NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

IN RE: UNIVERSAL ELECTRONICS, INC.,
Appellant

2022-1716, 2022-1717

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. 12/645,037, 16/279,095.

Decided: August 15, 2023

BENJAMIN GILFORD, Greenberg Traurig, P.A., Chicago, IL, argued for appellant Universal Electronics, Inc. Also represented by GARY R. JAROSIK, MATTHEW J. LEVINSTEIN, JAMES J. LUKAS, JR.

MICHAEL S. FORMAN, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for appellee Katherine K. Vidal. Also represented by THOMAS W. KRAUSE, MONICA BARNES LATEEF, AMY J. NELSON, FARHEENA YASMEEN RASHEED.

Before REYNA, TARANTO, and STOLL, *Circuit Judges.*

REYNA, *Circuit Judge.*

This is a consolidated appeal from two Patent Trial and Appeal Board decisions affirming the Patent Office Examiner's rejection of claims from Appellant Universal Electronics, Inc.'s U.S. Patent Application Nos. 12/645,037 and 16/279,095 as obvious under 35 U.S.C. § 103. For the reasons below, we affirm.

BACKGROUND

A. The Patent Applications

U.S. Patent Application No. 16/279,095 (the "'095 application") is a continuation of U.S. Patent Application No. 12/645,037 (the "'037 application") and the two applications share the same specification. Appellant's Br. 3 n.1 (citing J.A. 39–54; J.A. 691–706).[1] The applications generally relate to "a system and method for providing improved user input functionality on a controlling device." '037 application at 1:23–24. The controlling device is configured to control various appliances—like TVs and set top boxes. *Id.* at 3:12–13. The controlling device may include a "key matrix" and "a scrolling and/or navigation function input means," like "a capacitive or resistive touch sensor." *Id.* at 4:6–10. It may also include memories having "the necessary control protocols and command values for use in transmitting command signals to controllable appliances (collectively, the command data)." *Id.* at 4:18–23.

---

[1]   Because the two applications share the same specification, we generally cite the '037 application.

As shown in Figure 3 below, the input means may be a "multiple-electrode capacitive touch sensor 302," which "may accept finger sliding gestures on either axis for translation into navigation step commands in an X or Y direction, as well as finger pressure at, for example, the cardinal points and center area for translation into discrete commands." *Id.* at 7:13–23.

Figure 3
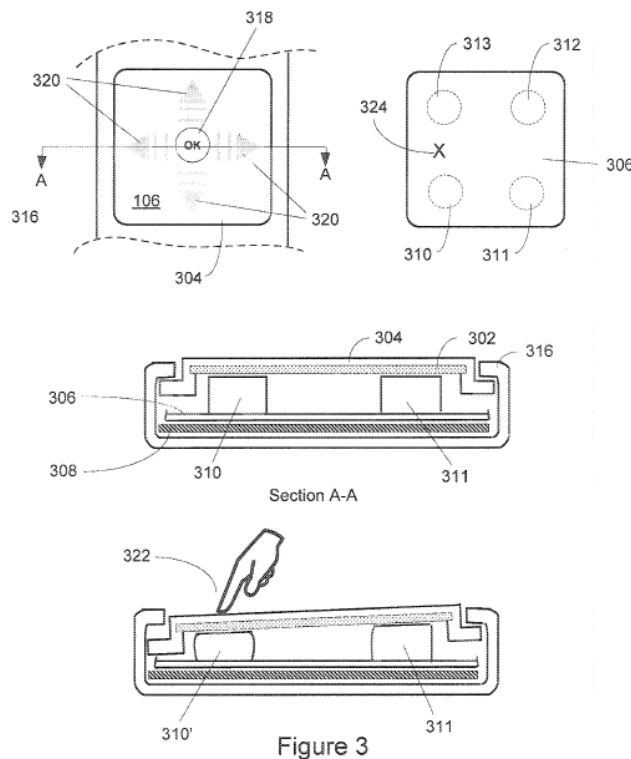
Id. at Fig. 3.

Touch sensor 302 may be above "keypad buttons" 310–313, which "may be supported by printed circuit board 308." *Id.* at 7:22–8:5. In a "first input mode," a user can slide a finger across the keycap 304 (which covers touch sensor 302). *Id.* at 8:5–18. The controlling device can then retrieve from the memory a navigation command representative of the gesture's speed and direction. *Id.* "In a

second input mode, which may be used in conjunction with or separately from finger slide input, a user may press downwards 322" on the keycap 304, compressing one or more of the buttons 310–313. *Id.* at 8:21–9:2. The controlling device can then retrieve a discrete command (equivalent, for example, to an arrow key on a keypad) from the memory based on finger position as reported by the touch sensor 302. *See id.* at 7:15–19, 9:8–11, 11:1–9. Once the controlling device has retrieved the command data, it can use the data to transmit a command in a recognizable format to the target appliance to control it. *Id.* at 5:19–6:2.

B. Procedural History

1. The Rejection of the '037 Application Claims

The Examiner issued a Final Office Action rejecting claims 1, 5–8, 11, 13–18, 20–21, and 23–25 from the '037 application as obvious over various combinations of "Fisher" (U.S. Pat. App. Pub. No. 2010/0149127), "Dresti" (U.S. Pat. App. Pub. No. 2005/0162282), and two other references not at issue here. J.A. 529–44. Representative claim 1 of the '037 application recites:[2]

    1. A controlling device, comprising:

       a casing having an opening; and

       an input device disposed in the opening comprised of a moveable touch sensitive surface positioned above a plurality of switches;

       [1] wherein the controlling device is adapted to respond to an activation of at least one of the plurality of switches by:

---

[2]   UEI does not dispute that claim 1 from each application is representative.

a) [2] determining a touch location of a touch upon the touch sensitive surface;

b) [3] using the determined touch location to retrieve from a library of command data stored in a memory of the controlling device a command data for use in controlling a functional operation of an appliance; and

c) [4] using the retrieved command data to transmit a command signal to the appliance via use of a transmission protocol recognizable by the appliance.

'037 application at Claim 1 (emphasis added to disputed limitation and the Board's bracketing added (J.A. 4)).

The Examiner found that claim 1 was obvious based on Fisher and Dresti. Fisher discloses an electronic device, which can be a remote control, that can include an input device. Fisher, ¶¶ 34–38. The input device can be configured to provide control functions and to include "a touch sensitive surface that provides location information for" a finger "in contact with . . . a touch sensor element associated with the touch sensitive surface." *Id.* at ¶ 38. It can also include "switch elements that actuate a switch when a particular area" is "pressed." *Id.* In some embodiments (*see, e.g.*, the Figures below), the input device can include a frame (or support structure) and a touch pad. *Id.* at ¶ 129.
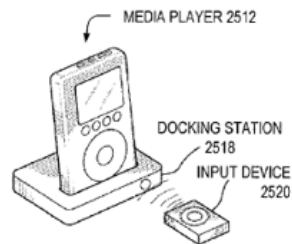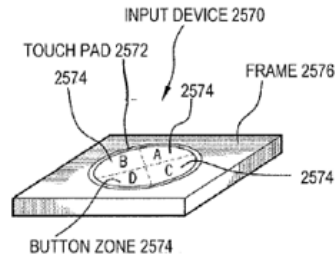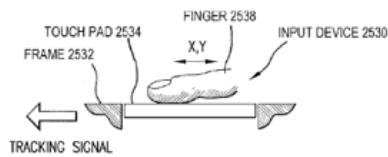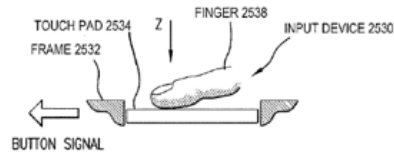
FIG. 33

FIG. 28

FIG. 26

FIG. 27

Id. at Figs. 26–27, 28, and 33.

The touch pad can generate "tracking signals when" a "finger is moved over the top surface of the touch pad in the x,y plane." *Id*. at ¶ 138. And "in the depressed position (z direction)," the touch pad "generates positional information and a movement indicator generates a signal indicating that" the touch pad "has moved." *Id*. "The positional information and the movement indication can be combined to form a button command." *Id*. The touch pad can also be divided into four different "button zones" that can "represent regions of the touch pad" that "can be moved by a user to implement distinct button functions or the same button function." *Id*. at ¶ 140. A "movement detector" (switches or sensors) "can be configured to sense movement of the button zones during [a] clicking action and to send a signal corresponding to the movement to the electronic device." *Id*. at ¶ 142. And the touch pad "can be configured to send positional information on what button zone may be acted on when the clicking action occurs." *Id*. at ¶ 143. "The positional information can allow the device to determine

which button zone to activate when the touch pad is moved relative to the frame." *Id.*

The Examiner found that Fisher taught all the limitations of claim 1 except that it did not "explicitly teach" all of limitation [3]—the limitation at issue here—and limitation [4]. J.A. 533–34. For limitation [3], the Examiner found that Fisher discloses that "a predefined function may be activated by pressing on each button zone," J.A. 533 (citing Fisher, ¶¶ 141, 143), which corresponds to "using the determined touch location to control a functional operation of an appliance," *id.* (bolding removed). Fisher, though, did not "explicitly" teach the entire limitation—including retrieving command data from a library of command data stored in a memory. *Id.*

But Dresti, the Examiner found, teaches what Fisher lacks. J.A. 534. Dresti discloses "a remote control" that is "capable of commanding the operation of home appliances," like TVs or DVD players. Dresti, ¶ 31. Dresti explains that "[f]or commanding the operation of home appliances of different makes, models, and types," the remote control includes a memory that has a "command code library." *Id.* at ¶ 34. The library includes "a plurality of command codes that may be transmitted from the remote control" to control the appliances. *Id.* Dresti, the Examiner explained, teaches what Fisher lacks, because Dresti discloses "a remote control 10 comprising a memory 26 including a command code library for controlling an operation of a home appliance." J.A. 534 (citing Dresti, Fig. 2 and ¶ 34). The Examiner concluded that a skilled artisan would have found it obvious "to modify the input device of Fisher to include the method of Dresti of providing a memory including a command code library and generating a command code associated with a command key to a home appliance" and would have done so "to facilitate controlling the home appliance." *Id.*

Universal Electronics, Inc. ("UEI") appealed to the Board. J.A. 557–65. In its Answer, the Examiner reaffirmed its reasoning and further explained that "Fisher and Dresti are in the same field of endeavor." J.A. 605–06.

The Board affirmed. *Ex Parte Hatambeiki*, No. 2021-353, 2022 WL 1185840, at *1 (P.T.A.B. Apr. 4, 2022) ("*'037 Decision*"). It explained that the Examiner found that Fisher's positional information allows a device to communicate a button zone to activate when a touch pad is moved, creating a clicking action, and therefore teaches limitations [1] and [2]. *Id*. at *2 (citing J.A. 533 & 604–05). The Board also explained that the Examiner found that "Dresti's use of a command code library to control the operation of home appliances teaches or suggests" limitations [3] and [4]. *Id*. (citing J.A. 534). The Board rejected UEI's argument that Fisher fails to teach using the determined touch location in the manner required by limitations [3] and [4], explaining that the Examiner relied on the combination of Fisher *and* Dresti—not on Fisher alone—to teach those limitations. *Id*. at *3 (citing J.A. 533–34 & 605–06).

The Board also rejected UEI's argument that a skilled artisan would not have modified Fisher based on Dresti's teachings. *Id*. at *3–4. "[A]s the Examiner's findings show," the Board explained, "modifying Fisher's input device 2540 based on Dresti's teachings and suggestions would have enabled the modified input device to control devices that respond to transmitted commands (as in Dresti) instead of sensor signals (as in Fisher)," which the Board found, was "supported" by Dresti's "use of a command code library for 'commanding the operation of home appliances of different makes, models, and types.'" *Id*. at *4 (citing J.A. 606 and quoting Dresti, ¶ 34). The Board thus "agree[d] with the Examiner that it would have been obvious to combine" Fisher's and Dresti's teachings "in the manner of recitations [3] and [4]." *Id*.

2. The Rejection of the '095 Application Claims

The Examiner issued a Final Office Action rejecting claims 1–6 and 8–11 of the '095 application as obvious over various combinations of Fisher, "Meijer" (U.S. Pat. App. Pub. No. 2008/0235406), and two other references not at issue here. J.A. 810–22. Representative claim 1 of the '095 application recites:

> 1. A remote control system for remotely controlling one or more devices and/or a user interface, the remote control system comprising:
>
> *a remote control comprising*:
>
> a plurality of user input buttons, at least one of the user input buttons configured to receive a user input event and comprising at least one metal dome and a printed circuit board;
>
> a plurality of sensors being coupled to the at least one of the user input buttons of the plurality of user input buttons, the plurality of sensors configured to generate sensor data in response to a user input event being received at the at least one of the user input buttons of the plurality of user input buttons;
>
> *a memory storing a plurality of command values*; and
>
> user input event detection logic configured to receive the sensor data and identify whether the user input event received at the at least one of the user input buttons of the plurality of user input buttons was a click event or a touch event, wherein the user input event detection logic identifies that the user input event is the click event based on receiving sensor data indicating that the at least one metal dome is depressed such that it forms an

electrical connection on the printed circuit board; and

command selection logic configured to include a first one of the plurality of command values in a first control command transmission in response to determining that the user input event received at the at least one of the user input buttons of the plurality of user input buttons was the click event and to include a second one of the plurality of command values in a second control command transmission in response to determining that the user input event received at the at least one of the user input buttons of the plurality of user input buttons was the touch event.

'095 application at Claim 1 (emphasis added to disputed limitations).

The Examiner found that Fisher teaches most of the limitations of claim 1 of the '095 application except that it does not "explicitly teach a memory storing a plurality of command values; and the command selection logic configured to include a first one of the plurality of command values in a first control command transmission and to include a second one of the plurality of command values in a second control command transmission." J.A. 814 (emphasis removed). But it found that Meijer taught this. J.A. 815.

Meijer discloses a remote control that can "issue commands to a multiplicity of appliances of different type and/or manufacture." Meijer, ¶ 1. The remote control is "capable of transmitting commands" to the appliances "to cause the appliances to perform operational functions, provided the control protocols and command values to be used are known to the" remote control's "operational software." *Id.* at ¶ 14. It includes a processor and memory, *id.* at ¶ 15, which stores executable instructions for the processor and "data that serves to define the . . . control protocols and command values to the operational software." *Id.* at ¶ 16.

The Examiner explained that Meijer "teaches a memory storing a plurality of command values" because it "discloses a controlling device 100 comprising memories 202,204,206 for storing a plurality of command values." J.A. 815 (emphasis removed) (citing Meijer, Fig. 2, ¶¶ 14–17). And Meijer, the Examiner continued, further teaches the first and second plurality of command values in first and second command transmissions because it discloses that "the controlling device 100 retrieves from the command data a command value corresponding to an actuated function key and transmits the command to an intended target appliance," and "[i]t is understood that an activation for each actuated function key would be corresponding to particular command value." *Id.* (citing Meijer at ¶¶ 15–17).

The Examiner found that it would have been obvious to modify Fisher to include "the method of Meijer of storing a plurality of command values in a memory; retrieving a command data from the memory; and transmitting the command data to an intended target appliance." *Id.* A "touch event," it explained, would correspond to a first command value and a "click event" to a second command value. *Id.* Thus, the Examiner concluded, "a first command data would be transmitted to an intended target appliance in response to a touch event" and a "second command data" would be transmitted in response to a "click event." *Id.* The "motivation," the Examiner explained, would have been "to enable the remote control to command an appliance in response to touch/click event." *Id.*

UEI appealed the rejections. J.A. 888–900. The Examiner answered. J.A. 935–42. The Examiner provided the below annotated Figure 29 from Fisher and explained that it teaches an example of a remote control that includes an input device 2540 that communicates with a computing device 2542 via a communication interface 2554. J.A. 936.
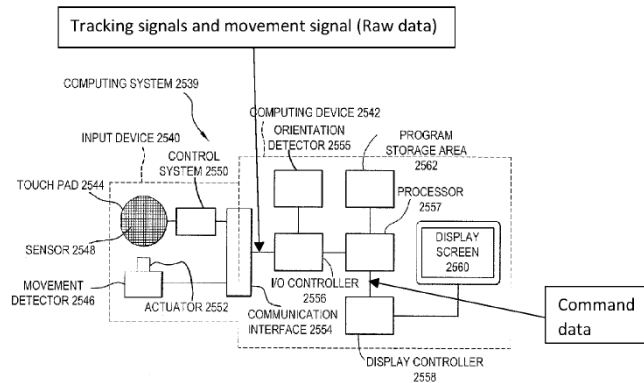
FIG. 29

J.A. 936 (annotations in original).

The Examiner explained that Fisher does not teach the remote control having a memory storing a plurality of command values, stating that the "program storage area (i.e., memory) of Fisher is included in the computing device" 2542—not the "input device" 2540—and thus Fisher's "input device 2540 transmits raw data (e.g., tracking signals and movement signal), instead of a command value as claimed, to the computing device 2542." J.A. 938. The Examiner then reaffirmed its finding that Meijer teaches a remote control that has the memory for storing a plurality of command values and that it would have been obvious to modify Fisher's remote control to include Meijer's teaching of using a memory in the remote control to store the command values. *Id.* The Examiner also countered UEI's argument that a skilled artisan would not have been motivated to combine Fisher with Meijer because Fisher "already has a capability of commanding an appliance." J.A. 939. The Examiner explained that Fisher "is not capable of selectively controlling an intended target appliance among multiple appliances." J.A. 940. So, the

Examiner explained, it would have been obvious to modify Fisher to include Meijer's teaching to do just that. *Id.*

The Board affirmed. *Ex Parte Hatambeiki*, No. 2020-6705, 2022 WL 737209, at *1 (P.T.A.B. Mar. 10, 2022) ("*'095 Decision*"). It explained that the Examiner found that Fisher's touch pad can detect touch events to scroll through a list of items and thus suggests command logic. *Id.* at *2. The Board then explained that although the Examiner acknowledged that Fisher's command logic is part of the computing device 2542—not the remote control—the Examiner "relie[d] on Meijer's teaching of a controlling device that retrieves command data from memory on the controlling device to transmit to an intended target appliance to teach or suggest moving the command logic from computing device 2542 to Fisher's input device 2540 (i.e., to a remote control)." *Id.* The remote control could then control *multiple* appliances in response to a touch or click event. *Id.*

The Board rejected UEI's arguments that relied on "attacking Fisher individually," explaining that the Examiner's rejection was "based on the combined teachings and suggestions of Fisher and Meijer." *Id.* at *3. It also disagreed with UEI's argument that the ability of Fisher's input device to control a "*single* device" undercut the Examiner's proposed rationale—modifying Fisher based on Meijer's teachings in order to make "Fisher's input device more capable by enabling it to control *multiple* appliances." *Id.* The Board found that the "Examiner's reason ha[d] a rational underpinning and [was] support[ed] by" Meijer's teaching that Meijer's functionality is "'for use in commanding the functional operations of one *or more* appliances.'" *Id.* (quoting Meijer, ¶ 15 (emphasis added by Board)). The Board thus "agree[d]" that the proposed modification of Fisher would have been obvious. *Id.*

UEI appeals the Board's decisions for both applications. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. § 141(a).

DISCUSSION

We review the Board's obviousness determination de novo. *See In re Brandt*, 886 F.3d 1171, 1175 (Fed. Cir. 2018). We review underlying factual findings—including what a reference teaches and whether there is a motivation to combine—for substantial evidence. *See In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1280 (Fed. Cir. 2015); *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1363 (Fed. Cir. 2018). "Substantial evidence is something less than the weight of the evidence but more than a mere scintilla of evidence." *Donner Tech., LLC v. Pro Stage Gear, LLC*, 979 F.3d 1353, 1358 (Fed. Cir. 2020). It is "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Brandt*, 886 F.3d at 1175 (citation omitted).

UEI argues on appeal that for both applications, the Board and the Examiner (1) failed to show that the prior art references teach certain claimed subject matter; and (2) failed to articulate a reason with a rational underpinning for why a skilled artisan would have combined the references. We address each argument for each application in turn.

A.

As for the '037 application, UEI first argues that the Board and the Examiner failed to show that Fisher and Dresti teach limitation [3]—the "claimed controlling device that uses 'the determined touch location' to retrieve command data from a library of command data stored in a memory of the controlling device." Appellant's Br. 27. We disagree.

The Board and the Examiner found that the combination of Fisher and Dresti teach the claimed controlling device that uses the determined touch location (Fisher) to retrieve command data from a library of command data stored in a memory of the controlling device (Dresti). *See*

'037 Decision, at *3 ("[T]he Examiner relies on the combination of Fisher and Dresti, not Fisher alone, to teach or suggest recitation[] [3]."); *id*. at *2–4; J.A. 533–34; J.A. 605–06. In particular, the Examiner found that Fisher discloses that "a predefined function may be activated by pressing on each button zone [of the touch pad]," J.A. 533 (citing Fisher, ¶¶ 141, 143), which it found corresponds to "using the determined touch location to control a functional operation of an appliance," *id*. (bolding removed). But it found that "Fisher does not explicitly teach a method of retrieving a command data from a library of command data stored in a memory." J.A. 605. It found, however, that Dresti discloses "a remote control 10 comprising a memory 26 including a command code library for controlling an operation of a home appliance," in which the remote control "reads the command code" when a command key is activated. J.A. 534 (citing Dresti, Fig. 2, ¶¶ 34, 36). The two references combined thus taught limitation [3]. J.A. 533–34. The Board affirmed that finding. *'037 Decision*, at *1–4. We conclude that the finding is supported by substantial evidence—the references themselves. *See, e.g., id*. at *2 (citing J.A. 533 (citing Fisher, ¶¶ 136, 138, 140–44, Fig. 28), J.A. 604–05 (citing Fisher, ¶¶ 130, 138, Fig. 29), J.A. 534 (citing Dresti, ¶¶ 34, 36, Fig. 2)).

UEI argues that "Fisher's alleged memory (*i.e.*, program storage area 2562) is located on computing device 2542"—not on the "input device 2540 (*i.e.*, the alleged controlling device)"—and that Fisher does not disclose that command data is retrieved from memory but instead "discloses that commands are generated in the processor 2557." Appellant's Br. 27–28. And Dresti, UEI argues, does not disclose using a "determined touch location" to retrieve command data but instead uses "command key activation (*i.e.*, a button press)" to retrieve command data from memory. *Id*. at 28 (emphasis removed). UEI claims that the combination fails because "using a 'command key' to retrieve a command code from memory is not the same

thing as the claimed 'using the determined touch location [of a touch upon a touch sensitive surface]'" to do so. *Id.* (emphasis removed and brackets in original).

UEI's arguments largely amount to an assertion that each reference on its own fails to teach the entire limitation—that is, that Fisher fails to teach retrieving command data from memory of the controlling device (which Dresti teaches) and that Dresti fails to teach using a determined touch location (which Fisher teaches). But the Board and Examiner relied on the *combination* of Fisher and Meijer for the limitation. "That the proposed *combination* of [Fisher] and [Meijer]—rather than one of the individual references—discloses the disputed claim limitation[] does not defeat the Board's conclusion of obviousness." *Fleming v. Cirrus Design Corp.*, 28 F.4th 1214, 1222 (Fed. Cir. 2022). And so when, as here, "the rejection is based upon the teachings of a combination of references," "[n]on-obviousness cannot be established by attacking [the] references individually." *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). UEI's attack on Fisher and Dresti for failing to individually teach the entire limitation is thus without merit.

UEI's "command key" combination argument also lacks merit. UEI asserts that the Examiner's proposed combination does not teach the limitation because the combination uses a *determined key activation* upon a *command key* (*i.e.*, a switch)—not a *determined touch location* of a touch upon *a touch sensitive surface* above the switch—to retrieve a command code from memory. Appellant's Br. 28 & n.3. And the Board, UEI continues, did not "remedy" the Examiner's failure to set forth a combination that teaches using a *determined touch location* to retrieve a command from memory. *Id.* at 29. UEI reads the Examiner's and the Board's analysis too narrowly. True, as UEI notes, the Examiner refers at the end of its claim 1 analysis to Dresti's "command key" when discussing modifying Fisher's input device to include the method of Dresti. *See* J.A. 534. But

reading the analysis as a whole—with its explanation of what Fisher teaches, J.A. 533, and its selective emphasis when explaining that "Dresti teaches **using the** determined key activation **to retrieve from a library of command data in a memory** . . .," J.A. 534—we think that it is clear that the Examiner relied on combining Fisher's use of button zones on a touch pad associated with functions and sending positional information (i.e., using a determined touch location to control an appliance) with Dresti's retrieving a command code from a memory having a command code library.[3] And again, the Board's affirmance recognized this. *See '037 Decision*, at *3 ("[T]he Examiner relies on the combination of Fisher and Dresti . . . to teach or suggest recitation[] [3]." (citing J.A. 533–34, 605–06)); *id.* at *4 ("[W]e agree with the Examiner that it would have been obvious to combine the teachings and suggestions of Fisher and Dresti in the matter of recitation[] [3]."). UEI's "command key" argument is thus unavailing.

UEI next argues that the Board and the Examiner failed to articulate a reason why a skilled artisan would have combined Fisher with Dresti. Appellant's Br. 30. The Examiner, UEI asserts, proposed modifying Fisher to include Dresti's method of generating a command code "to enable the input device to control an intended target appliance." *Id.* at 31 (quoting J.A. 606). But, UEI contends, Fisher already teaches that its input device can control an intended target appliance. *Id.* So, it says, the Examiner's reason for modifying Fisher lacks a rational underpinning. *Id.* UEI argues that the Board tried to "sidestep" this by proposing that "'modifying Fisher's input device 2540 based on Dresti's teachings . . . would have enabled the modified input device to control devices that respond to

---

[3]   UEI notably does not dispute that Fisher teaches using a determined touch location. *See* Oral Arg. at 12:51–13:06, 14:52–15:11.

transmitted commands (as in Dresti) instead of sensor signals (as in Fisher).'" *Id.* (quoting *Decision*, at *4). UEI argues that this merely states what the combination would do, not why it would be made. *Id.*

We disagree. The Examiner also explained in its Answer that Fisher and Dresti are in "the same field of endeavor," J.A. 605, and the Board, in agreeing with the Examiner's obviousness conclusion, continued on to state that the Examiner's conclusion was "supported by Dresti's teaching regarding the use of a command code library for 'commanding the operation of home appliances of different makes, models, and types,'" *'037 Decision*, at *4 (quoting Dresti, ¶ 34). UEI agreed at oral argument that Fisher fails to disclose universal-remote capability. *See* Oral Arg. at 6:01–6:11.

We note that "[t]here is a motivation to combine when a known technique has been used to improve one device" (Dresti's use of a command code library for operating appliances of different makes, models, and types), and a skilled artisan "would recognize that it would improve similar devices in the same way" (Fisher's input device, which controlled only a single device), "using the prior art elements according to their established functions." *Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1380–81 (Fed. Cir. 2023) (citations and internal quotation marks omitted) (reversing Board's finding of no motivation to combine where the references related to the same field of endeavor and addressed the same cache-coherency issue). Under the circumstances here, the Board provided a sufficient "apparent reason"—supported by substantial evidence, including Dresti, ¶ 34, which the Board and the Examiner both relied on—"to combine the known elements in the [claimed] fashion." *KSR v. Teleflex*, 550 U.S. 398, 418 (2007).

B.

Turning to the '095 application, UEI first argues that the Board and the Examiner failed to show that Fisher and

Meijer teach "a remote control comprising a memory storing a plurality of command values and command selection logic configured to include two of the command values stored in memory in two separate control command transmissions in response to a click and a touch event." Appellant's Br. 34. We are not persuaded.

The Board and the Examiner found that the combination of Fisher and Meijer taught the disputed limitations. *See '095 Decision*, at *3 (explaining that the "Examiner's rejection" was "based on the combined teachings and suggestions of Fisher and Meijer"); *id.* at *2; J.A. 814–15. The Examiner found that Fisher discloses "command selection logic (the controller 300, Fig.3)" that causes a command in response to the click event (the input device with a touch pad on which a button zone can be pressed to start a program or view a menu) and a command in response to the touch event (the detection of a touch on the touch pad and generating a tracking signal to scroll through a list of items). J.A. 814 (bolding removed) (citing Fisher, ¶¶ 38, 42, 130, 132, 138, 140–41, 153, and Figs. 3, 26–29); *see also* J.A. 936–38 (citing Fisher, ¶¶ 42, 130, 138, 145–46, 149, 150, and Figs. 25–27, 29). It found, though, that Fisher does not teach that the remote control has a memory storing a plurality of command values because, for example, Fisher's memory is in computing device 2542—not input device 2540—and so input device 2540 transmits tracking and movement signals—not a command value—to computing device 2542. J.A. 938. But it found that Meijer's remote control includes a memory that stores command values ("controlling device 100 comprising memories 202,204,206 for storing a plurality of command values") and command logic configured to include a first and second command value in a first and second control transmission ("controlling device 100 retrieves from the command data a command value corresponding to an actuated function key and transmits the command to an intended target appliance"). J.A. 815 (citing Meijer, ¶¶ 14–17, Fig. 2). Meijer

thus taught what Fisher lacked and the combination taught the limitations. *See id.*; *see also* J.A. 938.

The Board recounted and affirmed this analysis. *See '095 Decision*, at *2–4. And the finding on what the references teach is supported by substantial evidence—the cited portions of the two references. *See, e.g., id.* at *2 (citing J.A. 814 (citing Fisher, ¶¶ 38, 42, 130, 132, 138, 140–41, 153, and Figs. 3, 26–29; Meijer, ¶¶ 14–17, Fig. 2)); *id.* at *3 (citing J.A. 938 (citing Fisher, ¶¶ 145–46, Fig. 29) and Fisher, ¶ 150).

UEI has not shown any error. UEI says that Fisher fails to disclose the claimed remote control because its "input device 2540 (*i.e.*, the alleged remote control) does not include a memory" (the memory, "program storage area 2562," is instead in Fisher's "computing device 2542") and the memory does not "store a plurality of command values" (the "computing device 2542" instead "generates commands in the processor 2557"). Appellant's Br. 34–35. And Meijer, UEI argues, fails to suggest the claimed remote control because "Meijer's remote control does not transmit commands in response to a click event and a touch event" (it instead "transmits commands only in response to the actuation of a 'function key' (*i.e.*, a button press)"). *Id.* at 35. Stated differently, UEI argues that each reference on its own fails to teach what the other discloses—that Fisher fails to teach a memory storing multiple command values and that Meijer fails to teach transmitting commands in response to click or touch events. But this argument is unavailing because the Board and the Examiner relied on the *combination* of the two references. *See Merck*, 800 F.2d at 1097.

UEI's assertions pertaining to the combination are also unavailing. According to UEI, the Examiner and the Board proposed modifying Fisher to move Fisher's command logic from its computing device to its input device. Appellant's Br. 35–36. For the modification to work, UEI contends,

Fisher must teach storing command values in its memory. UEI argues that because Fisher does not teach this, the combination fails. We disagree.

UEI reads the Board's and the Examiner's analysis too narrowly. Both the Examiner and the Board plainly relied on Meijer's disclosure for the "memory storing a plurality of command values." *See, e.g.,* J.A. 938 ("It would have been obvious to [a skilled artisan] to modify the remote control system of Fisher to *include the teaching of Meijer of providing a memory storing a plurality of command values in a remote control*." (emphasis added)); J.A. 815; *'095 Decision*, at *2 ([T]he Examiner relies on *Meijer's teaching of a controlling device that retrieves command data from memory on the controlling device* to transmit to an intended target appliance to teach or suggest moving the command logic from computing device 2542 to Fisher's input device 2540 (i.e., to a remote control)." (emphasis added) (citing J.A. 815 & 938)). Including Meijer's teaching, they found, would enable the modified input device to control multiple appliances. *See, e.g.*, J.A. 938; *'095 Decision*, at *4. To the extent that UEI is demanding bodily incorporation or is otherwise attempting to compartmentalize each individual reference's teachings, it errs: The "test for obviousness is what the *combined* teachings of the references would have suggested to" skilled artisans and "does not require an actual, physical substitution of elements." *In re Mouttet*, 686 F.3d 1322, 1332–33 (Fed. Cir. 2012) (emphasis added).

UEI next argues that the Board and the Examiner failed to articulate a reason why a skilled artisan would have combined Fisher with Meijer. Appellant's Br. 37. According to UEI, the Examiner proposed modifying Fisher with Meijer "to enable the input device to control an intended target appliance among multiple appliances." *Id.* at 37–38 (quoting J.A. 938). But, UEI contends, Fisher already discloses this. *Id.* at 38. The Examiner's reason thus lacks a rational underpinning. *Id.* As for the Board, UEI argues that the Board conceded that Fisher's input device

can control an intended target appliance but asserted for the first time that a skilled artisan would have modified Fisher "such that tracking and movement signals are processed in the input device 2540 instead of in the computing device 2542 because doing so purportedly 'would have made Fisher's input device more capable by enabling it to control *multiple* devices.'" *Id.* at 39 (quoting *'095 Decision*, at *4). UEI maintains that the Board failed to explain why a skilled artisan would have thought to modify Fisher to control multiple devices in the first place. *Id.* We disagree.

In its Answer, the Examiner agreed that Fisher has the capability to command an appliance but noted that Fisher's input device transmits tracking and movement signals to the computing device and thus "is not capable of *selectively controlling* an intended target appliance among *multiple* appliances." J.A. 940 (emphasis added). Yet Meijer, the Examiner explained, discloses a remote control that transmits a command value in a recognizable format "to control an intended target appliance among multiple appliances." *Id.* (underlining removed) (citing Meijer, ¶¶ 16–18). The Examiner thus explained that "it would have been obvious to modify . . . Fisher to include the teaching of Meijer of providing a memory storing a plurality of command values so that the input device would be able to *selectively control* an intended target appliance among *multiple appliances*." *Id.* (emphasis added).

The Board agreed: "The Examiner's reason has a rational underpinning and is supported by the teaching in Meijer that the functionality added to a controlling device is 'for use in commanding the functional operations of one *or more* appliances.'" *'095 Decision*, at *4 (quoting Meijer, ¶ 15 (emphasis added by the Board)). Again, UEI agreed at oral argument that Fisher fails to disclose universal-remote capability. Oral Arg. at 6:01–6:11. Under the circumstances here, the Board provided a sufficient "apparent reason"—supported by substantial evidence, including

from the references themselves—"to combine the known elements in the [claimed] fashion." *KSR*, 550 U.S. at 418.

CONCLUSION

We have considered UEI's other arguments and find them unpersuasive. We conclude that the Board's factual determinations are supported by substantial evidence, and that the Board did not err in determining that it would have been obvious to a skilled artisan to combine the features of respective references to arrive at the inventions claimed in the '037 and '095 applications. We therefore affirm the Board's decisions.

AFFIRMED

COSTS

No costs.