES OF WHICH ONE IS THE FORCING RULE, WHEREIN THE FORCING RULE IS THAT THE DISPLAY ON THE ONE OR MORE DISPLAYS IS OBTAINED BY THE ACTION OF ONLY ONE PARTICIPANT INVOLVED IN THE MEETING, WITHOUT REQUIRING THE AGREEMENT OF ANOTHER PARTICIPANT, NEW SCREEN SCRAPED DATA OF ANY PARTICIPANT FOR DISPLAY OVERRIDES OR REPLACES ANY DATA DISPLAYED ON THE ONE OR MORE DISPLAYS FROM THE SAME OR ANOTHER PARTICIPANT OF THE MEETING.* 74

13. CLAIM 17: THE ELECTRONIC MEETING TOOL OF CLAIM 16 CONFIGURED

FOR USE BY A PLURALITY OF USERS IN A MEETING, THERE BEING PROCESSING DEVICES EACH FOR COUPLING TO A PERIPHERAL DEVICE FOR EVERY USER IN THE MEETING, WHEREBY THE ELECTRONIC MEETING TOOL IS CONFIGURED TO ALLOW A FIRST USER ACTION TO CONNECT A CLIENT PROCESSING DEVICE TO THE BASE UNIT, AND A SECOND USER ACTION COMPRISING ACTIVATING THE ACTUATOR ON THE INPUT DEVICE WHICH IS COUPLED TO THE PERIPHERAL DEVICE WHICH THEN STARTS A PROCESS OF OBTAINING THE USER SELECTED ARBITRARY MEDIA CONTENT BY SCREEN SCRAPING DATA FROM THE PROCESSING DEVICE AND TRANSMITTING SCREEN SCRAPED DATA FOR DISPLAY TO THE BASE UNIT, WHEREBY THE BASE UNIT IS CONFIGURED TO CARRY OUT GRAPHICAL COMMANDS SENT FROM THE PROCESSING DEVICE. 74

H. SNQ NO. 8 – UCHIDA COMBINED WITH GRIMSHAW RENDERS OBVIOUS CLAIMS 15 AND 17 OF THE '676 PATENT UNDER 35 U.S.C. § 103 75

1. CLAIM 14: *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.* 75

1. CLAIM 16: *WHEREBY THE FORCING RULE IS THAT THE DISPLAY ON THE ONE OR MORE FIRST DISPLAYS IS OBTAINED BY THE ACTION OF ONLY ONE PARTICIPANT INVOLVED IN THE MEETING, WITHOUT REQUIRING THE AGREEMENT OF ANOTHER PARTICIPANT, THE DATA OF ANY PARTICIPANT FOR DISPLAY OVERRIDING OR REPLACING ANY DATA DISPLAYED ON THE ONE OR MORE FIRST DISPLAYS BY THE SAME OR ANOTHER PARTICIPANT OF THE MEETING.* 75

2. CLAIM 15: *THE METHOD OF CLAIM 14, WHEREIN THE BASE NODE HAS ONE OR MORE DISPLAYS, FURTHER COMPRISING LOADING A SERVER PROGRAM ONTO THE BASE NODE, THE SERVER PROGRAM RECEIVING SCREEN SCRAPED DATA FROM ONE OR A PLURALITY OF CLIENT PROCESSING DEVICES, AND DISPLAYING THE SCREEN SCRAPED DATA ON THE ONE OR MORE DISPLAYS, THE SERVER PROGRAM ALLOWING DISPLAY IN ACCORDANCE WITH ONE OR MORE RULES OF WHICH ONE IS THE FORCING RULE, WHEREIN THE FORCING RULE IS THAT THE DISPLAY ON THE ONE OR MORE DISPLAYS IS OBTAINED BY THE ACTION OF ONLY ONE PARTICIPANT INVOLVED IN THE MEETING, WITHOUT REQUIRING THE AGREEMENT OF ANOTHER PARTICIPANT, NEW SCREEN SCRAPED DATA OF ANY PARTICIPANT FOR DISPLAY OVERRIDES OR REPLACES ANY DATA DISPLAYED ON THE ONE OR MORE DISPLAYS FROM THE SAME OR ANOTHER PARTICIPANT OF THE*

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3. CLAIM 17: *THE ELECTRONIC MEETING TOOL OF CLAIM 16 CONFIGURED FOR USE BY A PLURALITY OF USERS IN A MEETING, THERE BEING PROCESSING DEVICES EACH FOR COUPLING TO A PERIPHERAL DEVICE FOR EVERY USER IN THE MEETING, WHEREBY THE ELECTRONIC MEETING TOOL IS CONFIGURED TO ALLOW A FIRST USER ACTION TO CONNECT A CLIENT PROCESSING DEVICE TO THE BASE UNIT, AND A SECOND USER ACTION COMPRISING ACTIVATING THE ACTUATOR ON THE INPUT DEVICE WHICH IS COUPLED TO THE PERIPHERAL DEVICE WHICH THEN STARTS A PROCESS OF OBTAINING THE USER SELECTED ARBITRARY MEDIA CONTENT BY SCREEN SCRAPING DATA FROM THE PROCESSING DEVICE AND TRANSMITTING SCREEN SCRAPED DATA FOR DISPLAY TO THE BASE UNIT, WHEREBY THE BASE UNIT IS CONFIGURED TO CARRY OUT GRAPHICAL COMMANDS SENT FROM THE PROCESSING DEVICE.* 76

VII. MANNER OF APPLYING THE CLAIMS AS REQUIRED BY 37 C.F.R. § 1.510 (B)(2) 76

A. GROUND 1 – THE COMBINATION OF ONO, DEFORCHE, AND BANERJEE RENDERS OBVIOUS CLAIMS 2 AND 3. 77

1. RATIONALE TO MODIFY ONO WITH DEFORCHE, AND BANERJEE 77

2. CLAIM 1 82

a) *A method for connecting one or more processing devices ... to a wireless communications network having a base node with one or more first displays* 82

b) *each processing device being a user device of one participant in a meeting with a plurality of participants* 83

c) *the one or more processing devices each having a memory, a second display and an operating system with at least one pre-installed generic driver providing a generic communications protocol for communication between the processing device and a class of peripheral devices* 84

d) *the method comprising the following steps for each processing device: coupling a peripheral device to the processing device* 87

e) *the peripheral device having a wireless transceiver* 87

f) *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* 89

g) *coupling the processing device to the wireless communications network via the peripheral device* 92

h) *running a client application stored on the peripheral device to obtain screen scraped data* 93

i) *routing the screen scraped data between the processing device and the wireless communications network via the*

means for communication for display on the one or more first displays of the base node 96

j) *wherein the generic communication protocol is used for transferring the screen scraped data for display between the processing device and the peripheral device* 98

k) *obtaining electronic access to the one or more first displays for display of the screen scraped data* 98

l) *displaying the screen scraped data on the one or more first displays in accordance with a set of rules* 98

m) *one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting* 99

3. CLAIM 2 102

a) *The method of claim 1 further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays, the server program allowing display in accordance with one or more rules of which one is a forcing rule, wherein the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting.* 102

4. CLAIM 3 103

a) *The method of claim 2, wherein the server program is a portable application adapted to be loaded onto the base node and to be run on an operating system of the base node.* 103

B. GROUND 2 – ONO IN VIEW OF APPLICANT-ADMITTED PRIOR ART RENDERS OBVIOUS CLAIM 15 103

1. RATIONALE TO COMBINE 103

2. CLAIM 14 104

a) *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 104

b) *the method comprising the following steps: setting up a communications network between a base node of the communications network and a peripheral device coupled to the processing device* 104

c) *transferring media content between the processing device and the peripheral device the media content being screen scraped data from a screen of the processing device; transmitting the media content from the peripheral device to the communications network; receiving media content from the communications network at the base node* 105

d) *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* 107

3. CLAIM 15 107

a) *15. The method of claim 14, wherein the base node has one or more displays, further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on the one or more displays, the server program allowing display in accordance with one or more rules of which one is the forcing rule, wherein the forcing rule is that the display on the one or more displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more displays from the same or another participant of the meeting.* 107

C. GROUND 3 – THE COMBINATION OF ONO, DEFORCHE, GRIMSHAW, AND OPTIONALLY BANERJEE RENDERS OBVIOUS CLAIMS 6, 7, 11, AND 13 108

1. RATIONALE TO COMBINE 108

2. CLAIM 6 110

a) *The method of claim 1, wherein the peripheral device comprises: a base, a connector, and a flexible connection*

between the base and the connector for transferring data signals and power, and 110
b) *wherein the actuator is on the base and* 111
c) *the base has electronics comprising a processing engine, a transceiver and a visual indicator* 112
d) *the method further comprising: connecting the connector to a plug and play port of the processing device and actuating a signal with the actuator and transferring the signal to the connector for transfer to the port.* 112

3. CLAIM 7 113

a) *The method of claim 6, wherein the peripheral device comprises permanent storage for storing the client application.* 113

4. CLAIM 11 114

a) *The method of claim 7, further comprising pairing of the peripheral device to the base node before communication starts.* 114

5. CLAIM 13 115

a) *The method of claim 7, wherein the pre-installed generic drivers drive different device interfaces independently.* 115

D. GROUND 4 – THE COMBINATION OF ONO, DEFORCHE, GRIMSHAW, AUSTIN, AND OPTIONALLY BANERJEE RENDERS OBVIOUS CLAIM 12. 116

1. RATIONALE TO COMBINE ONO, DEFORCHE, GRIMSHAW, AUSTIN, AND OPTIONALLY BANERJEE. 116
2. CLAIM 12 117

a) *The method of claim 7, wherein a daemon is provided that is pre-installed on the processing device, the daemon providing a permanently running service that continuously monitors if a peripheral device has been offered up for connection to the processing device.* 117

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1. CLAIM 8 122

a) *The method of claim 1, wherein the transferring of the data for display is to a defined network node without user entry of configuration details.* 122

2. CLAIM 16 123

a) *An electronic meeting tool for communicating arbitrary media content, being data for display, from users at a meeting* 123

b) *the tool comprising a base unit of a wireless communications network, the base unit being coupled to one or more first displays* 125

c) *the base unit being adapted to receive user selected arbitrary media content from a processing device via the wireless communications network, and to control display of the user selected arbitrary media content on the one or more first displays* 126

d) *at least one peripheral device adapted to communicate the user selected arbitrary media content from the processing device to the base unit via the wireless communications network* 128

e) *a program adapted to be loaded onto the processing device and to run on an operating system of the processing device, said program being adapted to obtain user selected arbitrary media content from the processing device* 128

f) *an input device to allow the user to carry out a user action that triggers transfer of said user selected arbitrary media content from said processing device to a transmitter and to the wireless communications network, the input device being an actuator coupled to the peripheral device.* 129

g) the base unit is adapted to display said user selected arbitrary media content on the first display in accordance with a set of rules, wherein one of the rules is a forcing rule, ... 130

h) *whereby the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the data of any participant for display overriding or replacing any data displayed on the one or more first displays by the same or another participant of the meeting.* 130

3. CLAIMS 9 AND 17 130

a) *The method of claim 8 for [OR The electronic meeting tool of claim 16 configured] use by a plurality of users in a meeting, there being client processing devices each for coupling to a peripheral device for every user in the meeting, a first user action connecting a processing device to the base node, and a second user action comprising activating an actuator located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the*

processing device and transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device. 130

F. GROUND 6 – THE COMBINATION OF ONO, DEFORCHE, ICHIEDA, AND OPTIONALLY BANERJEE RENDERS OBVIOUS CLAIM 10. 133

1. RATIONALE TO COMBINE ONO, DEFORCHE, ICHIEDA, AND OPTIONALLY BANERJEE 133
2. CLAIM 10 134

a) *The method of claim 8, wherein, when the base node receives the screen scraped data, further comprising the step of providing auto composition of the screen scraped data on the first display connected to the base node.* 134

G. GROUND 7 – THE COMBINATION OF UCHIDA, DEFORCHE, GRIMSHAW, AND OPTIONALLY BANERJEE RENDERS OBVIOUS CLAIMS 2–3, 6–7, 9–13, 15, AND 17 135

1. RATIONALE TO MODIFY UCHIDA WITH DEFORCHE, GRIMSHAW, AND OPTIONALLY BANERJEE 135
2. CLAIM 1 140

a) *A method for connecting one or more processing devices ... to a wireless communications network having a base node with one or more first displays* 140
b) *each processing device being a user device of one participant in a meeting with a plurality of participants* 141
c) *the one or more processing devices each having a memory, a second display and an operating system with at least one pre-installed generic driver providing a generic communications protocol for communication between the processing device and a class of peripheral devices* 141
d) *the method comprising the following steps for each processing device: coupling a peripheral device to the processing device* 143
e) *the peripheral device having a wireless transceiver* 144
f) *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* 144
g) *coupling the processing device to the wireless communications network via the peripheral device* 147
h) *running a client application stored on the peripheral device to obtain screen scraped data* 148
i) *routing the screen scraped data between the processing device and the wireless communications network via the*

means for communication for display on the one or more first displays of the base node 150

j) *wherein the generic communication protocol is used for transferring the screen scraped data for display between the processing device and the peripheral device* 151

k) *obtaining electronic access to the one or more first displays for display of the screen scraped data* 152

l) *displaying the screen scraped data on the one or more first displays in accordance with a set of rules* 152

m) *one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting* 153

3. CLAIM 2 155

a) *The method of claim 1 further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays, the server program allowing display in accordance with one or more rules of which one is a forcing rule, wherein the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting.* 155

4. CLAIM 3 156

a) *The method of claim 2, wherein the server program is a portable application adapted to be loaded onto the base node and to be run on an operating system of the base node.* 156

5. CLAIM 6 157

a) *The method of claim 1, wherein the peripheral device comprises: a base, a connector, and a flexible connection between the base and the connector for transferring data signals and power, and* 157

b) *wherein the actuator is on the base and* 158

c) *the base has electronics comprising a processing engine, a transceiver and a visual indicator* 159

d) *the method further comprising: connecting the connector to a plug and play port of the processing device and actuating a signal with the actuator and transferring the signal to the connector for transfer to the port.* 159

6. CLAIM 7 160

a) *The method of claim 6, wherein the peripheral device comprises permanent storage for storing the client application.* 160

7. CLAIM 8 160

a) *The method of claim 1, wherein the transferring of the data for display is to a defined network node without user entry of configuration details.* 160

8. CLAIM 9 161

a) *The method of claim 8 for use by a plurality of users in a meeting, there being client processing devices each for coupling to a peripheral device for every user in the meeting, a first user action connecting a processing device to the base node, and a second user action comprising activating an actuator located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device.* 161

9. CLAIM 10 163

a) *The method of claim 8, wherein, when the base node receives the screen scraped data, further comprising the step of providing auto composition of the screen scraped data on the first display connected to the base node.* 163

10. CLAIM 11 163

a) *The method of claim 7, further comprising pairing of the peripheral device to the base node before communication starts.* 163

11. CLAIM 12 164

a) *The method of claim 7, wherein a daemon is provided that is pre-installed on the processing device, the daemon providing a permanently running service that continuously*

monitors if a peripheral device has been offered up for connection to the processing device. 164

12. CLAIM 13 165

a) *The method of claim 7, wherein the pre-installed generic drivers drive different device interfaces independently.* 165

13. CLAIM 14 166

a) *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:* 166

b) *setting up a communications network between a base node of the communications network and a peripheral device coupled to the processing device;* 166

c) *transferring media content between the processing device and the peripheral device; the media content being screen scraped data from a screen of the processing device;* 167

d) *the media content being screen scraped data from a screen of the processing device;* 167

e) *transmitting the media content from the peripheral device to the communications network;* 168

f) *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.* 168

14. CLAIM 15 169

a) *15. The method of claim 14, wherein the base node has one or more displays, further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on the one or more displays, the server program allowing display in accordance with one or more rules of which one is the forcing rule, wherein the forcing rule is that the display on the one or more displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped*

data of any participant for display overrides or replaces any data displayed on the one or more displays from the same or another participant of the meeting. 169

15. CLAIM 16 169

a) *An electronic meeting tool for communicating arbitrary media content, being data for display, from users at a meeting, the tool comprising:* 169

b) *a base unit of a wireless communications network, the base unit being coupled to one or more first displays,* 170

c) *at least one peripheral device adapted to communicate the user selected arbitrary media content from the processing device to the base unit via the wireless communications network;* 170

d) *the base unit being adapted to receive user selected arbitrary media content from a processing device via the wireless communications network, and to control display of the user selected arbitrary media content on the one or more first displays;* 171

e) *a program adapted to be loaded onto the processing device and to run on an operating system of the processing device, said program being adapted to obtain user selected arbitrary media content from the processing device;* 171

f) *an input device to allow the user to carry out a user action that triggers transfer of said user selected arbitrary media content from said processing device to a transmitter and to the wireless communications network, the input device being an actuator coupled to the peripheral device and* 172

g) *the base unit is adapted to display said user selected arbitrary media content on the first display in accordance with a set of rules, wherein one of the rules is a forcing rule,* 174

h) *whereby the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the data of any participant for display overriding or replacing any data displayed on the one or more first displays by the same or another participant of the meeting.* 174

16. CLAIM 17 174

a) *The electronic meeting tool of claim 16 configured for use by a plurality of users in a meeting, there being processing devices each for coupling to a peripheral device for every user in the meeting, whereby the electronic meeting tool is configured to allow a first user action to connect a client*

processing device to the base unit, and a second user action comprising activating the actuator on the input device which is coupled to the peripheral device which then starts a process of obtaining the user selected arbitrary media content by screen scraping data from the processing device and transmitting screen scraped data for display to the base unit, whereby the base unit is configured to carry out graphical commands sent from the processing device. 174

H. GROUND 8 – THE COMBINATION OF UCHIDA AND GRIMSHAW RENDERS OBVIOUS CLAIMS 15 AND 17. 175

1. RATIONALE TO COMBINE 175
2. CLAIM 14 175

a) *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:* 175
b) *setting up a communications network between a base node of the communications network and a peripheral device coupled to the processing device;* 175
c) *transferring media content between the processing device and the peripheral device; the media content being screen scraped data from a screen of the processing device;* 175
d) *the media content being screen scraped data from a screen of the processing device;* 175
e) *transmitting the media content from the peripheral device to the communications network;* 175
f) *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.* 175

3. CLAIM 15 176

a) *15. The method of claim 14, wherein the base node has one or more displays, further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data*

on the one or more displays, the server program allowing display in accordance with one or more rules of which one is the forcing rule, wherein the forcing rule is that the display on the one or more displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more displays from the same or another participant of the meeting. 176

4. CLAIM 16 176

a) *An electronic meeting tool for communicating arbitrary media content, being data for display, from users at a meeting, the tool comprising:* 176

b) *a base unit of a wireless communications network, the base unit being coupled to one or more first displays,* 176

c) *at least one peripheral device adapted to communicate the user selected arbitrary media content from the processing device to the base unit via the wireless communications network;* 176

d) *the base unit being adapted to receive user selected arbitrary media content from a processing device via the wireless communications network, and to control display of the user selected arbitrary media content on the one or more first displays;* 176

e) *a program adapted to be loaded onto the processing device and to run on an operating system of the processing device, said program being adapted to obtain user selected arbitrary media content from the processing device;* 177

f) *an input device to allow the user to carry out a user action that triggers transfer of said user selected arbitrary media content from said processing device to a transmitter and to the wireless communications network, the input device being an actuator coupled to the peripheral device and* 177

g) *the base unit is adapted to display said user selected arbitrary media content on the first display in accordance with a set of rules, wherein one of the rules is a forcing rule,* 177

h) *whereby the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the data of any participant for display overriding or replacing any data displayed on the one or more first displays by the same or another participant of the meeting.* 177

5. CLAIM 17 177

a) *The electronic meeting tool of claim 16 configured for use by a plurality of users in a meeting, there being processing devices each for coupling to a peripheral device for every user in the meeting, whereby the electronic meeting tool is configured to allow a first user action to connect a client processing device to the base unit, and a second user action comprising activating the actuator on the input device which is coupled to the peripheral device which then starts a process of obtaining the user selected arbitrary media content by screen scraping data from the processing device and transmitting screen scraped data for display to the base unit, whereby the base unit is configured to carry out graphical commands sent from the processing device.* 177

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I. LIST OF EXHIBITS

EXHIBIT	DESCRIPTION
Ex. 1001	U.S. Patent No. 11,258,676
Ex. 1002	Declaration of Kevin C. Almeroth, Ph.D.
Ex. 1003	Curriculum Vitae of Kevin C. Almeroth, Ph.D.
Ex. 1004	File History of U.S. Patent No. 11,258,676
Ex. 1005	U.S. Patent Application Publication No. 2005/0210390 ("Ono")
Ex. 1006	U.S. Patent Application Publication No. 2008/0074560 ("Ichieda")
Ex. 1007	U.S. Patent Application Publication No. 2006/0069840 ("Corbett")
Ex. 1008	U.S. Patent Application Publication No. 2011/0096138 ("Grimshaw")
Ex. 1009	English Translation of Japanese Patent Application Publication No. 2008-165007 ("Uchida")
Ex. 1010	Japanese Patent Application Publication No. 2008-165007
Ex. 1011	Certification for English Translation of Japanese Patent Application Publication No. 2008-165007
Ex. 1012	U.S. Provisional Application No. 61/255,326 ("Grimshaw Provisional")
Ex. 1013	Office Form SB/08A/B
Ex. 1014–Ex. 1019	**RESERVED**
Ex. 1020	U.S. Patent Application Publication No. 2010/0087139 ("Glass")
Ex. 1021	U.S. Patent Application Publication No. 2009/0198839 ("Banerjee")
Ex. 1022	U.S. Patent Application Publication No. 2011/0115689 ("Sugiyama")
Ex. 1023	U.S. Patent Application Publication No. 2009/0187687 (Hulbert")
Ex. 1024	**RESERVED**
Ex. 1025	**RESERVED**

EXHIBIT	DESCRIPTION
Ex. 1026	U.S. Patent Application Publication No. 2009/0172219 ("Mardiks")
Ex. 1027	U.S. Patent Application Publication No. 2010/0295994 ("Kaplan")
Ex. 1028	**RESERVED**
Ex. 1029	**RESERVED**
Ex. 1030	EP Patent Application Publication No. 2107463 ("Deforche")
Ex. 1031	English Translation of Japanese Patent Application Publication No. 2007-208606 ("Maeda")
Ex. 1032	U.S. Patent Application Publication No. 2010/0297964 ("Austin")
Ex. 1033	U.S. Patent Application Publication No. 2002/0196378 ("Slobodin")
Ex. 1034	U.S. Patent Application Publication No. 2002/0174254 ("Kita")
Ex. 1035–Ex. 1049	**RESERVED**
Ex. 1050	Imation Wireless Projection Link User Guide
Ex. 1051	EZAir Press Release, "EZAir Wireless PC to TV Solutions Now Available Across Europe," March 16, 2011
Ex. 1052	Warpia Product Brief, "Wireless USB PC to TV Audio/Video Display Adapter," 2009
Ex. 1053	Q-Waves Product Overview, "Quicklink TV," November 2010
Ex. 1054	IOGear Installation Guide, "Wireless USB to VGA Kit," 2008
Ex. 1055	JP Patent Application Publication No. 2007-208606
Ex. 1056	Certification for English Translation of JP Patent Application Publication No. 2007-208606
Ex. 1057	U.S. Patent Application Publication No. 2005/0036509 ("Acharya")
Ex. 1058	U.S. Patent Application Publication No. 2011/0038005 ("Ochai")
Ex. 1059–Ex. 1066	**RESERVED**
Ex. 1067	CSE-800 User Guide

EXHIBIT	DESCRIPTION
Ex. 1068	'237 Brogioli report (IPR2024-01437, Ex. 2004)
Ex. 1069–Ex. 1075	**RESERVED**
Ex. 1076	ClickShare C-5 Base Unit Datasheet
Ex. 1077	https://www.barco.com/en/inspiration/news-insights/2019-05-03-different-ways-to-share-your-content-with-clickshare (retrieved September 24, 2025).
Ex. 1078	**RESERVED**
Ex. 1079	Barco Driver Version Installed 18-7-2025 (https://www.barco.com/en/support/knowledge-base/12770-clickshare-windows-driver-version-installed)
Ex. 1080	"Why is ClickShare Windows Driver required and how can I install/update it on my PC?" (https://www.barco.com/en/support/knowledge-base/5676-clickshare-windows-driver-requirements-and-installation)
Ex. 1081	**RESERVED**
Ex. 1082	Yealink Press Release (https://www.yealink.com/en/product-detail/wireless-presentation-wpp30-eol)
Ex. 1083	Second Declaration of Kevin C. Almeroth, Ph.D. in IPR2024-01439
Ex. 1084	Dr. Brogioli Dist. Ct. Transcript
Ex. 1085	**RESERVED**
Ex. 1086	U.S. Patent No. 11,403,002
Ex. 1087	U.S. Patent No. 11,403,237
Ex. 1088	**RESERVED**
Ex. 1089	U.S. Patent No. 11,422,951
Ex. 1090–Ex. 1098	**RESERVED**
Ex. 1099	Claim construction order
Ex. 1100	Ex. 2006 – Transcript from IPR2024-01436
Ex. 1101	Ex. 2030 from IPR2024-01436

EXHIBIT	DESCRIPTION
Ex.1102–Ex. 1104	**RESERVED**
Ex. 1105	Petition in IPR2024-01438
Ex. 1106	Institution Decision in IPR2024-01438
Ex. 1107	Petitioner's Reply in IPR2024-01438
Ex. 1108	Patent Owner Response in IPR2024-01438
Ex. 1109	Prosecution History of appl. no. 14/725,401 (Notice of Allowance)

II. INTRODUCTION

Pursuant to 37 C.F.R. § 1.510, the requester respectfully requests reexamination of claims 2–3, 6–7, 9–13, 15, and 17 of U.S. Patent No. 11,258,676 ("the '676 patent"), and a finding that claims 2–3, 6–7, 9–13, 15, and 17 are unpatentable for the reasons set forth in SNQ Nos. 1–8.

III. FACTUAL, PROCEDURAL, AND CLAIM CONSTRUCTION BACKGROUND

A. Admissions of Prior Art Techniques

The '676 patent is directed to electronic tools for meetings, including methods or devices for use in displaying media content. Ex. 1001, 1:21-26; *see also id.*, 5:37-61, 17:21-23:27. In this vein, the '676 patent recognizes a recent "explosion of communication electronic communication tools" allowing ad hoc communication, such as "synchronous and asynchronous conferencing, online chat, Instant Messaging, audio conferencing, videoconferencing, data conferencing, application sharing, remote desktop sharing, electronic meeting systems, collaborative management (coordination) tools, project management systems, knowledge management systems, and social software systems." Ex. 1001, 1:35-43. The '676 patent contends that "despite the plethora of electronic aids to meetings, fundamental problems in handling meetings have not been solved." Ex. 1001, 2:29-31; Ex. 1002, ¶68.

The '676 patent acknowledges the known desirability for tools allowing greater participation in a meeting and tools addressing that need, such as the audience response system described in US 2010/0087139 (Ex. 1020 ("Glass")). Ex. 1001, 2:37-55. The approach taken by Glass uses a USB dongle to effectively turn an electronic devic0e into an audience participation device. Ex. 1020, abstract. As illustrated below, an embodiment of the Glass system includes linkable response units 12b coupled by a connector (*e.g.*, a USB plug) to a port in electronic devices 24 (*e.g.*, a laptops). *See*, *e.g.*, Ex. 1020, ¶¶0018, 0030. Linkable response unit 12b wirelessly transfers information via a wireless transceiver 30 to a base station 14, which in turn may be displayed on a screen. *See*, *e.g.*, Ex. 1020, ¶¶0013, 0020. Linkable response unit 12b may also include a keypad/buttons 46 to trigger transmission of the information.[1] Ex. 1020, ¶0033. A program 42 stored on response unit 12b enables communication between the various devices. Ex. 1020, ¶¶21, 24-26; Ex. 1002, ¶69.

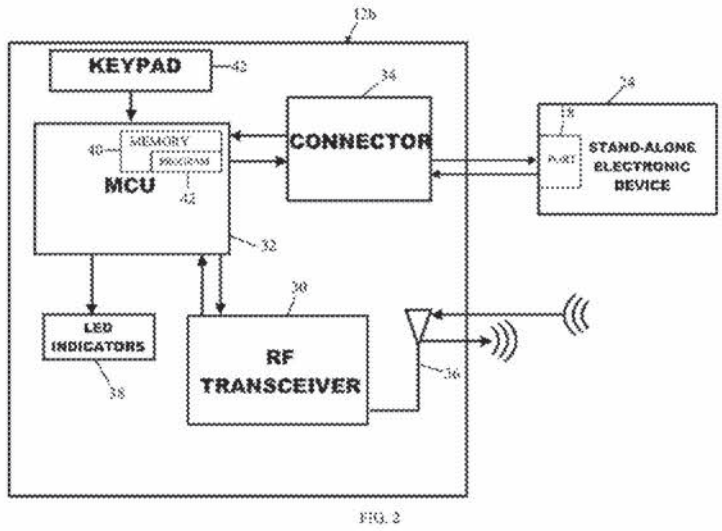


FIG. 2

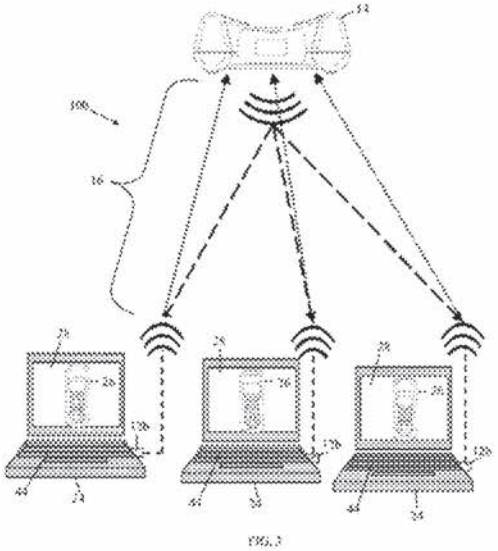


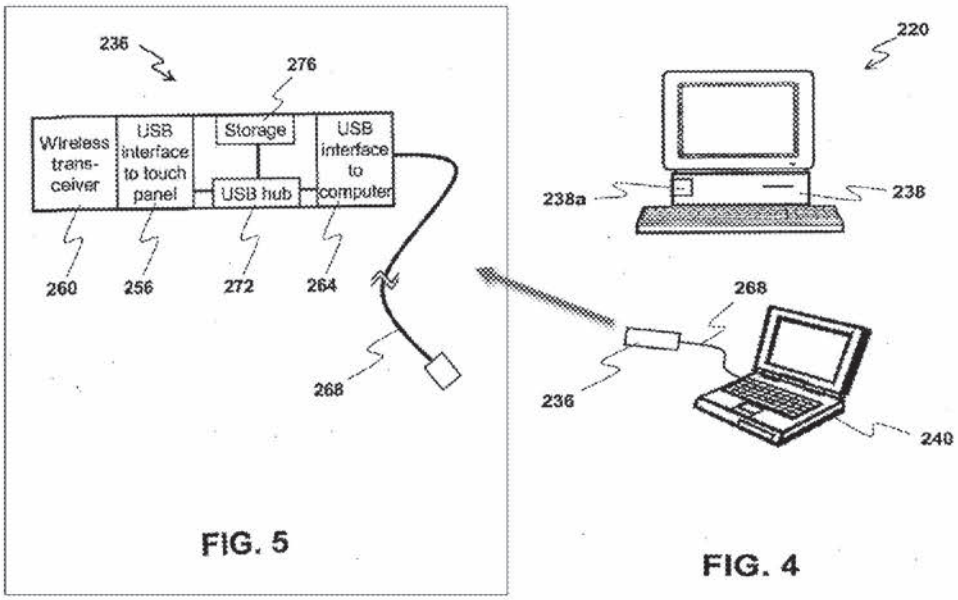
FIG. 3

Ex. 1020, FIGS. 2–3.

The '676 patent also recognizes three common techniques for transferring content of a computer to a projector. Ex. 1001, 3:29-41. According to the '676 patent, "[t]he most common

ways are to use a cable that connects the display adapter of the graphics card to the video input of the projector [method 1] or to use a software that captures the display contents and sends it over a wired or wireless network to a remote base unit connected to the projector [method 2]." *Id.*, 3:30-35. A known alternative to these techniques was "to use a special device connected to the display adapter of the graphics card that captures, encodes and streams the display content over a wired or wireless network [method 3]." *Id.*, 3:38-41; Ex. 1002, ¶70.

As examples of prior art techniques, the '676 patent identifies US 2009/0198839 (Ex. 1021 ("Banerjee")) and US 2011/0115689 (Ex. 1022 ("Sugiyama"). *Id.*, 4:55-62. The '676 patent admits that these publications describe the use of the "well-known USB interface of the computer for extracting the display content of the computer" and transferring to a projector. *Id.* Indeed, Banerjee describes, according to one embodiment illustrated in Figures 4 and 5 (below), a plug-and-play device 236 that physically connects to remote computer 240 and communicates with the master computer 238 over a wireless communications link. Ex. 1021, ¶0039. In this embodiment, "plug-and-play device 236 captures and compresses screen display data generated at the remote computer 240 and allows screen sharing between the remote computer 240 and the master computer 238 by automatically launching software stored on the plug-and-play device 236." *Id.*; Ex. 1002, ¶71



Ex. 1021, FIGS. 4–5.[1]

Although Figure 4 of Banerjee shows a master computer 238 communicating with a single remote computer 240, Banerjee contemplates that communication can be made to multiple remote computers via respective plug-and-play devices. Ex. 1021, ¶0052. Additionally, the master computer 238 may act as a node for transfer of the screen display data to a projection device 244 for display. Ex. 1021, ¶54; Ex. 1002, ¶72.

B. The Purported Invention

The '676 patent purports to improve problems associated with previous meeting technologies such as the "high demands of technical expertise" and "barriers to the use of complicated technology" and the "lack of, or restriction of participation by members of the meeting." (Ex. 1001, 5:6-18.) Yet, the claims of '676 patent are simply directed to electronic meeting tools that wirelessly communicate media content between an electronic device and a

[1] All annotations were added throughout unless otherwise noted.

display via a peripheral device and base node—much like the acknowledged prior art discussed in the previous subsection. *See id.*, 4:55-67, 32:40-36:28; Ex. 1002, ¶73. For example, claim 1 recites:

> *1. A method for connecting one or more processing devices, each processing device being a user device of one participant in a meeting with a plurality of participants, to a wireless communications network having a base node with one or more first displays, the one or more processing devices each having a memory, a second display and an operating system with at least one pre-installed generic driver providing a generic communications protocol for communication between the processing device and a class of peripheral devices, the method comprising the following steps for each processing device:*
>
> *a) coupling a peripheral device to the processing device, the peripheral device having a wireless transceiver;*
>
> *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;*
>
> *c) coupling the processing device to the wireless communications network via the peripheral device; running a client application stored on the peripheral device to obtain screen scraped data;*
>
> *d) routing the screen scraped data between the processing device and the wireless communications network via the means for communication for display on the one or more first displays of the base node, wherein the generic communication protocol is used for transferring the screen scraped data for display between the processing device and the peripheral device; and*
>
> *e) obtaining electronic access to the one or more first displays for display of the screen scraped data;*
>
> *the method further comprising:*
>
> *displaying the screen scraped data on the one or more first displays in accordance with a set of rules, one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting.*

Prior art, such as Banerjee and others, describe systems with vast majority of these features. Ex. 1002, ¶¶38–67.

In the examiner's statement for reasons of allowance, the examiner indicates the prior art of record does not teach or suggest "rules for the meeting system that includes a forcing rule that displays new screen information by only one participant of the meeting, without requiring the agreement of other participants, that overrides or replaces the displays of one or more of other

participants." Ex. 1004, 24-29. However, as discussed below, this forcing rule is disclosed by the prior art, including, for example, Ono and Grimshaw. Ex. 1002, ¶¶53–67.

C. Summary of the Prosecution History

The file history has minimal substantive prosecution. No rejections were issued, and the claims proceeded directly to allowance.

The parent application of the '676 patent, appl. no. 14/725,401, received a notice of allowance indicating the claims are allowable because the examiner believed:

> prior art of record do not teach or suggest, inter alia, wherein the base has a visual indicator which is also activated by the user action applied to the physical actuator, wherein the physical actuator is configured to be activated by the user action applied to the physical actuator to trigger delivery of the arbitrary media content on the host processing device to said transceiver on the computer peripheral device through said serial plug and play port and from the transceiver to the communications network.

Ex. 1109, 13 (NOA dated 7/13/2020) (emphasis added). However, while claim 6 of the '676 patent recites an "actuator" and a "visual indicator," the claim does not include the other features indicated in the reason for allowance. Ex. 1002, ¶¶76-77

D. The *Inter Partes* Review of the '676 Patent.

The '676 patent is the subject of IPR2024-01438. The Board instituted the IPR on all challenged claims and grounds, finding a reasonable likelihood of Petitioner's success and crediting, amongst other things, the combination of Ono and Deforche as disclosing the claim elements, including coupling via a peripheral transceiver, setting up communication by pre-installed generic drivers, and the display rules. Ex. 1106. In the Patent Owner's Response, procedurally and substantively flawed arguments were presented which misread the art, improperly invoke teaching-away, and are inconsistent with controlling obviousness law. Ex. 1108. The Petitioner's Reply explains flaws in the Patent Owner's Response by confirming, amongst other things, that (i) Deforche expressly teaches using pre-installed generic drivers and

zero-footprint applications, (ii) "screen scraped data" was known and would be implemented as a simple, predictable modification, and (iii) Patent Owner's secondary considerations lack nexus and cannot overcome the strong showing of obviousness. Ex. 1107. Claims 2–3, 6–7, 9–13, 15, and 17, which are the subject of the present request, are not at issue in the IPR. Ex. 1002, ¶¶78. 442-481.

E. Claim Terms to be Construed

The claim terms are presented by the requestor under 37 C.F.R. § 1.555(b) and MPEP § 2111. Each term of the claims is to be given its "broadest reasonable construction" consistent with the specification. MPEP § 2111; *In re Swanson*, 540 F.3d 1368, 1377–78 (Fed.Cir.2008); *In re Trans Texas Holding Corp.*, 498 F.3d 1290, 1298 (Fed. Cir. 2007) (*citing In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984). As the Federal Circuit noted in *Trans Texas*, the Office has traditionally applied a broader standard than a Court does when interpreting claim scope. MPEP § 2111. The Office applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art. *In re Morris*, 127 F.3d 1048, 1054–55, 44 U.S.P.Q.2d 1023, 1027–28 (Fed. Cir. 1997). Applying the "broadest reasonable construction" standard reduces the possibility that a claim, after issue or certificate of reexamination, will be interpreted more broadly than is justified. 37 C.F.R. § 1.555(b); MPEP § 2111.

1. "*means for communication*" (claim 1)

The term "means for communication" presumably invokes means-plus-function language and refers to an interface using the generic communication protocol of claim 1. Ex. 1001, 20:38-50; Ex. 1099, p.13. In the EDTX case, this limitation has been construed as having the structure of "an interface using a generic communications protocol" and the function to "[p]rovide

communication between the peripheral device and the processing device." Ex. 1099, p.16; Ex. 1002, ¶84.

2. *"arbitrary media content" (claim 16)*

The '676 patent defines this term with reference to "the fact that a user may generate, create or select any media content that is appropriate to display" and indicates the term "refers to client oriented, distributed rights and privileges for the display of content rather than a central presenter providing content which is presented to the members of the meeting." Ex. 1001, 13:50-58; Ex. 1002, ¶85

3. *"coupled" (claims 14, 16)*

The '676 patent indicates that this term:

> should not be interpreted as being restricted to direct connections only. Thus, the scope of the expression "a device A coupled to a device B" should not be limited to devices or systems wherein an output of device A is directly connected to an input of device B. It means that there exists a path between an output of A and an input of B which may be a path including other devices or means.

Ex. 1001, 15:25-32; Ex. 1002, ¶86.

4. *"wireless communications network"* (claims 1, 4, 16)

The '676 patent states that this term "any network that does not use cable links between nodes," *e.g.*, a WLAN (Wireless Local Area Network) or any other. Ex. 1001, 14:1-6; Ex. 1002, ¶87.

5. *"setting up, by means of the pre-installed generic driver"* (claim 1, 5)

The '676 patent states that "one of the pre-installed generic drivers of the operating system on the relevant computer device 31, 36 is exploited for setting up communication." Ex. 1001, 20:38-50; Ex. 1002, ¶88.

6. *"screen scraped data"* (claim 1, 14)

The '676 patent states that "'[s]creen scraping' in our sense refers to reading the video frame buffers and processing them, rather than just rendering them on a display." Ex. 1001, 13:59-61; Ex. 1002, ¶89.

IV. REQUIREMENTS FOR *EX PARTE* REEXAMINATION UNDER 37 C.F.R. § 1.510

Requester satisfies each requirement for *ex parte* reexamination of the '676 patent as stated below.

A. 37 C.F.R. § 1.510 (b)(1): Statement Pointing Out Each Substantial New Question Of Patentability

Please see § VI below.

B. 37 C.F.R. §1.510 (b)(2): Detailed Explanation Of The Pertinence And Manner Of Applying The Prior Art

Please see § VII below.

C. 37 C.F.R. § 1.510 (b)(3): Copy Of Every Patent Or Printed Publication Cited Against The Claims

Exs. 1005, 1006, 1007, 1008, 1009, 1021, 1030, and 1032 are also listed on Exhibit PTO–SB/08 (*i.e.*, Form PTO–SB/08). Each of these references constitutes effective prior art on the claims of the '676 patent under 35 U.S.C. §103 as explained in greater detail below.

D. 37 C.F.R. § 1.510 (b)(4): Copy of the Entire Patent

A full copy of U.S. Patent No. 11,258,676 is submitted herein as Ex. 1001 under 37 C.F.R. § 1.510(b)(4).

E. 37 C.F.R. § 1.510 (b)(5): Certification that a Copy of the Request has been served in its Entirety on the Patent Owner

A complete copy of this request is being served on the patent owner under 37 C.F.R. § 1.510(b)(5) at the correspondence address in PAIR on this date:

52835 - HSML P.C.
45 South Seventh Street
Suite 2700
MINNEAPOLIS, MN 55402-1683

F. 37 C.F.R. § 1.510 (a): Fee for Requesting Reexamination

Under 37 C.F.R. § 1.510(a), the reexamination fee has been paid as part of the Patent Center submission. Any deficiency or overpayment may be debited/credited to Deposit Account No. 19-3140.

G. Related Co-Pending Litigation

The '676 patent is at issue in *Barco, Inc. et al v. Yealink (USA) Network Technology Co., Ltd.*, 2:2023-cv-521 (EDTX), filed November 14, 2023 ("EDTX case"). The '676 patent is also the subject of IPR2024-01438, but claim 6 is not at issue in that IPR.

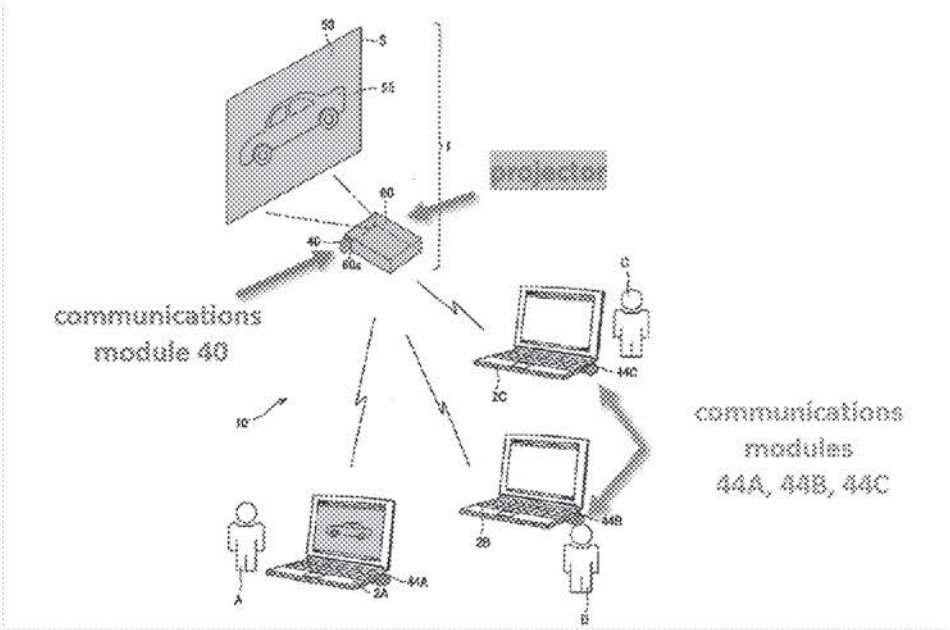
The requester, under 35 U.S.C. § 305, respectfully urges this request be granted and the reexamination be conducted not only with "special dispatch," but also with "priority over all other cases" under MPEP § 2261.

V. SUMMARY OF THE PRIOR ART

A brief description of the prior relied upon in this reexamination appears below.

A. Ono (Ex. 1005)

Like the '676 patent, Ono describes an image display system including an image display apparatus (*e.g.*, projector and screen) that receives images transferred from multiple information terminal apparatus (*e.g.*, personal computers (PCs)) connected via a wireless network and displays them. Ex. 1005, ¶2; Ex. 1002, ¶¶91–93. Communications modules 44A, 44B, *etc.* couple to each PC wirelessly and wirelessly connect to a communications module 40, which is coupled to projector 60. *Id.*, ¶36. A remote controller can switch among PCs and display image information from the selected PC. *Id.*, ¶¶7, 144.



Ex. 1005, FIG. 1.

B. Banerjee (Ex. 1021)

Similar to the '676 patent, Banerjee describes a plug-and-play device 236 that physically connects to remote computer 240 and communicates with the master computer 238 over a wireless communications link. (Ex. 1021, ¶39.) The plug-and-play device 236 captures and compresses screen display data generated at the remote computer 240 and allows screen sharing between the remote computer 240 and the master computer 238 by automatically launching software stored on the plug-and-play device 236." *Id.* The plug-and-play device 236 includes a base (*e.g.*, holding electronics, such as the wireless transceiver 260, interfaces 256, 264, storage 276, and USB hub controller 272), a connector for connecting the plug-and-play device 236 to a plug-and-play port of the remote computer 240, and a flexible connection via cable segment 268 between the base and the connector. Ex. 1002, ¶¶94-95.

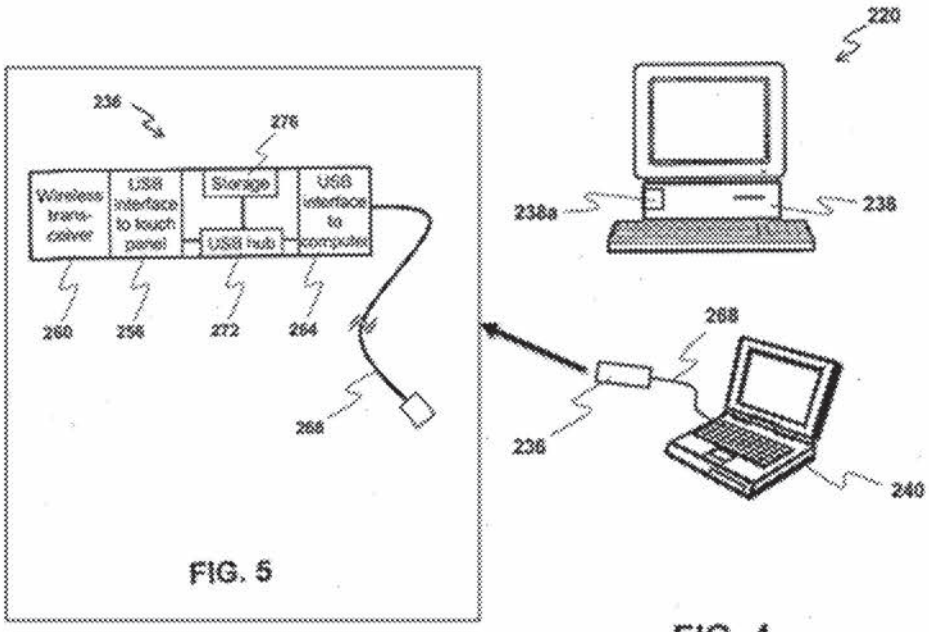


FIG. 5

FIG. 4

Ex. 1021, FIGs. 4, 5.

Additionally, Banerjee contemplates that communication can be made to multiple remote computers via multiple, respective plug-and-play devices connected to each remote computer, such as in a meeting environment. *Id.*, ¶52. Additionally, the master computer 238 may act as a node for transfer of the screen display data to a projection device 244 for display. *Id.*, ¶54.

C. Grimshaw (Ex. 1008)

Grimshaw discloses a communication system that provides presentation and conferencing functions. Ex. 1008, ¶2; Ex. 1012, 1:4–7; Ex. 1002, ¶¶96–101. The Grimshaw system includes individual user modules 14–20 that each connect to a laptop computer and allow them to send content to display module 22. Ex. 1008, ¶12; Ex. 1012, 1:23–2:6. The user modules include a button on its base that lets a user take control over the content of display module 22 and switch the displayed content to the content on their respective laptop. *Id.*, ¶19; Ex. 1012, 5:8–24. The user modules also include indicators 346-376, which may be visual indicators which indicate, for

example, which user module is providing information for display. Ex. 1008, ¶29, Ex. 1012, 9:21-28.

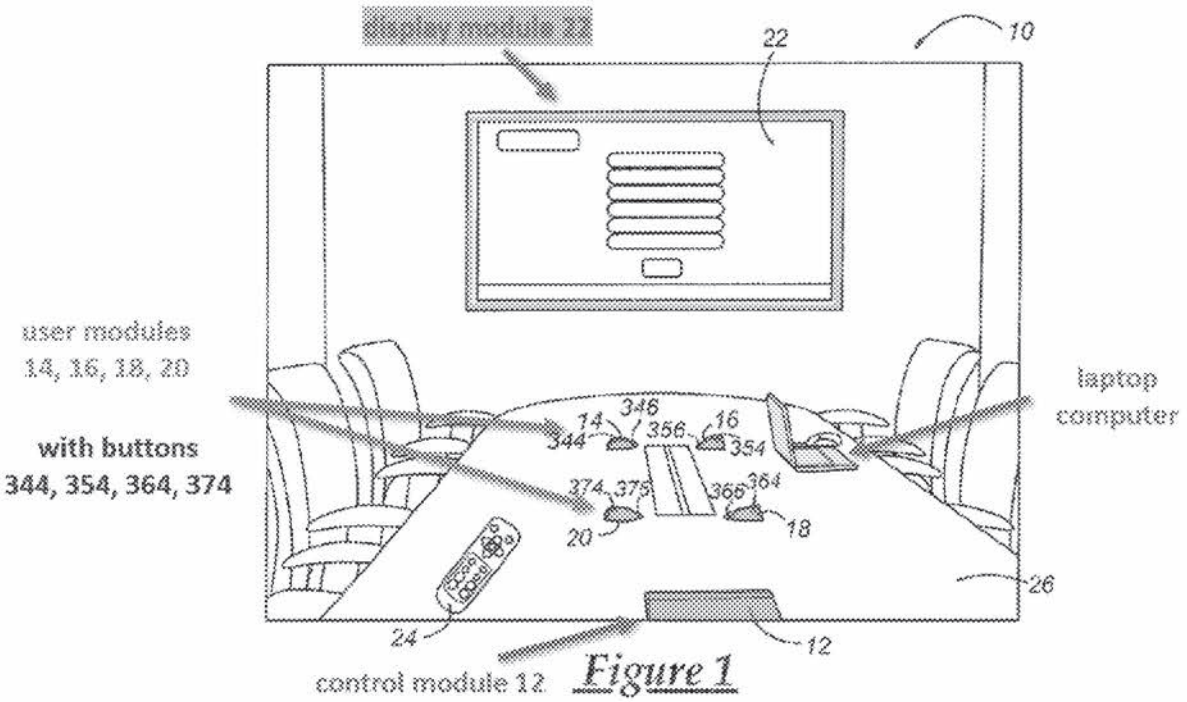


Figure 1

Ex. 1008, FIG. 1; Ex. 1012, FIGS. 1–3.

D. Corbett (Ex. 1007)

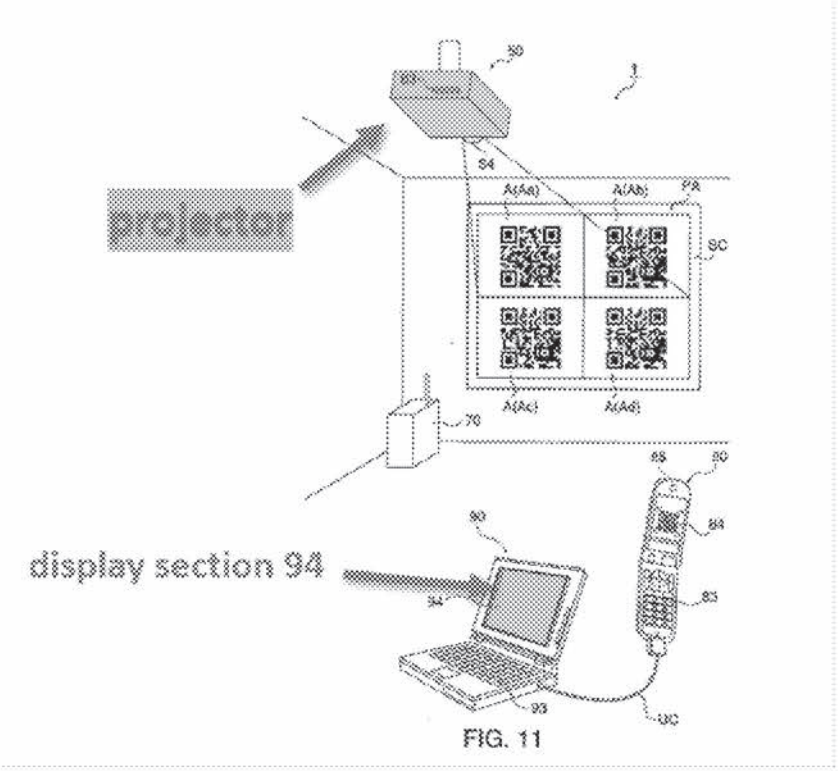
Corbett discloses a peripheral device, such as a USB flash drive, that uses a physical USB connection to a host computing system. Ex. 1007, ¶17. Corbett recognized an issue that a user may wish to transfer data to a separate, external device while the USB flash drive is connected to the host computing system. *Id.*, ¶18. To solve that issue, Corbett discloses that the USB flash drive can include a transmitter within the flash drive itself "for transmitting data from the computer readable medium 112 to an external device 150." *Id.* The transmitter further has the ability to transmit the data to the external device wirelessly. *Id.*, ¶20; Ex. 1002, ¶102.

Further, Corbett discloses that the user may manually initiate the transmission of the data to the external device. To initiate the transfer, Corbett discloses a "USB flash drive 100 may

include a transmission initiation selector 134, such as a button, selector wheel, and the like" which, upon activation, causes the transmitter to transmit all or a portion of the data to the external device. *Id.*, ¶23; Ex. 1002, ¶103.

E. Ichieda (Ex. 1006)

Ichieda describes an image display system 1 including a projector 50 which connects to a personal computer 90 over a wireless LAN. Ex. 1006, ¶43, FIG. 1; Ex. 1002, ¶104. To wirelessly connect, the personal computer may be connected to a phone to capture an image of a barcode displayed by projector on a screen. *Id.*, ¶75–91, FIG. 3–4. The control section 81 is then used to route image data (displayed on the phone) to particular area Aa-Ad on the screen where the barcode appeared, such that the automatically composed or positioned on the screen in an intuitive manner. *Id.*, ¶¶104 Once connected, the personal computer 90 transmits an image signal to the projector 50 via the wireless LAN. *Id.*, ¶¶129–150, FIG. 11; Ex. 1002, ¶104.



Ex. 1006, FIG. 11.

F. Deforche (Ex. 1030)

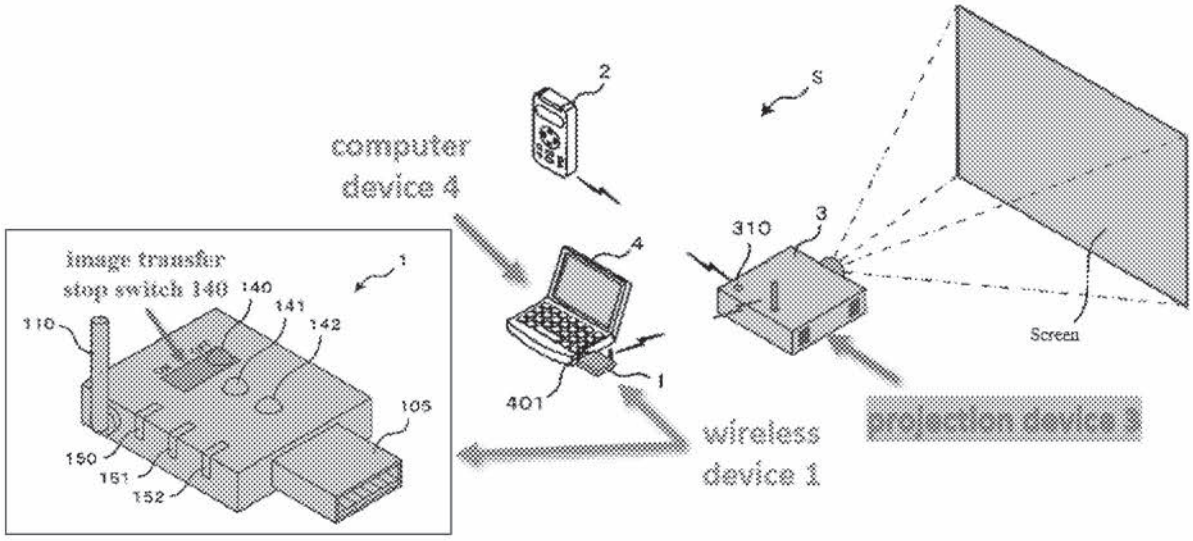
Similar to the '676 patent, Deforche discloses a method of connecting a host computer to a wireless communication network by means of "at least one pre-installed generic driver providing a generic communications protocol (7) for communication between the host computer device and a standard class of computer peripheral devices." Ex. 1030, abstract. In particular, Deforche defined a "pre-installed generic driver" as "a driver which is installed on the computer device along with the installation of the operating system, i.e. a driver which is standard for the operating system and which is capable of driving a standard class of computer peripheral devices connected to the computer device without requiring installation of a specific driver….[such as] a human interface device (HID)….[or] a mass storage device (MSD) driver." *Id.*, ¶10. These "HID and MSD drivers [were] known per se in the art." *Id.*

In operation, the "[d]ata traffic from the computer device towards the wireless communication network and vice versa is routed over this modem/host communication interface and uses the generic communication protocol provided by the pre-installed generic driver." *Id.*, ¶9. Deforche recognized that this method provided an advantage to users of avoiding the "need for a specific driver for the communication between the wireless modem device and the computer device" to be downloaded/installed, increasingly important for users with restricted user rights, i.e., user rights do not allow for installation of the necessary driver to the device *Id.* A further advantage noted by Deforche in its disclosed method is that the method leaves "zero footprint, i.e. the wireless modem device "leaves no trace … on the computer device." Ex. 1030, ¶16; Ex. 1002, ¶¶105-106.

G. Uchida (Ex. 1009)

Uchida discloses a method for wireless connecting an image projection device to a computer device. Ex. 1009, Abstract; Ex. 1002, ¶¶107–109. A wireless USB dongle (wireless

device 1) couples to computer device 4 through a USB connector 105. *Id.*, ¶¶4, 39. Wireless device 1 "transmit[s] image data [from the computer device 4] to the image projection device 3" where, thereafter, the image projection device "projects an image corresponding to the image data on the screen." *Id.* An image transfer stop switch 140 may halt or allow image transfer. *Id.*, ¶¶70–72.



Ex. 1009, FIG. 1.

H. Austin (Ex. 1032)

Austin describes a wireless media system in which a USB transmitter 120 (dongle) plugged into a computer 220 streams audio/video wirelessly to a receiver 110 connected to a display 210. Ex.1032, ¶¶19-22, FIG. 2 (reproduced below); Ex. 1002, ¶110. In this system, a daemon executing on the computer 220 detects when a USB device, such as USB transmitter 120, is coupled to the computer 220.*Id.*, ¶84.

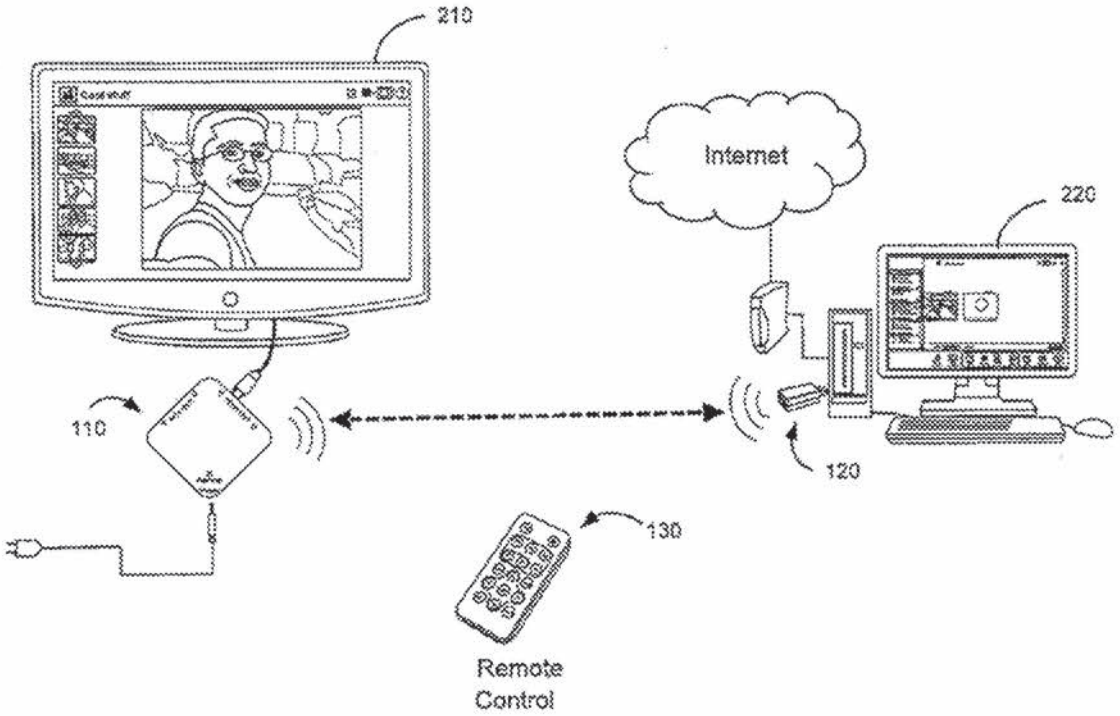


FIG. 2

Ex. 1032, FIG. 2.

VI. STATEMENTS ESTABLISHING SUBSTANTIAL NEW QUESTIONS OF PATENTABILITY ("SNQS") OF CLAIMS

Requestor respectfully submits that the SNQs identified below satisfy the SNQ requirement. The specific rationale for each substantial new question of patentability ("SNQ") based on the cited patents, and a separate detailed explanation of the pertinence and manner of applying the prior art patents to the challenged claims are presented below under 37 C.F.R. § 1.510 (b)(1) and (b)(2).

Claims 2 and 15 further limit claims 1 and 14, respectively, to include *loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays, the server program allowing display in accordance with the one or more rules* already recited in claims 1 and 14.

Claim 3 further limits claim 2 to include that the *server program is a portable application adapted to be loaded onto the base node and to be run on an operating system of the base node*.

Claim 6 further limits the *peripheral device* of claim 1, requiring it to include a base, a connector, and a flexible connection between the base and the connector for transferring data signals and power. Claim 6 further requires the actuator of the peripheral device to be on the base and the base to have electronics including a processing engine, a transceiver, and a visual indicator. Claim 6 also further limits the *method* of claim 1, requiring it to include a step of connecting the connector to a plug and play port of the processing device and actuating a signal with the actuator and transferring the signal to the connector for transfer to the port.

Claim 7 further limits claim 6 to include that *the peripheral device comprises permanent storage for storing the client application*.

Claims 9 and 17 further limit claims 8 and 16, respectively, to include *use by a plurality of users in a meeting, there being client processing devices each for coupling to a peripheral device for every user in the meeting, a first user action connecting a processing device to the base node, and a second user action comprising activating an actuator located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device*.

Claim 10 further limits claim 8 to include *providing auto composition of the screen scraped data on the first display connected to the base node*.

Claim 11 further limits claims 7 to include *pairing of the peripheral device to the base node before communication starts*.

Claim 12 further limits claim 7 to include that *a daemon is provided that is pre-installed on the processing device, the daemon providing a permanently running service that continuously monitors if a peripheral device has been offered up for connection to the processing device.*

Claim 13 further limits claim 7 to include that *the pre-installed generic drivers drive different device interfaces independently.*

The eight proposed grounds present SNQs for at least the features identified above. Ex. 1002, ¶¶111-121.

A. SNQ No. 1 – Ono combined with Deforche and Banerjee renders obvious claims 2 and 3 of the '676 patent under 35 U.S.C. § 103.

The new, non-cumulative, and not previously considered arguments with respect to Ono combined with Deforche and Banerjee establish an SNQ for claims 2, 3, 8, and 11 of the '676 patent. Neither Ono nor Deforche was previously considered, and the combination presents an SNQ for at least the claimed *forcing rule* of claim 1 and the additional features of claims 2, 3, and 8. Ex. 1002, ¶122

1. Claim 1: *one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting*

Ono discloses this "*forcing rule*" *limitation*. Ex. 1002, ¶¶123-129. For example, Ono discloses using a remote controller 69 to select an information terminal apparatus (2A, 2B, etc.) to display an image 55 based on the image data from the display (LCD 21) of the apparatus. Thus, through operations using the remote controller 69, the image display system 10 is capable of switching among a plurality of PCs connected to a network and selecting the display content from the desired PC to be displayed on projection screen 5 "with ease." Ex. 1005, ¶144.

Ono also indicates:

> Further, since, just through operations from the remote controller 69 of the image display apparatus 1, it is possible to switch the information terminal apparatus whose image is to be projected onto the screen 5, even in cases where, for example, there are a plurality of presenters to present in a given order, it becomes unnecessary for each presenter, in accordance with the order, to perform an output on/off operation at each information terminal apparatus, and therefore, the gap in time until the next presentation is eliminated, and presentations can be conducted speedily.

Ex. 1005, ¶144.

Therefore, Ono "forces" switching of display by the action of only one participant involved in the meeting (*i.e.*, the user of the remote controller), and new screen data from the information terminal apparatus overrides or replaces any data displayed on the display module without requiring the agreement of another participant.

In particular, Ono discloses rules for a remote controller to switch among PCs wirelessly connected to a projector. Ex. 1005, ¶¶7, 36-39, 64-70, 77-78, 0144, FIGs. 1, 3. Ono's system includes an image display apparatus capable of switching among a plurality of networked information terminal apparatuses 2A, 2B, 2C (*e.g.*, personal computers (PCs)) and selecting a desired PC for displaying its screen content on a larger shared projection screen 5. *Id.* As Ono illustrates in FIGs. 1 and 3, the user simply presses a button on the remote controller 69, which brings of a list 71 of the connected PCs. Ono explains:

> When the user selects from the list 71 the information terminal apparatus s/he wants to connect with by pressing the up or down selection key on the operation section of the remote controller 69 and presses the confirm (enter) key, the image display apparatus 1 connects with the selected information terminal apparatus.

Ex. 1005, ¶78.

In this way, a user can forcibly switch between the different PCs to display on the projections screen the desired content. Ono and Deforche disclose only a couple of design options

of the many options discussed in the prior art. *See additionally*, Ex. 1013, ¶¶2, 31, 48-49, FIG. 2; Ex. 1008, ¶¶19-20; 23-27, FIG. 1.

Ono describes an exemplary method (or set of rules) for switching from the displaying the image data from information terminal apparatus 2A (coming from its LCD display 21) to the image data from information terminal apparatus 2B in Figure 13. Ex. 1005, ¶111-126, FIG. 13. As illustrated in Figure 13 below, PC 2A begins connected to the projector. *Id.* After PC 2B is selected by the remote controller, a sequence of steps occurs to disconnect PC 2A and connect PC 2B. *Id.* Once PC 2B is connected, "the transfer of image information from the [PC] 2B to the projector 60 is begun, and the projector 60 of the image display apparatus 1 projects and displays on the screen 5 the image from the information terminal apparatus 2B. Ex. 1005, ¶125. Thus, the projector displays new "screen scraped data" from the information terminal apparatus 2B.

Additionally, Ono teaches that the remote controller also has fast forwarding/rewinding capabilities. Ex. 1005, ¶70. The information terminal apparatus 2 interprets the control data for fast forwarding/rewinding images, which is received through the wireless connection module 44, and fast forwards/rewinds the image information displayed on its display section. In conjunction therewith, the image projected onto the screen 5 of the image display apparatus 1 is also fast forwarded/rewound. *Id.*, ¶70.

Thus, through operation of the remote controller, the screen data projected onto the projection screen by the same participant is replaced without requiring the agreement of another participant. In this additional way, Ono teaches a "forcing rule" as claimed.

2. **<u>Claim 2</u>: The method of claim 1 further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays, the server program allowing display in accordance with one or more rules of which one is a forcing rule, wherein the forcing rule is that the**

> **display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting.**

Ono discloses *loading a server program* (*e.g.*, configuration information 43 and/or connection application 41) onto the base node (*e.g.*, image display apparatus 1). Ex. 1005, ¶58. Ono further discloses the *server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays*. Ex. 1005, ¶42. Ono also discloses the limitations associated with a "*forcing rule*" as explained above with respect to identical claim language of claim 1. *See* § VI.A.1, supra; Ex. 1002, ¶130.

3. Claim 3: *The method of claim 2, wherein the server program is a portable application adapted to be loaded onto the base node and to be run on an operating system of the base node.*

Ono discloses *server program is adapted to be loaded onto the base node and to be run on an operating system of the base node*. Ex. 1005, ¶58 ("With respect to the projector 60 of the image display apparatus 1, the configuration information 43 is already stored in the ROM along with the connection application 41 and the driver 42 at the time of purchase of the projector 60"); Ex. 1002, ¶¶131-132.

The '676 patent defines a portable application as "a computer software program designed to run without installation on the target machine". Ex. 1001, 12:23-25. Deforche discloses running a program as *a portable application*. *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 Id.* ¶¶18, 26-27, 30-31, 47. A POSITA would have been motivated to run the *server program* (*e.g.*, configuration information 43 and/or

connection application 41) of Ono as a *portable application* as taught by Deforche to obtain known benefits such as avoiding that any traces of the program are left on the operating system after its use. Ex. 1030, ¶30.

B. SNQ No. 2 – Ono in view of applicant-admitted prior art renders obvious claim 15 of the '676 patent under 35 U.S.C. § 103.

The new, non-cumulative, and not previously considered arguments with respect to Ono combined with applicant-admitted prior art (AAPA) establish an SNQ for claim 15 of the '676 patent. Ono was not previously considered, and the combination presents an SNQ for at least the claimed *forcing rule* of claim 14 and the additional features of claim 15. Ex. 1002, ¶133.

1. **Claim 14:** ***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.***

See § VI.A.1 regarding analogous features of claim 1; Ex. 1002, ¶134.

2. **Claim 15:** ***wherein the base node has one or more displays, further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on the one or more displays, the server program allowing display in accordance with one or more rules of which one is the forcing rule, wherein the forcing rule is that the display on the one or more displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more displays from the same or another participant of the meeting.***

See § VI.A.2, regarding analogous features of claim 2; Ex. 1002, ¶¶135-136.

These technical teachings of Ono in combination with AAPA were not cited, considered or discussed on the record by the examiner during prosecution of the '676 patent or in IPR2024-01438 with respect to claim 15, and an examiner would have considered the new technical

teachings of Ono in combination with AAPA important in deciding the patentability of claim 15. The new technical teachings of Ono in combination with AAPA are not cumulative of any technical teachings discussed or suggested during the original prosecution of the '676 patent. Therefore, Ono in combination with AAPA establishes an SNQ with respect to claim 15 of the '676 patent.

C. SNQ No. 3 – Ono combined with Deforche, Grimshaw, and Banerjee renders obvious claims 6, 7, 11, and 13 of the '676 patent under 35 U.S.C. § 103.

The new, non-cumulative, and not previously considered arguments with respect to Ono combined with Deforche, Grimshaw, and optionally Banerjee establish an SNQ for claims 6, 7, 11, and 13 of the '676 patent. Ono, Deforche, and Grimshaw were not previously considered, and the combination presents an SNQ for at least the claimed *forcing rule* of claims 1 (*see* § VI.A.1) and 16 and additional features of claims 6, 7, 11, and 13. Ex. 1002, ¶137

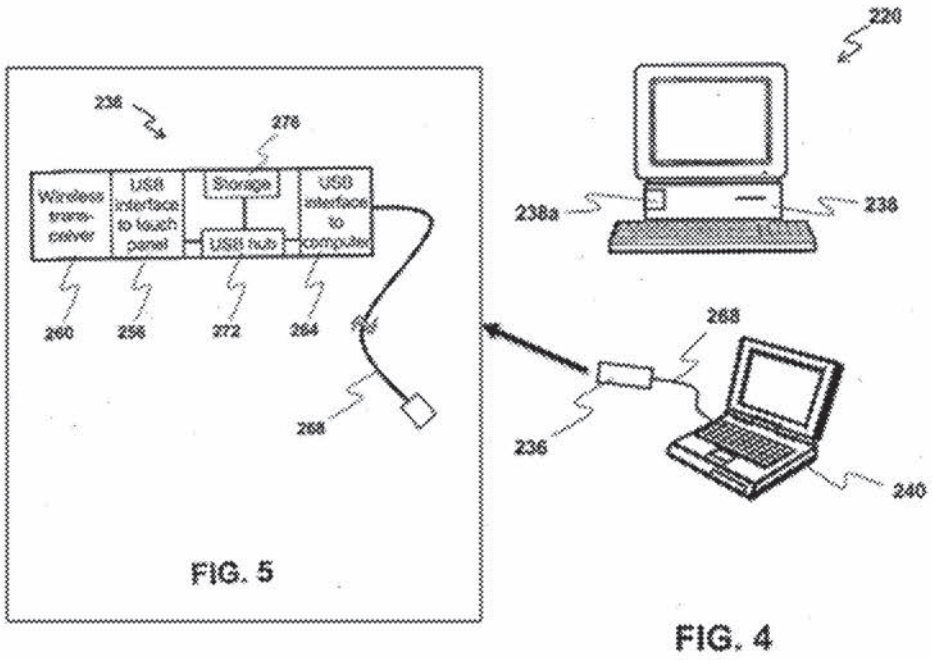
1. Claim 6:

a) *The method of claim 1, wherein the peripheral device comprises: a base, a connector, and a flexible connection between the base and the connector for transferring data signals and power, and*

Ono discloses *the peripheral device* (*e.g.*, the wireless connection module 44) *comprises a base* (*e.g.*, the housing holding components of the wireless device 1) *and a connector* (*e.g.*, USB connector 105). Ex. 1009, ¶¶39-42, FIG. 3; Ex. 1002, ¶¶138-139. A POSITA would have understood it would have been a design choice to include *a flexible connection between the base and the connector for transferring data signals and power*. For example, USB extension cables were widely known and available and could have been connected to the USB connector 105 of Uchida's wireless device 1 to obtain a flexible connection as claimed.

Banerjee describes a plug-and-play device for wireless screen sharing that is similar to the wireless connection module 44 of Ono. Ex. 1021, ¶¶39-42, FIG. 5 (reproduced below). Banerjee

discloses *the peripheral device* (*e.g.*, the plug-and-play device 236) *comprises a base* (*e.g.*, holding electronics, such as the wireless transceiver 260, interfaces 256, 264, storage 276, and USB hub controller 272), *a connector* (e.g., a connector for connecting the plug-and-play device 236 to a plug-and-play port of the remote computer 240), *and a flexible connection between the base and the connector for transferring data signals and power* (*e.g.*, the cable segment 268 between the base and the connector). *Id.* It would have been a predictable variation of Ono's system to include the flexible cable 268 of Banerjee, using known electronic manufacturing techniques.



Ex. 1021, FIGs. 4, 5.

b) *wherein the actuator is on the base and*

Ono also discloses that an input device (remote controller 69) includes an *actuator* (a button on the remote controller 69) that can switch among PCs and display image information from the selected PC. *Id.*, ¶¶7, 144. It would have been obvious to a POSITA to include the actuator (providing functionality like Ono's remote controller device) on a peripheral device (like wireless connection module 44) for the reasons described below in § VII.C.1. Furthermore, Grimshaw

discloses *the actuator* (*e.g.*, button 344-374) *is on the base* (*e.g.*, on the user module 14, 16, 18, 20). Ex. 1008, ¶¶04 ("each of the user modules includes a button"), 5, 19, 20, 24, 27-29, 34, 39, 41, and claims 1, 16.

c) *the base has electronics comprising a processing engine, a transceiver and a visual indicator*

A POSITA would understand that Ono's wireless connection module 44 has electronics and that these electronics would necessarily include at least *a processing engine* (*e.g.*, some processing unit or controller) and the *transceiver* addressed above. Ex. 1002, ¶¶141-142. Banerjee discloses electronics included in a plug-and-play device 236 that is similar to the wireless connection module 44 of Ono. Specifically, Banerjee discloses *the base* (*e.g.*, of the plug-and-play device 236) *has electronics comprising a processing engine* (*e.g.*, the controller 272) *and a transceiver* (*e.g.*, the wireless transceiver 260). Ex. 1021, ¶¶41-42, FIG. 5. A POSITA would have understood how to include these known electronic components of Banerjee's plug-and-play device 236 in the similar wireless connection module 44 of Ono with predictable results using well-known electronic manufacturing techniques.

Grimshaw discloses that the base of a user module 14, 16, 18, 20, which is also similar in structure and function to Ono's wireless connection module 44, having a *visual indicator* (*e.g.*, indicators 346-376). Ex. 1008, ¶29. A POSITA would have understood how to and been motivated to include the known visual indicator of Grimshaw's user module 14, 16, 18, 20 in the wireless connection module 44 of Ono to achieve desirable visual status indications to users with predictable results using well-known electronic manufacturing techniques.

d) ***connecting the connector to a plug and play port of the processing device and actuating a signal with the actuator and transferring the signal to the connector for transfer to the port.***

Ono discloses *connecting the connector* (*e.g.*, the connector of the wireless connection module 44) *to a plug and play port of the processing device* (*e.g.*, a USB jack on the information terminal apparatus 2A). For example, the '676 patent specifies that plug and play interfaces include USB ports, which is the same interface disclosed by Ono. Ex. 1001, 11:52-65 ("Plug and play interfaces include for example (not an exhaustive list): Firewire (IEEE-1394), PCI, Mini PCI, PCI Express, Mini PCI Express, PCMCIA, PC Card, Universal Serial Bus (USB), SDIO cards"); Ex. 1005, ¶¶54-55 ("[I]f the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network"); Ex. 1002, ¶¶143-144.

Ono also discloses *actuating a signal with the actuator* (*e.g.*, operating the remote controller 69 to cause the CPU 61 of the image display apparatus 1 to generate a transmission signal) *and transferring the signal to the connector* (*e.g.*, sending the transmission signal to the wireless connection module 44) *for transfer to the port* (*e.g.*, for transfer to the I/F 66 of the information terminal apparatus 2). Ex. 1005, ¶69.

2. Claim 7: ***The method of claim 6, wherein the peripheral device comprises permanent storage for storing the client application.***

Although Ono's connection application 46, driver 47, and configuration information 48 are described in one embodiment as stored on a USB memory 45 (as opposed to USB-type wireless information communications module 44), at the time of the alleged invention in 2011, the location of storage of that information would have been simply a matter of design choice. In 2011, a

POSITA would have readily combined the memory storage capability of a USB memory device (like USB memory 45) and the wireless transceiver functionality (like that of information communications module 44) into a single device, such that *the peripheral device* (*e.g.*, the wireless information communications module 44) *comprises permanent storage* (*e.g.*, the USB memory 45) *for storing the client application*. Furthermore, Deforche discloses running an application stored on the peripheral device itself rather than on a separate USB mass storage device. Ex. 1030, FIG. 2, ¶¶9, 34, 46, 52; Ex. 1002, ¶145.

3. Claim 11

a) *The method of claim 7, further comprising pairing of the peripheral device to the base node before communication starts.*

In Ono, the communication module ("*peripheral device*") and projector ("*base node*") are preconfigured with network connection parameters to establish a wireless network connection, or pairing, between the devices. Ex. 1005, ¶60; Ex. 1002, ¶¶146-148. The '676 describes use of this type of wireless network connection as a type of pairing. Ex.1001, 21:51-55 ("The user can also **pair the peripheral device to a base node** or base unit that controls the display in the meeting room and which is **connectable to the peripheral device via a communications network such as a wired or wireless communications network**." (emphasis added)). Therefore, establishing this wireless connection in Ono is a type of "pairing" and is performed "*before communications starts*" as it allows the subsequent communication between the devices.

In the event establishing this wireless connection is not considered "pairing", Banerjee expressly discloses pairing a peripheral plug-and-play device to another device before data exchange. Ex. 1021, ¶41 ("The wireless communication device 238 a and wireless transceiver 260 are paired to enable a peer-to-peer wireless connection between the master computer 238 and the remote computer 240 to be established."). A POSITA would recognize that this known approach

to establishing device-to-device communication could be employed in the system of Ono. ALMEROTH.

4. Claim 13: *The method of claim 7, wherein the pre-installed generic drivers drive different device interfaces independently.*

Deforche demonstrates that *pre-installed generic drivers drive different device interfaces independently* because they ubiquitously drove multiple different interfaces, such as keyboards, mass storage devices, and audio devices. Ex. 1030, ¶10 ("An example of such a generic driver is a human interface driver (HID), which has predetermined software components configured for driving a human interface device such as a mouse, a keyboard or other."); Ex. 1002, ¶149. Even the '676 patent admits that generic drivers were known by their definition to drive different devices independently:

> The term "pre-installed generic driver" is intended to mean a driver which is installed on a processing device such as a computer as a standard driver, e.g. is installed with the installation of the operating system. Such a driver is standard for the operating system and can drive a standard class of peripheral devices coupled to or connected to the processing device. The installation of a specific driver for such a peripheral device is not required. Such a generic driver can be a human interface driver (HID) or a mass storage device driver, which has predetermined software components configured for driving mass storage, a CD-ROM, a keyboard etc. or combinations of these. Such devices can be readable and writable computer peripheral memory devices such as USB memory sticks, flash memories, external hard drives, or more.

Ex. 1001, 14:20-34. It would be obvious to include this well-known, standard feature of a "pre-installed generic driver" in the system of Ono.

D. SNQ No. 4 – Ono combined with Deforche, Grimshaw, Austin, and Banerjee renders obvious claim 12 of the '676 patent under 35 U.S.C. § 103.

The new, non-cumulative, and not previously considered arguments with respect to Ono combined with Deforche, Grimshaw, Austin, and optionally Banerjee establish an SNQ for claim 12 of the '676 patent. Ono, Deforche, and Grimshaw were not previously considered, and the

combination presents an SNQ for at least the claimed *forcing rule* of claim 1 (*see* § VI.A.1) and the additional features of claim 7 (*see* § VI.C.2) and claim 12. Ex. 1002, ¶150.

1. **Claim 12:** ***The method of claim 7, wherein a daemon is provided that is pre-installed on the processing device, the daemon providing a permanently running service that continuously monitors if a peripheral device has been offered up for connection to the processing device.***

A "*daemon*" is a program that runs in the background and provides important system services, such as processing incoming email or handling requests from the network. Ex. 1002, ¶¶151-153. One use of a daemon to "detect that the device in mass storage mode is coupled to the computer system and may cause the command to be transmitted to the device. Additionally, in some embodiments, the command is a HID (Human Interface Device) command to switch the device to the second mode of operation." Ex. 1032, ¶84. The '676 patent admits that this is a common use of a daemon:

> In an embodiment of the present invention a very small service—also called daemon on some OS's—is provided that requires installation on the processing device such as a laptop. This service is pre-installed on the processing device. The installation is required only once on every processing device such as a laptop. The role of this is to provide a permanently running service that continuously monitors if a peripheral device according to the present invention has been offered up for connection to the processing device. When such a peripheral device is connected, the service will detect this and start the client application software residing in the mass storage area of the peripheral device.

Ex. 1001, 7:43-57. Ex. 1002, ¶153.

These technical teachings of Ono in combination with Deforche, Grimshaw, Austin and Banerjee were not cited, considered or discussed on the record by the examiner during prosecution of the '676 patent or in IPR2024-01438 with respect to claim 12, and an examiner would have considered the new technical teachings of Ono in combination with Deforche, Grimshaw, Austin, and Banerjee important in deciding the patentability of claim 12. The new technical teachings of Ono in combination with Deforche, Grimshaw, Austin, and Banerjee are not cumulative of any

technical teachings discussed or suggested during the original prosecution of the '676 patent. Therefore, Ono in combination with Deforche, Grimshaw, Austin, and Banerjee establishes an SNQ with respect to claim 12 of the '676 patent. Ex. 1002, ¶154.

E. SNQ No. 5 – Ono, Deforche, Corbett, and optionally Banerjee/Grimshaw renders obvious claims 9 and 17 of the '676 patent under 35 U.S.C. § 103.

The new, non-cumulative, and not previously considered arguments with respect to Ono combined with Deforche, Corbett, and optionally Banerjee/Grimshaw establish an SNQ for claims 9 and 17 of the '676 patent. Ono, Deforche, Corbett, and Grimshaw were not previously considered, and the combination presents an SNQ for at least the claimed *forcing rule* of claims 1 (*see* § VI.A.1) and 16 (*see* § VI.C.5) and the additional features of claims 8 (*see* § VI.A.4), 9, and 17. Ex. 1002, ¶155.

1. Claim 8: *The method of claim 1, wherein the transferring of the data for display is to a defined network node without user entry of configuration details.*

Ono discloses *transferring of the data for display to a defined network node* (*e.g.*, projector 60) *without user entry of configuration details* (*e.g.*, "configuration information 48"). According to Ono:

> [T]he configuration information 48 will automatically be stored in the HDD (Hard Disk Drive). Then, if the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network.

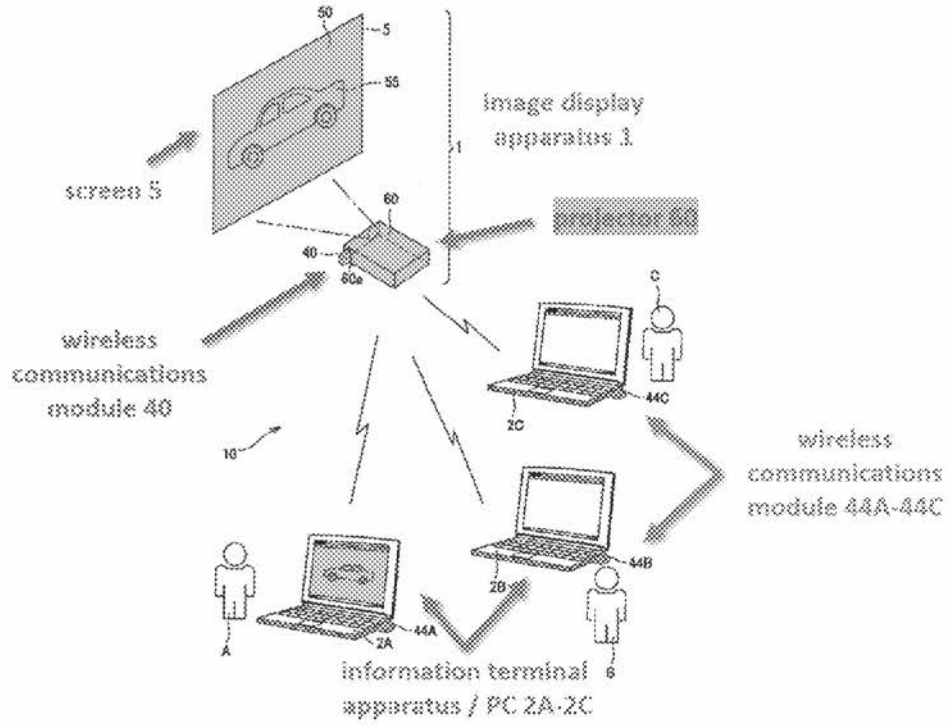
Ex. 1005, ¶55, *see also* ¶¶56-63; Ex. 1001, 7:24-29; Ex. 1034, ¶¶14-17 and FIGS. 3, 18; Ex. 1002, ¶156.

2. Claim 9: *The method of claim 8 for use by a plurality of users in a meeting, there being client processing devices each for coupling to a peripheral device for every user in the meeting, a first user action connecting a processing device to the base node, and a second user action comprising activating an actuator located on an input device coupled to*

> ***the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device.***

See § VII.A.5 (regarding the obviousness of claim 8 from which claim 9 depends) and § VII.C.6 (regarding obviousness of claim 16 from which claim 17 depends). Ex. 1002, ¶¶157-160.

Ono discloses *a plurality of users in a meeting,* (*e.g.*, FIG. 1 illustrating users A-C) *there being client processing devices* (*e.g.*, 2A-2C) *each for coupling to a peripheral device* (*e.g.*, 44a-44c) *for every user in the meeting*. *See also* Ex. 1005, ¶82–83, 88.



Ex. 1005, FIG. 1.

Ono also discloses *a first user action connecting a processing device to the base node* (*e.g.*, "the user clicks on a set-up file [and] if the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60")

Ex. 1005, ¶55. The *first user action* comprises clicking the set-up file and inserting the wireless connection module 44. *Id*.

Ono discloses *a second user action comprising activating an actuator located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device*, *e.g.*, "transmit[ing] the image information signal … to … the projector 60" in response to pressing a key on the remote control 69. Ex. 1005, ¶82–83, 88 and FIG. 1 (illustrating transmitting image of a vehicle; and FIG. 9, "IMAGE TRANSFER" step of the "connection process."). Pressing the key results in an "image transfer." Ex. 1005, FIG. 9. Corbett further teaches that the "*actuator*" (*e.g.*, a selector 130) can be on the "*peripheral device*" (*e.g.*, the flash drive). Ex. 1007, FIG. 1, ¶23 ("transfer of data through the transmitter 122 may be initiated through selection of one or more selectors 130 of the USB flash drive."). There were also a finite number of locations to place the input devices with a reasonable expectation of success to achieve "predictable variations." *Id.*; *see also*, MPEP § 2143.I.E. Therefore, Ono in combination with Corbett renders obvious the "*input device*" limitation.

The Patent Owner argued in the related IPR that "connecting to a network brings the danger of virus, malware or spyware transfer in either direction, and there is danger of copying of confidential information." Ex. 1091, 24 (citing Ex. 1001, 3:3-6). However, there is nothing in the claims of the '676 patent addressing this issue. Moreover, the claims expressly require transferring the media content "*to the base node*." The Board instituted despite this argument. Ex. 1106. Therefore, the malware issue is irrelevant. Ex. 1002, ¶160.

1. <u>Claim 16</u>: *whereby the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in*

the meeting, without requiring the agreement of another participant, the data of any participant for display overriding or replacing any data displayed on the one or more first displays by the same or another participant of the meeting.

See, e.g., § VI.A.1. Ex. 1002, ¶161.

2. **Claim 17**: ***The electronic meeting tool of claim 16 configured for use by a plurality of users in a meeting, there being processing devices each for coupling to a peripheral device for every user in the meeting, whereby the electronic meeting tool is configured to allow a first user action to connect a client processing device to the base unit, and a second user action comprising activating the actuator on the input device which is coupled to the peripheral device which then starts a process of obtaining the user selected arbitrary media content by screen scraping data from the processing device and transmitting screen scraped data for display to the base unit, whereby the base unit is configured to carry out graphical commands sent from the processing device.***

See § VI.E.1. Ex. 1002, ¶162.

These technical teachings of Ono in combination with Deforche, Corbett, and optionally Banerjee/Grimshaw were not cited, considered or discussed on the record by the examiner during prosecution of the '676 patent or in IPR2024-01438 with respect to claims 9 and 17, and an examiner would have considered the new technical teachings of Ono in combination with Deforche, Corbett, and optionally Banerjee/Grimshaw important in deciding the patentability of claims 9 and 17. The new technical teachings of Ono in combination with Deforche, Corbett, and optionally Banerjee/Grimshaw are not cumulative of any technical teachings discussed or suggested during the original prosecution of the '676 patent. Therefore, Ono in combination with Deforche, Corbett, and optionally Banerjee/Grimshaw establishes an SNQ with respect to claims 9 and 17 of the '676 patent. Ex. 1002, ¶¶163.

F. SNQ No. 6 – Ono combined with Deforche, Ichieda, and optionally Banerjee renders obvious claim 10 of the '676 patent under 35 U.S.C. § 103.

The new, non-cumulative, and not previously considered arguments with respect to Ono combined with Deforche, Ichieda, and optionally Banerjee establish an SNQ for claim 10 of the

'676 patent. Ono, Deforche, and Ichieda were not previously considered, and the combination presents an SNQ for at least the claimed *forcing rule* of claim 1 (*see* § VI.A.1) and the additional features of claim 8 (*see* § VI.A.4) and claim 10. Ex. 1002, ¶164.

1. **Claim 10**: ***The method of claim 8, wherein, when the base node receives the screen scraped data, further comprising the step of providing auto composition of the screen scraped data on the first display connected to the base node.***

The '676 patent indicates:

> "Auto composition" or "auto layout" refers to the automatic nature in which multiple graphics/video sources are rendered on a central display, without user intervention and in a way that a user would intuitively expect it to happen.

Ex. 1001, 13:64-67; Ex. 1002, ¶165.

Ichieda discloses "*auto composition of the screen scraped data on the first display*" by automatically assigning each new image source to the next available sub-area (Aa, Ab, Ac, Ad) on the central display as devices connect, without user intervention. Ex. 1006, p1122, FIG. 10. As each device establishes a wireless connection, the projector fills the sub-areas in order (e.g., first device to Aa, second to Ab, and so on), displaying each image in its pre-assigned area. FIG. 10 (reproduced below) visually shows this auto composition process in which the images are intuitively arranged. This layout is handled automatically and in a way users would expect, requiring no manual setup or configuration by the user. Ex. 1002, ¶166.

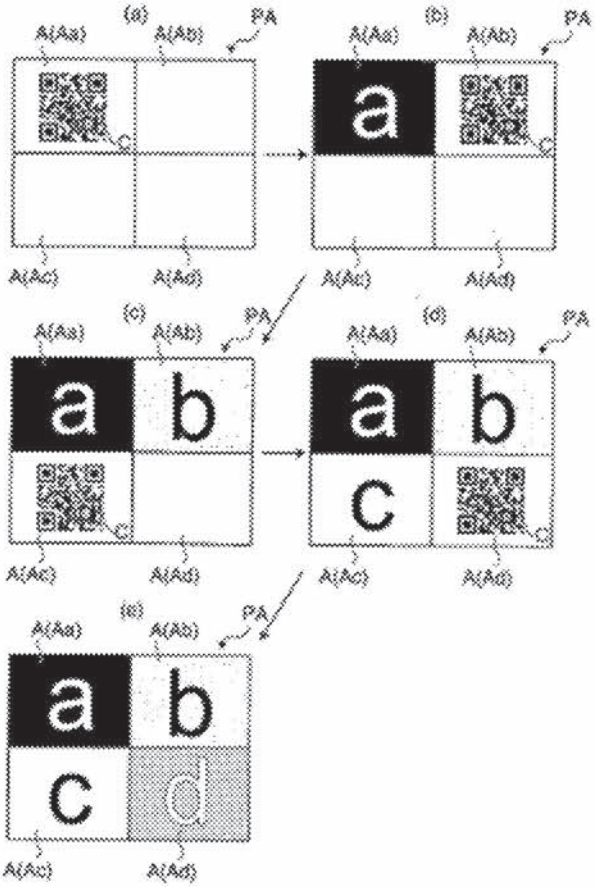


FIG. 10

Ex. 1006, FIG. 10.

G. SNQ No. 7 – Uchida combined with Deforche, Grimshaw, and optionally Banerjee renders obvious claims 2–3, 6–7, 9–13, 15, and 17, of the '676 patent under 35 U.S.C. § 103.

The new, non-cumulative, and not previously considered arguments with respect to Uchida combined with Deforche, Grimshaw, and Banerjee establish an SNQ for claims 2, 3, 6, 7–13, 15, and 17 of the '676 patent. Ono, Deforche, and Grimshaw were not previously considered, and the combination presents an SNQ for the *forcing rule* of claims 1, 14, and 16 and the additional features of claims 2, 3, 6, 7–13, 15, and 17. Ex. 1002, ¶167.

1. Claim 1: *one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting,*

without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting

Grimshaw discloses *one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting*. Ex. 1002, ¶¶168-173. For example, Grimshaw is directed to a communication system that allows users in a meeting to share media content and other conferencing functions. Ex. 1008, ¶0002; Ex. 1012, 1:4-7; *see also* § V.C (Grimshaw Summary). Grimshaw, like the '676 patent, addresses the ability of the users of the system to control what is displayed on a shared display module. *See* Ex. 1008, ¶¶19-20; Ex. 1012,5:8-6:17; Ex. 1001, 6:60-7:3. Thus, Grimshaw is from the same field as the '676 patent and addresses a similar problem.

Grimshaw describes the following scenario in a meeting room context:

> consider the case where separate laptop computers are connected to user modules 14-20 and are vying for control of the display module 22; that is, each of the connected computers is outputting data signals through data connections 342, 352, 362, 372 for presentation on display module 22. The display module 22 may not simultaneously display the information from all four computers/user modules.

Ex. 1008, ¶19.

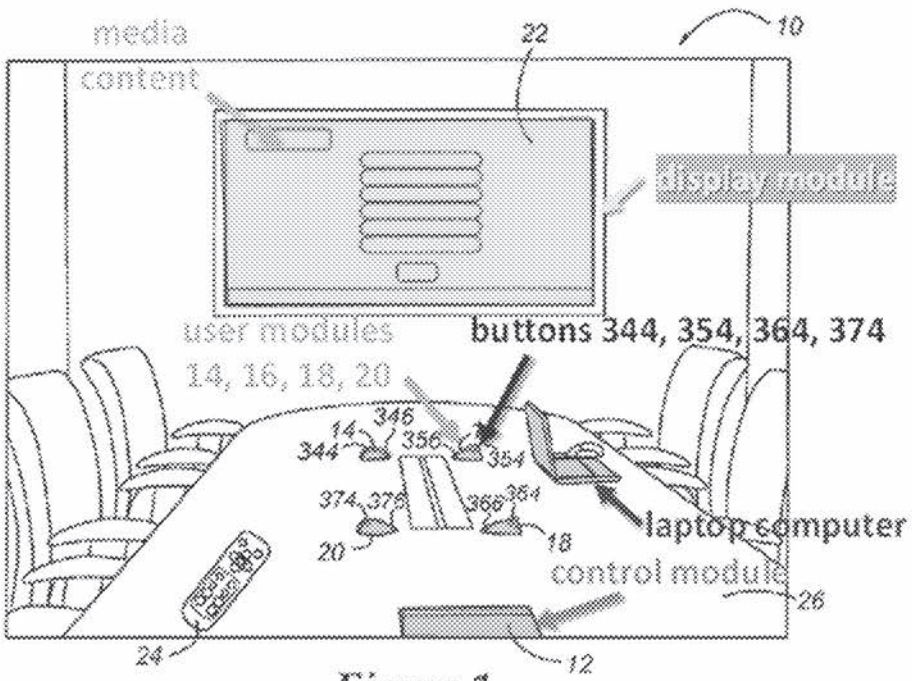


Figure 1

Ex. 1008, FIG. 1; Ex. 1012, FIGS. 1–3.

A POSITA would have understood this problem and sought out known design options and solutions. *See also*, Ex. 1013, ¶¶2, 31, 48-49, FIG. 2. Grimshaw describes a set of "user modules" can be coupled to each user's laptop computer, which connect the laptops to a shared display module. Ex. 1008, ¶¶5-6, 12, 19-20, 23-24, 26-27. Each user module includes a button that allows the user to forcibly take control over the display module. Ex. 1008, ¶20. Grimshaw states that:

> [a] user may engage or push a button 344, 354, 364, 374 on their user module in order to take control of display module 22 (e.g., display module 22 could show whatever is currently being displayed on the screen of the laptop computer connected to the selected user module).

Ex. 1008, ¶20.

Grimshaw then explains possible ways to implement this functionality, stating:

> In the example above, controller 324 reviews the status of buttons 344, 354, 364, 374, determines that user module 14 has been selected, and sends command signals to switch controller 318, video processor 316 and/or converter 320 instructing them to pass the data signals from the selected user module 14 to display

> module 22. It is possible for controller 324 to review the status of each user module 14-20 or only those user modules that have a laptop computer or other device connected thereto, to cite a few possibilities. Controller 324 is not limited to this example, as it may gather information, make decisions, and issue command signals for a variety of other tasks as well.

Id.

Hence, Grimshaw describes a set of rules, including a "forcing rule" where, by the action of only one participant involved in the meeting, new screen data from the laptop of that participant overrides or replaces any data displayed on the display module without requiring the agreement of another participant (including the one whose screen was being displayed).

Given the known problem and the known solutions described by Grimshaw and others (*see* § VII.C.1), a POSITA would have been motivated to implement a method of connecting processing devices and displays (similar to those of Uchida) according to a "forcing rule," for example as described by Grimshaw. A POSITA would have found such solutions advantageous in solving known problems such as when multiple users wish to display content on a shared display. A POSITA would have had a reasonable expectation of success in implementing such a solution (*e.g.*, employing buttons and other well-known hardware/software components to trigger transmission of images and override or replace prior image data) given the simplicity of such common technology.

2. **Claim 2**: ***The method of claim 1 further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays, the server program allowing display in accordance with one or more rules of which one is a forcing rule, wherein the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display***

overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting.

Uchida discloses a *server program* (*e.g.*, software executed by control unit 303) which is loaded on *the base node* (e.g., image projection device 3), *the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays*. Ex. 1009, ¶127 ("The control unit 303 has a built-in CPU, ROM, RAM, etc., and functions as a control unit by the CPU reading and executing a program pre-stored in the ROM. The RAM can also be used as a working memory, etc. The control unit 303 controls the wireless unit 306 to receive image data transmitted by wireless communication from the computer device 4, and projects an image corresponding to the received image data by the projection unit 308"); Ex. 1002, ¶174.

The combination of Uchida and Grimshaw also discloses the limitations associated with a "*forcing rule*" as explained above with respect to identical claim language of claim 1. *See* § VII.G.2.m; Ex. 1002, ¶175.

3. <u>Claim 3</u>: *The method of claim 2, wherein the server program is a portable application adapted to be loaded onto the base node and to be run on an operating system of the base node.*

Uchida discloses *server program is adapted to be loaded onto the base node and to be run on an operating system of the base node*. Ex. 1009, ¶127 ("The control unit 303 has a built-in CPU, ROM, RAM, etc., and functions as a control unit by the CPU reading and executing a program pre-stored in the ROM. The RAM can also be used as a working memory, etc. The control unit 303 controls the wireless unit 306 to receive image data transmitted by wireless communication from the computer device 4, and projects an image corresponding to the received image data by the projection unit 308"); Ex. 1002, ¶176.

The '676 patent defines a portable application as "a computer software program designed to run without installation on the target machine". Ex. 1001, 12:23-25. Deforche discloses running a program as *a portable application*. *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. A POSITA would have been motivated to run the *server program* (*e.g.*, software executed by control unit 303) of Uchida as a *portable application* as taught by Deforche to obtain known benefits such as avoiding that any traces of the program are left on the operating system after its use. Ex. 1030, ¶30; Ex. 1002, ¶177.

4. Claim 6:

a) *The method of claim 1, wherein the peripheral device comprises: a base, a connector, and a flexible connection between the base and the connector for transferring data signals and power, and*

Uchida discloses *the peripheral device* (*e.g.*, the wireless device 1) *comprises a base* (*e.g.*, the housing holding components of the wireless device 1) *and a connector* (*e.g.*, USB connector 105). Ex. 1009, ¶¶39-42, FIG. 3. A POSITA would have understood it would have been a design choice to include *a flexible connection between the base and the connector for transferring data signals and power*. For example, USB extension cables were available and could have been connected to the USB connector 105 of Uchida's wireless device 1 to obtain such a flexible connection. Ex. 1002, ¶¶178-179

Such a flexible connection was known, as evidenced by Banerjee, which describes a plug-and-play device for wireless screen sharing that is similar to the wireless device 1 of Uchida. Ex. 1021, ¶¶39-42, FIG. 5 (reproduced below). Banerjee discloses *the peripheral device* (*e.g.*, the plug-and-play device 236) *comprises a base* (*e.g.*, holding electronics, such as the wireless transceiver

260, interfaces 256, 264, storage 276, and USB hub controller 272), *a connector* (e.g., a connector for connecting the plug-and-play device 236 to a plug-and-play port of the remote computer 240), *and a flexible connection between the base and the connector for transferring data signals and power* (*e.g.*, the cable segment 268 between the base and the connector). *Id.* It would have been a predictable variation of Uchida's system to include the flexible cable 268 of Banerjee, using a known technique.

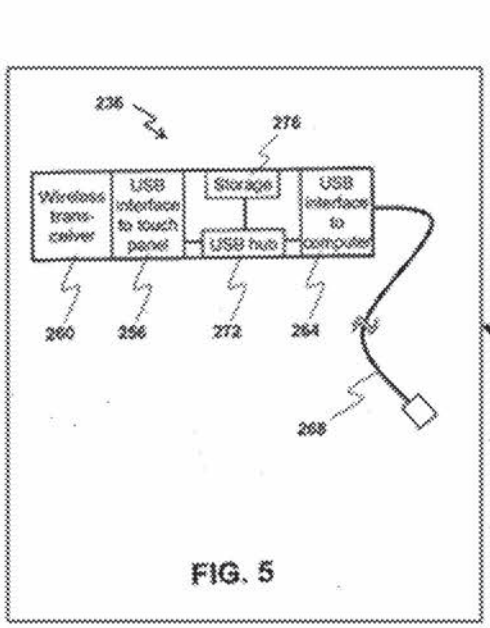


FIG. 5

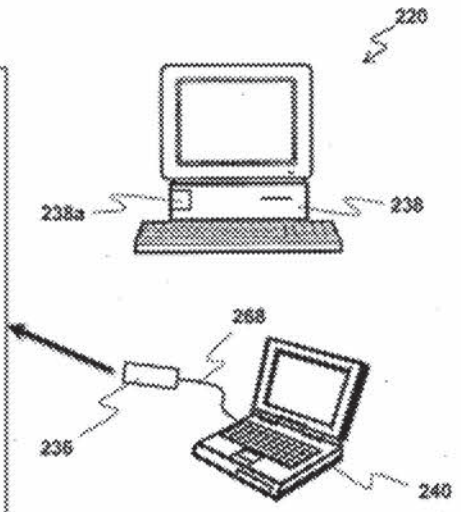


FIG. 4

Ex. 1021, FIGs. 4, 5.

b) *wherein the actuator is on the base and*

Uchida discloses *the actuator* (e.g., image transfer stop switch 140) *is on the base* (e.g., on the wireless device 1). Ex. 1009, ¶¶70-72, FIG. 3; Ex. 1002, ¶180.

c) *the base has electronics comprising a processing engine, a transceiver and a visual indicator*

Uchida discloses *the base has electronics comprising a processing engine* (*e.g.*, CPU 101) *and a transceiver* (*e.g.*, the wireless communication unit 107) *and a visual indicator* (*e.g.*,

notification unit 109 with writing lamp LED 150, image transfer lamp 151, and alarm lamp 152). Ex. 1009, ¶75 ("The notification unit 109 has a writing lamp LED 150, an image transfer lamp 151, an alarm lamp 152 (see FIG. 3), etc., and the CPU 101 lights or flashes these lamps depending on the situation"); Ex. 1002, ¶181.

d) ***the method further comprising: connecting the connector to a plug and play port of the processing device and actuating a signal with the actuator and transferring the signal to the connector for transfer to the port.***

Uchida discloses *connecting the connector* (*e.g.*, the connector 105 of the wireless device 1) *to a plug and play port of the processing device* (*e.g.*, a USB connector 401 of the computer device 4). Ex. 1009, ¶48 ("[T]he USB connector 105 of the wireless device 1 is connected to the USB connector 401 of the computer device 4."). The '676 patent specifies that plug and play interfaces include USB ports, which is the same interface disclosed by Uchida. Ex. 1001, 11:52-65 ("Plug and play interfaces include for example (not an exhaustive list): Firewire (IEEE-1394), PCI, Mini PCI, PCI Express, Mini PCI Express, PCMCIA, PC Card, Universal Serial Bus (USB), SDIO cards"); Ex. 1009, ¶39 ("The wireless device 1 is a USB dongle that functions as a wireless part of a computer device 4 and as a memory. The computer device 4 connects the USB connector 105 (see FIG. 3) described below in the wireless device 1."); Ex. 1002, ¶182.

Uchida also discloses *actuating a signal with the actuator* (*e.g.*, operating the image transfer stop switch 190) *and transferring the signal to the connector* (*e.g.*, sending a notification generated by the CPU 101) *for transfer to the port* (*e.g.*, for transfer to the USB connector 401 of the computer device 4). Ex. 1009, ¶71 ("When the image transfer stop switch 140 is operated to the image stop ON mode side while connected to the computer device 4 via the USB connector 105, the CPU 101 notifies the computer device 4 of this information."); Ex. 1002, ¶183.

5. **Claim 7**: ***The method of claim 6, wherein the peripheral device comprises permanent storage for storing the client application.***

Uchida discloses *the peripheral device* (*e.g.*, wireless device 1) *comprises permanent storage* (*e.g.*, ROM 103 and/or flash memory 104) *for storing the client application* (*e.g.*, an image transfer application program). Ex. 1009, ¶¶62-64, 67, FIG. 5; Ex. 1002, ¶184.

6. **Claim 8**: ***The method of claim 1, wherein the transferring of the data for display is to a defined network node without user entry of configuration details.***

Uchida and/or suggests that *transferring of the data for display is to a defined network node* (*e.g.*, image projection device 3) *without user entry of configuration details*. Ex. 1009, ¶¶48 ("The control unit of the computer device 4 executes the wireless setting application and requests the wireless device 1 to output the wireless setting information written by the remote control device 2. The control unit of the wireless device 1 retrieves the wireless setting information from the wireless setting information storage unit of the wireless device 1 and outputs this wireless setting information to the computer device 4 via the USB connector 105. The computer device 4 acquires the wireless setting information output from the wireless device 1 and sets this wireless setting information in the wireless communication unit of the wireless device 1 using a device driver. The wireless device 1 is thus able to communicate with the wireless unit of the image projection device 3 based on the wireless setting information set by the wireless communication unit, in other words, the wireless setting information written by the remote control device 2."), 42, 166; Ex. 1002, ¶185.

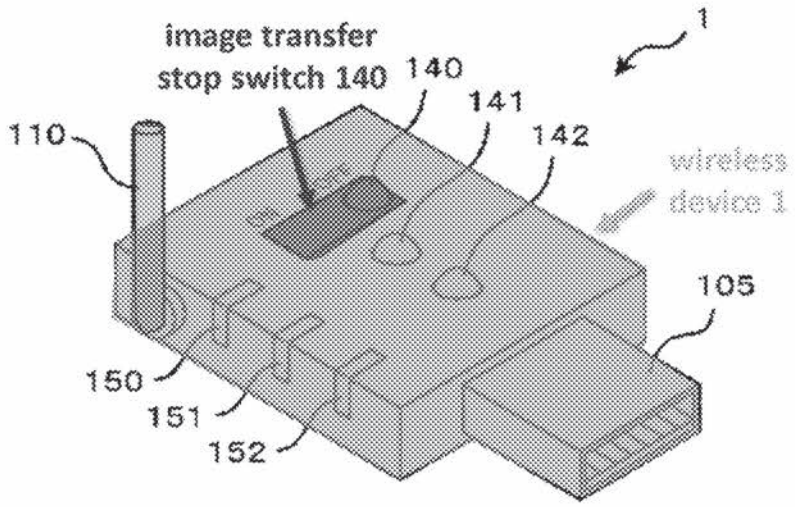
7. **Claim 9**: ***The method of claim 8 for use by a plurality of users in a meeting, there being client processing devices each for coupling to a peripheral device for every user in the meeting, a first user action connecting a processing device to the base node, and a second user action comprising activating an actuator located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and***

transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device.

Uchida discloses *a plurality of users in a meeting,* (*e.g.*, in "a conference … [with] an unspecified number of participants") *there being client processing devices* (*e.g.*, computer device 4) *each for coupling to a peripheral device* (*e.g.*, wireless device 1) *for every user in the meeting*. Ex. 1009, ¶¶28, 31; Ex. 1002, ¶186.

Uchida also discloses *a first user action connecting a processing device to the base node* (*e.g.*, connecting the wireless device with wireless setting information to the USB connector 401 of the computer device) Ex. 1009, ¶¶47-48. The *first user action* allows the wireless device 1 to connect the computer device 4 to the projector 3. *Id.*; Ex. 1002, ¶187.

Uchida discloses *a second user action comprising activating an actuator* (*e.g.*, moving the image transfer stop switch 140 to the OFF position) *located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device*. Ex. 1009, ¶¶52-53, 65-72, FIG. 3 (reproduced below); Ex. 1002, ¶¶188-190. Uchida discloses that image transfer stop switch 140 slides between an ON and OFF position. When the "image stop" switch is in the ON position, the image transfer application transmits a request to the image projection device 3 via the wireless communication unit 107 to project a specific image on the image projection device 3. *Id.* At this stage, image data from the computer device 4 would not be obtained or transmitted to the projection device 3. A POSITA would have understood that reversing the slide switch back to OFF would resume the process of obtaining data for display and transmitting the data to the projection device 3.



Ex. 1009, FIG. 3.

A POSITA would have found it obvious to include an input device to allow individual users the ability to override or switch the source of the display via the wireless device. Grimshaw is from the same field as the '676 patent and addresses a similar problem. Ex. 1002, ¶189; *see also* § VII.G.2.m (limitation 1(m)).

In particular, Grimshaw discloses buttons 344, 354, 364, 374 (*e.g.*, "input device") on respective user modules 14, 16, 18, 20 configured to allow the user to carry out engaging (*e.g.*, "user action") the button that triggers transfer of the data signal (*e.g.*, "user selected arbitrary media content") from a user module to the control module 12 for display on the display module 22. Ex. 1008, ¶¶5, 19 ("[T]he users of modules 14, 16, 18, 20 can take control of the display module 22 by respectively engaging buttons 344, 354, 364, 374, which causes switch controller 318 to pass the data signals from the selected user module on to the display module."), 20, 27-28, FIGs. 1-4; Ex. 1012, 5:8-6:17, 8:29-9:20, FIGs. 1-4; *See* § VII.G.2.m (Limitation 1(m))). A POSITA would have understood that buttons 344, 354, 364, 374 constitute actuators coupled to the user modules 14, 16, 18, 20. Ex. 1002, ¶¶188-190.

8. Claim 10: ***The method of claim 8, wherein, when the base node receives the screen scraped data, further comprising the step of providing auto composition of the screen scraped data on the first display connected to the base node.***

The '676 patent indicates:

> "Auto composition" or "auto layout" refers to the automatic nature in which multiple graphics/video sources are rendered on a central display, without user intervention and in a way that a user would intuitively expect it to happen.

Ex. 1001, 13:64-67; Ex. 1002, ¶191.

Grimshaw discloses "*auto composition of the screen scraped data on the first display*" by automatically providing a split-screen view of the image data from the personal computer and video from a camera. Ex. 1008, ¶40. The split-screen feature described in Grimshaw is a type of well-known auto composition which automatically arranges and displays content from multiple user devices on a central display in a way that is organized, intuitive, and requires no manual intervention from the users. The "*auto composition*" limitation is also well-known in the art, as evidenced, for example, by Ichieda. *See* § VI.F.1, supra; Ex. 1002, ¶192.

9. Claim 11: ***The method of claim 7, further comprising pairing of the peripheral device to the base node before communication starts.***

In Uchida, the wireless device ("*peripheral device*") and projection device ("*base node*") are pre-provisioned with wireless settings to establish a wireless network connection, or pairing, between the devices. Ex. 1009, ¶26. The '676 describes use of this type of wireless network connection as a type of pairing. Ex.1001, 21:51-55 ("The user can also **pair the peripheral device to a base node** or base unit that controls the display in the meeting room and which is **connectable to the peripheral device via a communications network such as a wired or wireless communications network**." (emphasis added)). Therefore, establishing this wireless connection in Ono is a type of "pairing" and is performed "*before communications starts*" as it allows the subsequent communication between the devices. Ex. 1002, ¶193.

In the event establishing this wireless connection is not considered "pairing", Banerjee expressly discloses pairing a peripheral plug-and-play device to another device before data exchange. Ex. 1021, ¶41 ("The wireless communication device 238 a and wireless transceiver 260 are paired to enable a peer-to-peer wireless connection between the master computer 238 and the remote computer 240 to be established."). A POSITA would recognize that this known approach to establishing device-to-device communication could be employed in the system of Uchida. Ex. 1002, ¶194.

10. Claim 12: ***The method of claim 7, wherein a daemon is provided that is pre-installed on the processing device, the daemon providing a permanently running service that continuously monitors if a peripheral device has been offered up for connection to the processing device.***

A "*daemon*" is a program that runs in the background and provides important system services, such as processing incoming email or handling requests from the network. Ex. 1002, ¶¶ 195-198. One use of a daemon to "detect that the device in mass storage mode is coupled to the computer system and may cause the command to be transmitted to the device. Additionally, in some embodiments, the command is a HID (Human Interface Device) command to switch the device to the second mode of operation." Ex. 1032, ¶84. The '676 patent admits that this is a common use of a daemon:

> In an embodiment of the present invention a very small service—also called daemon on some OS's—is provided that requires installation on the processing device such as a laptop. This service is pre-installed on the processing device. The installation is required only once on every processing device such as a laptop. The role of this is to provide a permanently running service that continuously monitors if a peripheral device according to the present invention has been offered up for connection to the processing device. When such a peripheral device is connected, the service will detect this and start the client application software residing in the mass storage area of the peripheral device.
>
> Ex. 1001, 7:43-57. Ex. 1002, ¶ 197.

Uchida discloses software executed by a CPU that "*continuously monitors if a peripheral device has been offered up for connection to the processing device*." Ex. 1009, 154 ("CPU 405 of the computer device 4 determines whether or not the wireless device 1 is connected (step S300). To determine whether or not wireless device 1 is connected, it is determined whether or not a USB device is connected to USB connector 401.") A POSITA would recognize that the well-known option of a daemon as evidenced by the '676 patent itself and Austin, is one of a limited number of options for determining whether or not a USB device is connected to USB connector 401. A POSITA would have no difficulty employing this known technique to achieve the already present features of Uchida with a high expectation of success. Ex. 1002, ¶¶195-198.

11. Claim 13: *The method of claim 7, wherein the pre-installed generic drivers drive different device interfaces independently.*

Deforche demonstrates that *pre-installed generic drivers drive different device interfaces independently* because they ubiquitously drove multiple different interfaces, such as keyboards, mass storage devices, and audio devices. Ex. 1030, ¶10 ("An example of such a generic driver is a human interface driver (HID), which has predetermined software components configured for driving a human interface device such as a mouse, a keyboard or other.") Even the '676 patent admits that generic drivers were known by their definition to drive different devices independently:

> The term "pre-installed generic driver" is intended to mean a driver which is installed on a processing device such as a computer as a standard driver, e.g. is installed with the installation of the operating system. Such a driver is standard for the operating system and can drive a standard class of peripheral devices coupled to or connected to the processing device. The installation of a specific driver for such a peripheral device is not required. Such a generic driver can be a human interface driver (HID) or a mass storage device driver, which has predetermined software components configured for driving mass storage, a CD-ROM, a keyboard etc. or combinations of these. Such devices can be readable and writable computer peripheral memory devices such as USB memory sticks, flash memories, external hard drives, or more.

Ex. 1001, 14:20-34. It would be obvious to include this well-known, standard feature of a "pre-installed generic driver" in the system of Uchida. Ex. 1002, ¶199 (*See* VII.C.5.)

12. **Claim 15**: ***The method of claim 14, wherein the base node has one or more displays, further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on the one or more displays, the server program allowing display in accordance with one or more rules of which one is the forcing rule, wherein the forcing rule is that the display on the one or more displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more displays from the same or another participant of the meeting.***

See claim 2, § VI.G.2. Ex. 1002, ¶200.

13. **Claim 17: The electronic meeting tool of claim 16 configured for use by a plurality of users in a meeting, there being processing devices each for coupling to a peripheral device for every user in the meeting, whereby the electronic meeting tool is configured to allow a first user action to connect a client processing device to the base unit, and a second user action comprising activating the actuator on the input device which is coupled to the peripheral device which then starts a process of obtaining the user selected arbitrary media content by screen scraping data from the processing device and transmitting screen scraped data for display to the base unit, whereby the base unit is configured to carry out graphical commands sent from the processing device.**

See claim 9, § VI.G.7. Ex. 1002, ¶201

These technical teachings of Uchida in combination with Deforche, Grimshaw, and Banerjee were not cited, considered or discussed on the record by the examiner during prosecution of the '676 patent or in IPR2024-01438 with respect to claims 2, 3, 6, 7, 9–13, 15, and 17, and an examiner would have considered the new technical teachings of Uchida in combination with Deforche, Grimshaw, and Banerjee important in deciding the patentability of claims 2, 3, 6, 7, 9–13, 15, and 17. The new technical teachings of Uchida in combination with Deforche, Grimshaw, and Banerjee are not cumulative of any technical teachings discussed or suggested during the

original prosecution of the '676 patent. Therefore, Uchida in combination with Deforche, Grimshaw, and Banerjee establishes an SNQ with respect to claims 2, 3, 6, 7, 9–13, 15, and 17 of the '676 patent. Ex. 1002, ¶202.

H. SNQ No. 8 – Uchida combined with Grimshaw renders obvious claims 15 and 17 of the '676 patent under 35 U.S.C. § 103.

The new, non-cumulative, and not previously considered arguments with respect to Uchida combined with Grimshaw establish an SNQ for claims 15 and 17 of the '676 patent. Neither reference was previously considered, and the combination presents an SNQ for the *forcing rule* of claims 14, and 16 and the additional features of claims 15 and 17. Ex. 1002, ¶203

1. **Claim 14:** ***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.***

See § VI.G.1 regarding a similar *forcing rule* limitation of claim 1. Ex. 1002, ¶204

1. **Claim 16:** ***whereby the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the data of any participant for display overriding or replacing any data displayed on the one or more first displays by the same or another participant of the meeting.***

See § VI.G.1 regarding a similar *forcing rule* limitation of claim 1. Ex. 1002, ¶205.

2. **Claim 15:** ***The method of claim 14, wherein the base node has one or more displays, further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on the one or more displays, the server program allowing display in accordance with one or more rules of which one is the forcing rule, wherein the forcing rule is that the display on the one or more displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen***

scraped data of any participant for display overrides or replaces any data displayed on the one or more displays from the same or another participant of the meeting.

See claim 2, § VI.G.2. Ex. 1002, ¶206

3. **Claim 17:** ***The electronic meeting tool of claim 16 configured for use by a plurality of users in a meeting, there being processing devices each for coupling to a peripheral device for every user in the meeting, whereby the electronic meeting tool is configured to allow a first user action to connect a client processing device to the base unit, and a second user action comprising activating the actuator on the input device which is coupled to the peripheral device which then starts a process of obtaining the user selected arbitrary media content by screen scraping data from the processing device and transmitting screen scraped data for display to the base unit, whereby the base unit is configured to carry out graphical commands sent from the processing device.***

See claim 9, § VI.G.7, supra. Ex. 1002, ¶207.

These technical teachings of Uchida in combination with Grimshaw were not cited, considered or discussed on the record by the examiner during prosecution of the '676 patent or in IPR2024-01438 with respect to claims 15 and 17, and an examiner would have considered the new technical teachings of Uchida in combination with Grimshaw important in deciding the patentability of claims 15 and 17. The new technical teachings of Uchida in combination with Grimshaw are not cumulative of any technical teachings discussed or suggested during the original prosecution of the '676 patent. Therefore, Ono in combination with Deforche, Grimshaw, and Banerjee establishes an SNQ with respect to claims 15 and 17 of the '676 patent. Ex. 1002, ¶208.

VII. MANNER OF APPLYING THE CLAIMS AS REQUIRED BY 37 C.F.R. § 1.510 (B)(2)

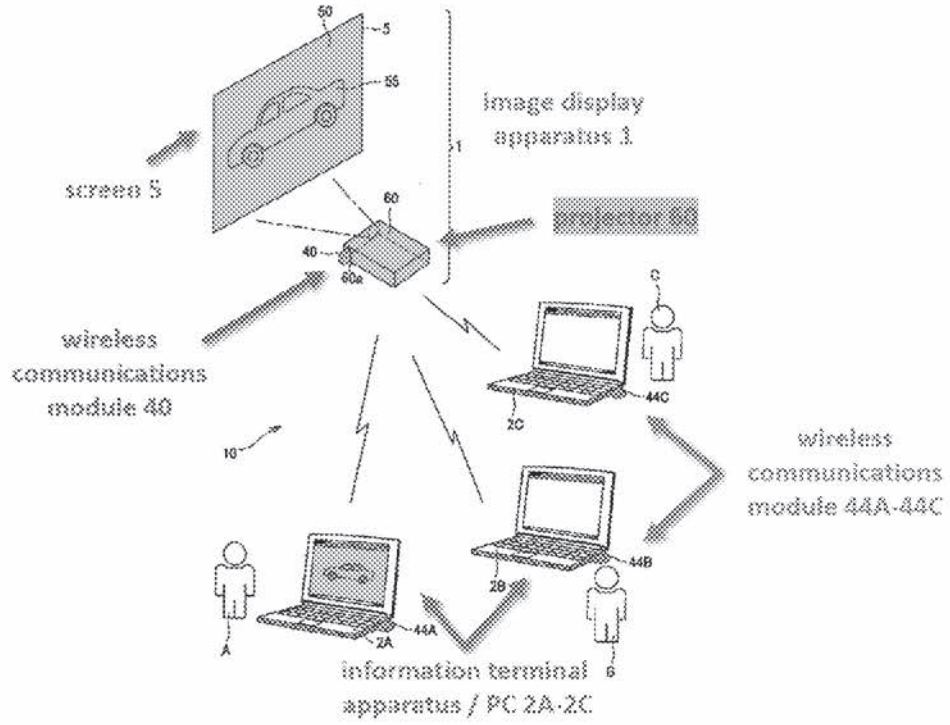
Requester asks the Office to reexamine claims 2–3, 6–7, 9–13, 15, and 17, and addresses the limitations of independent claims 1, 14, and 16, and other dependent claims as necessary to address every limitation of the challenged claims.

A. Ground 1 – The combination of Ono, Deforche, and Banerjee renders obvious claims 2 and 3.

Claims 2 and 3 depend from unchallenged claim 1 and include all its claims.

1. Rationale to Modify Ono with Deforche, and Banerjee

Ono discloses an electronic meeting tool in the form of an image display system. Ex. 1005, abstract, ¶2. A peripheral device (communications module 44) couples to a PC (information terminal apparatus 2) to wirelessly transfer image information to an image display apparatus 1. *Id.*, ¶36. Ex. 1002, ¶209.



Ex. 1005, FIG. 1.

Ono also discloses that an input device (remote controller 69) includes a physical *actuator* that can switch among PCs and display image information from the selected PC. *Id.*, ¶¶7, 144. Although Ono does not disclose that the *peripheral device* (wireless connection module 44) *is on the base* of the peripheral device (as recited in claim 6), it would have been obvious to a POSITA

to include the physical actuator (providing functionality like Ono's remote controller device) with a peripheral device (like wireless connection module 44) for the following reasons. Ex. 1002, ¶¶.

First, combining Ono's remote controller actuator with Ono's communications module "simply arranges old elements with each performing the same function it had been known to perform" and yields predictable results. Ex. 1002, ¶210. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007). Physical actuators (like those of Ono's remote controller) were ubiquitous and commonly incorporated into electronic devices. Ex. 1002, ¶211-214, 327. Combining Ono's actuator (remote controller button) 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, ¶¶211-214. 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.*

Moreover, independent of this and yet further supporting it, there was a known desirability to provide a user of an electronic meeting tool with a local actuator that would allow control over sharing the content of the user's computer screen to a shared display. Ex. 1002, ¶¶211-214. 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 actuator located on a peripheral device, where the actuator 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, ¶¶211-214. Thus, a POSITA would have found it obvious to provide such an input device with the peripheral device in light of this known design incentive. *KSR*, 550 U.S. at 417 ("[I]f a technique has been used to improve one device, and a person of

ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.").

Furthermore, because the art identifies a limited number of known locations for such an actuator, it would have been obvious to combine the actuator and the peripheral device, as claimed in claim 6. Ex. 1002, ¶213. *See Uber Techs., Inc. v. X One, Inc.*, 957 F.3d 1334, 1340 (Fed. Cir. 2020); *KSR*, 550 U.S. at 421. It would have been a "predictable variation" of Ono's system, using a technique that was known to a POSITA, particularly since the location of the actuator solves no stated problem in the art. *KSR*, 550 U.S. at 417; *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010) (finding obviousness when "it is simply a matter of common sense" to combine known elements of the prior art to solve a known problem); *In re Kuhle,* 526 F.2d 553, 555 (C.C.P.A. 1975) (relocating electrical connection "solves no stated problem and would be an obvious matter of design choice").

Ono and Deforche disclose similar systems for sending information wirelessly. Ex. 1005, ¶¶2, 53-55; Ex. 1030, ¶¶9, 30; Ex. 1002, ¶214. These systems would have required an operating system, such as the ubiquitous Windows operating system as discussed by Deforche. Ex. 1030, ¶¶9, 30. Windows was well known to include standard USB drivers for various classes of devices, including USB mass storage and human-interface devices. (Id.). A driver is a term for a special form of software that provides an interface between hardware and application-level software, and is standard in all personal computers. Ono likely relied on such drivers but did not expressly state so, but Deforche does. *Id*. It would have been obvious that Ono would or at least could have used similar device well-known pre-installed generic Window's drivers, as disclosed by Deforche to enable Ono's USB peripheral devices. The combination of Ono and Deforche would have been nothing more than a predictable way of implementing Ono's system. Ex. 1002, ¶214.

Grimshaw also discloses a similar presentation communication system. Ex. 1008, abstract. Therefore, Ono, Deforche, and Grimshaw all relate to similar presentation technology. As described briefly above, both Ono and Grimshaw disclose buttons or actuators for controlling display of images from user's PCs. Ex. 1008, ¶¶5, 19-20, 27-28, FIGs. 1-4; Ex. 1005, ¶¶44-48, 66-71, 77-78, 80-89, FIGs. 3, 6, 8, 9. However, Grimshaw's button is on a USB device connected to the PC in contrast with Ono's, which is on a separate remote control. *Id*. It would have been a simple design choice to move Ono's button to other devices in the system, including the peripheral device as taught by Grimshaw. Ex. 1002, ¶215. Grimshaw also discloses benefits of giving each user control of the display. *Id*., ¶¶4-6, 28, 37. Moving or adding a button to Ono's peripheral device would have predictably resulted in a system similar to Grimshaw allowing the user to present their display onto the projector.

Grimshaw is directed to "a communication system and, more particularly, to a communication system that may provide a combination of audio, video, telephony, presentation and/or other conferencing functions." *See*, *e.g.*, Ex. 1008, abstract, ¶2; *see also* my summary of Grimshaw above. In particular, Grimshaw describes user modules that couple to laptop computers to allow transmission to a common display and thus is analogous to the arrangement in Ono. Again, a POSITA would have also recognized that Grimshaw was from the same field of endeavor as the '676 patent and address similar problems of allowing user control over transmission of information. Ex. 1001, 1:21-26; Ex. 1002, ¶216. Thus, a POSITA looking to implement an image display system like that of Ono would have been aware of, and considered, in considering various ways in which to improve Ono, teachings like those disclosed in Grimshaw.

Grimshaw discloses user modules 14, 16, 18, 20 can connect to each to each user's laptop around the table, for example, and—with the push of a button—allow the user to take control of a

common display module 22 and display the contents of the user's laptop screen. *See*, *e.g.*, Ex. 1008, ¶¶4, 19 ("The display module 22 may not simultaneously display the information from all four computers/user modules". Thus, the users of modules 14, 16, 18, 20 can take control of the display module 22 by respectively engaging buttons 344, 354, 364, 374, which causes switch controller 318 to pass the data signals from the selected user module on to the display module."), 20 ("Consider the example where separate laptop computers are connected to each of the user modules 14-20 (each user module has one or more data ports), but an operator has engaged button 344 on user module 14 because they wish to take control of display module 22. To explain, a user may engage or push a button 344, 354, 364, 374 on their user module in order to take control of display module 22 (e.g., display module 22 could show whatever is currently being displayed on the screen of the laptop computer connected to the selected user module)."), 27-28, FIG. 1. Thus, Grimshaw illustrates another design option in implementing transmission initiation actuator like that of Ono and claimed by the '676 patent. Ex. 1002, ¶217.

Ono's wireless connection module 44 includes a base with a housing holding components of the module 44 and a USB connector 105. Ex. 1005, ¶54, FIG. 1. Although the wireless connection module 44 is not illustrated having a flexible cable, it would have been a routine design decision to include such a cable (*e.g.*, using a USB extension cable). Ex. 1002, ¶218. Banerjee discloses a plug-and-play device 236 that is similar to Ono's wireless connection module 44 but also includes a cable segment 268 between the base or electronic housing of the plug-and-play device 236 and the device's connector. Ex. 1021, ¶¶39-42, FIG. 5. It would have been a "predictable variation" of Ono's system, using a technique that was known to a POSITA (*e.g.*, from Banerjee), particularly since the absence of the flexible cable from Ono solves no stated problem in the art. Ex. 1002, ¶218. *KSR*, 550 U.S. at 417; *Wyers v. Master Lock Co.*, 616 F.3d

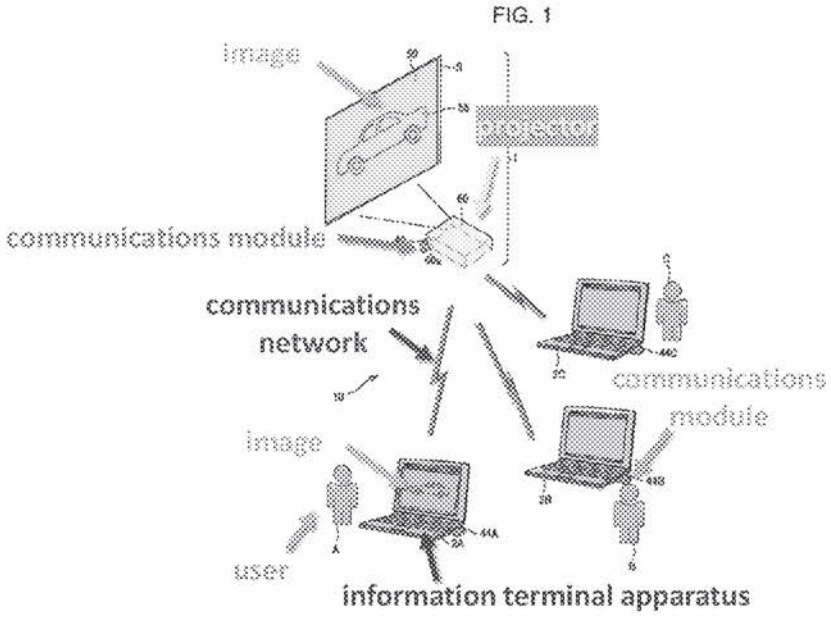
1231, 1238 (Fed. Cir. 2010) (finding obviousness when "it is simply a matter of common sense" to combine known elements of the prior art to solve a known problem); *In re Kuhle,* 526 F.2d 553, 555 (C.C.P.A. 1975) (relocating electrical connection "solves no stated problem and would be an obvious matter of design choice").

2. Claim 1

a) *A method for connecting one or more processing devices … to a wireless communications network having a base node with one or more first displays*

To the extent limiting, Ono discloses connecting one or more processing devices (*e.g.*, one or more information terminal apparatus 2A, 2B, 2C) *to a wireless communications network having a base node* (*e.g.*, an image display apparatus 1) *with one or more first displays* (*e.g.*, a projector 50 and screen 5).[2] Ex. 1005, ¶¶36 ("The image display system 10 is a system that makes up a wireless network by connecting an image display apparatus 1 and three information terminal apparatuses 2A, 2B and 2C to a wireless communications channel."), 37-41, FIGs. 1 (reproduced below), 2 (illustrating the wireless network), 9 (illustrating a method connecting via the network), 13 (illustrating a method of switching connections between information terminal apparatus 2A, 2B); *see also* Figures 16 and 17 (illustrating a similar embodiment but with an access point AP 3); *see also* Ex. 1001, 29:54-60 (explaining that a projector can be a base node); Ex. 1002, ¶¶219-220.

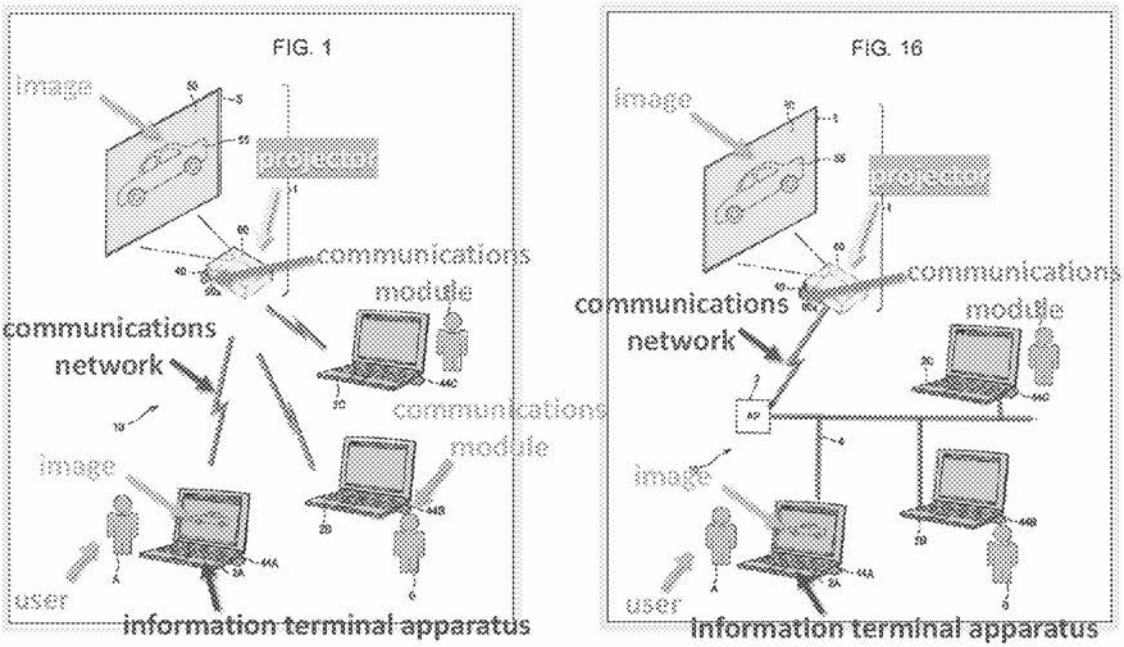
[2] The identified structure corresponding to claim elements is exemplary only. Additional or alternative components could be identified. For example, projector 50 might alternatively be identified as a "base node" with a "first display." Similarly, Ono teaches alternatives to the projector and screen as an image display apparatus and hence a "first display." *See* Ex. 1005, ¶162.



Ex. 1005, FIG. 1.

b) ***each processing device being a user device of one participant in a meeting with a plurality of participants***

To the extent limiting, Ono discloses *each processing device* (*e.g.*, information terminal apparatus 2A, 2B, 2C) *being a user device* (*e.g.*, personal computers (PCs)). Ex. 1005, ¶39. A POSITA would have understood from Ono that each PC may be for *one participant* (*e.g.*, a presenter) *in a meeting with a plurality of participants*. *See*, *e.g.*, Ex. 1005, ¶144 ("Further, since, just through operations from the remote controller 69 of the image display apparatus 1, it is possible to switch the information terminal apparatus whose image is to be projected onto the screen 5, even in cases where, for example, there are a plurality of presenters to present in a given order, it becomes unnecessary for each presenter, in accordance with the order, to perform an output on/off operation at each information terminal apparatus, and therefore, the gap in time until the next presentation is eliminated, and presentations can be conducted speedily."), 161, FIGs. 1, 16; Ex. 1002, ¶221.

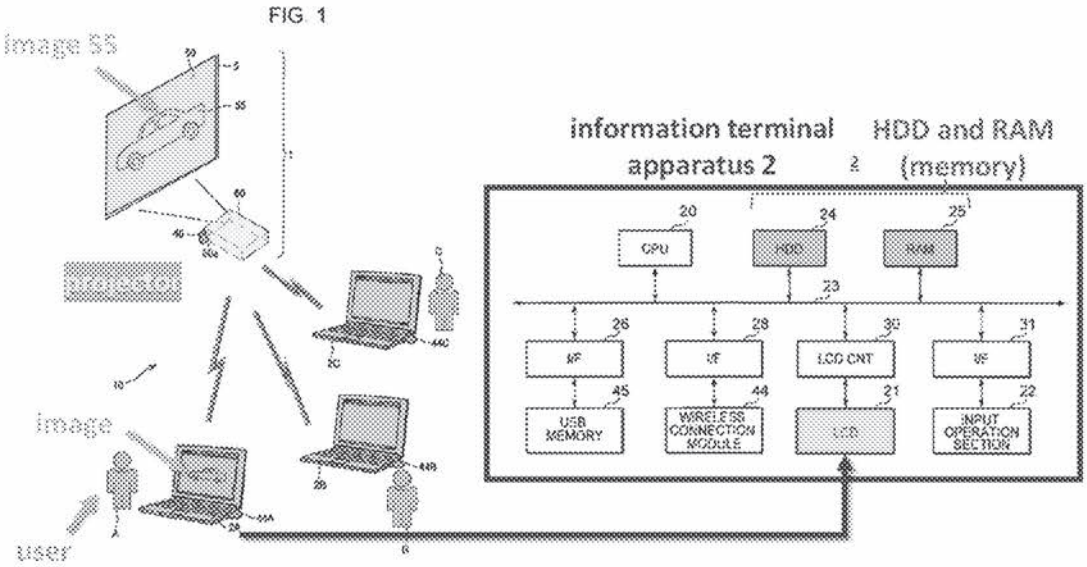


Ex. 1005, FIG. 1, 16

c) ***the one or more processing devices each having a memory, a second display and an operating system with at least one pre-installed generic driver providing a generic communications protocol for communication between the processing device and a class of peripheral devices***

To the extent limiting, Ono discloses *the one or more processing devices* (*e.g.*, information terminal apparatus 2A, 2B, 2C) *each having a memory* (*e.g.*, a hard disk drive (HDD) 24 and random access memory (RAM) 25) and *a second display* (*e.g.*, a liquid crystal display device (LCD) 21). Ex. 1005, ¶¶50, 73 ("FIG. 7 is a diagram showing a hardware configuration of the information terminal apparatus 2A (2B and 2C are also similar). A hard disk drive (HDD) 24 and a random access memory (RAM) 25 are connected to a CPU 20 via a bus 23. ... Further, an LCD controller 30 for controlling a liquid crystal display apparatus LCD 21 which is the above-mentioned display section of its own, and an I/F 31 for interfacing an input operation section 22 such as a keyboard or a mouse are connected to the CPU 20 via the bus 23. In addition, it is

assumed that image information to be sent out to the image display apparatus 1 is selected and displayed on the liquid crystal display apparatus LCD 21."), 74, FIGs. 1 & 7; Ex. 1002, ¶222.



Ex. 1005, FIGs. 1 & 7.

A POSITA would have understood information terminal apparatus 2A, 2B, 2C (for example as personal computers) to include an operating system with standard drivers (such as USB mass storage drivers) to communicate with peripheral devices, like USB memory 45 via interface 26. Ex. 1005, ¶¶53-55, 58, 60-62, 73, 76, 88, FIG. 7; *see also* Ex. 1006, ¶133, Ex. 1026, ¶1; Ex. 1002, ¶223.

A POSITA would have also recognized that operating systems, such as Microsoft Windows® had standard USB drivers with corresponding communication protocols to interface with peripheral devices, such as a keyboard or USB flash drive. *See, e.g.*, Ex. 1021, ¶¶3-4.

> Universal Serial Bus (USB) standard provides communication protocols for interfacing between a host and its peripheral devices. For example, a personal computer implementing the Microsoft Windows® operating system may use the USB standard for communicating with a key board, a compact disc (CD) player, or

> a USB flash drive. The USB standard may also be implemented in Macintosh® and Linux® operating systems.

Ex. 1026, ¶1; *see also* Ex. 1030, ¶10; Ex. 1002, ¶.

A POSITA would also have understood standard USB drivers were used for communication between the computer and a class of peripheral devices. Ex. 1030, ¶10 ("'[P]re-installed generic driver' is intended to mean a driver which is installed on the computer device along with the installation of the operating system, i.e. a driver which is standard for the operating system and which is capable of driving a standard class of computer peripheral devices connected to the computer device without requiring installation of a specific driver for such a computer peripheral device. An example of such a generic driver … a mass storage device (MSD) driver, which has predetermined software components configured for driving mass storage devices such as USB memory sticks....MSD drivers are known per se in the art."). Ex. 1002, ¶225.

Thus, a POSITA would have understood that Ono's information terminal apparatus 2A, 2B, 2C (as personal computers) includes *an operating system with at least one pre-installed generic driver providing a generic communications protocol for communication between the processing device and a class of peripheral devices*. For instance, information terminal apparatus 2A, 2B, 2C may include an operating system with at least one already installed driver, such as a USB driver, which provides a standard communications protocol for communication between the processing device and is generic at least for a class of peripheral devices, such as mass storage devices. At least in this sense, Ono describes a "pre-installed generic driver" providing a "*generic communications protocol*" for communication between the processing device and a class of peripheral devices as was well known in the art. (*See, e.g.*, Ex. 1021, ¶¶3 ("Plug-and-play devices are well known… the most common being USB."), 4 ("Many operating systems possess a number of pre-loaded drivers for generic plug-and-play device classes, such as USB mass storage….");

Ex. 1026, ¶¶1-3 ("USB flash drives belong to the USB mass storage device class."); Ex. 1027, ¶¶45, 58-59; Ex. 1030, ¶¶10, 28-30, 34-41, 52.) This is also consistent with the description of a "pre-installed generic driver" in the prior art and in the '676 patent and. *Compare* Ex. 1001, 14:20-34 (describing a "pre-installed generic driver") *with* Ex. 1030, ¶0010 (describing a "pre-installed generic driver"). Ex. 1002, ¶226.

d) *the method comprising the following steps for each processing device: coupling a peripheral device to the processing device*

Ono discloses *coupling* (*e.g.*, via a USB slot) *a peripheral device* (*e.g.*, a wireless connection module 44A, 44B, 44C) *to the processing device* (*e.g.*, information terminal apparatuses 2A, 2B and 2C. Ex. 1005, ¶¶54 ("The image display apparatus 1 may come with the wireless connection module 44 of a USB (Universal Serial Bus) type, for the information terminal apparatus 2A,"), 55 ("[I]f the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed…."), 62 ("[I]nserting the plurality of wireless connection modules 44 into the respective other USB jacks, the user of the image display apparatus 1 may connect the image display apparatus 1 and the plurality of information terminal apparatuses 2A, 2B and 2C to the wireless network."), FIGs. 1, 4, 16; Ex. 1002, ¶227.

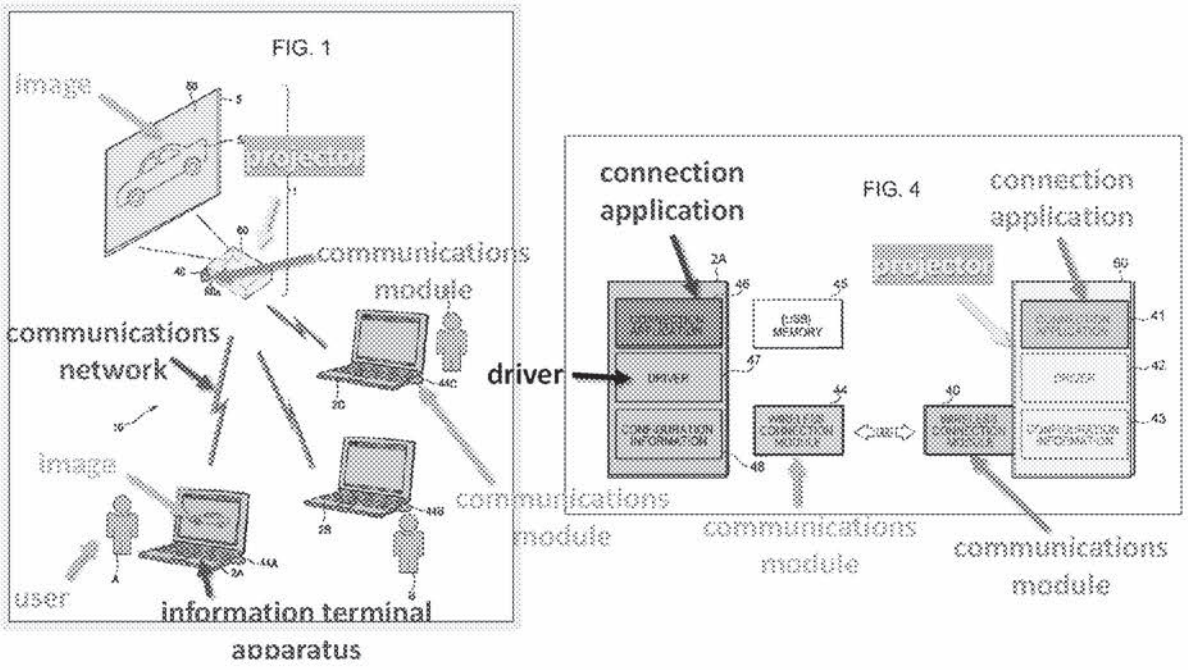
e) *the peripheral device having a wireless transceiver*

Ono discloses that, in addition to wirelessly transmitting image information to the projector 60, wireless communication modules 44A, 44B, 44C (*e.g.*, a "*peripheral device*") are capable of "transmitting and receiving request signals, response signals, rejection signals and the like for the connection and disconnection of communications with the communications module 40 of the projector 60." Ex. 1005, ¶¶39; *see also*, *id.*, 83-90 (describing wirelessly transmitting to and receiving signals from communications module 40), FIGs. 1, 4, 9.) Hence, wireless

communication modules 44A, 44B, 44C perform the function of a transceiver (*i.e.*, wireless transmission and reception of signals) and would have been considered by POSITA to include a wireless transceiver. Further, a POSITA would have understood such communication modules to include a transmitter as necessary means for wireless transmission (particularly, using a Direct Sequence Spread Spectrum modulation technique). *See*, *e.g.*, *Id*, ¶37 ("The wireless communications channel is one that utilizes a transmission path other than a wire cable, such as radio waves…. For example, there are wireless communications, such as those for Direct Sequence Spread Spectrum (DSSS) wireless communications, which utilize the 2.4 GHz ISM (Industrial, Scientific and Medical) band which is the same as that adopted in wireless LAN (WLAN) communications compliant with the IEEE 802.11 specifications. These are referred to as Bluetooth."). Furthermore, Banerjee discloses a similar device for wirelessly transmitting image data which includes a wireless transceiver 260. Ex. 1021, ¶¶26-27, 41; Ex. 1002, ¶228.

Notably, Ono discloses another communication module 40 includes an antenna and chip for wireless transmission and that connection module 44 performs a similar function of wireless transmission. *See*, *e.g.*, Ex. 1005, ¶¶52 ("This wireless connection module 40 may be of a CF (Compact Flash) card type including an antenna and a transmission/reception chip…. More specifically, transmission data is sent from a CPU, described later, to a baseband processing section via a communications control section or an I/F section, signal processed at the baseband processing section, impressed upon a carrier wave at an RF processing section, and wirelessly transmitted to a device in its vicinity from the wireless communications antenna. On the other hand, radio waves wirelessly transmitted from devices in the vicinity are communicated to the CPU described later via the communications control section or the I/F section after being received by the local wireless communications antenna, having signals extracted at the RF processing section, and being signal

processed at the baseband signal processing section."), 54 ("[T]he wireless connection module 44 [is] of a USB (Universal Serial Bus) type, … having functions similar to those of the wireless connection module 40."). Thus, a POSITA would have immediately envisioned connection module 44 (which communicates with communication module 40) to be similarly structured and would include a transceiver. Ex. 1002, ¶229.



Ex. 1005, FIGs. 1 and 4.

f) ***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***

Ono discloses *setting up a means for communication between the peripheral device* (*e.g.*, wireless communications module 44) *and the processing device* (*e.g.*, information terminal apparatus 2), such that, when wireless communications module 44 is inserted into information terminal apparatus 2, the two devices can communicate via interface 28. Ex. 1005, ¶¶55 ("In order to connect the projector 60 of the image display apparatus 1 and the information terminal apparatus

2A to the wireless network, the user clicks on a set-up file with a mouse after plugging the USB memory 45 in a USB jack on the information terminal apparatus 2A. As a result, an installer will automatically be activated on the information terminal apparatus 2A, and the connection application 46, the driver 47 and the configuration information 48 will automatically be stored in the HDD (Hard Disk Drive). Then, if the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network."), 62, 76; Ex. 1002, ¶230.

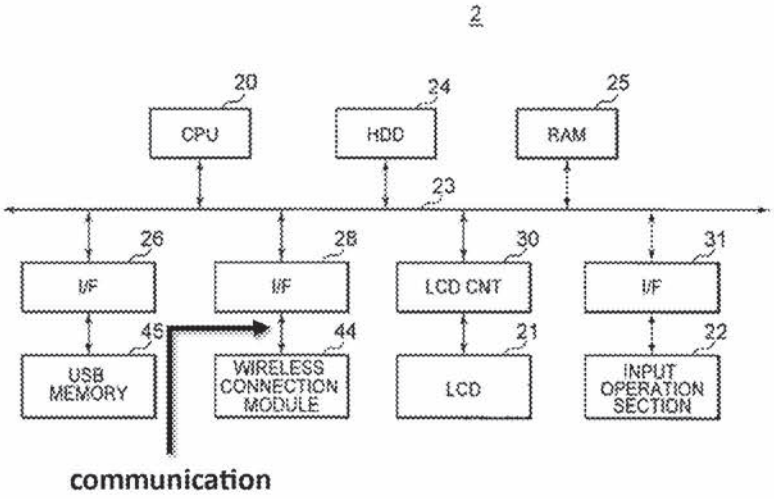
Beyond Ono's disclosure and for many of the same reasons described above, operating systems' commonly included drivers, such as a USB driver already stored and installed with the operating system. Such a pre-installed USB driver, such as a USB mass storage device driver, stored on information terminal apparatus (PC) 2 would have allowed the PC to recognize and communicate at least with Ono's USB memory 45 (*i.e.*, a mass storage device) according to a standard USB communication protocol. *See*, *e.g.*, Ex. 1021, ¶¶3-4; Ex. 1026, ¶¶1-3; Ex. 1027, ¶¶58-59; Ex. 1030, ¶¶10, 28-30, 34-41, 52; Ex. 1002, ¶231.

Therefore, a POSITA looking to implement an image display system like that described by Ono would have been motivated to utilize drivers that were already installed on an operating system, such as USB drivers, to communicate with USB-type devices like connection module 44 suggested by the prior art. *See*, *e.g.*, Ex. 1027, ¶45 (explaining the ubiquity of and suitability the USB standard for a dongle in wireless communication applications); Ex. 1030, FIG. 2, ¶¶9, 28-30, 34 (explaining the desire to avoid the use of having to install drivers and promoting the use of existing USB class drivers, such as USB human interface device (HID) or mass storage device

class drivers, "available in the most common operating systems (OS)); Ex. 1002, ¶232.) "An advantage is the ease of use of e.g. USB modem products which can even be allowed usage in restricted conditions." Ex. 1030, ¶28.

Therefore, a POSITA would have been motivated by the ubiquity and ease of use of a USB interface to set up by means of a USB drive, such as a USB mass storage driver, a USB interface (such as I/F 28) *between a processing device* (like information terminal apparatus 2) *and a peripheral device* (like Ono's wireless communications module 44) using a USB communication protocol (*i.e., by means of the pre-installed generic driver of the operating system*). A POSITA would have had a reasonable expectation of success in implementing such well-known technology, as evidenced by the teachings of Deforche, for example. Ex. 1002, ¶233. *See* § VII.2.h below.

FIG. 7



Ex. 1005, FIG. 5.

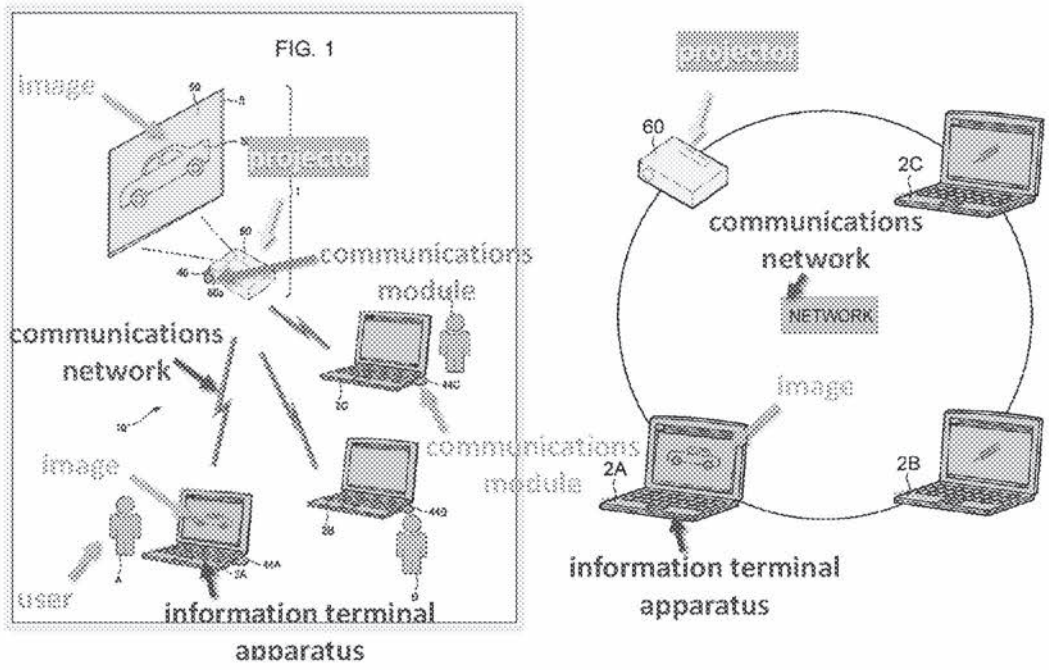
Assuming as discussed in § III.E.1 above that "the means for communication" refers to an interface using "the generic communication protocol", wireless communications module 44 communicated with the information terminal apparatus via an interface (I/F) 26 that conforms to the USB standard, and thus a POSITA would have recognized that it employs the ubiquitous USB

standards and protocols for communicating between an information terminal apparatus 2 and a wireless connection module 44. Ex. 1026, ¶0001; Ex. 1027, ¶45; Ex. 1030, FIG. 2, ¶¶9, 28-30, 34; Ex. 1002, ¶234. A POSITA also would have recognized that making use of a pre-installed USB driver (as suggested by Deforche and discussed in the preceding sections) would set up communications using a corresponding USB protocol. *Id*. Therefore, a POSITA naturally would have been motivated to implement a standard USB protocol in communicating with a wireless communications module across an interface (like Ono's I/F 26). Ex. 1002, ¶234. A POSITA would have had a reasonable expectation of success in that implementation because USB standards were well known and ubiquitous. Ex. 1002, ¶234.

g) *coupling the processing device to the wireless communications network via the peripheral device*

Ono discloses *coupling the processing device* (*e.g.*, information terminal apparatus 2A, 2B, 2C) (each a "processing device") *to the wireless communications network via the peripheral device* (*e.g.*, a respective wireless connection module 44A, 44B, 44C). Ex. 1005, ¶¶35, 39-42 ("[I]mage information that is sent from the above-mentioned three information terminal apparatuses 2A, 2B and 2C via the network…."), 50-55 ("[I]f the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network."), 61 ("The information terminal apparatuses 2B and 2C are connected to the wireless network in a manner similar to the information terminal apparatus 2A."), 56-57, 62 ("Thus, by … inserting the plurality of wireless connection modules 44 into the respective other USB jacks, the user of the image display apparatus 1 may connect the image display apparatus 1 and the plurality of information terminal apparatuses 2A, 2B and 2C to the wireless network), 68, 76, 88, 144, FIGs.

1, 2 (schematically showing a wireless network system including the projector 60 and the three information terminal apparatuses 2A, 2B and 2C), 16; Ex. 1002, ¶235.



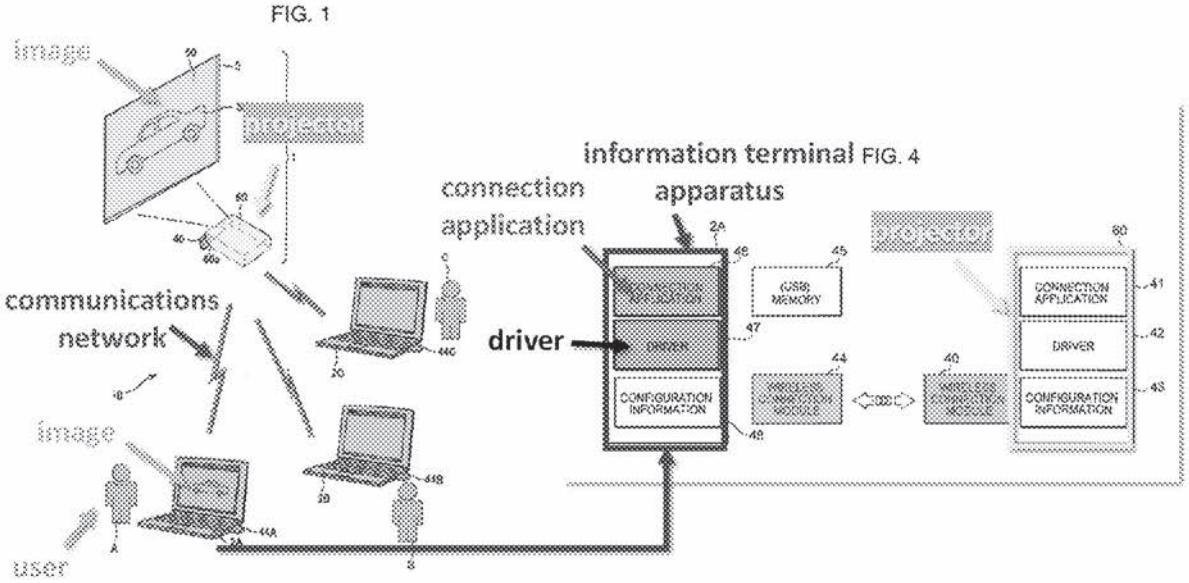
Ex. 1005, FIGs. 1 and 2.

h) *running a client application stored on the peripheral device to obtain screen scraped data*

Ono discloses *running a client application stored on the peripheral device* (*e.g.*, USB memory 45 (a peripheral device)) *to obtain screen scraped data*. Ex. 1005, ¶¶41, 54, 55, 58, 73 ("[I]mage information to be sent out to the image display apparatus 1 is selected and displayed on the liquid crystal display apparatus LCD 21."), 76, 88 ("[T]he CPU 20 of the selected information terminal apparatus 2A transmits the image information signal displayed on the liquid crystal display apparatus 21 to the wireless connection module 40 of the projector 60 from the wireless connection module 44 via the I/F 28."), 144, FIG. 1. While a POSITA would have recognized from Ono's disclosures that the content of the transmitted image data is "*screen scraped data*," a POSITA looking to implement a system like Ono, particularly such that the image data from a

display (*e.g.*, LCD 21) of the information terminal apparatus is transmitted and displayed on projection screen (*e.g.*, as illustrated in Ono's Figure 1), would have considered and utilized well-known screen scraping algorithms. Ex. 1002, ¶236. Indeed, the '676 patent acknowledges that screen scraping was known in the art (Ex. 1001, 13:59-62) and could have been predictably implemented in an image display system like that of Ono using known techniques, for instance, as described in Slobodin, which is directed to wireless transmission of screen scraped data to a projector. Ex. 1033, ¶¶11-12; Ex. 1002, ¶236.

Further, Ono discloses that "the image display apparatus 1 may come with a USB memory 45 in which a connection application 46, a driver 47 and configuration information 48 … are stored." Ex. 1005, ¶¶54-55 ("In order to connect the projector 60 of the image display apparatus 1 and the information terminal apparatus 2A to the wireless network, the user clicks on a set-up file with a mouse after plugging the USB memory 45 in a USB jack on the information terminal apparatus 2A. As a result, an installer will automatically be activated on the information terminal apparatus 2A, and the connection application 46, the driver 47 and the configuration information 48 will automatically be stored in the HDD (Hard Disk Drive). Then, if the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network."), 76; FIGs. 1 and 4; Ex. 1002, ¶237.



Ex. 1005, FIGs. 1 and 4.

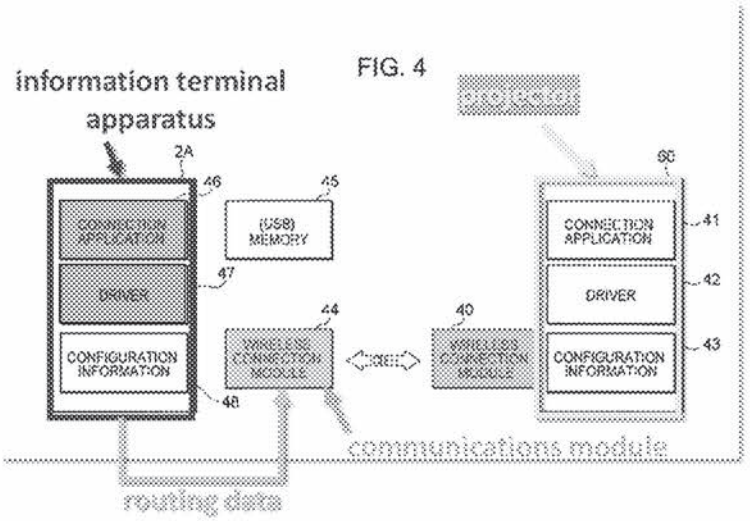
Although Ono's connection application 46, driver 47, and configuration information 48 are described in one embodiment as stored on a USB memory 45 (as opposed to USB-type wireless information communications module 44), at the time of the alleged invention in 2011, the location of storage of that information would have been simply a matter of design choice. Ex. 1002, ¶238. In 2011, a POSITA could have readily combined the memory storage capability of a USB memory device (like USB memory 45) and the wireless transceiver functionality (like that of information communications module 44) into a single device. Ex. 1002, ¶238.

Furthermore, Deforche discloses running an application stored on the peripheral device itself rather than on a separate USB mass storage device. Ex. 1030, FIG. 2, ¶¶9, 34, 46, 52. Where the program is stored is simply a matter of design choice. Moving the program from a separate USB device to a similar USB device could include simply writing the program to another device, or adding or including a larger memory chip in the peripheral device. Ex. 1002, ¶239. The person

of ordinary skill in the art would have a reasonable expectation of success because adding chips to devices was well-known, particularly for simple devices such as USB dongles relative to much more complicated PCs, which have many more chips than USB peripheral devices. Ex. 1002, ¶239. Therefore, the combination of Ono and Deforche would have predictably resulted in moving the client application from one device to another. Ex. 1002, ¶239.

i) ***routing the screen scraped data between the processing device and the wireless communications network via the means for communication for display on the one or more first displays of the base node***

Ono discloses *routing the screen scraped data* (*e.g.*, image data from LCD 21) *between the processing device* (*e.g.*, the information terminal apparatus 2A, 2B, 2C) *and the wireless communications network for display on the one or more first displays* (*e.g.*, a projector 50 and screen 5) *of the base node* (*e.g.*, the image display apparatus 1). Ex. 1005, ¶¶39, 41-42, 54 (explaining that wireless connection module 44 is "of a USB (Universal Serial Bus type"), 55, 73, 76, 88 ("[T]he CPU 20 of the selected information terminal apparatus 2A transmits the image information signal displayed on the liquid crystal display apparatus 21 to the wireless connection module 40 of the projector 60 from the wireless connection module 44 via the I/F 28."), 162 (describing alternative displays); Ex. 1002, ¶240.



Ex. 1005, FIG. 4.

As discussed in § III.E.1, "*the means for communication*" is assumed to refer to an interface using "the generic communication protocol." In this regard and as discussed above, wireless communications module 44 communicated with the information terminal apparatus via an interface (I/F) 26 that conforms to the USB standard, and thus a POSITA would have recognized that it employs the ubiquitous USB standards and protocols for communicating between an information terminal apparatus 2 and a wireless connection module 44. Ex. 1005, ¶¶39, 41-42, 54-55, 73, 76, 88 ("[T]he CPU 20 of the selected information terminal apparatus 2A transmits the image information signal … from the wireless connection module 44 via the I/F 28"); *see also* Ex. 1026, ¶1; Ex. 1027, ¶45; Ex. 1002, ¶241. A POSITA also would have recognized that making use of a pre-installed USB driver (as suggested by Deforche and discussed in the preceding sections) would set up communications using a corresponding USB protocol. *Id.* Therefore, a POSITA naturally would have been motivated to implement a standard USB protocol in communicating with a wireless communications module across an interface (like Ono's I/F 26). Ex. 1002, ¶241.

A POSITA would have had a reasonable expectation of success in that implementation because USB standards were so well known and ubiquitous. Ex. 1002, ¶241.

j) ***wherein the generic communication protocol is used for transferring the screen scraped data for display between the processing device and the peripheral device***

See VII.2(c)-(d) and (f)-(i) above. Ex. 1002, ¶242.

k) ***obtaining electronic access to the one or more first displays for display of the screen scraped data***

Ono discloses *obtaining electronic access* (*e.g.*, connecting) *to one or more first displays* (*e.g.*, the projector 50 and screen 5) *for display of the screen scraped data* (*e.g.*, image data). Ex. 1005, ¶¶35, 39-42, 50-55 ("[I]f the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network."), 61, 56-57, 62, 76, 88, 144, FIGs. 1, 9; Ex. 1002, ¶243.

l) ***displaying the screen scraped data on the one or more first displays in accordance with a set of rules***

Ono discloses *displaying the screen scraped data* (*e.g.*, image data) *on the one or more first displays* (*e.g.*, the projector 50 and screen 5) *in accordance with a set of rules*. Ex. 1005, ¶¶41, 78 ("When the user selects from the list 71 the information terminal apparatus. S/he wants to connect with by pressing the up or down selection key on the operation section of the remote controller 69 and presses the confirm (enter) key, the image display apparatus 1 connects with the selected information terminal apparatus."), 82-90, 112-126, FIGs. 1, 3, 9, 13; Ex. 1002, ¶244; *see also* § VII.A.2.h.

FIG. 3

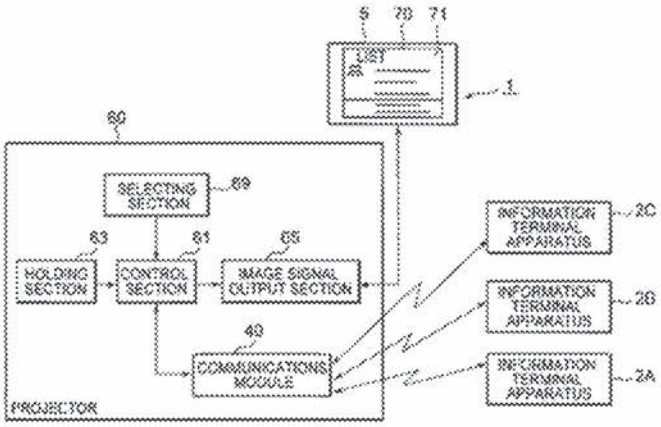
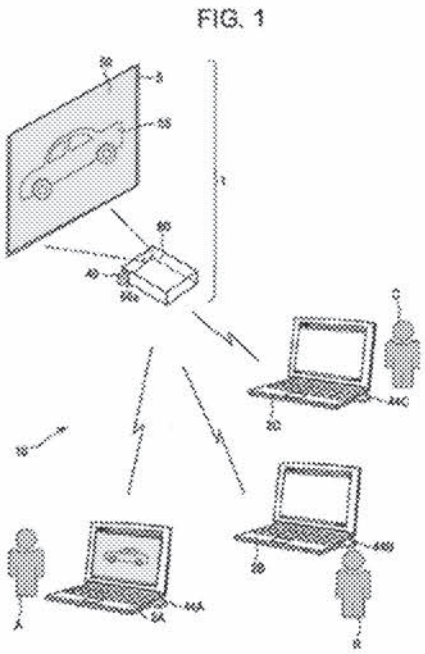


FIG. 1



Ex. 1005, FIGs. 1, 3.

m) ***one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting***

Ono *discloses one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting*. Ex. 1002, ¶245. For example, Ono discloses using a remote controller 69 to select an information terminal apparatus (2A, 2B, etc.) to display an image 55 based on the image data from the display (LCD 21) of the apparatus. Thus, through operations using the remote controller 69, the image display system 10 is capable of switching among a plurality of PCs connected to a network and selecting

the display content from the desired PC to be displayed on projection screen 5 "with ease." Ex. 1005, ¶144; Ex. 1002, ¶245.

Ono also indicates:

> Further, since, just through operations from the remote controller 69 of the image display apparatus 1, it is possible to switch the information terminal apparatus whose image is to be projected onto the screen 5, even in cases where, for example, there are a plurality of presenters to present in a given order, it becomes unnecessary for each presenter, in accordance with the order, to perform an output on/off operation at each information terminal apparatus, and therefore, the gap in time until the next presentation is eliminated, and presentations can be conducted speedily.

Ex. 1005, ¶144.

Therefore, Ono "forces" switching of display by the action of only one participant involved in the meeting (*i.e.*, the user of the remote controller) and understandably new screen data from the information terminal apparatus overrides or replaces any data displayed on the display module without requiring the agreement of another participant. Ex. 1002, ¶246.

In particular, Ono discloses rules for a remote controller to switch among PCs wirelessly connected to a projector. Ex. 1005, ¶¶7, 36-39, 64-70, 77-78, 144, FIGs. 1, 3; Ex. 1002, ¶247. Ono's system includes an image display apparatus capable of switching among a plurality of networked information terminal apparatuses 2A, 2B, 2C (*e.g.*, personal computers (PCs)) and selecting a desired PC for displaying its screen content on a larger shared projection screen 5. *Id.* As Ono illustrates in FIGs. 1 and 3, the user simply presses a button on the remote controller 69, which brings of a list 71 of the connected PCs. Ono explains:

> When the user selects from the list 71 the information terminal apparatus s/he wants to connect with by pressing the up or down selection key on the operation section of the remote controller 69 and presses the confirm (enter) key, the image display apparatus 1 connects with the selected information terminal apparatus.

Ex. 1005, ¶78; Ex. 1002, ¶247.

In this way, a user can forcibly switch between the different PCs to display on the projections screen the desired content. Ono and Deforche disclose only a couple of design options of the many options discussed in the prior art. *See additionally*, Ex. 1013, ¶¶2, 31, 48-49, FIG. 2; Ex. 1008, ¶¶19-20; 23-27, FIG. 1; Ex. 1002, ¶248.

Ono describes an exemplary method (or set of rules) for switching from the displaying the image data from information terminal apparatus 2A (coming from its LCD display 21) to the image data from information terminal apparatus 2B in Figure 13. Ex. 1005, ¶111-126, FIG. 13. As illustrated in Figure 13 below, PC 2A begins connected to the projector. *Id.* After PC 2B is selected by the remote controller, a sequence of steps occurs to disconnect PC 2A and connect PC 2B. *Id.* Once PC 2B is connected, "the transfer of image information from the [PC] 2B to the projector 60 is begun, and the projector 60 of the image display apparatus 1 projects and displays on the screen 5 the image from the information terminal apparatus 2B. Ex. 1005, ¶125. Thus, the projector displays new "screen scraped data" from the information terminal apparatus 2B. Ex. 1002, ¶249.

Additionally, Ono teaches that the remote controller also has fast forwarding/rewinding capabilities. Ex. 1005, ¶70. The information terminal apparatus 2 interprets the control data for fast forwarding/rewinding images, which is received through the wireless connection module 44, and fast forwards/rewinds the image information displayed on its display section. In conjunction therewith, the image projected onto the screen 5 of the image display apparatus 1 is also fast forwarded/rewound. *Id.*; Ex. 1002, ¶250

Thus, through operation of the remote controller, the screen data projected onto the projection screen by the same participant is replaced without requiring the agreement of another participant. In this additional way, Ono teaches a "*forcing rule*" as claimed. Ex. 1002, ¶251.

3. Claim 2

a) ***The method of claim 1 further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays, the server program allowing display in accordance with one or more rules of which one is a forcing rule, wherein the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting.***

Ono discloses *loading a server program* (e.g., configuration information 43 and/or connection application 41) onto the base node (e.g., image display apparatus 1). Ex. 1005, ¶58 ("With respect to the projector 60 of the image display apparatus 1, the configuration information 43 is already stored in the ROM along with the connection application 41 and the driver 42 at the time of purchase of the projector 60"); Ex. 1002, ¶252.

Ono further discloses the *server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays*. Ex. 1005, ¶42 ("The image display apparatus 1 is comprised of the screen 5 and the projector 60, receives, through the communications module 40, such as a wireless connection module, image information that is sent from the above-mentioned three information terminal apparatuses 2A, 2B and 2C via the network, and displays an image based on the image information on the screen 5"); Ex. 1002, ¶252.

Ono also discloses the limitations associated with a "*forcing rule*" as explained above with respect to identical claim language of claim 1. *See* § VII.A.2.m.

4. Claim 3

a) *The method of claim 2, wherein the server program is a portable application adapted to be loaded onto the base node and to be run on an operating system of the base node.*

Ono discloses *server program is adapted to be loaded onto the base node and to be run on an operating system of the base node*. Ex. 1005, ¶58 ("With respect to the projector 60 of the image display apparatus 1, the configuration information 43 is already stored in the ROM along with the connection application 41 and the driver 42 at the time of purchase of the projector 60"); Ex. 1002, ¶253.

The '676 patent defines a portable application as "a computer software program designed to run without installation on the target machine". Ex. 1001, 12:23-25. Deforche discloses running a program as *a portable application*. *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. A POSITA would have been motivated to run the *server program* (*e.g.*, configuration information 43 and/or connection application 41) of Ono as a *portable application* as taught by Deforche to obtain known benefits such as avoiding that any traces of the program are left on the operating system after its use. Ex. 1030, ¶30; Ex. 1002, ¶254.

B. Ground 2 – Ono in view of applicant-admitted prior art renders obvious claim 15.

Claim 15 depends from unchallenged claim 14 and includes all its limitations.

1. Rationale to Combine

Ono (and a POSITA's knowledge/Applicant Admitted Prior Art) renders obvious claim 14. Ex. 1002, ¶152. Ono discloses screen scraping as disclosed in the '676 patent. Ex. 1005, FIG.

1, ¶73; Ex. 1002, ¶255. To the extent that Ono does not disclose screen scraping, the '676 patent acknowledges that screen scraping was known in the art. Ex. 1001, 13:59-62; Ex. 1002, ¶255. Therefore, the person of ordinary skill in the art would have understood that Ono's disclosure of reproducing an image from a PC onto a projector display was screen scraping (Ex. 1005, FIG. 1, ¶73), at least in view of the admission from the '676 patent that screen scraping was known. Ex. 1002, ¶255.

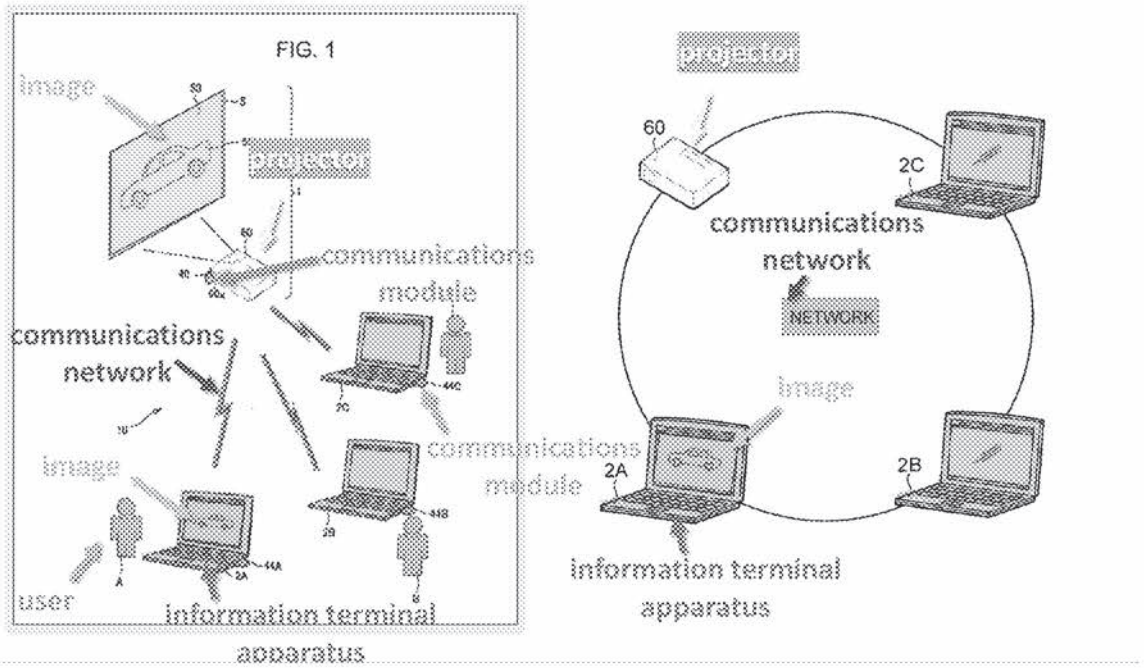
2. Claim 14

a) ***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***

See § VII.A.2.a-b (limitation 1(a)-(b)). This claim is very similar to claim 1 but does not include the pre-installed generic driver disclosed by Deforche. (*See also* Ex. 1002, ¶¶256-257).

b) ***the method comprising the following steps: setting up a communications network between a base node of the communications network and a peripheral device coupled to the processing device***

Ono discloses *setting up a communications network between a base node* (*e.g.*, image display apparatus 1) *of the communications network and a peripheral device* (*e.g.*, "wireless communication modules 44A, 44B, 44C") *coupled to the processing device* (*e.g.*, information terminal apparatuses 2A, 2B and 2C coupled via interface (I/F) 28). (Ex. 1005, ¶¶39 ("Communications modules 44A, 44B and 44C, such as wireless connection modules ... are also used for transmitting image information to the projector 60"), 54, 55, 62 ("[I]nserting the plurality of wireless connection modules 44 into the respective other USB jacks, the user of the image display apparatus 1 may connect the image display apparatus 1 and the plurality of information terminal apparatuses 2A, 2B and 2C to the wireless network"), FIGs. 1, 2, 4, 16; § VII.A.2.d-e, g (Limitations 1(d)-(e), (g); Ex. 1002, ¶258).



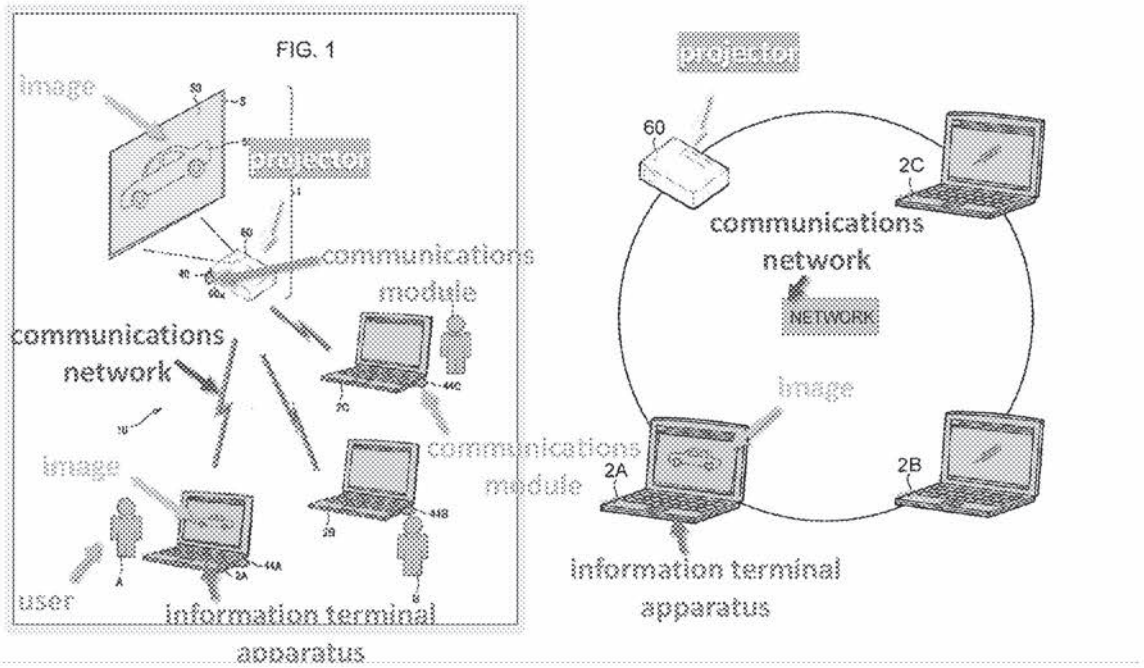
(Ex. 1005, FIGs. 1, 2)

c) ***transferring media content between the processing device and the peripheral device the media content being screen scraped data from a screen of the processing device; transmitting the media content from the peripheral device to the communications network; receiving media content from the communications network at the base node***

Ono discloses *transferring media content between the processing device and the peripheral device*. Ex. 1005, ¶¶39 (Communications modules 44A, 44B and 44C, such as wireless connection modules, are also attached to the body of the information terminal apparatuses 2A, 2B and 2C, respectively, via a slot.... In addition, they are also used for transmitting image information to the projector 60"), 54, 55 ("[I]f the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, … transmission and reception of data with the projector 60 of the image display apparatus 1 … will be carried out via the wireless network"), 62, FIGs. 1, 4, 16; Ex. 1002, ¶¶259-260. FIG. 1 of Ono illustrates that the *media content is scraped data from a screen of the processing device*, illustrating PC 2A displaying a car and the same

image being projected onto the display screen 50. *See also*, Ex. 1005, ¶73 ("[I]t is assumed that image information to be sent out to the image display apparatus 1 is selected and displayed on the liquid crystal display apparatus LCD 21."). Indeed, the '676 patent contains applicant-admitted prior art that screen scraping was known in the art (Ex. 1001, 13:59-62) and could have been predictably implemented in an image display system like that of Ono using known techniques, as described in Slobodin, which is directed to wireless transmission of screen scraped data to a projector (*see, e.g.*, Ex. 1033, ¶¶11-12).

Ono discloses *transmitting the media content from the peripheral device to the communications network* that is *received at the base node*. Ex. 1005, ¶¶11 ("an image display apparatus [] receives a transfer of image information via the network from the above-mentioned one or more information terminal apparatuses and displays on a display section an image"), 35, 38-42, 50-57 ("if the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network") 61, 62, 68, 76, 88-89, FIGs. 1-3, 6, 7, 9, 16; Ex. 1002, ¶260.



Ex. 1005, FIGs. 1, 2.

d) ***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.***

See § VI**Error! Reference source not found.**-m (limitations 1(l)-(m); Ex. 1002, ¶261).

3. Claim 15

a) ***15. The method of claim 14, wherein the base node has one or more displays, further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on the one or more displays, the server program allowing display in accordance with one or more rules of which one is the forcing rule, wherein the forcing rule is that the display on the one or more displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on***

the one or more displays from the same or another participant of the meeting.

See § VII.A.3, describing obviousness of analogous feature of claim 2 in view of Ono. Ex. 1002, ¶262

C. Ground 3 – The combination of Ono, Deforche, Grimshaw, and optionally Banerjee renders obvious claims 6, 7, 11, and 13.

1. Rationale to Combine

See § VII.A above regarding the combination of Ono, Deforche, and Banerjee. Ex. 1002, ¶263.

Ono discloses an electronic meeting tool in the form of an image display system. Ex. 1005, abstract, ¶2. A USB peripheral device (communications module 44) couples to a PC (information terminal apparatus 2) to wirelessly transfer image information to an image display apparatus 1. *Id.*, ¶¶36, 54–55; Ex. 1002, ¶264. Grimshaw describes a similar content sharing and conferencing technology which addresses the scenario in which multiple users are vying for control over the display to project images from their individual computers and provides suitable solutions. Ex. 1008, ¶¶19–20 (Ex. 1012, 5:8–6:17); Ex. 1002, ¶¶264–268.

Grimshaw's system includes individual user modules 14, 16, 18, 20 that each couple to a laptop and allow the laptops to send content to display module 22. Ex. 1008, ¶12 (Ex. 1012, 1:23–2:6); Ex. 1002, ¶265. Each user modules 14, 16, 18, 20 includes "a push a button 344, 354, 364, 374 on their user module in order to take control of display module 22 (e.g., display module 22 could show whatever is currently being displayed on the screen of the laptop computer connected to the selected user module)" Ex. 1008, ¶¶19–20; Ex. 1012, 5:8–6:17. Grimshaw's modules further include "Indicators 346, 356, 366, 376 are mounted on user modules 14, 16, 18, 20, respectively, and indicate the status or state of buttons 344-374." Ex. 1008, ¶39; Ex. 1012, 9:21-28.

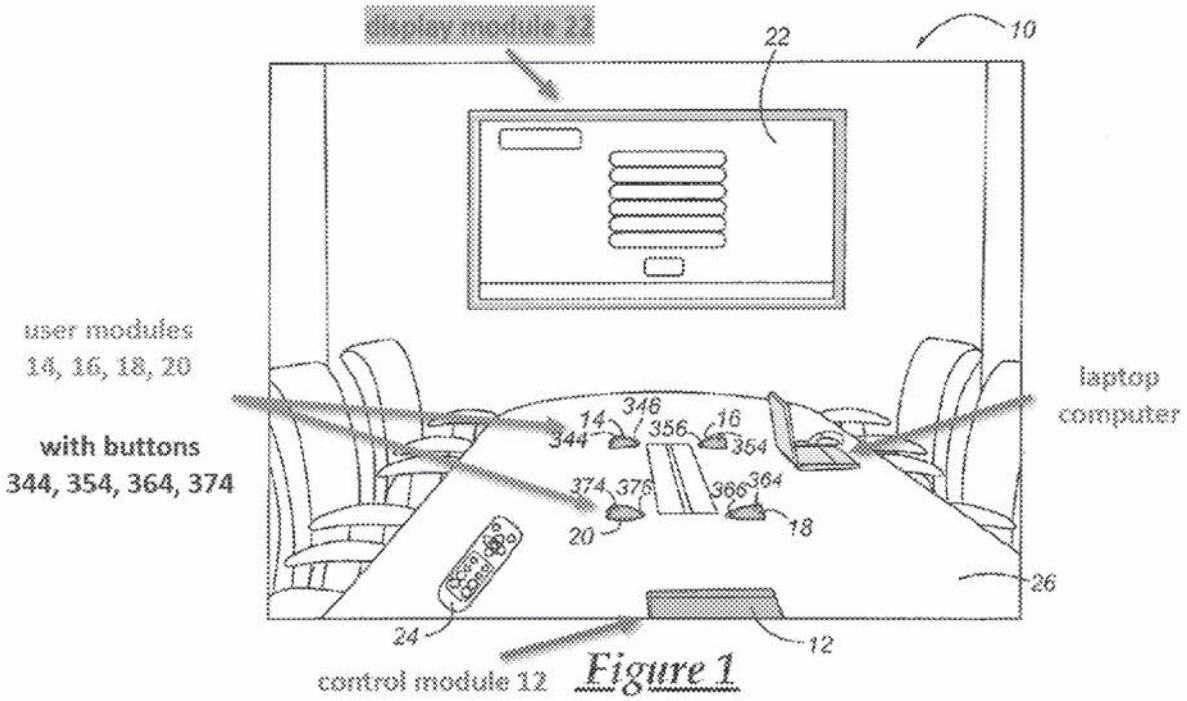


Figure 1

Ex. 1008, FIG. 1; Ex. 1012, FIGS. 1–3.

Thus, Grimshaw recognizes the desire for a peripheral device, like the communications module of Ono, to include both push buttons and visual indicators. Ex. 1002, ¶266.

Guided by these teachings of Grimshaw, a POSITA would have found it obvious and would have been motivated to implement a communications module (like that of Ono) with Grimshaw's known use of buttons and visual indicators, as in claim 6. Ex. 1002, ¶267. Such a modification would have yielded a predictable result and would have been desirable to address the scenario where a user wishes to take control of a shared display to present image data from their computer (*i.e.*, using the button) while having an indication of the status of the button via a visual indicator. *Id.*

Ono's communications module already provides much of this functionality. Thus, any modification to Ono's communications module would have been relatively minor and straightforward. Ex. 1002, ¶268. The use of a button and visual indicator described by Grimshaw

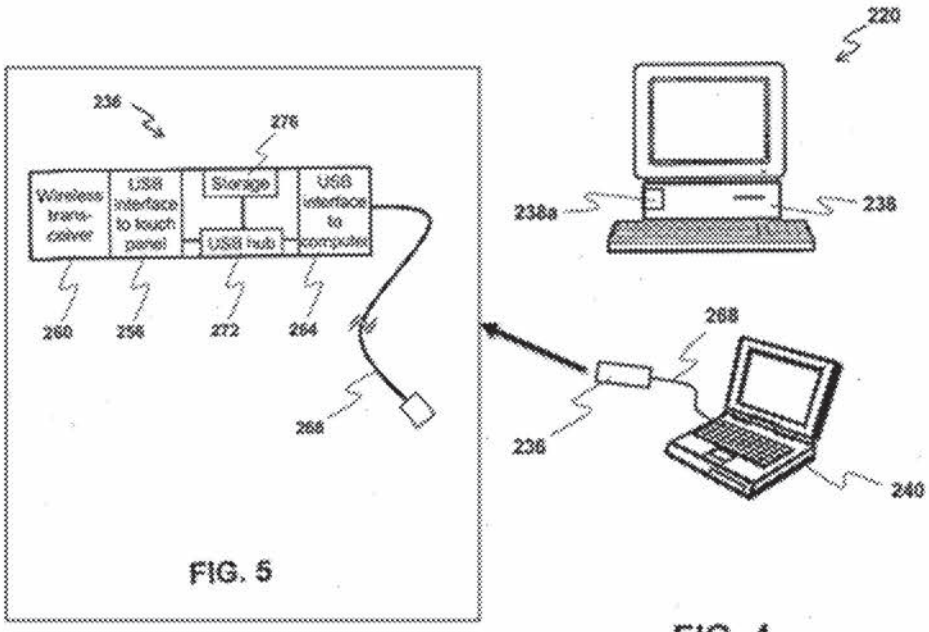
could have been implemented according to known methods. *Id.* Therefore, a POSITA would have had a reasonable expectation of success in achieving the claimed combination given the relatively simple modification to a communications module like that of Ono. *Id.*

2. Claim 6

a) *The method of claim 1, wherein the peripheral device comprises: a base, a connector, and a flexible connection between the base and the connector for transferring data signals and power, and*

Ono discloses *the peripheral device* (*e.g.*, the wireless connection module 44) *comprises a base* (*e.g.*, the housing holding components of the wireless device 1) *and a connector* (*e.g.*, USB connector 105). Ex. 1009, ¶¶39-42, FIG. 3. A POSITA would have understood it would have been a design choice to include *a flexible connection between the base and the connector for transferring data signals and power*. Ex. 1002, ¶269. For example, USB extension cables were widely known and available and could have been connected to the USB connector 105 of Uchida's wireless device 1 to obtain a flexible connection as claimed.

As an example, Banerjee describes a plug-and-play device for wireless screen sharing that is like the wireless connection module 44 of Ono. Ex. 1021, ¶¶39-42, FIG. 5 (reproduced below). Banerjee discloses *the peripheral device* (*e.g.*, the plug-and-play device 236) *comprises a base* (*e.g.*, holding electronics, such as the wireless transceiver 260, interfaces 256, 264, storage 276, and USB hub controller 272), *a connector* (e.g., a connector for connecting the plug-and-play device 236 to a plug-and-play port of the remote computer 240), *and a flexible connection between the base and the connector for transferring data signals and power* (*e.g.*, the cable segment 268 between the base and the connector). *Id.* It would have been a predictable variation of Ono's system to include the flexible cable 268 of Banerjee, using a known technique. Ex. 1002, ¶270.



Ex. 1021, FIGs. 4, 5.

b) *wherein the actuator is on the base and*

Ono also discloses that an input device (remote controller 69) includes an *actuator* (a button on the remote controller 69) that can switch among PCs and display image information from the selected PC. *Id.*, ¶¶7, 144. It would have been obvious to a POSITA to include the actuator (providing functionality like Ono's remote controller device) on a peripheral device (like wireless connection module 44) for the reasons described in § VII.A.1. Ex. 1002, ¶271. Furthermore, Grimshaw discloses *the actuator* (e.g., button 344-374) *is on the base* (e.g., on the user module 14, 16, 18, 20). Ex. 1008, ¶¶4 ("each of the user modules includes a button"), 5, 19, 20, 24 ("[U]ser modules 14-20 respectively include…buttons 344-374"), 27-29, 34, 39, 41, and claims 1, 16; Ex. 1012, 5:8-24, 8:29-9:20; Ex. 1002, ¶271.

c) *the base has electronics comprising a processing engine, a transceiver and a visual indicator*

A POSITA would understand that Ono's wireless connection module 44 has electronics and that these electronics would necessarily include at least a *processing engine* (*e.g.*, some processing unit or controller) and the *transceiver* addressed above. *See* VII.A.2.e. Banerjee discloses electronics included in a plug-and-play device 236 that is similar and structure and function to the wireless connection module 44 of Ono. Specifically, Banerjee discloses *the base* (*e.g.*, of the plug-and-play device 236) *has electronics comprising a processing engine* (*e.g.*, the controller 272) *and a transceiver* (*e.g.*, the wireless transceiver 260). Ex. 1021, ¶¶41-42, FIG. 5. A POSITA would have understood how to and been motivated to include the known electronics of Banerjee's plug-and-play device 236 in the wireless connection module 44 of Ono with predictable results using well-known electronic manufacturing techniques. Ex. 1002, ¶272.

Grimshaw discloses a base of the user module 14, 16, 18, 20, which is also similar in structure and function to Ono's wireless connection module 44, having a *visual indicator* (*e.g.*, indicators 346-376). Ex. 1008, ¶29 ("Indicators 346, 356, 366, 376 are mounted on user modules 14, 16, 18, 20 … Indicators 346-376 can include audio (e.g., beep sound), visual (e.g., LED), or any combination of indicators."); Ex. 1012, 9:21-28. A POSITA would have understood how to and been motivated to include the known visual indicator of Grimshaw's user module 14, 16, 18, 20 in the wireless connection module 44 of Ono with predictable results using well-known electronic manufacturing techniques. Ex. 1002, ¶273.

d) *the method further comprising: connecting the connector to a plug and play port of the processing device and actuating a signal with the actuator and transferring the signal to the connector for transfer to the port.*

Ono discloses *connecting the connector* (*e.g.*, the connector of the wireless connection module 44) *to a plug and play port of the processing device* (*e.g.*, a USB jack on the information

terminal apparatus 2A). Ex. 1002, ¶274. For example, the '676 patent specifies that plug and play interfaces include USB ports, which is the same interface disclosed by Ono. Ex. 1001, 11:52-65 ("Plug and play interfaces include for example (not an exhaustive list): Firewire (IEEE-1394), PCI, Mini PCI, PCI Express, Mini PCI Express, PCMCIA, PC Card, Universal Serial Bus (USB), SDIO cards"); Ex. 1005, ¶¶54-55 ("[I]f the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network"); Ex. 1002, ¶274.

Ono also discloses *actuating a signal with the actuator* (*e.g.*, operating the remote controller 69 to cause the CPU 61 of the image display apparatus 1 to generate a transmission signal) *and transferring the signal to the connector* (*e.g.*, sending the transmission signal to the wireless connection module 44) *for transfer to the port* (*e.g.*, for transfer to the I/F 66 of the information terminal apparatus 2). Ex. 1005, ¶69 ("When operations for switching or disconnecting information terminal apparatuses are performed by the user using the remote controller 69, the CPU 61 interprets the command, generates the respective transmission signals corresponding to the command, and sends them to the wireless connection module 44 of the appropriate information terminal apparatus from the wireless connection module 40 via the I/F 66."); Ex. 1002, ¶275.

3. Claim 7

a) *The method of claim 6, wherein the peripheral device comprises permanent storage for storing the client application.*

Although Ono's connection application 46, driver 47, and configuration information 48 are described in one embodiment as stored on a USB memory 45 (as opposed to USB-type wireless

information communications module 44), at the time of the alleged invention in 2011, the location of storage of that information would have been simply a matter of design choice. In 2011, a POSITA could have readily combined the memory storage capability of a USB memory device (like USB memory 45) and the wireless transceiver functionality (like that of information communications module 44) into a single device, such that *the peripheral device* (*e.g.*, the wireless information communications module 44) *comprises permanent storage* (*e.g.*, the USB memory 45) *for storing the client application*. Furthermore, Deforche discloses running an application stored on the peripheral device itself rather than on a separate USB mass storage device. Ex. 1030, FIG. 2, ¶¶9, 34, 46, 52; Ex. 1002, ¶276. *See also* § VII.A.2.h.

4. Claim 11

a) *The method of claim 7, further comprising pairing of the peripheral device to the base node before communication starts.*

In Ono, the communication module ("*peripheral device*") and projector ("*base node*") are preconfigured with network connection parameters to establish a wireless network connection, or pairing, between the devices. Ex. 1005, ¶60; Ex. 1002, ¶¶277-280. The '676 describes use of this type of wireless network connection as a type of pairing. Ex.1001, 21:51-55 ("The user can also **pair the peripheral device to a base node** or base unit that controls the display in the meeting room and which is **connectable to the peripheral device via a communications network such as a wired or wireless communications network**." (emphasis added)). Therefore, establishing this wireless connection in Ono is a type of "pairing" and is performed "*before communications starts*" as it allows the subsequent communication between the devices. Ex. 1002, ¶278.

In the event establishing this wireless connection is not considered "pairing", Banerjee expressly discloses pairing a peripheral plug-and-play device to another device before data exchange. Ex. 1021, ¶41 ("The wireless communication device 238 a and wireless transceiver 260

are paired to enable a peer-to-peer wireless connection between the master computer 238 and the remote computer 240 to be established."); Ex. 1002, ¶279. A POSITA would recognize that this known approach to establishing device-to-device communication could be employed in the system of Ono. Ex. 1002, ¶280. For example, Banerjee's pairing method could be readily adopted in Ono by replacing Ono's pre-established wireless connection approach with the device pairing of Ono. This modification could be easily implemented while retaining Ono's other operational aspects but routing communication over a the pre-authenticated link achieved by pairing. This would provide several benefits as would be evident to a POSITA, such as clearer access control, stronger security, and a smoother user experience. Ex. 1002, ¶280.

5. Claim 13

a) *The method of claim 7, wherein the pre-installed generic drivers drive different device interfaces independently.*

Deforche demonstrates that *pre-installed generic drivers drive different device interfaces independently* because they ubiquitously drove multiple different interfaces, such as keyboards, mass storage devices, and audio devices. Ex. 1030, ¶10 ("An example of such a generic driver is a human interface driver (HID), which has predetermined software components configured for driving a human interface device such as a mouse, a keyboard or other."); Ex. 1002, ¶281. Even the '676 patent admits that generic drivers were known by their definition to drive different devices independently:

> The term "pre-installed generic driver" is intended to mean a driver which is installed on a processing device such as a computer as a standard driver, e.g. is installed with the installation of the operating system. Such a driver is standard for the operating system and can drive a standard class of peripheral devices coupled to or connected to the processing device. The installation of a specific driver for such a peripheral device is not required. Such a generic driver can be a human interface driver (HID) or a mass storage device driver, which has predetermined software components configured for driving mass storage, a CD-ROM, a keyboard etc. or combinations of these. Such devices can be readable and writable computer

> peripheral memory devices such as USB memory sticks, flash memories, external hard drives, or more.

Ex. 1001, 14:20-34. It would be obvious to include this well-known, standard feature of a "pre-installed generic driver" in the system of Ono. Ex. 1002, ¶282.

D. Ground 4 – The combination of Ono, Deforche, Grimshaw, Austin, and optionally Banerjee renders obvious claim 12.

1. Rationale to combine Ono, Deforche, Grimshaw, Austin, and optionally Banerjee.

See § VII.C above regarding the combination of Ono, Deforche, Grimshaw, and optionally Banerjee. Ex. 1002, ¶283.

Ono discloses an electronic meeting tool in the form of an image display system. Ex. 1005, abstract, ¶2. A USB peripheral device (communications module 44) couples to a PC (information terminal apparatus 2) to wirelessly transfer image information to an image display apparatus 1. *Id.*, ¶¶36, 54–55. USB ports were and still are common standardized interfaces with pre-installed software for detecting device connections and for driving typical USB devices, such as a mouse, keyboard, or mass storage device. Ex. 1002, ¶284. One example of software for detecting when a USB device is connected is called a daemon. Ex. 1002, ¶284.

Austin discloses the typical use of such daemons to detect when a USB device is connected. Ex.1032, ¶84; Ex. 1002, ¶285. Indeed, the '676 patent admits that daemons are pre-installed:

> In an embodiment of the present invention a very small service—also called daemon on some OS's—is provided that requires installation on the processing device such as a laptop. This service is pre-installed on the processing device. The installation is required only once on every processing device such as a laptop. The role of this is to provide a permanently running service that continuously monitors if a peripheral device according to the present invention has been offered up for connection to the processing device. When such a peripheral device is connected, the service will detect this and start the client application software residing in the mass storage area of the peripheral device.

Ex. 1001, 7:43-57. Ex. 1002, ¶ 285. The combination of Ono and Austin to detect when a USB device is plugged in would obviously use known techniques such as a daemon to yield the predictable result of detecting a device being connected to a USB port. Ex. 1002, ¶285.

2. Claim 12

a) ***The method of claim 7, wherein a daemon is provided that is pre-installed on the processing device, the daemon providing a permanently running service that continuously monitors if a peripheral device has been offered up for connection to the processing device.***

See § VII.C.3 regarding the obviousness of claim 7 from which claim 12 depends. Ex. 1002, ¶286

A "*daemon*" is a program that runs in the background and provides important system services, such as processing incoming email or handling requests from the network. Ex. 1002, ¶¶287-289. One use of a daemon to "detect that the device in mass storage mode is coupled to the computer system and may cause the command to be transmitted to the device. *Id.* Additionally, in some embodiments, the command is a HID (Human Interface Device) command to switch the device to the second mode of operation." Ex. 1032, ¶84. The '676 patent admits that this is a common use of a daemon:

> In an embodiment of the present invention a very small service—also called daemon on some OS's—is provided that requires installation on the processing device such as a laptop. This service is pre-installed on the processing device. The installation is required only once on every processing device such as a laptop. The role of this is to provide a permanently running service that continuously monitors if a peripheral device according to the present invention has been offered up for connection to the processing device. When such a peripheral device is connected, the service will detect this and start the client application software residing in the mass storage area of the peripheral device.

Ex. 1001, 7:43-57. Ex. 1002, ¶¶287-290.

E. Ground 5 – The combination of Ono, Deforche, Corbett, Grimshaw, and optionally Banerjee renders obvious claims 9 and 17.

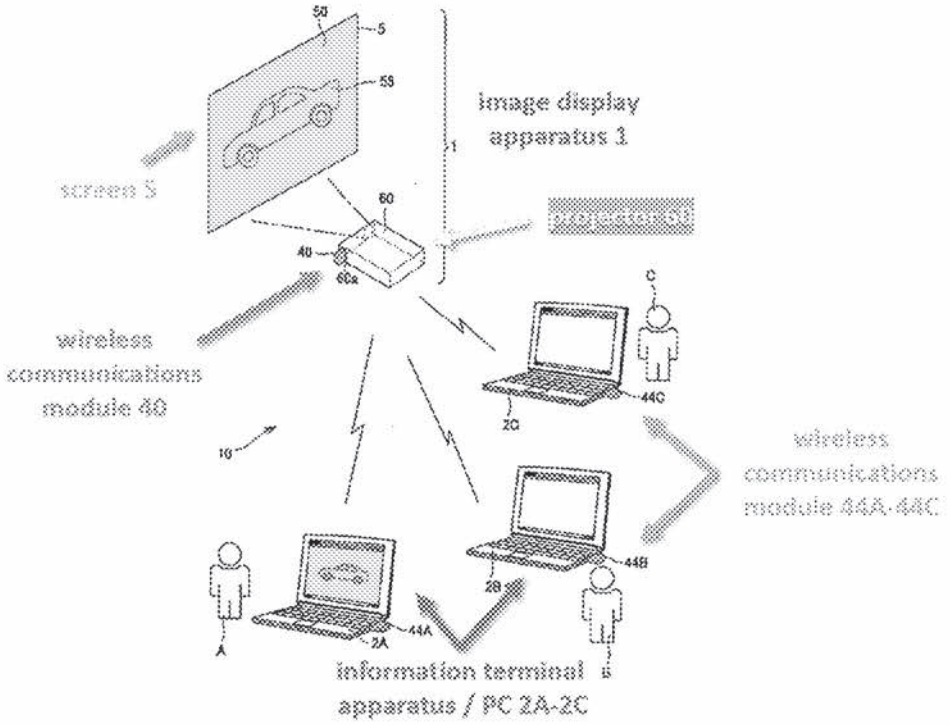
Claims 9 and 17 are essentially identical but depend from claims 8 and 16, respectively. This request applies Grimshaw to claim 16 includes Grimshaw, whereas ground 1 for claim 8 does not. Therefore, the combinations for the two claims differs slightly. Irrespective, the combination of Ono and Corbett teach the isolated limitations of claims 9 and 17, and the combinations of other references render obvious the limitations of their parent claims.

1. Rationale to Combine Ono, Deforche, Corbett, Grimshaw, and optionally Banerjee

See § VII.A.1 above regarding the combination of Ono, Deforche, and optionally Banerjee for claim 8. Ex.1002, ¶291.

See § VII.C.6 above regarding the combination of Ono, Deforche, Grimshaw, and optionally Banerjee for claim 16. Ex.1002, ¶292.

Ono discloses an electronic meeting tool in the form of an image display system. Ex. 1005, abstract, ¶2. A peripheral device (communications module 44) couples to a PC (information terminal apparatus 2) to wirelessly transfer image information to an image display apparatus 1. *Id.*, ¶36. Ex.1002, ¶293.



Ex. 1005, FIG. 1.

Ono also discloses that *an input device* (remote control 69) includes a physical actuator that can switch among PCs and display image information from the selected PC. *Id.*, ¶¶7, 144; Ex.1002, ¶294. Although Ono does not disclose that the *peripheral device* (communication module 44) *comprises* an *input device* (as recited in claim 1), it would have been obvious to a POSITA to include input device/physical actuator (providing functionality like Ono's remote controller device) with a peripheral device (like communications module 44) for the following reasons (*see* Ex. 1002, ¶¶295-298):

First, combining Ono's remote controller actuator with Ono's communications module "simply arranges old elements with each performing the same function it had been known to perform" and yields predictable results. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007). Physical actuators (like those of Ono's remote controller) were ubiquitous and commonly incorporated into electronic devices. Ex. 1002, ¶295. 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, ¶¶295-298. 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*.

Moreover, independent of this and yet further supporting it, there was a known desirability to provide a user of an electronic meeting tool with a local input device that would allow control over sharing the content of the user's computer screen to a shared display. Ex. 1002, ¶¶295-298. 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, ¶¶295-298. Thus, a POSITA would have found it obvious to provide such an input device with the peripheral device in light of this known design incentive. *KSR*, 550 U.S. at 417 ("[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.").

Second, Corbett illustrates that the placement of the input device would have been an obvious matter of design choice within the skill of the art. Ex. 1002, ¶¶295-298. 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, ¶297.

Specifically, Corbett discloses a wireless USB flash drive 100 with a transmitter 122 a transmission initiation button 134 to trigger transfer of information to an external device 150. (*See*, *e.g.*, Ex. 1007, ¶¶6, 18, 20, 22-23, 26, 28, 46, FIG. 1; Es. 1002, ¶297. Thus, Corbett describes one known design option in implementing a similar input device on a similar USB peripheral device. Ex. 1002, ¶¶295-298.

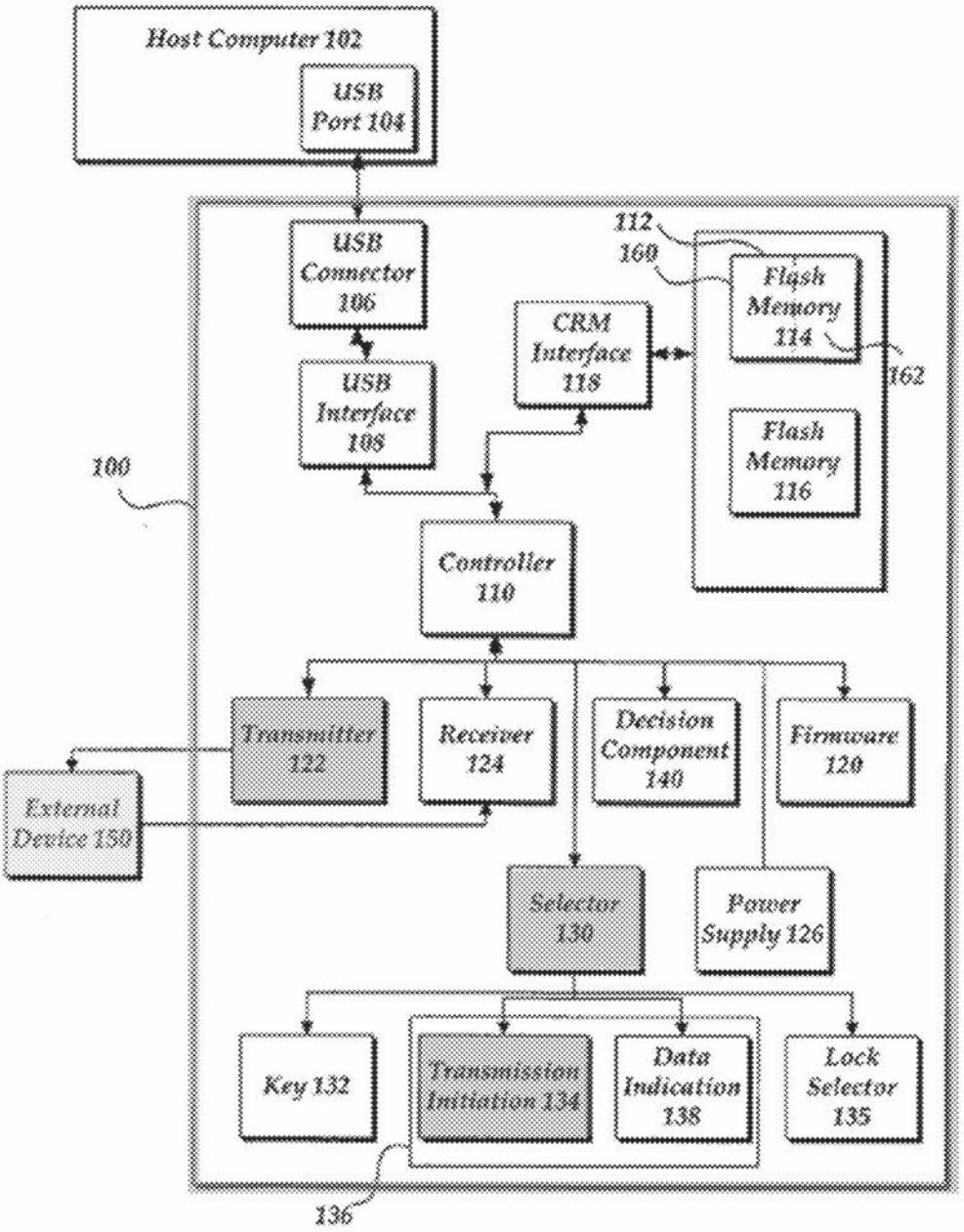


Fig. 1

Ex. 1007, FIG. 1.

Although there are other suitable locations for such an input device, these were finite in number. Corbett, for example, recognizes that a user input device could be displayed on a host computer or on the peripheral device itself. Ex. 1007, ¶¶22-23. Thus, the prior art describes three potential locations for a user input device for triggering transmission from a peripheral device: the host computer, the peripheral device itself, and a remote controller. Ex. 1002, ¶¶295-298; Ex. 1005, ¶66, Ex. 1007, ¶¶22-23. Because the art identifies a limited number of known locations for such a user input device, it would have been obvious to combine an input device and peripheral device, as claimed. *See Uber Techs., Inc. v. X One, Inc.*, 957 F.3d 1334, 1340 (Fed. Cir. 2020); *KSR*, 550 U.S. at 421. It would have been a "predictable variation" of Ono's system, using a technique that was known to a POSITA, particularly since the location of the input device solves no stated problem in the art. *KSR*, 550 U.S. at 417; *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010) (finding obviousness when "it is simply a matter of common sense" to combine known elements of the prior art to solve a known problem); *In re Kuhle,* 526 F.2d 553, 555 (C.C.P.A. 1975) (relocating electrical connection "solves no stated problem and would be an obvious matter of design choice").

1. Claim 8

a) *The method of claim 1, wherein the transferring of the data for display is to a defined network node without user entry of configuration details.*

Ono discloses *transferring of the data for display to a defined network node* (*e.g.*, projector 60) *without user entry of configuration details* (*e.g.*, "configuration information 48").

> [T]he configuration information 48 will automatically be stored in the HDD (Hard Disk Drive). Then, if the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data

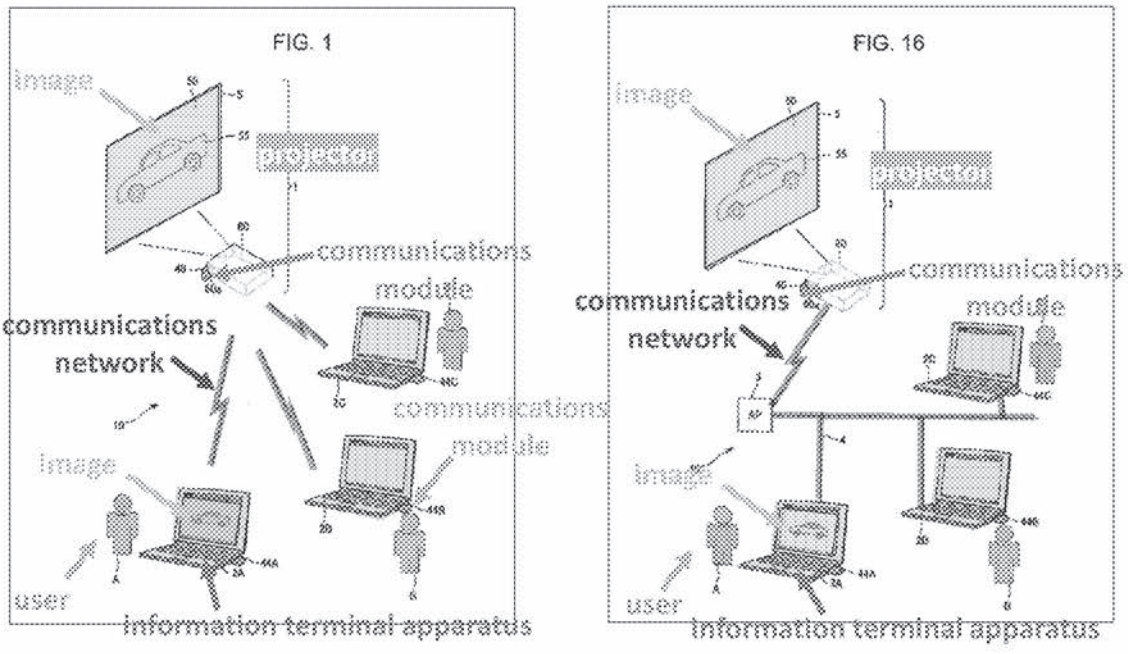
> with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network.

Ex. 1005, ¶55, *see also* ¶¶56-63; Ex. 1001, 7:24-29; Ex. 1034, ¶¶14-17 and FIGS. 3, 18; Ex. 1002, ¶299.

2. Claim 16

a) *An electronic meeting tool for communicating arbitrary media content, being data for display, from users at a meeting*

Ono discloses *an electronic meeting tool* (*e.g.*, image display system 10) *for communicating arbitrary media content, being data for display, from users at a meeting* (Ex. 1005, ¶36 ("makes up a wireless network by connecting an image display apparatus 1 and three information terminal apparatuses 2A, 2B and 2C to a wireless communications channel."), FIG. 1; *see also* FIGs. 16, 17 (similar embodiment but with access point 3)). Ono's first embodiment is equally applicable to the embodiment illustrated in Figures 16 and 17. (Ex. 1002, ¶¶304-306).

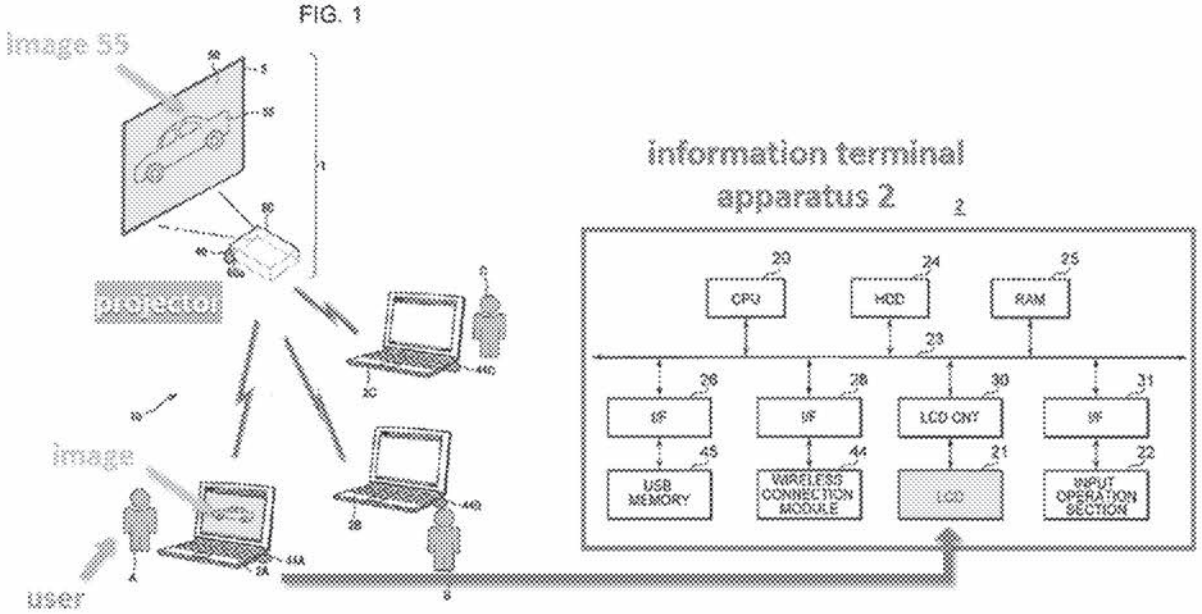


Ex. 1005, FIGs. 1, 4.

Ono's image display system enables display of an image 55 based on the image data of display 21 of the user's information terminal apparatus (*e.g.*, "data for display"). Said differently, Ono's system displays what is on a user's computer screen and, therefore, Ono's image information is thus consistent with description of "*user selected arbitrary media content*" provided by the '676 patent. Ex.1002, ¶¶306-307.

For example, when the information terminal apparatus 2A and the projector 60 are connected (step S8), "the CPU 20 of the selected information terminal apparatus 2A transmits the image information signal displayed on the liquid crystal display apparatus 21 to the wireless connection module 40 of the projector 60 from the wireless connection module 44 via the I/F 28." (Ex. 1005, ¶88; *see also*, ¶¶73, 77-89, FIGs. 7, 9). Ono further discloses that "the projector 60 receives the image information … and projects and displays the image from the information terminal apparatus 2A on the screen 5." Ex. 1005, ¶89; *see also*, FIG. 1. The same can be said for information terminal apparatus 2B and 2C, and reasonably extends to others in a meeting. *See*, *e.g.*, Ex. 1005, ¶¶36, 39; Ex.1002, ¶308.

FIG. 1

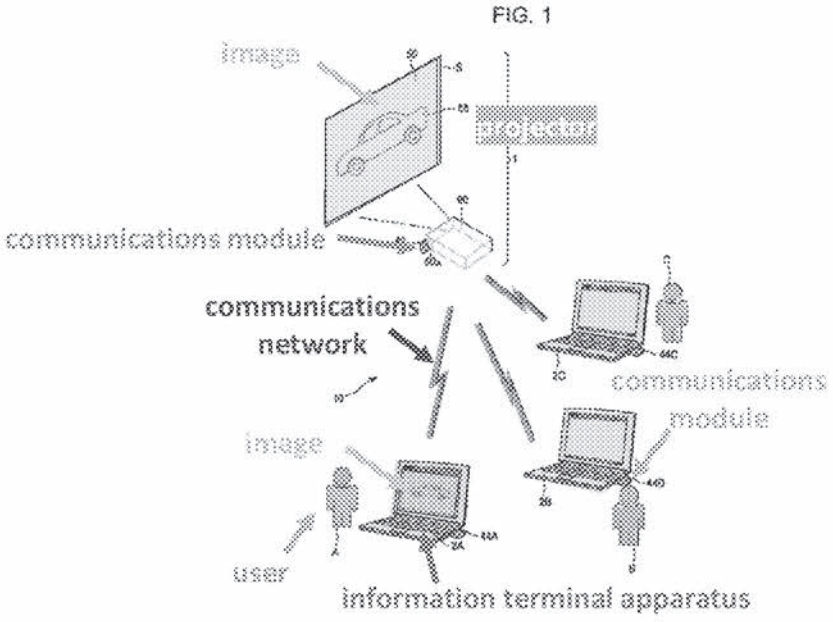


Ex. 1005, FIGs. 1, 7.

A POSITA would have understood image display system 10 to be an electronic meeting tool for communicating arbitrary media content, being data for display, from users at a meeting. (Ex 1002, ¶309).

b) ***the tool comprising a base unit of a wireless communications network, the base unit being coupled to one or more first displays***

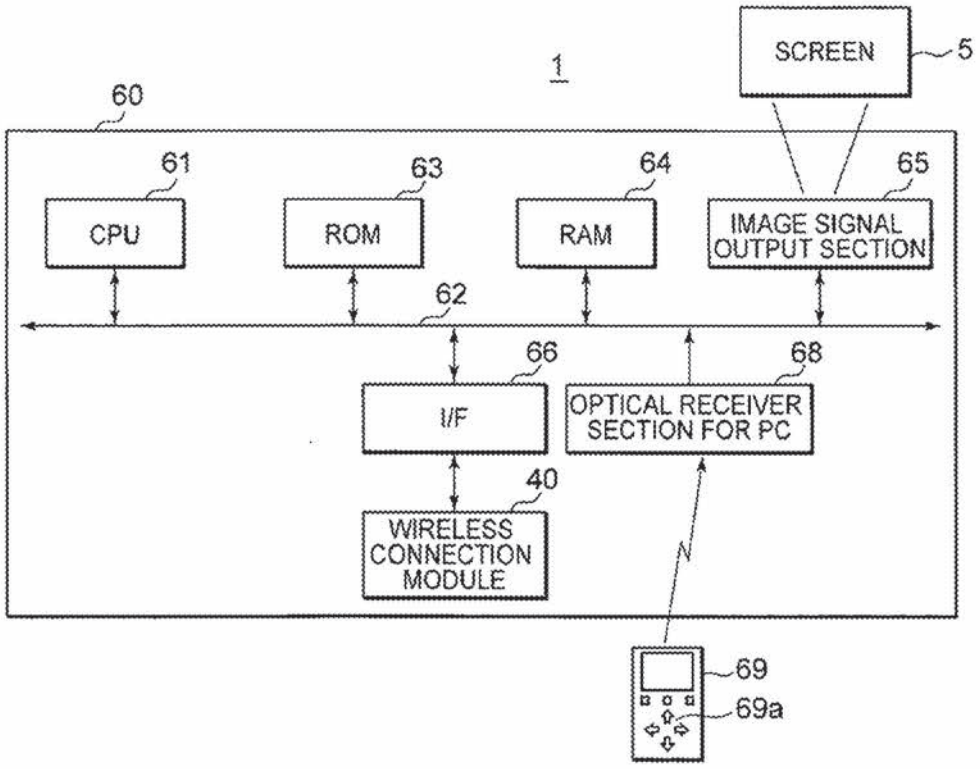
Ono discloses that image display apparatus 1 *comprises a base unit* (*e.g.*, projector 60) *of a wireless communications network … coupled to one or more first displays* (*e.g.*, screen 5). Ex. 1005, ¶¶42 ("The image display apparatus 1 is comprised of the screen 5 and the projector 60, receives … image information that is sent from the above-mentioned three information terminal apparatuses 2A, 2B and 2C via the network, and displays an image based on the image information on the screen 5"), 43, 65, 89, FIGs. 1-3, 6, 7, 9; Ex. 1002, ¶310.



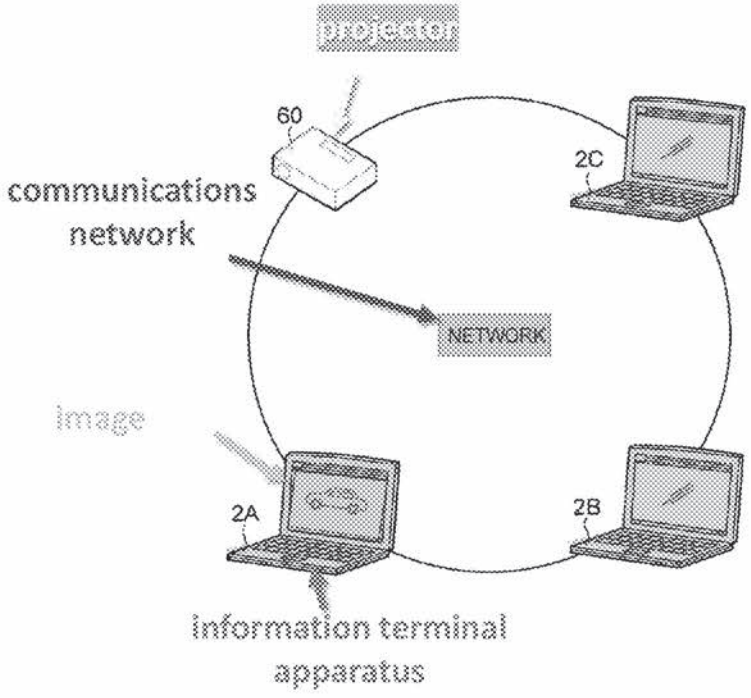
Ex. 1005, FIG. 1.

c) ***the base unit being adapted to receive user selected arbitrary media content from a processing device via the wireless communications network, and to control display of the user selected arbitrary media content on the one or more first displays***

Ono discloses the *base unit* (*e.g.*, "projector 60") *being adapted to receive user selected arbitrary media content* (*e.g.*, image information) *from the processing device* (*e.g.*, information terminal apparatus 2) *via the wireless communications network, and to control display of the user selected arbitrary media content on the one or more first displays* (*e.g.*, image data on screen 5). (Ex. 1005, ¶¶11, 37-38, 41 ("The projector 60 of the image display apparatus 1 receives, through the communications module 40, the above-mentioned encrypted image information wirelessly transmitted from the information terminal apparatus 2A via the above-mentioned wireless communications channel, and projects it onto the display screen 50 of the screen 5"), 43-48, 65-70 (explaining how projector 60 controls display), FIGs. 1-3, 6, 7, 9; *see also* § VII.C.2.b (limitation 16(a))). The control section 61 controls display of the image information (*e.g.*, "user selected arbitrary media content") on the screen 5. (Ex. 1005, ¶89; Ex. 1002, ¶311).



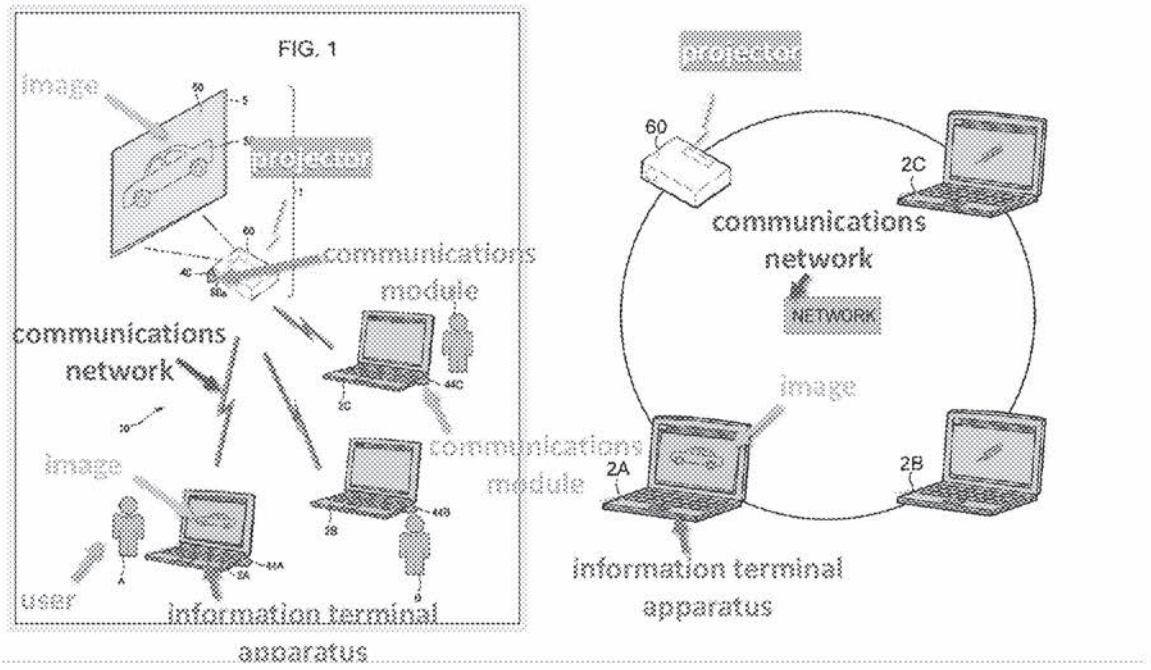
Ex. 1005, FIG. 6.



Ex. 1005, FIG. 2.

d) ***at least one peripheral device adapted to communicate the user selected arbitrary media content from the processing device to the base unit via the wireless communications network***

Ono discloses *at least one peripheral device* (*e.g.*, wireless communications module 44) *adapted to communicate the user selected arbitrary media content* (*e.g.*, image information) *from the processing device* (*e.g.*, information terminal apparatus 2) to the base unit (*e.g.*, projector 60) *via the wireless communications network*. Ex. 1005, ¶¶39, 55 ("[I]f the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, … transmission and reception of data with the projector 60 of the image display apparatus 1 that is already running will be carried out via the wireless network"), 144, FIGs. 1, 2, 16; Ex. 1002, ¶312.



Ex. 1005, FIGs. 1, 4.

e) ***a program adapted to be loaded onto the processing device and to run on an operating system of the processing device, said program***

being adapted to obtain user selected arbitrary media content from the processing device

The combination of Ono and Deforche discloses the claimed *program* in the same way it discloses the "client application" in limitation 1(h) above. *See* § VII.C.2.h; Ex.1002, ¶313.

f) ***an input device to allow the user to carry out a user action that triggers transfer of said user selected arbitrary media content from said processing device to a transmitter and to the wireless communications network, the input device being an actuator coupled to the peripheral device.***

Ono discloses the input device. *See* claim 4 (§ VII.C.3). Ono does not disclose, *the input device being an actuator coupled to the peripheral device*; however, Grimshaw does (*e.g.*, buttons 344, 354, 364, 374). (Ex. 1008, ¶¶5, 19 ("[T]he users of modules 14, 16, 18, 20 can take control of the display module 22 by respectively engaging buttons 344, 354, 364, 374, which causes switch controller 318 to pass the data signals from the selected user module on to the display module."), 20, 27-28, FIGs. 1-4; Ex. 1012, 5:8-6:17, 8:29-9:20, FIGs. 1-4; *See* § VII.C.2.m (Limitation 1(m)); Ex. 1002, ¶¶314-327). A POSITA would have understood that buttons 344, 354, 364, 374 constitute actuators coupled to the user modules 14, 16, 18, 20.

A POSITA would have appreciated the known desire to provide the user with means to control transmission of information on a wireless peripheral device. For example, Grimshaw describes user modules, each which connect to a user's laptop to a shared display and are distributed around a meeting table. (Ex. 1008, abstract, ¶¶2, 4, 19-20, 27-28, FIGs. 1-3; Ex. 1012, 1:4-7, 5:8-24, 5:25-6:17, 8:29-9:20, FIGs. 1-3. Each module includes buttons to allow the user to override the input to a display with the content currently being displayed on the screen of their own laptop. (*Id*). So where multiple meeting participants are vying for control over a shared display screen, a push of a button allows the user to transfer contents of that user's laptop screen. (*Id*).

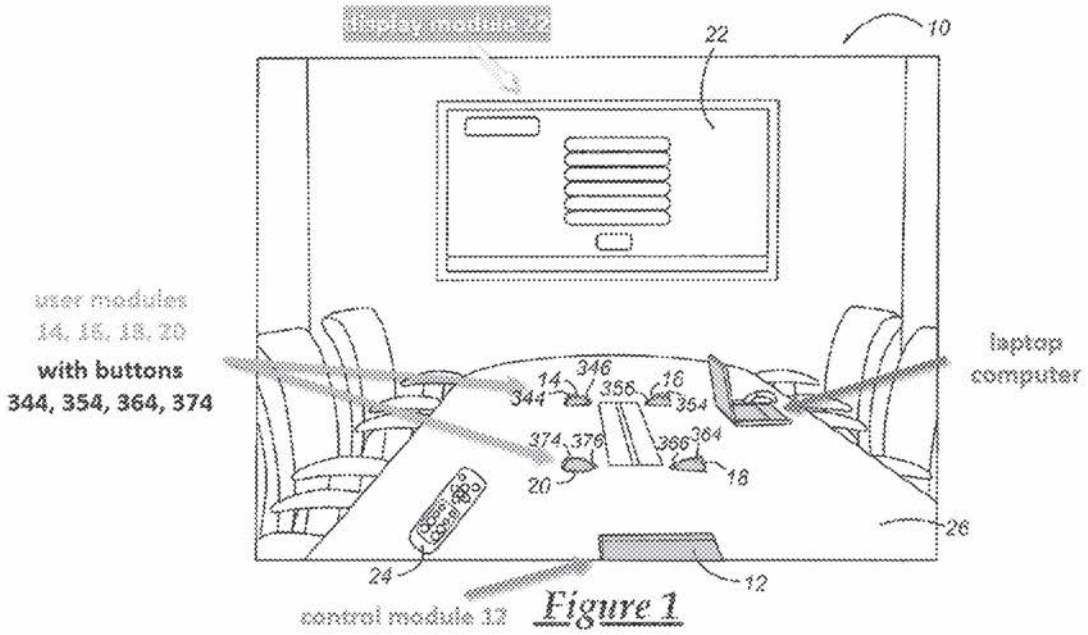


Figure 1

(Ex. 1008, FIG. 1).

g) the base unit is adapted to display said user selected arbitrary media content on the first display in accordance with a set of rules, wherein one of the rules is a forcing rule,

See, e.g., § VII.A.2.l. Ex.1002, ¶328.

h) ***whereby the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the data of any participant for display overriding or replacing any data displayed on the one or more first displays by the same or another participant of the meeting.***

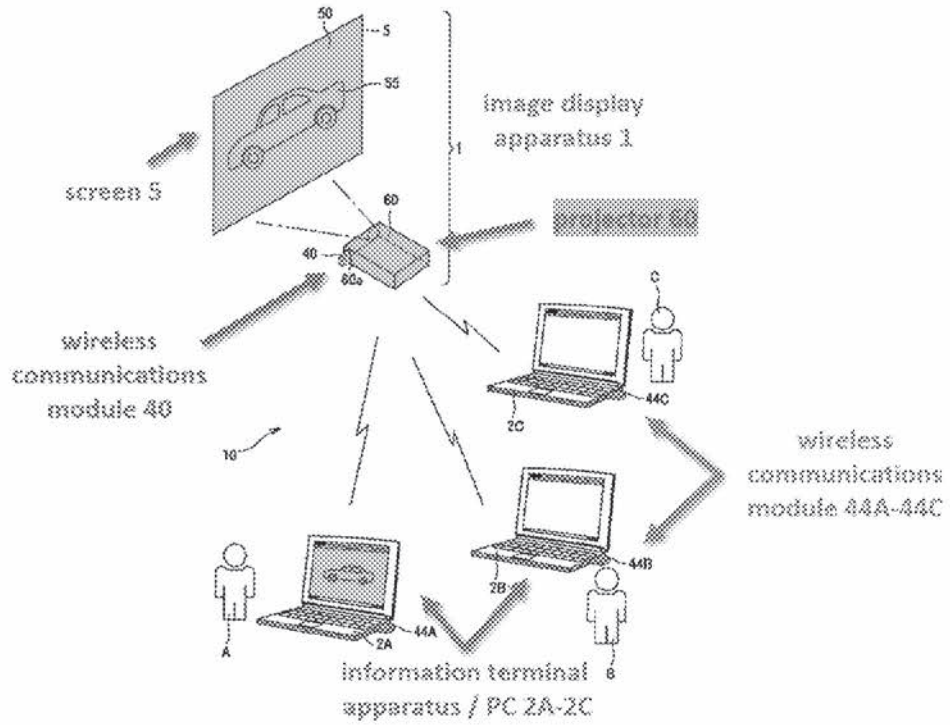
See, e.g., § VII.A.2.m. Ex.1002, ¶329.

3. Claims 9 and 17

a) ***The method of claim 8 for [OR The electronic meeting tool of claim 16 configured] use by a plurality of users in a meeting, there being client processing devices each for coupling to a peripheral device for every user in the meeting, a first user action connecting a processing device to the base node, and a second user action comprising activating an actuator located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and transmitting screen scraped data to the base***

node, the base node carrying out graphical commands sent from the processing device.

Ono discloses *a plurality of users in a meeting,* (*e.g.*, FIG. 1 illustrating users A-C) *there being client processing devices* (*e.g.*, 2A-2C) *each for coupling to a peripheral device* (*e.g.*, 44a-44c) *for every user in the meeting*. *See also* Ex. 1005, ¶82–83, 88; Ex.1002, ¶¶300-303, 330.



Ex. 1005, FIG. 1.

Ono also discloses *a first user action connecting a processing device to the base node* (*e.g.*, "the user clicks on a set-up file [and] if the user inserts the wireless connection module 44 into the USB jack (slot) on the information terminal apparatus 2A, connection configuration for the wireless network will be completed, and transmission and reception of data with the projector 60") Ex. 1005, ¶55. The *first user action* comprises clicking the set-up file and inserting the wireless connection module 44. *Id*. Ex.1002, ¶¶300-303, 330.

Ono discloses *a second user action comprising activating an actuator located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device*, *e.g.*, "transmit[ing] the image information signal … to … the projector 60" in response to pressing a key on the remote control 69. Ex. 1005, ¶82–83, 88 and FIG. 1 (illustrating transmitting image of a vehicle; and FIG. 9, "IMAGE TRANSFER" step of the "connection process."). Pressing the key results in an "image transfer." Ex. 1005, FIG. 9. Corbett further teaches that the "*actuator*" (*e.g.*, a selector 130) can be on the "*peripheral device*" (*e.g.*, the flash drive). Ex. 1007, FIG. 1, ¶23 ("transfer of data through the transmitter 122 may be initiated through selection of one or more selectors 130 of the USB flash drive."). There were also a finite number of locations to place the input devices with a reasonable expectation of success to achieve "predictable variations." *Id.*; *see also*, MPEP § 2143.I.E. Therefore, Ono in combination with Corbett renders obvious the "*input device*" limitation. Ex.1002, ¶¶300-303, 330.

The Patent Owner argued in the related IPR that "connecting to a network brings the danger of virus, malware or spyware transfer in either direction, and there is danger of copying of confidential information." Ex. 1091, 24 (citing Ex. 1001, 3:3-6). However, there is nothing in the claims of the '676 patent addressing this issue. Moreover, the claims expressly require transferring the media content "*to the base node*." The Board instituted despite this argument. Ex. 1106. Therefore, the malware issue is irrelevant. Ex.1002, ¶¶300-303, 330.

F. Ground 6 – The combination of Ono, Deforche, Ichieda, and optionally Banerjee renders obvious claim 10.

1. Rationale to combine Ono, Deforche, Ichieda, and optionally Banerjee.

See § VII.A.1 above regarding the combination of Ono, Deforche, and Banerjee. Ex.1002, ¶331.

Ono discloses an electronic meeting tool in the form of an image display system. Ex. 1005, abstract, ¶2. A USB peripheral device (communications module 44) couples to a PC (information terminal apparatus 2) to wirelessly transfer image information to an image display apparatus 1. *Id.*, ¶¶36, 54–55. Ichieda describes a similar system in which a projector 50 is connected to a personal computer 90 over a wireless LAN. Ex. 1006, ¶43, FIG. 1. To wirelessly connect, the personal computer may be connected to a phone peripheral device to capture an image of a barcode displayed by projector on a screen. *Id.*, ¶75–91, FIG. 3–4. The control section 81 is then used to route image data (displayed on the phone) for automatic display in a particular area Aa-Ad on the screen where the barcode appeared, such that the image data is automatically positioned on the screen in an intuitive manner. *Id.*, ¶¶104; Ex.1002, ¶¶332.

It would be obvious to use the automatic arrangement of images on the display from Ichieda in the system of Ono because both references address similar technical problems of how to manage and display content from multiple user devices on a shared central display in a meeting or other collaborative environment. Ex.1002, ¶333. A POSITA would also recognize the benefits and straightforward applicability of Ichieda's auto composition technique to Ono's system. Ex.1002, ¶333.

Ichieda's auto composition provides a clear usability and workflow benefit, and its implementation in Ono's system would be straightforward and predictable. Both systems use standard wireless networking and image transfer protocols, and the display apparatus in Ono (e.g.,

a projector and screen) is fully capable of rendering multiple images in divided areas, as described in Ichieda. Furthermore, there are no technical obstacles to combining the features, and a POSITA would readily recognize the advantages of doing so. Ichieda's method is not limited to a specific hardware configuration and is directly applicable to the type of wireless, multi-user environment described in Ono. Therefore, a POSITA would be motivated to make the combination of Ono and Ichieda to achieve a more intuitive, user-friendly display of images during multi-user collaboration. Ex.1002, ¶334.

2. Claim 10

a) *The method of claim 8, wherein, when the base node receives the screen scraped data, further comprising the step of providing auto composition of the screen scraped data on the first display connected to the base node.*

The '676 patent indicates:

> "Auto composition" or "auto layout" refers to the automatic nature in which multiple graphics/video sources are rendered on a central display, without user intervention and in a way that a user would intuitively expect it to happen.

Ex. 1001, 13:64-67; Ex.1002, ¶335.

Ichieda discloses "*auto composition of the screen scraped data on the first display*" by automatically assigning each new image source to the next available sub-area (Aa, Ab, Ac, Ad) on the central display as devices connect, without user intervention. Ex. 1006, p1122, FIG. 10. As each device establishes a wireless connection, the projector fills the sub-areas in order (e.g., first device to Aa, second to Ab, and so on), displaying each image in its pre-assigned area. FIG. 10 (reproduced below) visually shows this auto composition process in which the images are intuitively arranged. This layout is handled automatically and in a way users would expect, requiring no manual setup or configuration by the user. Ex.1002, ¶336.

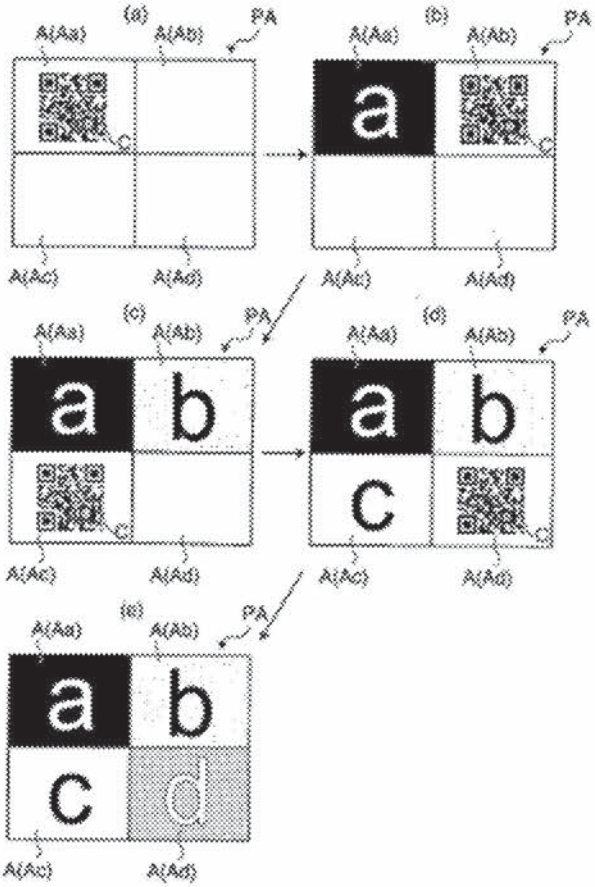


FIG. 10

Ex. 1006, FIG. 10.

G. Ground 7 – The combination of Uchida, Deforche, Grimshaw, and optionally Banerjee renders obvious claims 2–3, 6–7, 9–13, 15, and 17.

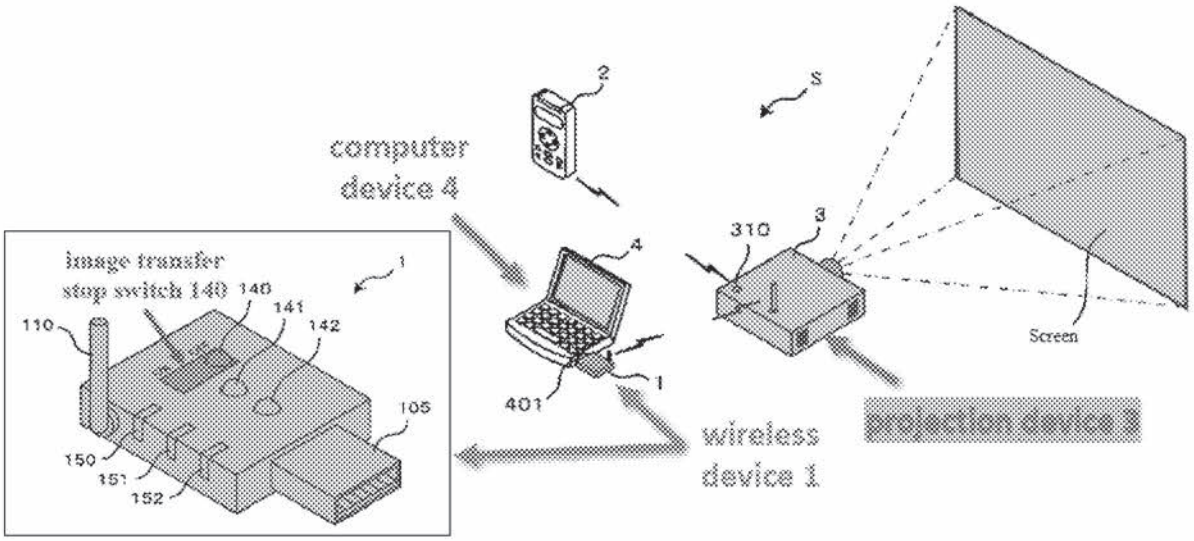
1. Rationale to Modify Uchida with Deforche, Grimshaw, and optionally Banerjee

Uchida and Deforche disclose similar systems for sending information wirelessly. Ex. 1009, Abstract; Ex. 1030, ¶¶9, 30; Ex.1002, ¶337. The computer devices used in these systems would have required an operating system, such as the ubiquitous Windows operating system as discussed by Deforche. Ex. 1030, ¶¶9, 30. Windows was well known to include standard pre-installed USB drivers for various classes of devices, including USB mass storage and human-interface devices. *Id.* Uchida described the use of drivers but does not specify that a pre-installed

generic driver is used to communicate between the wireless device 1 and computer device 4. However, Deforche does. *Id.* It would have been obvious that Uchida would or at least could have used similar device well-known pre-installed generic Window's drivers, as disclosed by Deforche to enable Uchida's wireless devices. The combination of Uchida and Deforche would have been nothing more than a predictable way of implementing Uchida's system.

Furthermore, even if Uchida is believed to disclose the use of a special purpose driver, a POSITA would have been motivated to swap the special purpose driver for the known generic drivers of Deforche that can provide the same functionality (*e.g.*, setting up communication between a USB device and computer). Ex. 1030, abstract ("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.1002, ¶338. Such a modification would have yielded a predictable result based on the general ubiquity and predictability of USB driver technology and would have been desirable because a separate driver installation would not be needed to allow communication between Uchida's wireless device 1 and computer device 4. Ex.1002, ¶338.

Uchida discloses a method for wireless connecting an image projection device to a computer device. Ex. 1009, Abstract; Ex. 1002, ¶¶161–168; Ex.1002, ¶339. Wireless device 1 transmits image data from the computer device 4 to the image projection device 3 for display of the image data on a screen. *Id.* An image transfer stop switch 140 may halt or allow image transfer. Ex. 1009, ¶¶70–72.



Ex. 1009, FIG. 1.

Uchida contemplates multiple computers and wireless devices connected to the image projection device. Ex. 1009, ¶¶3–12, 36–37, 58, 112, 122, 186; Ex. 1002, ¶340. Grimshaw describes a similar content sharing and conferencing technology which addresses the scenario in which multiple users are vying for control over the display to project images from their individual computers and provides suitable solutions. Ex. 1008, ¶¶19–20 (Ex. 1012, 5:8–6:17); Ex. 1002, ¶340.

Grimshaw discloses a communication system that provides presentation and conferencing functions like those of Uchida. Ex. 1008, ¶¶2–6, 12; Ex. 1012, 1:4–2:6. Grimshaw's system includes individual user modules 14, 16, 18, 20 that each couple to a laptop and allow the laptops to send content to display module 22. Ex. 1008, ¶12 (Ex. 1012, 1:23–2:6); Ex. 1002, ¶341.

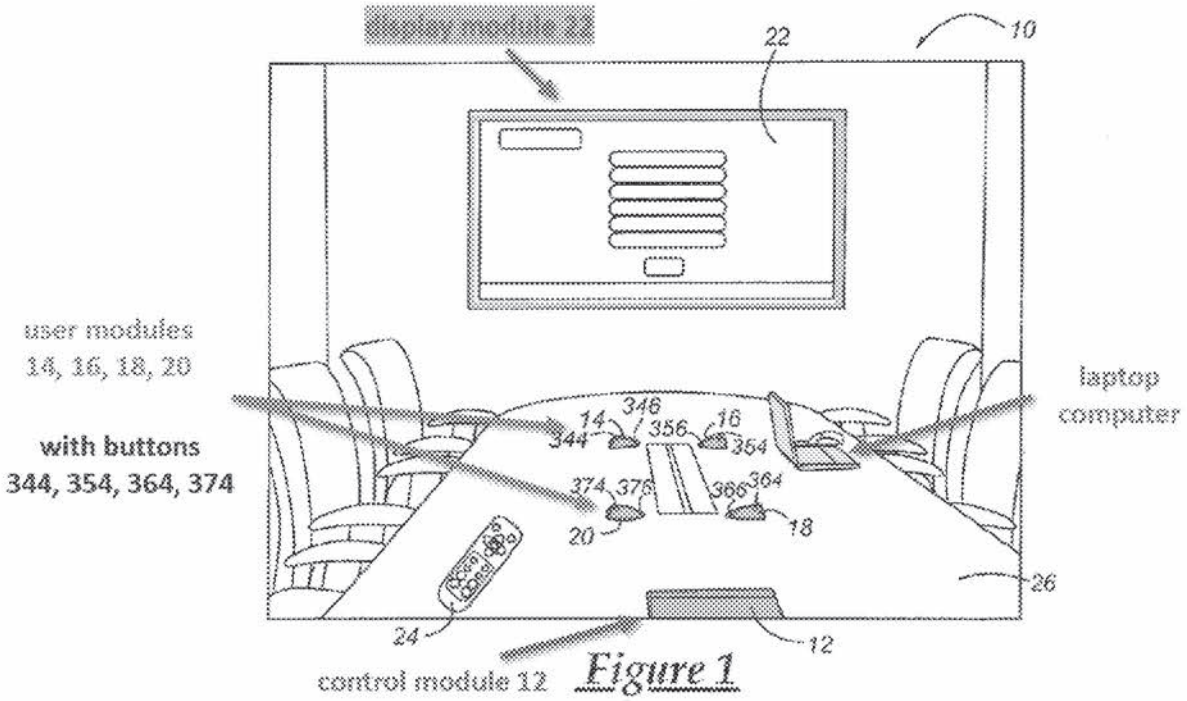


Figure 1

Ex. 1008, FIG. 1; Ex. 1012, FIGS. 1–3.

Grimshaw discloses user modules 14, 16, 18, 20 can connect to each user's laptop around the table, for example, and—with the push of a button and without waiting for agreement from other meeting participant—allow the user to take control of a common display module 22 and display the contents of the user's laptop screen. *See*, *e.g.*, Ex. 1008, ¶¶4, 19 (Ex. 1012, 5:8–24), 20 Ex. 1012, 5:25–6:17. For instance, Grimshaw explains the case where separate laptop computers are connected to user modules and are vying for control of the display module 22, stating:

> a user may engage or push a button 344, 354, 364, 374 on their user module in order to take control of display module 22 (e.g., display module 22 could show whatever is currently being displayed on the screen of the laptop computer connected to the selected user module).

Ex. 1008, ¶¶19–20; Ex. 1012, 5:8–6:17; Ex.1002, ¶342.

Thus, Grimshaw recognizes the desire for attendees at a meeting to have the ability to forcibly take control of the presentation, such that their content is presented on the shared display

without agreement from other participants. 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, ¶343.

Guided by these teachings of Grimshaw, a POSITA would have found it obvious and would have been motivated to implement a wireless device (like that of Uchida) with Grimshaw's known presentation forcing technique where data is displayed based on the action (*e.g.*, pushing a button) of only one participant involved in the meeting, without requiring the agreement of another participant, for new data to override or replace any data previously displayed, as in claim 1. Ex. 1002, ¶344. Such a modification would have yielded a predictable result and would have been desirable to address the scenario where a user wishes to take control of a shared display to present image data from their computer (*i.e.*, share their screen with the group) without waiting for approval or some action from other users. *Id.*

Uchida's wireless device 1 already provides much of this functionality. Thus, any modification to Uchida's wireless device would have been relatively minor and straightforward. Ex. 1002, ¶345. The forced takeover functionality described by Grimshaw could have been implemented according to known methods. *Id.* Therefore, a POSITA would have had a reasonable expectation of success in achieving the claimed combination given the relatively simple modification to a wireless device like that of Uchida. *Id.*

Uchida's wireless device 1 includes a base with a housing holding components of the wireless device 1 and a USB connector 105. Ex. 1009, ¶¶39-42, FIG. 3. Although the wireless device 1 is not illustrated having a flexible cable, it would have been a routine design decision to include such a cable (*e.g.*, using a USB extension cable). Banerjee discloses a plug-and-play device 236 that is like Uchida's wireless device 1 but also includes a cable segment 268 between the base or electronic housing of the plug-and-play device 236 and the device's connector. Ex. 1021, ¶¶39-

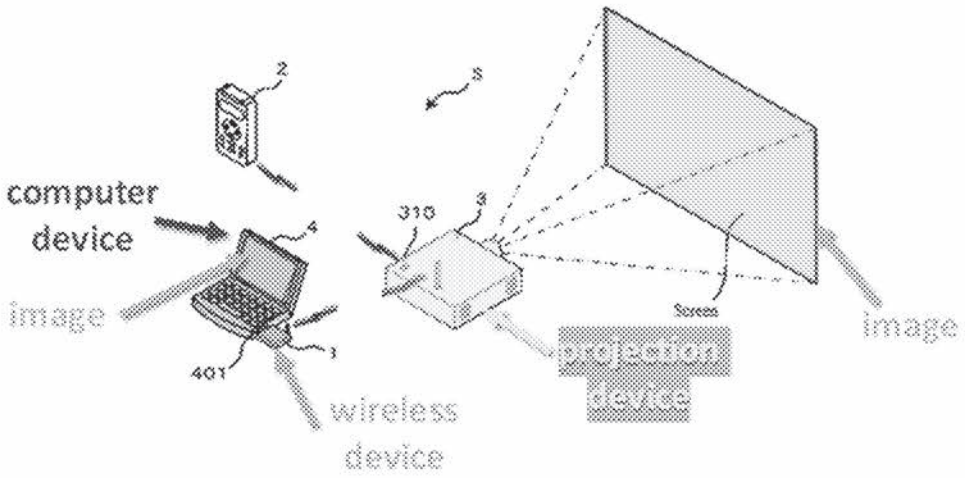
42, FIG. 5. It would have been a "predictable variation" of Uchida's system, using a technique that was known to a POSITA (*e.g.*, from Banerjee), particularly since the absence of the flexible cable from Uchida solves no stated problem in the art. Ex.1002, ¶346. *KSR*, 550 U.S. at 417; *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010) (finding obviousness when "it is simply a matter of common sense" to combine known elements of the prior art to solve a known problem); *In re Kuhle,* 526 F.2d 553, 555 (C.C.P.A. 1975) (relocating electrical connection "solves no stated problem and would be an obvious matter of design choice").

2. Claim 1

a) *A method for connecting one or more processing devices … to a wireless communications network having a base node with one or more first displays*

To the extent limiting, Uchida discloses a *method for connecting one or more processing devices* (*e.g.*, computer device 4) *to a wireless communications network* (*e.g.*, a wireless LAN (Local Area Network)) *having a base node* (*e.g.*, image projection device 3) wit*h one or more first displays* (*e.g.*, a screen).[3] Ex. 1009, ¶¶39-42 (describing image projection system S), 43-59 (procedure for setting up wireless communication in image projection system S), 153-158, 166, 176, FIGs. 1-3, 14, 17, 18; Ex.1002, ¶¶347-348.

[3] Structure identified corresponding to the claim elements is exemplary only. For example, one or more components within image projection device 3 could alternatively be identified as a "base node" with a "first display."



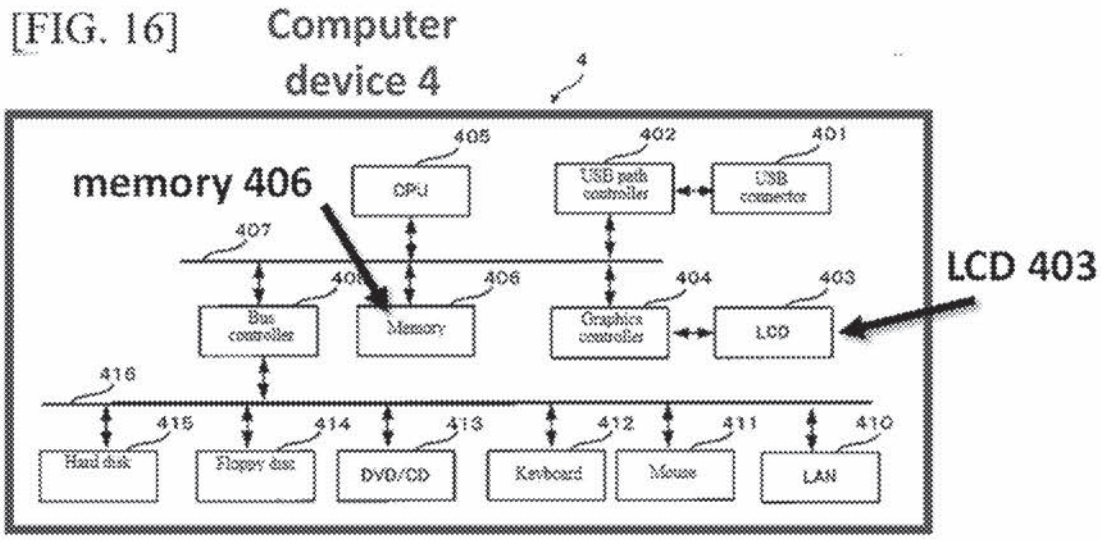
Ex. 1009, FIG. 1.

b) ***each processing device being a user device of one participant in a meeting with a plurality of participants***

To the extent limiting, Uchida discloses each processing device being a user device (*e.g.*, computer device 4 is described as a personal computer). A laptop computer *user device* is also illustrated in FIG. 1. Ex. 1009, ¶39, FIG. 1. Further, a POSITA would have readily understood that personal computers are capable of use by *one participant in a meeting with a plurality of participants*. *See* Ex. 1009, ¶¶3, 12 (discussing "when an image projection device is shared among multiple groups"), 36, 37, 58, 112, 186; Ex.1002, ¶349.)

c) ***the one or more processing devices each having a memory, a second display and an operating system with at least one pre-installed generic driver providing a generic communications protocol for communication between the processing device and a class of peripheral devices***

Uchida discloses *the one or more processing devices* (*e.g.*, computer device 4) *each having a memory* (memory 406), *a second display* (LCD 403) *and an operating system* (OS). Ex. 1009, ¶¶148-152 ("The memory 406 also stores an operating system (OS) program."), FIG. 16 (below); Ex.1002, ¶350.



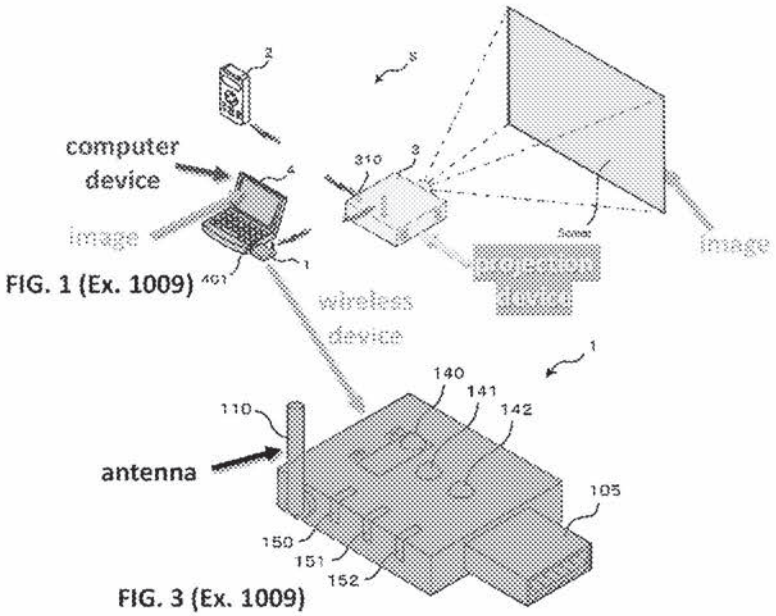
Ex. 1009 Uchida, FIG. 16.

A POSITA would have understood that the most common operating systems included *at least one pre-installed generic driver providing a generic communications protocol for communication between the processing device and a class of peripheral devices.* For example, common operating systems included standard drivers to communicate with various peripheral devices. While the drivers could vary depending on the operating system and change over time, Uchida discloses that computer device 4 was able to recognize wireless device 1 as a CD-ROM when connected—indicating that the operating system of computer device 4 included a standard USB mass storage driver which was able to communicate with CD-ROMs using a corresponding USB protocol. Ex. 1009, ¶¶78, 136; Ex. 1021, ¶¶39-42; Ex. 1058, ¶¶125 ("The USB mass storage driver 202 is software to control mass storages such as a hard disk drive, CD-ROM, DVD-ROM, CD-R, DVD-R, USB memory, and the like."), 132 ("Microsoft Windows(R) operating system 101 supports a USB device of mass storage class on a standard basis."); Ex.1002, ¶351; *see also* the discussion regarding claim 1 in Ground 1 (§ VII.A). Uchida's driver could also be a pre-installed generic driver because those were well known and disclosed by Deforche Ex. 1030, ¶¶9-10.

Thus, a POSITA would have understood Uchida to disclose a computer device 4 including an operating system with mass storage device driver (*e.g.*, "*pre-installed generic driver*") which included the use of a corresponding protocol (e.g., a "*generic communications protocol*") for communication between a class of peripheral devices, such as mass storage devices. Ex.1002, ¶352.

d) *the method comprising the following steps for each processing device: coupling a peripheral device to the processing device*

Uchida discloses *coupling* a peripheral device (*e.g.*, wireless device 1) *to the processing device* (*e.g.*, computer device 4). Ex. 1009, ¶¶39 ("The computer device 4 connects the USB connector 105 (see FIG. 3) described below in the wireless device 1, so that the wireless device 1 functions as a wireless unit and transmits image data to the image projection device 3 via the wireless device 1."), 47-48 ("[T]he USB connector 105 of the wireless device 1 is connected to the USB connector 401 of the computer device 4…."), 66 ("The USB connector 105 is a general purpose USB connector and can be connected to the USB connectors 201, 401 of the remote control device 2 and the computer device 4."), FIGs. 1-3; Ex.1002, ¶353.



Ex. 1009, FIGs. 1 and 3.

e) *the peripheral device having a wireless transceiver*

Uchida discloses *the peripheral device* (*e.g.*, wireless device 1) *having a wireless transceiver* (*e.g.*, wireless communication unit 107). Ex. 1009, ¶¶53, 62, 68 ("The wireless communication unit 107 has an antenna 110, an RF unit 111, and a baseband unit 112, and is capable of transmitting and receiving data based on the wireless LAN standard."), 176, FIGs. 3, 5; Ex.1002, ¶354.

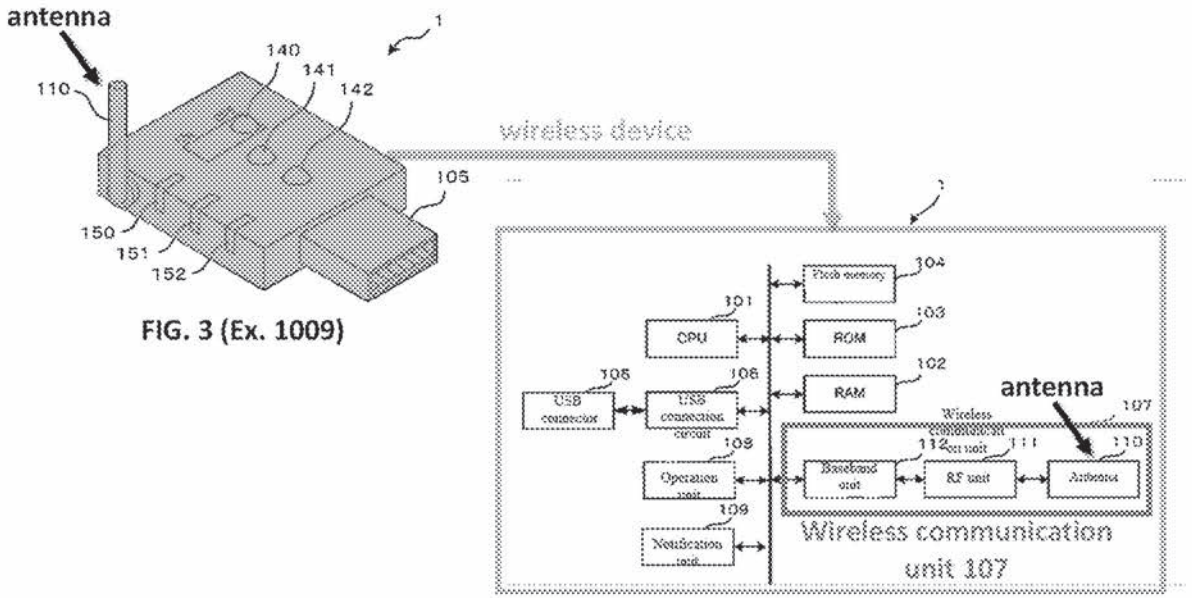


FIG. 3 (Ex. 1009)

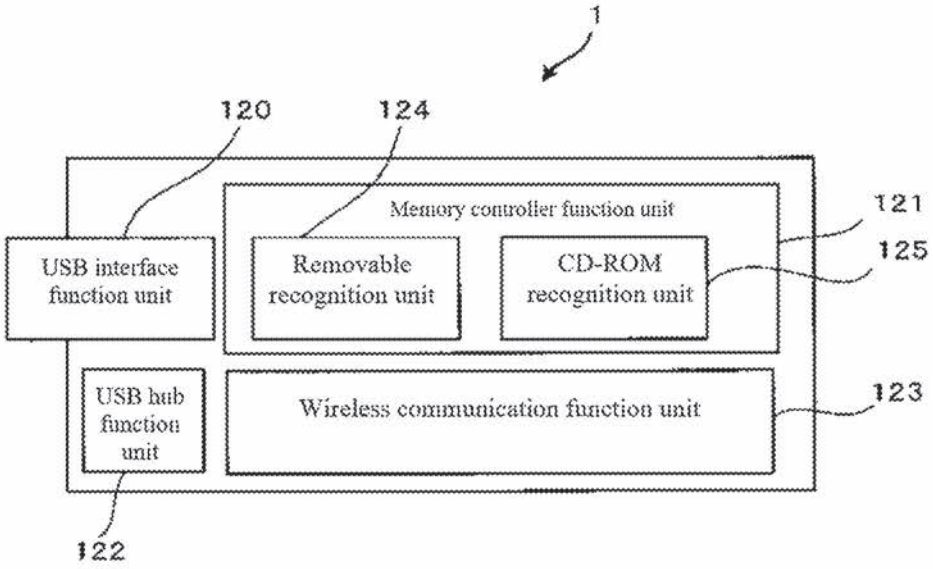
FIG. 5 (Ex. 1009)

Ex. 1009, FIGs. 3 and 5.

f) *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*

Uchida discloses *setting up, by means of a pre-installed generic driver* (*e.g.*, the USB mass storage driver) *of the operating system, a means of communication* (*e.g.*, using a USB protocol and a USB interface) *between the peripheral device* (*e.g.*, wireless device 1) *and the processing device* (computer device 4). Ex. 1009, ¶¶39, 48, 66, 76-79, 150, 163-165, FIGs. 5-7, 17, 18; Ex.1002,

¶¶355-357. When wireless device 1 is connected to the computer device 4, communication is set up between the USB connector 401 of the computer device 4 and the USB connector 105 of the wireless device 1. Ex. 1009, ¶39, 48, 66, 76-79, 150, 163-165. Uchida explains the following process then occurs: "[a]s shown in FIG. 17, the CPU 405 of the computer device 4 determines whether or not the wireless device 1 is connected (step S300)." Ex. 1009, ¶154. "To determine whether or not wireless device 1 is connected, it is determined whether or not a USB device is connected to USB connector 401, and when a USB device is connected, it is further determined whether this USB device has specific identification information." *Id.* "In this process, if it is determined that wireless device 1 has been inserted (step S300: YES), the CPU 405 starts the auto-run operation process (step S301)," which "corresponds to steps S320 to S327 in FIG. 18. Ex. 1009, ¶155. "This auto-run operation works by having the CPU 405 recognize the wireless device 1 as a CD-ROM when the wireless device 1 is connected, using the function of the CD-ROM recognition unit 125 of the wireless device 1, and automatically reading the information of the wireless device 1." Ex. 1009, ¶163. Communication through USB interface function unit 120 (which corresponds to the USB connector 105 and the USB connection circuit 106 in FIG. 5) is "based on the USB standard." Ex. 1009, ¶77. Based on this disclosure, a POSITA would have understood that a USB mass storage device driver (already installed with the operating system of computer device 4) recognizes wireless device 1 as a CD-ROM device and is thus able to set up communication via a corresponding USB protocol (which is required by the USB standard).



Ex. 1009, FIG. 6.

Uchida's use of a "*pre-installed generic driver*" is also evidenced by Deforche. Deforche recognizes that "[u]sually, a user needs to install proprietary drivers before he/she can use a USB network device." Ex. 1030, ¶30. Deforche, however, proposes using USB class drivers supported without any extra installation in all [operating systems (OS)." *Id.* In particular, Deforche proposes using a "pre-installed generic driver of an operating system installed on the computer device [] for setting up a modem/host communication interface by means of which the wireless modem device and the computer device can communicate with each other." Ex. 1030, ¶9. According to Deforche, examples of such drivers includes a "human interface driver (HID, which has predetermined software components configured for driving a human interface device such as a mouse, keyboard or other" and "a mass storage device (MSD) driver, which has predetermined software components configured for driving mass storage devices such as USB memory sticks, external hard drives, or more generally readable and writeable computer peripheral memory devices." Ex. 1030, ¶10. Deforche explains that a generic driver can be used to set up a communication interface using a generic driver and by using a generic communication protocol. Ex. 1030, ¶11. For example,

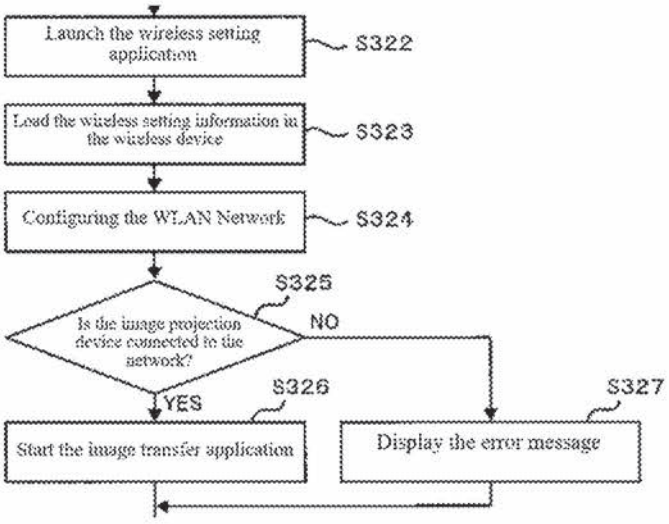
Deforche describes a USB modem may present itself as a "MSD+HID generic device," including presenting itself as a USB mass storage device (MSD) with a CD-ROM. Ex. 1030, ¶34; *see also id.*, ¶¶40-41. Thus, when Uchida describes that the operating system recognizes the wireless device as a CD-ROM, a POSITA would have understood that the operating system of computer device 4 is setting up communication with the wireless device using a mass storage driver.

Further, Deforche's techniques (to the extent it varied from those of Uchida) could also have been used to set up communication with a wireless modem device, like Uchida's wireless device 1. Deforche discloses "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, ¶¶9-11, 17-18, 31. As discussed in greater detail below § VII.B.2.h, a POSITA also would have been motivated to implement these teachings from Deforche in setting up wireless communication through a peripheral device using a pre-install generic driver. Deforche explains that this "has the advantage the user can use the wireless modem device on a computer device on which he has no administrative rights, i.e., a computer device on which … he cannot install a specific driver for the wireless modem device." Ex. 1030, ¶9. A POSITA would have had a reasonable expectation of success in implementing such a solution given the guidance of Deforche and the general ubiquity and predictability of the technology. Ex.1002, ¶¶355-357.

g) *coupling the processing device to the wireless communications network via the peripheral device*

Uchida discloses *coupling the processing device* (*e.g.*, computer device 4) *to the wireless communications network via the peripheral device* (*e.g.*, wireless device 1). Ex. 1009, ¶¶40-41, 65, 68, 90, 165-167, FIGs. 8, 17-18; Ex.1002, ¶¶358-363. Specifically, in connection with the process of Figure 18, Uchida discloses that "CPU 405 launches a wireless setting application (step

S322) and reads the wireless setting information stored in the wireless device 1 via the USB connector 401 (step S323)." Ex. 1009, ¶165. "The CPU 405 then configures the WLAN (Wireless LAN) network by executing the wireless configuration application (step S324). Ex. 1009, ¶165. "CPU 405 transmits the wireless setting information to the wireless device 1 via the USB connector 401, and the wireless device 1 configures the WLAN network according to this wireless setting information." Ex. 1009, ¶166. "When the processing of step S324 is completed, the CPU 405 determines whether wireless communication with the image projection device 3 is established via the wireless device 1." Ex. 1009, ¶167. In this way, computer device 4 couples to the wireless LAN via wireless device 1.



Ex. 1009, FIG. 18 (excerpted).

h) ***running a client application stored on the peripheral device to obtain screen scraped data***

Uchida discloses *running a client application* (*e.g.*, an image transfer application program) *stored on the peripheral device* (*e.g.*, wireless device 1) *to obtain screen scraped data* (*e.g.*, display image data). Ex. 1009, ¶¶20, 48 ("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 … an image transfer application program (hereinafter abbreviated as 'image transfer application')

stored in the program storage unit of the wireless device 1."), 78, 81, 167 ("[I]f it is determined that a network connection with the image projection device 3 has been established (step S325: YES), the CPU 405 launches an image transfer application (step S326)."), 52, 148, 158, 169, claim 8, FIGs. 6-7, 18.

Uchida indicates that the image data corresponds to "the screen displayed on the LCD 403, which is the display unit of the computer device 4." Ex. 1009, ¶¶158; *see also id.*, ¶3. While a POSITA would have recognized from Uchida's disclosures that the content of the transmitted image data is "screen scraped data," a POSITA looking to implement an image projection system like Uchida would have considered and utilized well-known screen scraping algorithms. Indeed, the '676 patent acknowledges that screen scraping was known in the art (Ex. 1001, 13:59-62) and could have been predictably implemented in an image display system like that of Uchida using known techniques, for instance, as described in Slobodin, which is directed to wireless transmission of screen scraped data to a projector (*see*, *e.g.*, Ex. 1033, ¶¶11-12).

Further, while Uchida's image transfer application is loaded and installed onto computer device 4, an alternative design choice would have been to simply load the application without requiring installation on the computer device. Deforche, for example, describes running an application as a portable application from a peripheral device that does not require installation. Ex. 1030, ¶¶14-16, 28-30. Deforche explains that this has the advantage ease of use and "Zero Footprint," i.e., avoiding modification to settings in the kernel protocol stack or in the operating system and in general any traces on the computer device so that if the wireless device is disconnected leaving the computer as if the wireless device had never been used on the computer. *Id.*

Therefore, given Deforche's teachings, a POSITA would have been motivated to implement a technique like Deforche to run a client application stored on a peripheral device (like the wireless device of Uchida) to obtain screen scraped data for advantages described by Deforche. A POSITA would have had a reasonable expectation of success in implementing such a solution given the guidance of Deforche and the general ubiquity and predictability of the technology. Ex.1002, ¶¶358-363.

i) ***routing the screen scraped data between the processing device and the wireless communications network via the means for communication for display on the one or more first displays of the base node***

Uchida discloses *routing the screen scraped data* (*e.g.*, display image data) *between the processing device* (*e.g.*, the computer device 4) and the wireless communications network via means for communication (*e.g.*, the communication provided by wireless device 1, and hence via USB interface function unit 120/USB connection 105 and wireless communication unit 107) *for display on the one or more first displays of the base node* (*e.g.*, the image projections screen). Ex.1009, ¶¶158; Ex.1002, ¶¶364. Specifically, Uchida explains that the image data corresponds to "the screen displayed on the LCD 403, which is the display unit of the computer device 4." Ex. 1009, ¶¶158. "CPU 405 transmits display image data to the wireless device 1 via the USB connector 401, which then transmits the data from the wireless device 1 to the image projection device 3 via wireless communication." *Id.* "When the image projection device 3 receives the display image data transmitted in this manner, it projects an image based on the display image data onto a screen." *Id.*

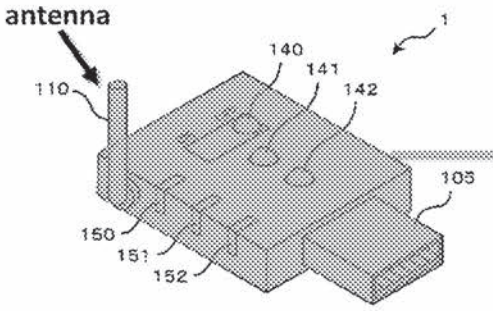


FIG. 3 (Ex. 1009)

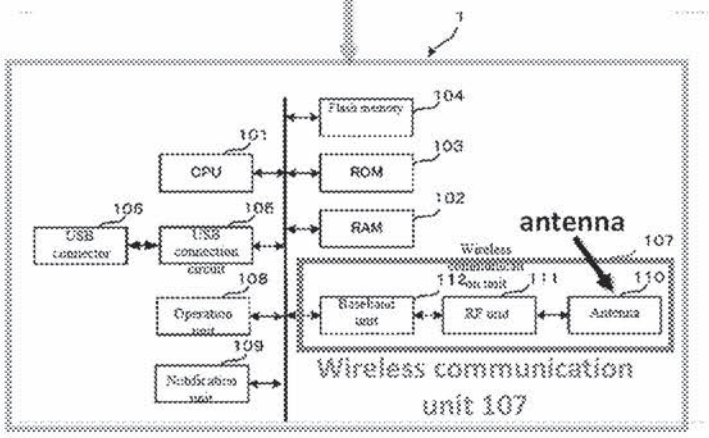


FIG. 5 (Ex. 1009)

Ex. 1009, FIGs. 3, 5.

j) ***wherein the generic communication protocol is used for transferring the screen scraped data for display between the processing device and the peripheral device***

Uchida discloses *the generic communication protocol* (*e.g.*, the protocol compliant with USB standards) *is used for transferring the screen scraped data* (*e.g.*, image data) *for display between the processing device* (*e.g.*, computer device 4) *and the peripheral device* (*e.g.*, wireless device 1). Ex. 1009, ¶¶77, 163; Ex. 1030, ¶¶9, 11, Abstract; Ex.1002, ¶¶365-366. Specifically, Uchida explains that communication through USB interface function unit 120 (which corresponds to the USB connector 105 and the USB connection circuit 106 in FIG. 5) is "based on the USB standard," which a POSITA would have understood to include the use of standard communication protocol applicable to a class of devices, such as a CD-ROM (which is how the wireless device 1 presents itself to the computer device 4). *Id.*

Further, the combination of Uchida and Deforche described above also suggests the use of a generic communications protocol in implementing Deforche's techniques. For example, Deforche discloses that "the wireless modem device can communicate with the computer device by using the generic communication protocol provided by the generic driver." Ex. 1030, ¶11, *see also id.*, Abstract, ¶9. For the same reasons discussed regarding the Uchida-Deforche combination, a POSITA would have been motivated to implement the use of a generic communication protocol as provided by a pre-installed generic driver as was conventionally employed. Ex.1002, ¶¶365-366.

k) *obtaining electronic access to the one or more first displays for display of the screen scraped data*

Uchida discloses *obtaining electronic access to the one or more first displays* (*e.g.*, image projection device 3 and screen) *for display of the screen scraped data* (*e.g.*, image data). Ex. 1009, ¶¶48-52; Ex.1002, ¶367.

> When the processing of step S324 is completed, the CPU 405 determines whether wireless communication with the image projection device 3 is established via the wireless device 1, in other words, whether a network connection with the image projection device 3 is established (step S325). In this process, if it is determined that a network connection with the image projection device 3 has been established (step S325: YES), the CPU 405 launches an image transfer application (step S326).

Id., ¶176

l) *displaying the screen scraped data on the one or more first displays in accordance with a set of rules*

Uchida discloses displaying the screen scraped data (*e.g.*, image data) o*n the one or more first displays* (*e.g.*, screen of image projection device 3). Ex. 1009, ¶¶52 ("[A]s shown in FIG. 2(c), image data is sent from the computer device 4 to the image projection device 3 via the wireless device 1 by executing an image transfer application on the computer device 4, and the image projection device 3 projects an image based on the image data onto a screen."), 176, FIG. 1, 17,

18.; Ex.1002, ¶368 Uchida also describes several different rules regarding display. *See*, *e.g.*, Ex. 1009, ¶¶70-71, 136-146; Ex.1002, ¶368.

m) ***one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting***

Grimshaw discloses *one of the rules being a forcing rule, wherein the forcing rule is that display on the one or more first displays of new screen scraped data is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting*. Ex.1002, ¶¶369-374. For example, Grimshaw is directed to a communication system that allows users in a meeting to share media content and other conferencing functions. Ex. 1008, ¶2; Ex. 1012, 1:4-7; *see also* § V.C (Grimshaw Summary). Grimshaw, like the '676 patent, addresses the ability of the users of the system to control what is displayed on a shared display module. *See* Ex. 1008, ¶¶19-20; Ex. 1012,5:8-6:17; Ex. 1001, 6:60-7:3. Thus, Grimshaw is from the same field as the '676 patent and addresses a similar problem.

Grimshaw describes the following scenario in a meeting room context:

> consider the case where separate laptop computers are connected to user modules 14-20 and are vying for control of the display module 22; that is, each of the connected computers is outputting data signals through data connections 342, 352, 362, 372 for presentation on display module 22. The display module 22 may not simultaneously display the information from all four computers/user modules.

Ex. 1008, ¶19.

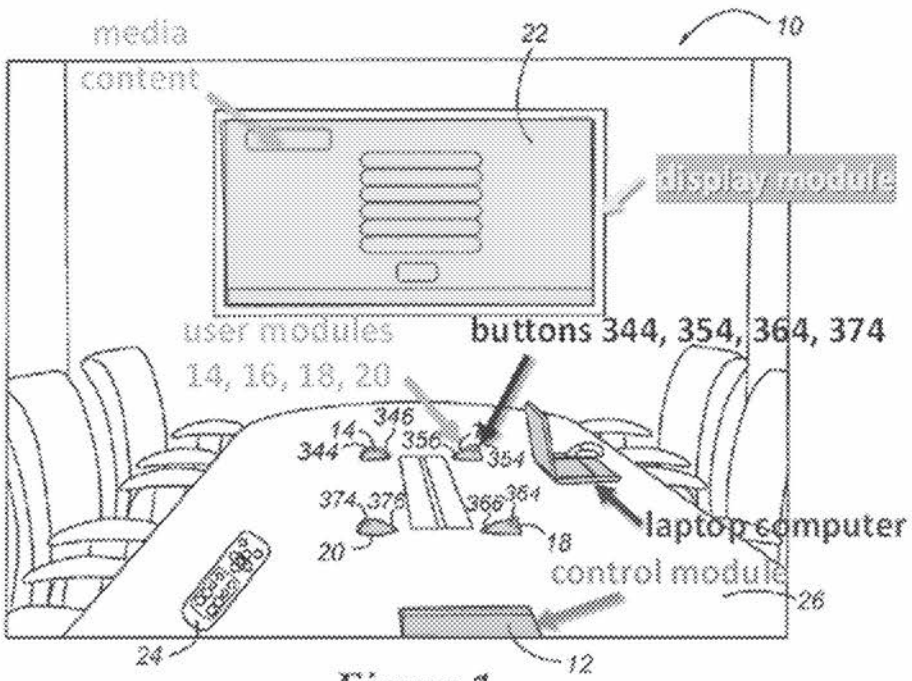


Figure 1

Ex. 1008, FIG. 1; Ex. 1012, FIGS. 1–3.

A POSITA would have understood this problem and sought out known design options and solutions. *See*, *e.g.*, § VII.C.1. (discussing similar problems and solutions); *see additionally*, Ex. 1013, ¶¶2, 31, 48-49, FIG. 2; Ex.1002, ¶¶369-374. Grimshaw describes a set of "user modules" can be coupled to each user's laptop computer, which connect the laptops to a shared display module. Ex. 1008, ¶¶5-6, 12, 19-20, 23-24, 26-27. Each user module includes a button that allows the user to forcibly take control over the display module. Ex. 1008, ¶20. Grimshaw states that:

> [a] user may engage or push a button 344, 354, 364, 374 on their user module in order to take control of display module 22 (e.g., display module 22 could show whatever is currently being displayed on the screen of the laptop computer connected to the selected user module).

Ex. 1008, ¶20.

Grimshaw then explains possible ways to implement this functionality, stating:

> In the example above, controller 324 reviews the status of buttons 344, 354, 364, 374, determines that user module 14 has been selected, and sends command

> signals to switch controller 318, video processor 316 and/or converter 320 instructing them to pass the data signals from the selected user module 14 to display module 22. It is possible for controller 324 to review the status of each user module 14-20 or only those user modules that have a laptop computer or other device connected thereto, to cite a few possibilities. Controller 324 is not limited to this example, as it may gather information, make decisions, and issue command signals for a variety of other tasks as well.

Id.

Hence, Grimshaw describes a set of rules, including a "forcing rule" where, by the action of only one participant involved in the meeting, new screen data from the laptop of that participant overrides or replaces any data displayed on the display module without requiring the agreement of another participant (including the one whose screen was being displayed). Ex.1002, ¶¶369-374.

Given the known problem and the known solutions described by Grimshaw and others (*see* § VII.C.1), a POSITA would have been motivated to implement a method of connecting processing devices and displays (like those of Uchida) according to a "forcing rule," for example as described by Grimshaw. A POSITA would have found such solutions advantageous in solving known problems such as when multiple users wish to display content on a shared display. A POSITA would have had a reasonable expectation of success in implementing such a solution (*e.g.*, employing buttons and other well-known hardware/software components to trigger transmission of images and override or replace prior image data) given the simplicity of such common technology. Ex.1002, ¶¶369-374.

3. Claim 2

a) ***The method of claim 1 further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays, the server program allowing display in accordance with one or more rules of which one is a forcing rule, wherein the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the***

meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more first displays from the same or another participant of the meeting.

Uchida discloses a *server program* (*e.g.*, software executed by control unit 303) which is loaded on *the base node* (e.g., image projection device 3), *the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on one or more first displays*. Ex. 1009, ¶127 ("The control unit 303 has a built-in CPU, ROM, RAM, etc., and functions as a control unit by the CPU reading and executing a program pre-stored in the ROM. The RAM can also be used as a working memory, etc. The control unit 303 controls the wireless unit 306 to receive image data transmitted by wireless communication from the computer device 4, and projects an image corresponding to the received image data by the projection unit 308"); Ex.1002, ¶375.

The combination of Uchida and Grimshaw also discloses the limitations associated with a "*forcing rule*" as explained above with respect to identical claim language of claim 1. Ex.1002, ¶376; *see* § VII.G.2.m.

4. Claim 3

a) ***The method of claim 2, wherein the server program is a portable application adapted to be loaded onto the base node and to be run on an operating system of the base node.***

Uchida discloses *server program is adapted to be loaded onto the base node and to be run on an operating system of the base node*. Ex. 1009, ¶127 ("The control unit 303 has a built-in CPU, ROM, RAM, etc., and functions as a control unit by the CPU reading and executing a program pre-stored in the ROM. The RAM can also be used as a working memory, etc. The control unit 303 controls the wireless unit 306 to receive image data transmitted by wireless communication

from the computer device 4, and projects an image corresponding to the received image data by the projection unit 308"); Ex.1002, ¶377.

The '676 patent defines a portable application as "a computer software program designed to run without installation on the target machine". Ex. 1001, 12:23-25. Deforche discloses running a program as *a portable application*. *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. A POSITA would have been motivated to run the *server program* (*e.g.*, software executed by control unit 303) of Uchida as a *portable application* as taught by Deforche to obtain known benefits such as avoiding that any traces of the program are left on the operating system after its use. Ex. 1030, ¶30; Ex.1002, ¶378.

5. Claim 6

a) *The method of claim 1, wherein the peripheral device comprises: a base, a connector, and a flexible connection between the base and the connector for transferring data signals and power, and*

Uchida discloses *the peripheral device* (*e.g.*, the wireless device 1) *comprises a base* (*e.g.*, the housing holding components of the wireless device 1) *and a connector* (*e.g.*, USB connector 105). Ex. 1009, ¶¶39-42, FIG. 3. A POSITA would have understood it would have been a design choice to include *a flexible connection between the base and the connector for transferring data signals and power*. For example, USB extension cables were available and could have been connected to the USB connector 105 of Uchida's wireless device 1 to obtain such a flexible connection. Ex.1002, ¶379

Such a flexible connection was known, as evidenced by Banerjee, which describes a plug-and-play device for wireless screen sharing that is like the wireless device 1 of Uchida. Ex. 1021,

¶¶39-42, FIG. 5 (reproduced below). Banerjee discloses *the peripheral device* (*e.g.*, the plug-and-play device 236) *comprises a base* (*e.g.*, holding electronics, such as the wireless transceiver 260, interfaces 256, 264, storage 276, and USB hub controller 272), *a connector* (e.g., a connector for connecting the plug-and-play device 236 to a plug-and-play port of the remote computer 240), *and a flexible connecti*on between the base and the connector for transferring data signals and power (*e.g.*, the cable segment 268 between the base and the connector). *Id.* It would have been a predictable variation of Uchida's system to include the flexible cable 268 of Banerjee, using a known technique. Ex.1002, ¶380.

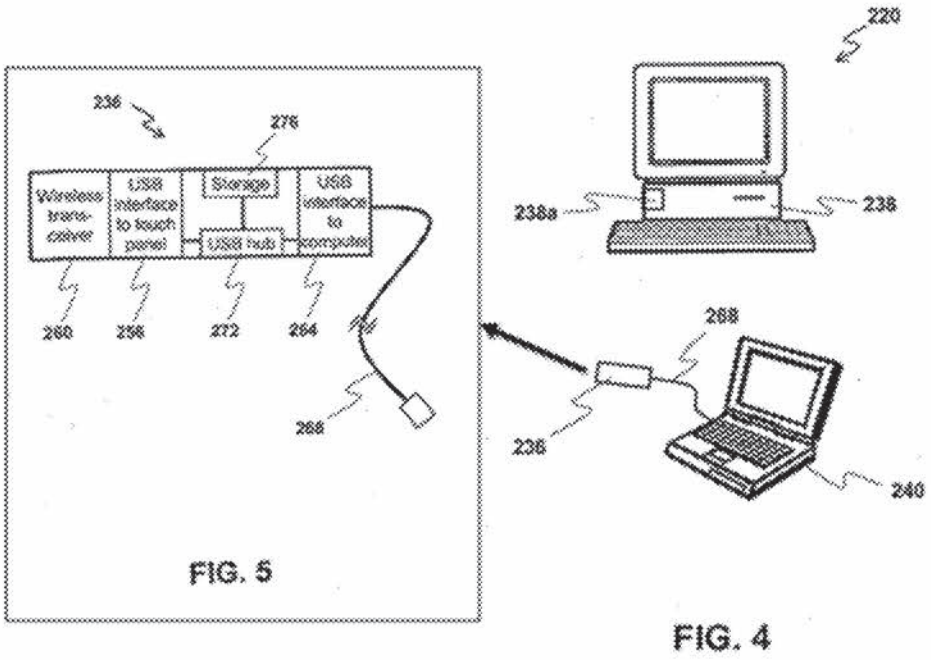


FIG. 5

FIG. 4

Ex. 1021, FIGs. 4, 5.

b) *wherein the actuator is on the base and*

Uchida discloses *the actuator* (e.g., image transfer stop switch 140) *is on the base* (e.g., on the wireless device 1). Ex. 1009, ¶¶70-72, FIG. 3; Ex.1002, ¶381.

c) ***the base has electronics comprising a processing engine, a transceiver and a visual indicator***

Uchida discloses *the base has electronics comprising a processing engine* (*e.g.*, CPU 101) *and a transceiver* (*e.g.*, the wireless communication unit 107) *and a visual indicator* (*e.g.*, notification unit 109 with writing lamp LED 150, image transfer lamp 151, and alarm lamp 152). Ex. 1009, ¶75 ("The notification unit 109 has a writing lamp LED 150, an image transfer lamp 151, an alarm lamp 152 (see FIG. 3), etc., and the CPU 101 lights or flashes these lamps depending on the situation"); Ex.1002, ¶382.

d) ***the method further comprising: connecting the connector to a plug and play port of the processing device and actuating a signal with the actuator and transferring the signal to the connector for transfer to the port.***

Uchida discloses *connecting the connector* (*e.g.*, the connector 105 of the wireless device 1) *to a plug and play port of the processing device* (*e.g.*, a USB connector 401 of the computer device 4). Ex. 1009, ¶48 ("[T]he USB connector 105 of the wireless device 1 is connected to the USB connector 401 of the computer device 4."). The '676 patent specifies that plug and play interfaces include USB ports, which is the same interface disclosed by Uchida. Ex. 1001, 11:52-65 ("Plug and play interfaces include for example (not an exhaustive list): Firewire (IEEE-1394), PCI, Mini PCI, PCI Express, Mini PCI Express, PCMCIA, PC Card, Universal Serial Bus (USB), SDIO cards"); Ex. 1009, ¶39 ("The wireless device 1 is a USB dongle that functions as a wireless part of a computer device 4 and as a memory. The computer device 4 connects the USB connector 105 (see FIG. 3) described below in the wireless device 1."); Ex.1002, ¶383.

Uchida also discloses *actuating a signal with the actuator* (*e.g.*, operating the image transfer stop switch 190) *and transferring the signal to the connector* (*e.g.*, sending a notification generated by the CPU 101) *for transfer to the port* (*e.g.*, for transfer to the USB connector 401 of the computer device 4). Ex. 1009, ¶71 ("When the image transfer stop switch 140 is operated to

the image stop ON mode side while connected to the computer device 4 via the USB connector 105, the CPU 101 notifies the computer device 4 of this information."); Ex.1002, ¶384.

6. Claim 7

a) *The method of claim 6, wherein the peripheral device comprises permanent storage for storing the client application.*

Uchida discloses *the peripheral device* (*e.g.*, wireless device 1) *comprises permanent storage* (*e.g.*, ROM 103 and/or flash memory 104) *for storing the client application* (*e.g.*, an image transfer application program). Ex. 1009, ¶¶62-64, 67, FIG. 5; Ex.1002, ¶385.

7. Claim 8

a) *The method of claim 1, wherein the transferring of the data for display is to a defined network node without user entry of configuration details.*

Uchida and/or suggests that *transferring of the data for display is to a defined network node* (*e.g.*, image projection device 3) *without user entry of configuration details*. Ex. 1009, ¶¶48 ("The control unit of the computer device 4 executes the wireless setting application and requests the wireless device 1 to output the wireless setting information written by the remote control device 2. The control unit of the wireless device 1 retrieves the wireless setting information from the wireless setting information storage unit of the wireless device 1 and outputs this wireless setting information to the computer device 4 via the USB connector 105. The computer device 4 acquires the wireless setting information output from the wireless device 1 and sets this wireless setting information in the wireless communication unit of the wireless device 1 using a device driver. The wireless device 1 is thus able to communicate with the wireless unit of the image projection device 3 based on the wireless setting information set by the wireless communication unit, in other words, the wireless setting information written by the remote control device 2."), 42, 166; Ex.1002, ¶386.

8. Claim 9

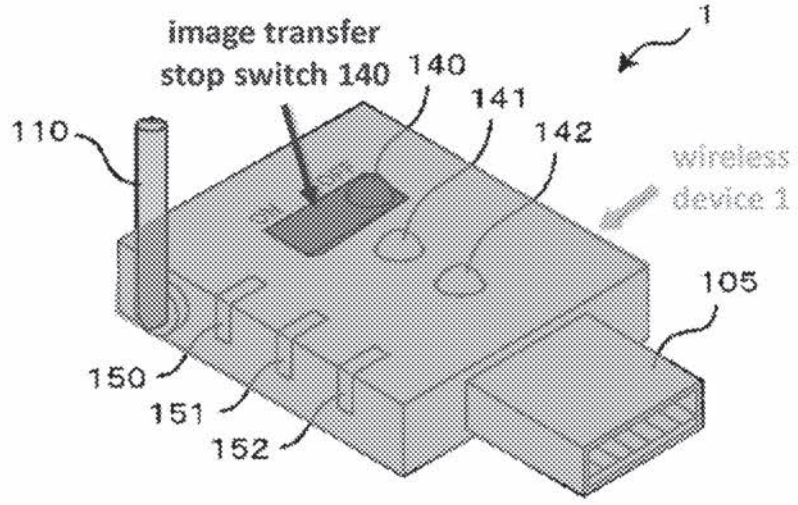
a) ***The method of claim 8 for use by a plurality of users in a meeting, there being client processing devices each for coupling to a peripheral device for every user in the meeting, a first user action connecting a processing device to the base node, and a second user action comprising activating an actuator located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device.***

Uchida discloses *a plurality of users in a meeting,* (*e.g.*, in "a conference … [with] an unspecified number of participants") *there being client processing devices* (*e.g.*, computer device 4) *each for coupling to a peripheral device* (*e.g.*, wireless device 1) *for every user in the meeting*. Ex. 1009, ¶¶28, 31; Ex.1002, ¶387.

Uchida also discloses *a first user action connecting a processing device to the base node* (*e.g.*, connecting the wireless device with wireless setting information to the USB connector 401 of the computer device) Ex. 1009, ¶¶47-48; Ex.1002, ¶388. The *first user action* allows the wireless device 1 to connect the computer device 4 to the projector 3. *Id*.

Uchida discloses *a second user action comprising activating an actuator* (*e.g.*, moving the image transfer stop switch 140 to the OFF position) *located on an input device coupled to the peripheral device which then starts a process of obtaining the data for display by screen scraping data from the processing device and transmitting screen scraped data to the base node, the base node carrying out graphical commands sent from the processing device*. Ex. 1009, ¶¶52-53, 65-72, FIG. 3 (reproduced below); Ex. 1002, ¶¶389-391. Uchida discloses that image transfer stop switch 140 slides between an ON and OFF position. When the "image stop" switch is in the ON position, the image transfer application transmits a request to the image projection device 3 via the wireless communication unit 107 to project a specific image on the image projection device 3. *Id*.

At this stage, image data from the computer device 4 would not be obtained or transmitted to the projection device 3. A POSITA would have understood that reversing the slide switch back to OFF would resume the process of obtaining data for display and transmitting the data to the projection device 3.



Ex. 1009, FIG. 3.

A POSITA would have found it obvious to include an input device to allow individual users the ability to override or switch the source of the display via the wireless device. Grimshaw is from the same field as the '676 patent and addresses a similar problem. Ex.1002, ¶390. *See* § VII.G.2.m (limitation 1(m)).

Grimshaw discloses buttons 344, 354, 364, 374 (*e.g.*, "input device") on respective user modules 14, 16, 18, 20 configured to allow the user to carry out engaging (*e.g.*, "user action") the button that triggers transfer of the data signal (*e.g.*, "user selected arbitrary media content") from a user module to the control module 12 for display on the display module 22. Ex. 1008, ¶¶5, 19 ("[T]he users of modules 14, 16, 18, 20 can take control of the display module 22 by respectively engaging buttons 344, 354, 364, 374, which causes switch controller 318 to pass the data signals

from the selected user module on to the display module."), 20, 27-28, FIGs. 1-4; Ex. 1012, 5:8-6:17, 8:29-9:20, FIGs. 1-4; *See* § VII.G.2.m (Limitation 1(m))). A POSITA would have understood that buttons 344, 354, 364, 374 constitute actuators coupled to the user modules 14, 16, 18, 20. Ex. 1002, ¶391.

9. Claim 10

a) *The method of claim 8, wherein, when the base node receives the screen scraped data, further comprising the step of providing auto composition of the screen scraped data on the first display connected to the base node.*

The '676 patent indicates:

> "Auto composition" or "auto layout" refers to the automatic nature in which multiple graphics/video sources are rendered on a central display, without user intervention and in a way that a user would intuitively expect it to happen.

Ex. 1001, 13:64-67; Ex.1002, ¶392.

Grimshaw discloses "*auto composition of the screen scraped data on the first display*" by automatically providing a split-screen view of the image data from the personal computer and video from a camera. Ex. 1008, ¶40; Ex.1002, ¶393. The split-screen feature described in Grimshaw is a type of well-known auto composition which automatically arranges and displays content from multiple user devices on a central display in a way that is organized, intuitive, and requires no manual intervention from the users. The "*auto composition*" limitation is also well-known in the art, as evidenced, for example, by Ichieda. Ex.1002, ¶393. *See* VII.F.2, supra.

10. Claim 11

a) *The method of claim 7, further comprising pairing of the peripheral device to the base node before communication starts.*

In Uchida, the wireless device ("*peripheral device*") and projection device ("*base node*") are pre-provisioned with wireless settings to establish a wireless network connection, or pairing, between the devices. Ex. 1009, ¶26. The '676 describes use of this type of wireless network

connection as a type of pairing. Ex.1001, 21:51-55 ("The user can also **pair the peripheral device to a base node** or base unit that controls the display in the meeting room and which is **connectable to the peripheral device via a communications network such as a wired or wireless communications network**." (emphasis added)); Ex.1002, ¶¶394-395. Therefore, establishing this wireless connection in Ono is a type of "pairing" and is performed "*before communications starts*" as it allows the subsequent communication between the devices.

In the event establishing this wireless connection is not considered "pairing", Banerjee expressly discloses pairing a peripheral plug-and-play device to another device before data exchange. Ex. 1021, ¶41 ("The wireless communication device 238 a and wireless transceiver 260 are paired to enable a peer-to-peer wireless connection between the master computer 238 and the remote computer 240 to be established."). A POSITA would recognize that this known approach to establishing device-to-device communication could be employed in the system of Uchida. Ex.1002, ¶395.

11. Claim 12

a) ***The method of claim 7, wherein a daemon is provided that is pre-installed on the processing device, the daemon providing a permanently running service that continuously monitors if a peripheral device has been offered up for connection to the processing device.***

A "*daemon*" is a program that runs in the background and provides important system services, such as processing incoming email or handling requests from the network. Ex.1002, ¶¶396-399. One use of a daemon to "detect that the device in mass storage mode is coupled to the computer system and may cause the command to be transmitted to the device. Additionally, in some embodiments, the command is a HID (Human Interface Device) command to switch the device to the second mode of operation." Ex. 1032, ¶84. The '676 patent admits that this is a common use of a daemon:

> In an embodiment of the present invention a very small service—also called daemon on some OS's—is provided that requires installation on the processing device such as a laptop. This service is pre-installed on the processing device. The installation is required only once on every processing device such as a laptop. The role of this is to provide a permanently running service that continuously monitors if a peripheral device according to the present invention has been offered up for connection to the processing device. When such a peripheral device is connected, the service will detect this and start the client application software residing in the mass storage area of the peripheral device.

Ex. 1001, 7:43-57. Ex. 1002, ¶398.

Uchida discloses software executed by a CPU that "*continuously monitors if a peripheral device has been offered up for connection to the processing device*." Ex. 1009, 154 ("CPU 405 of the computer device 4 determines whether or not the wireless device 1 is connected (step S300). To determine whether or not wireless device 1 is connected, it is determined whether or not a USB device is connected to USB connector 401.") A POSITA would recognize that the well-known option of a daemon as evidenced by the '676 patent itself and Austin, is one of a limited number of options for determining whether or not a USB device is connected to USB connector 401. A POSITA would have no difficulty employing this known technique to achieve the already present features of Uchida with a high expectation of success. Ex.1002, ¶¶396-399.

12. Claim 13

a) *The method of claim 7, wherein the pre-installed generic drivers drive different device interfaces independently.*

Deforche demonstrates that *pre-installed generic drivers drive different device interfaces independently* because they ubiquitously drove multiple different interfaces, such as keyboards, mass storage devices, and audio devices. Ex. 1030, ¶10 ("An example of such a generic driver is a human interface driver (HID), which has predetermined software components configured for driving a human interface device such as a mouse, a keyboard or other.") Even the '676 patent admits that generic drivers were known by their definition to drive different devices independently:

> The term "pre-installed generic driver" is intended to mean a driver which is installed on a processing device such as a computer as a standard driver, e.g. is installed with the installation of the operating system. Such a driver is standard for the operating system and can drive a standard class of peripheral devices coupled to or connected to the processing device. The installation of a specific driver for such a peripheral device is not required. Such a generic driver can be a human interface driver (HID) or a mass storage device driver, which has predetermined software components configured for driving mass storage, a CD-ROM, a keyboard etc. or combinations of these. Such devices can be readable and writable computer peripheral memory devices such as USB memory sticks, flash memories, external hard drives, or more.

Ex. 1001, 14:20-34. It would be obvious to include this well-known, standard feature of a "pre-installed generic driver" in the system of Uchida. Ex.1002, ¶400; *see* also Section VII.C.5.

13. Claim 14

a) ***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:***

See § VII.G.2.a-b. This claim is very similar to claim 1 but does not include the pre-installed generic driver disclosed by Deforche. Ex.1002, ¶401

b) ***setting up a communications network between a base node of the communications network and a peripheral device coupled to the processing device;***

Uchida discloses *setting up a communications network between a base node* (*e.g.*, "image projection device 3") *of the communications network and a peripheral device* (*e.g.*, wireless device 1) *coupled to the processing device*. Ex. 1009, ¶¶40-41, 61-69, 90, 165-167, 176, FIGs. 8, 17-18; Ex. 1002, ¶402. Uchida discloses "CPU 405 transmits the wireless setting information to the wireless device 1 via the USB connector 401, and the wireless device 1 configures the WLAN network according to this wireless setting information." Ex. 1009, ¶166. "When the processing of step S324 is completed, CPU 405 determines whether wireless communication with the image projection device 3 is established via the wireless device 1, in other words, whether a network

connection with the image projection device 3 is established (step S325)." Ex. 1009, ¶167. Thus, Uchida discloses that image projection device 3 couples to the wireless LAN via wireless device 1.

c) ***transferring media content between the processing device and the peripheral device; the media content being screen scraped data from a screen of the processing device;***

Uchida discloses *transferring media content* (*e.g.*, image data) *between the processing device* (*e.g.*, computer device 4) *and the peripheral device* (*e.g.*, wireless device 1). Ex. 1009, ¶¶33, 39 ("The computer device 4 connects the USB connector 105 (*see* FIG. 3) described below in the wireless device 1, so that the wireless device 1 functions as a wireless unit and transmits image data to the image projection device 3 via the wireless device 1"), 47-48, 52, 81, 156, 167, 176; Ex. 1002, ¶403. *See also* § VII.G.2.c (limitation 1(c).

d) ***the media content being screen scraped data from a screen of the processing device;***

Uchida discloses *the media content* (*e.g.*, image data) *being screen scraped data from a screen of the processing device*. Ex. 1009, ¶¶158, 176. The image data corresponds to "the screen displayed on the LCD 403, which is the display unit of the computer device 4." Ex. 1009, ¶¶158; *see also id.*, ¶3. A POSITA would have recognized that the content of the transmitted image data is "screen scraped data." The '676 patent acknowledges that screen scraping was known in the art Ex. 1001, 13:59-62) and could have been predictably implemented in an image display system like that of Uchida using known techniques, as described in Slobodin, which is directed to wireless transmission of screen scraped data to a projector. *See*, *e.g.*, Ex. 1033, ¶¶11-12; Ex. 1002, ¶404. *See also* VII.G.2.d (limitation 1(d).

e) ***transmitting the media content from the peripheral device to the communications network;***

Uchida discloses *transmitting the media content from the peripheral device to the communications network*. Ex. 1009, ¶¶40-41, 65, 106, 166-167, 176 ("[W]ireless device 1 … functions as a wireless unit of a computer device 4 that transmits image data via wireless communication to an image projection device 3"), FIG. 18; Ex. 1002, ¶405).

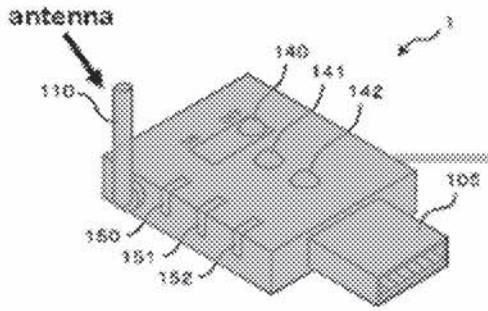


FIG. 3 (Ex. 1009)

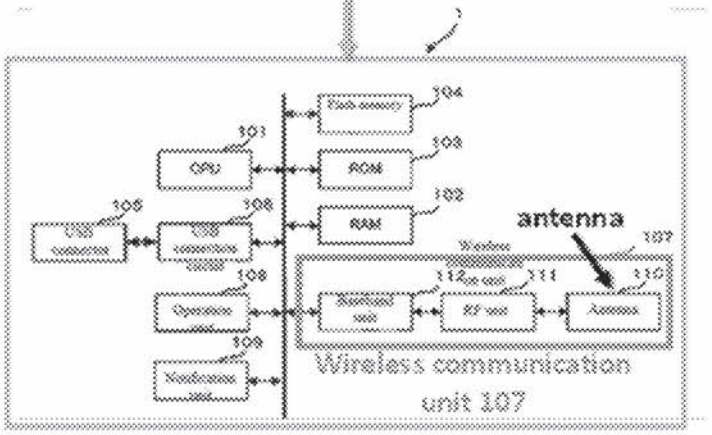


FIG. 5 (Ex. 1009)

Ex. 1009, FIGs. 3, 5; *see also* § VII.G.2.e (limitation 1(e).

f) ***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.***

Uchida discloses *receiving media content from the communications network at the base node*. Ex. 1009, ¶¶39, 70-71, 124-129, 139, 158 ("When the image projection device 3 receives

the display image data transmitted in this manner, it projects an image based on the display image data onto a screen."), 176; Ex. 1002, ¶¶406-407; *see also* § VII.G.f (limitation 1(f)), and § VII.G.l-m (limitations 1(l)-(m)).

14. Claim 15

a) ***15. The method of claim 14, wherein the base node has one or more displays, further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on the one or more displays, the server program allowing display in accordance with one or more rules of which one is the forcing rule, wherein the forcing rule is that the display on the one or more displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more displays from the same or another participant of the meeting.***

See claim 2, § VII.G.3. Ex.1002, ¶408.

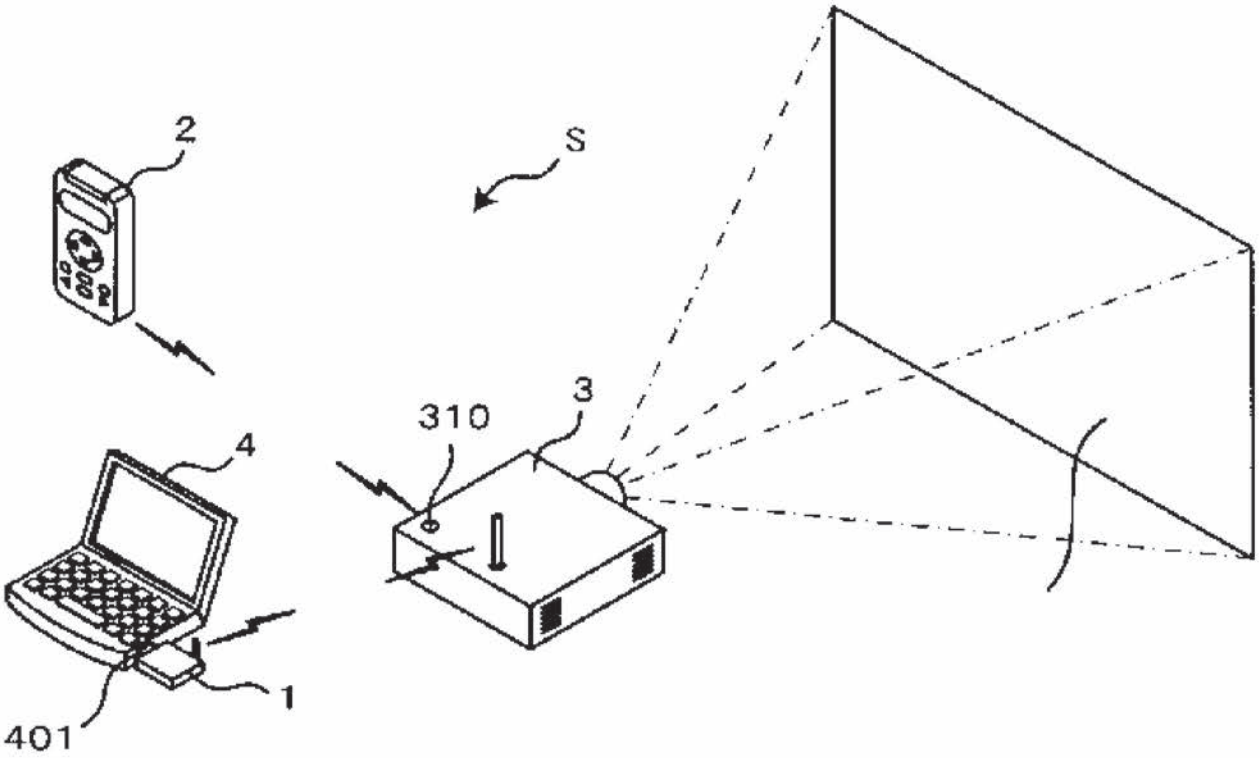
15. Claim 16

a) ***An electronic meeting tool for communicating arbitrary media content, being data for display, from users at a meeting, the tool comprising:***

Uchida discloses *an electronic meeting tool* (*e.g.*, image display system S) *for communicating arbitrary media content* (*e.g.*, display image data) *being data for display, from users at a meeting*. Ex. 1009, ¶¶12 ("when an image projection device is shared among multiple groups"), 36, 37, 58, 112, 158, 186. Uchida's image projection system enables display of an image data based on the image data of LCD display 403 (*e.g.*, "data for display") of computer device 4. Said differently, Uchida's system enables a projector to display what is on a user's computer screen and thus, image data is consistent with description of "user selected arbitrary media content" provided by the '676 patent. Ex. 1002, ¶¶409-411.

b) ***a base unit of a wireless communications network, the base unit being coupled to one or more first displays,***

Uchida discloses *a base unit* (*e.g.*, image projection device 3) *of a wireless communications network*, and *coupled to one or more first displays* (*e.g.*, screen). Ex. 1009, ¶¶124-134, 166-167, FIGs. 1, 8, 14, 18; Ex. 1002, ¶412.



Ex. 1009, FIG. 1.

c) ***at least one peripheral device adapted to communicate the user selected arbitrary media content from the processing device to the base unit via the wireless communications network;***

Uchida discloses *the base unit* (*e.g.*, image projection device 3) *being adapted to receive user selected arbitrary media content* (*e.g.*, image data) *from a processing device* (*e.g.*, computer device 4) *via the wireless communications network, and to control display of the user selected arbitrary media content on the one or more first displays*. Ex. 1009, ¶¶39, 124-129, 137-146, 158 ("When the image projection device 3 receives the display image data transmitted in this manner,

it projects an image based on the display image data onto a screen."), 176, FIG. 15; *see also* § VII.G.15.b (limitation 16(a)); Ex Ex.1002, ¶¶413-414.

d) ***the base unit being adapted to receive user selected arbitrary media content from a processing device via the wireless communications network, and to control display of the user selected arbitrary media content on the one or more first displays;***

Uchida discloses *at least one peripheral device* (*e.g.*, wireless device 1) *adapted to communicate the user selected arbitrary media content from the processing device* (*e.g.*, image data from computer device 4) *to the base unit* (*e.g.*, image projection device 3) *via the wireless communications network*. Ex. 1009, ¶¶39-41 ("The computer device 4 connects the USB connector 105 (*see* FIG. 3) described below in the wireless device 1, so that the wireless device 1 functions as a wireless unit and transmits image data to the image projection device 3 via the wireless device 1."), 65, 68, 90, 165-166, 167 ("[I]f it is determined that a network connection with the image projection device 3 has been established (step S325: YES), the CPU 405 launches an image transfer application (step S326)"), FIGs. 8, 17-18; Ex. 1002, ¶415.

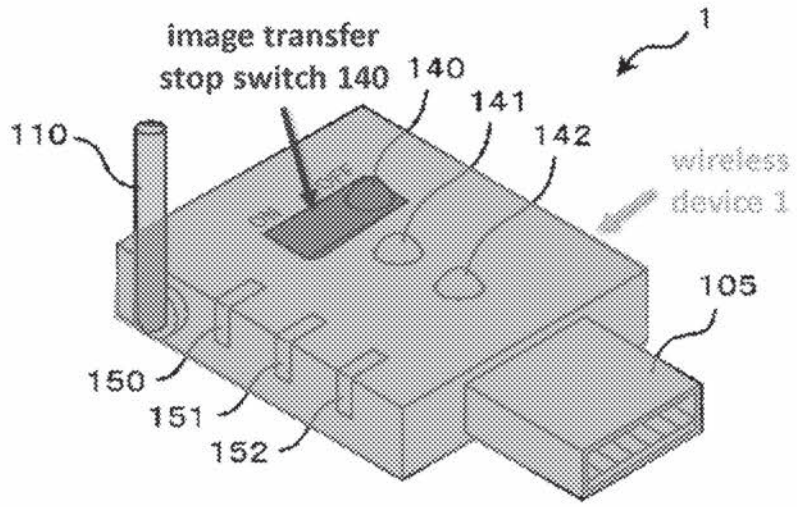
e) ***a program adapted to be loaded onto the processing device and to run on an operating system of the processing device, said program being adapted to obtain user selected arbitrary media content from the processing device;***

Uchida discloses *a program* (*e.g.*, image transfer application) *adapted to be loaded onto the processing device* (*e.g.*, computer device 4) *and to run on an operating system of the processing device ... to obtain user selected arbitrary media content* (*e.g.*, image data) *from the processing device*. Ex. 1009, ¶¶48, 52, 54, 78, 81 ("When the image transfer application is installed on the computer device 4, it causes the computer device 4 to function as an image transmission means that controls the wireless device 1 and transmits the image data from the computer device 4 to the image projection device 3"), 83, 152, 156, 167, 176; Ex. 1002, ¶¶416-417.

While Uchida's image transfer application is loaded and installed onto computer device 4, a person of ordinary skill in the art would have understood that an alternative design choice would have been to simply load the application without requiring installation on the computer device. Deforche describes launching an application to set up wireless transfer of data as a portable application that does not require installation as discussed above. (*See* § VII.G.2.h (limitation 1(h)). A POSITA would have found it obvious to implement as least an image transfer application like that of Uchida as a portable application. Ex.1002, ¶417.

f) ***an input device to allow the user to carry out a user action that triggers transfer of said user selected arbitrary media content from said processing device to a transmitter and to the wireless communications network, the input device being an actuator coupled to the peripheral device and***

Uchida discloses *an input device* (*e.g.*, image transfer stop switch 140) *to allow the user to carry out a user action* (*e.g.,* slide the stop transfer switch140) *that triggers transfer of said user selected arbitrary media content* from the *processing device to a transmitter* (*e.g.*, wireless communication unit 107) *and to the wireless communications network, the input device being an actuator coupled to the peripheral device* (*e.g.*, image transfer stop switch 140 coupled to wireless device). Ex. 1009, ¶¶52-53, 65-72; Ex. 1002, ¶¶418-421. Uchida further discloses that image transfer stop switch 140 slides between ON and OFF position. When the "image stop" switch is in the ON position, the image transfer application transmits a request to the image projection device 3 via the wireless communication unit 107 to project a specific image on the image projection device 3. *Id.* A POSITA would have understood that reversing the slide switch back to OFF would resume (*i.e.*, trigger image transfer).



Ex. 1009, FIG. 3.

A POSITA would have found it obvious to include an input device to allow individual users the ability to override or switch the source of the display via the wireless device. Grimshaw is from the same field as the '676 patent and addresses a similar problem. (*See* § VII.G.2.m (limitation 1(m))).

In particular, Grimshaw discloses buttons 344, 354, 364, 374 (*e.g.*, "input device") on respective user modules 14, 16, 18, 20 configured to allow the user to carry out engaging (*e.g.*, "user action") the button that triggers transfer of the data signal (*e.g.*, "user selected arbitrary media content") from a user module to the control module 12 for display on the display module 22. Ex. 1008, ¶¶5, 19 ("[T]he users of modules 14, 16, 18, 20 can take control of the display module 22 by respectively engaging buttons 344, 354, 364, 374, which causes switch controller 318 to pass the data signals from the selected user module on to the display module."), 20, 27-28, FIGs. 1-4; Ex. 1012, 5:8-6:17, 8:29-9:20, FIGs. 1-4; *See* § VII.G.2.m (Limitation 1(m)). A POSITA would have understood that buttons 344, 354, 364, 374 constitute actuators coupled to the user modules 14, 16, 18, 20. Ex. 1002, ¶¶418-421.

A POSITA looking to implement an image projection system like that of Uchida would have found it obvious to employ a technique and components as described by Grimshaw in addressing the problem where multiple users are "vying for control" of a shared display.

g) ***the base unit is adapted to display said user selected arbitrary media content on the first display in accordance with a set of rules, wherein one of the rules is a forcing rule,***

Uchida-Grimshaw discloses this limitation for the same reasons discussed in limitation 1(l) and 14(f). *See, e.g.*, § VII.G.2.l (limitation 1(l); Ex. 1002, ¶¶422.

h) ***whereby the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the data of any participant for display overriding or replacing any data displayed on the one or more first displays by the same or another participant of the meeting.***

Uchida-Grimshaw discloses this limitation for the same reasons discussed in limitation 1(m) and 14(f). *See, e.g.*, § VII.G.m (limitation 1(m)); Ex. 1002, ¶¶423.

16. Claim 17

a) ***The electronic meeting tool of claim 16 configured for use by a plurality of users in a meeting, there being processing devices each for coupling to a peripheral device for every user in the meeting, whereby the electronic meeting tool is configured to allow a first user action to connect a client processing device to the base unit, and a second user action comprising activating the actuator on the input device which is coupled to the peripheral device which then starts a process of obtaining the user selected arbitrary media content by screen scraping data from the processing device and transmitting screen scraped data for display to the base unit, whereby the base unit is configured to carry out graphical commands sent from the processing device.***

See claim 9, § VII.G.8. Ex.1002, ¶424

H. Ground 8 – The combination of Uchida and Grimshaw renders obvious claims 15 and 17.

Claim 15 depends from unchallenged claim 14 and includes all its limitations. Claim 17 depends from unchallenged claim 16 and includes all its limitations.

1. Rationale to combine

See § VII.G.1 for rationale to combine Uchida and Grimshaw. Ex.1002, ¶425.

2. Claim 14

a) ***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:***

See § VII.G.13.a. Ex.1002, ¶426

b) ***setting up a communications network between a base node of the communications network and a peripheral device coupled to the processing device;***

See § VII.G.13.b. Ex.1002, ¶427.

c) ***transferring media content between the processing device and the peripheral device; the media content being screen scraped data from a screen of the processing device;***

See § VII.G.13.c. Ex.1002, ¶428.

d) ***the media content being screen scraped data from a screen of the processing device;***

See § VII.G.13.d. Ex.1002, ¶429.

e) ***transmitting the media content from the peripheral device to the communications network;***

See § VII.G.13.e. Ex.1002, ¶430.

f) ***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.

See § VII.G.13.f. Ex.1002, ¶431.

3. Claim 15

a) ***15. The method of claim 14, wherein the base node has one or more displays, further comprising loading a server program onto the base node, the server program receiving screen scraped data from one or a plurality of client processing devices, and displaying the screen scraped data on the one or more displays, the server program allowing display in accordance with one or more rules of which one is the forcing rule, wherein the forcing rule is that the display on the one or more displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, new screen scraped data of any participant for display overrides or replaces any data displayed on the one or more displays from the same or another participant of the meeting.***

See § VII.G.14. Ex.1002, ¶432.

4. Claim 16

a) ***An electronic meeting tool for communicating arbitrary media content, being data for display, from users at a meeting, the tool comprising:***

See § VII.G.15.a, supra. Ex.1002, ¶433.

b) ***a base unit of a wireless communications network, the base unit being coupled to one or more first displays,***

See § VII.G.15.b, supra. Ex.1002, ¶434.

c) ***at least one peripheral device adapted to communicate the user selected arbitrary media content from the processing device to the base unit via the wireless communications network;***

See § VII.G.15.c, supra. Ex.1002, ¶435.

d) ***the base unit being adapted to receive user selected arbitrary media content from a processing device via the wireless communications***

network, and to control display of the user selected arbitrary media content on the one or more first displays;

See § VII.G.15.d, supra. Ex.1002, ¶436.

e) ***a program adapted to be loaded onto the processing device and to run on an operating system of the processing device, said program being adapted to obtain user selected arbitrary media content from the processing device;***

See § VII.G.15.e, supra. Ex.1002, ¶437.

f) ***an input device to allow the user to carry out a user action that triggers transfer of said user selected arbitrary media content from said processing device to a transmitter and to the wireless communications network, the input device being an actuator coupled to the peripheral device and***

See § VII.G.15.f, supra. Ex.1002, ¶438.

g) ***the base unit is adapted to display said user selected arbitrary media content on the first display in accordance with a set of rules, wherein one of the rules is a forcing rule,***

See § VII.G.15.g, supra. Ex.1002, ¶439.

h) ***whereby the forcing rule is that the display on the one or more first displays is obtained by the action of only one participant involved in the meeting, without requiring the agreement of another participant, the data of any participant for display overriding or replacing any data displayed on the one or more first displays by the same or another participant of the meeting.***

See § VII.G.15.h, supra. Ex.1002, ¶440.

5. Claim 17

a) ***The electronic meeting tool of claim 16 configured for use by a plurality of users in a meeting, there being processing devices each for coupling to a peripheral device for every user in the meeting, whereby the electronic meeting tool is configured to allow a first user action to connect a client processing device to the base unit, and a second user action comprising activating the actuator on the input device which is coupled to the peripheral device which then starts a process of obtaining the user selected arbitrary media content by screen scraping data from the processing device and transmitting screen scraped data for display to the base unit,***

whereby the base unit is configured to carry out graphical commands sent from the processing device.

See § VII.G.16, supra. Ex.1002, ¶441.

VIII. PATENT OWNER'S CONCERNS WITH DR. ALMEROTH'S TESTIMONY SHOULD NOT BE AFFORDED WEIGHT.

Patent Owner points to Dr. Almeroth's "data is data" statement (Ex. 1108 (POR), 10-11, citing Ex. 1100 (Ex. 2006, IPR2024-01436)) from his multiple declarations and depositions to imply inconsistency. However, his comment simply states the well-known fact that all computer data is binary (1's and 0's) and transmitted via interfaces like USB, regardless of type. This does not indicate any deficiency in his expertise. Ex. 1002, ¶442.

In another proceeding, Dr. Almeroth testified about prior art addressing transcoding data "based on a type of functional data," demonstrating the routine use of different codecs for audio and video data (Ex. 1098 (Ex. 2030, IPR2024-01436), ¶¶212-213). This is unrelated to his "data is data" comment in the '1436 IPR, which simply reaffirms that all digital data is transmitted as 1's and 0's over interfaces like USB. Patent Owner's claim that Dr. Almeroth is unclear about the definition of "driver" is unfounded, as he provided a specific definition for this context, and the term varies by context. Ex. 1002, ¶¶443-444.

Patent Owner spends four pages challenging Dr. Almeroth's view that implementation details are design choices, alleging unreliability and inconsistency (Ex. 1108 (POR), 12-16). This argument improperly limits prior art to explicit disclosures and ignores the flexibility recognized by a person of ordinary skill. As stated in *KSR*, 127 S. Ct. at 1741, courts may consider inferences and creative steps made by such a person. Therefore, Patent Owner's position lacks support under current legal standards. Ex. 1083, ¶¶2-5; Ex. 1002, ¶445.

IX. SECONDARY CONSIDERATIONS DO NOT OVERCOME THE STRONG GROUNDS OF REJECTION

Barco's patentability arguments are weak and rely on features already in the prior art. Their rationale for combining elements is unsupported by law, and they have not shown a nexus for any claimed commercial success.

A. Barco's ClickShare Product Lacks Nexus because It Is Not Essentially the Claimed Invention.

Barco cannot claim a presumption of nexus when the patented invention is only a component of a commercially successful product, unless unclaimed features are insignificant. *See Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988); *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1374 (Fed. Cir. 2019).

Barco's ClickShare product is not coextensive with the claimed invention because it includes significant unclaimed features. For example, the ClickShare product can work with or without a peripheral device (dongle) by using either the ClickShare app or other platforms, such as Teams or Zoom. Ex. 1076 (Barco base unit sold without dongles and works with Teams and Zoom); Ex. 1077 (Barco instructions for using a base unit without a dongle). Indeed, most meetings today are conducted using software solutions, such as Teams and Zoom, without any dongles. Dr. Brogioli could not even recall ever using a dongle to share content prior to this case. Ex. 1084, 91:14-23. Using the ClickShare Product without the dongle is not an insignificant feature; nexus, therefore, cannot be presumed.

Barco holds several patents for distinct inventions, including U.S. Patent Nos. 10,762,002 (the '002 patent, Ex. 1086), 11,403,237 (the '237 patent, Ex. 1087), 11,422,951 (the '951 patent, Ex. 1089), and the '676 patent (Ex. 1001). Only the '951 patent has a terminal disclaimer, and it is over a different application. Barco has not and cannot account for the independent value attributed to each of its patents. Each patent covers different features—media sharing methods

('002), network connectivity via a peripheral device ('237), meeting systems for sharing content ('676), and wireless media display tools ('951)—meaning none is coextensive with the ClickShare product, which relies on multiple critical features covered by several patents.

B. Barco Failed to Demonstrate "Commercial Success" Due to the Claimed Features.

Barco's evidence of revenue alone does not establish secondary considerations without showing it is the "direct result" of the claimed features. *See In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996). Barco relied solely on a presumption of nexus and did not show revenue was due to the claimed features rather than significant unclaimed ones. It is not possible to separate revenue from claimed and commonly used features, such as compatibility with Teams and Zoom. Yealink ceased selling dongles in the U.S. but continues selling base units, indicating base units retain value without dongles. Ex. 1082. Barco's products also function without a dongle or peripheral device. Ex. 1076, Ex. 1077. Barco does not show how much revenue is tied to the claimed features versus unclaimed ones.

C. Barco Failed to Show the '676 Patent Covers Crestron's Products.

Barco has publicly relied on a confidential Crestron license in related IPRs. However, Barco must show more than the mere existence of a license. *See Sibia Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1358 (Fed. Cir. 2000) ("[T]he mere existence of these licenses is insufficient to overcome the conclusion of obviousness ...."); *see also Merck & Cie v. Gnosis S.P.A.*, 808 F.3d 829, 838 (Fed. Cir. 2015) ("It is therefore difficult to determine the extent to which the licensing agreement was a result of the novel features in the [challenged] patent, as opposed to the other patents involved."). Yet Barco offers little beyond just that. In fact, the value of the Crestron license extends well beyond the '676 patent at least because it is a "global patent license" for multiple patents. https://www.barco.com/en/about/press-releases/barco-and-crestron-

announce-patent-license-agreement-regarding-a. There is no evidence that Crestron entered the license because it believed that Barco's patents were valid or enforceable. *Teva Pharms. Int'l GmbH v. Eli Lilly & Co.*, 8 F.4th 1349, 1364 (Fed. Cir. 2021). The Federal Circuit affirmed a Board decision holding the Patent Owner did not show "that any of the challenged patents cover the [licensee's] Product by a comparison of the [ ] product to the challenged claims." *Id.* Here, too, Barco fails to explain how Crestron's products embody the claim limitations. Therefore, there is insufficient evidence of a nexus.

X. THE PROPOSED GROUNDS ARE NOT SUBSTANTIALLY THE SAME AS PREVIOUSLY CONSIDERED ART OR ARGUMENTS

The Board already instituted trial in IPR2024-01438 for some claims finding a reasonable likelihood of success. After filing that IPR petition, Requester was asked to admit infringement to additional claims, which are the only claims for which reexamination is requested. There is no history of abusive filings from the Requester or against the '676 patent. The '676 patent issued only in 2022, and therefore there are no settled expectations regarding patentability. Furthermore, the Office has determined that *Advanced Bionics* does not apply to reexaminations.[4] This request passes the *Advanced Bionics* test even if it did apply.

First, there have been no post-grant challenges to any of challenged claims 2–3, 6–7, 9–13, 15, and 17. Independent claims 1, 14, and 16, are currently subject to *inter partes* review, but this request only challenges their dependent claims, and by virtue the limitations of their parent claims. Therefore, there is no overlap in challenged claims between this request and the pending IPR.

[4] As the Office of Patent Legal Administration has explained, *Advanced Bionics* and the "*Becton* factors were specifically formulated to apply to AIA trial proceedings, not to *ex parte* reexamination proceedings." *See* Reexam Petition Decision, Ctrl. No. 90/014,801, at p. 6 (August 31, 2022); *see also Advanced Bionics, LLC v. MEDEL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 (PTAB Feb. 13, 2020) (precedential); *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (PTAB Dec. 15, 2017) (precedential as to § III.C.5., first paragraph).

A. Factors (a), (b) and (d): "(a) the similarities and material differences between the Asserted Art and the prior art involved during examination; (b) the cumulative nature of the Asserted Art and the prior art evaluated during examination; (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art."

The Asserted Art was not the basis of any rejection nor substantively evaluated. (*See generally* Ex. 1004). Indeed, the examiner evaluated no art and Patent owner made no arguments. (*Id.*) Patent Owner listed Uchida and Deforche on an IDS among hundreds of references and materials, but the examiner and the Patent Owner never mentioned them.

The Board is considering similar grounds for different claims in IPR2024-01438, but not for the claims for which reexamination is requested. Moreover, the examiner materially erred, as discussed below.

B. Factors (c), (e), and (f): "(c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection; (e) whether petitioner has pointed out sufficiently how the examiner erred in its evaluation of the asserted prior art; (f) the extent to which additional evidence and facts presented in this petition warrant reconsideration of the prior art or arguments."

The examiner allowed the claims based on the "forcing rule." (Ex. 1004, p.28). Yet as discussed, Ono and Grimshaw teach the claimed "forcing rule" and were not considered by the Office. *See* §X.A.1.m; Ex. 1002, ¶¶53-67. Although Uchida and Deforche were cited, the record lacks any evidence that they were considered for the remaining claim limitations. *See* §III.B. Therefore, the examiner materially erred in failing to address Uchida and Deforche's teachings, particularly given the combination of teachings relied upon here. Accordingly, discretionary denial is not appropriate. *Keysight Technologies, Inc. v. Centripetal Networks, Inc.*, IPR2022-1421, Paper 14, 8 (PTAB Aug. 24, 2023) (reversing denial of institution when art cited in an IDS was not addressed); *see also Oticon Medical AB v. Cochlear Limited*, IPR2019-975, Paper 15, 19-20 (October 16, 2019) (most references were cited but not considered) (precedential); and *Parse*

Biosciences, Inc. v. 10x Genomics, Inc., IPR2023-876, Paper 7, 16 (PTAB Oct. 13, 2023) (instituting review when the examiner did not consider relevant teachings of cited art).

XI. CONCLUSION

The prior art references render obvious claims 2–3, 6–7, 9–13, 15, and 17 of the '676 patent and raise substantial new questions of patentability. The reasons for finding the claims unpatentable are not cumulative with the grounds previously considered. The Requester respectfully requests that the Office order reexamination with special dispatch.

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Respectfully submitted,

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