

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner,

v.

SMITH INTERFACE TECHNOLOGIES, LLC
Patent Owner.

Case IPR2024-01083
Patent 10,642,413

AUTHORIZED RESPONSE TO DIRECTOR REVIEW REQUEST

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I. Introduction

Smith Interface Technologies (“Smith”) requests Director Review to relitigate a factual dispute that it argued and lost on a fully developed record. Specifically, Smith argues that the Board did not find motivation to combine known elements “as arranged in the claims.” DR Req. 2. But the Board did exactly that, by showing that the Ahn-Chaudri-Hinckley combination meets all claimed limitations exactly as they are arranged. As the Board recognized, Ahn explicitly teaches that its menus need not be implemented exactly as shown. Accordingly, Smith’s premise that the Board had to show motivation to bodily incorporate Hinckley’s radial menu and associated icon into a particular embodiment of Ahn’s menus is entirely faulty.

Smith cannot disguise these factual grievances as putative legal errors, particularly when Smith itself repeatedly misstates and misapplies the law. Vacating the Board’s final decision via Director Review is an extraordinary remedy reserved for abuses of discretion and important policy questions or clear errors of law and fact.¹ Smith alleges none of the former and proves none of the latter. Nor could it, credibly, as the Board firmly anchored its decision in the extensive available

¹ Director Review process at §2.B. Retrieved from <https://www.uspto.gov/patents/ptab/decisions/director-review-process#RIDRP>.

evidentiary record, faithfully applying longstanding precedent on obviousness.

Smith's request therefore should be denied.

II. Federal Circuit Precedent Rejects Smith's Assertion that the Petition and FWD Needed to Prove that "Incorporating" One Reference Into Another Is Obvious

Smith's request hinges on its contention that the Final Written Decision ("FWD") was required to "find and support" that it was obvious to "incorporat[e] a radial menu into Ahn's right menu." DR Req. 11-12. Smith bases this requirement on its legally and factually unsupportable assumption that the Ahn-Chaudri-Hinckley combination must preserve the functionality of Ahn's example embodiment of menu 420/1300, including its sub-menus 420a-420f. *See* DR Req. 7-8. From this flawed foundation, Smith argues that the "FWD's findings...offer no basis to support the notion that a POSITA would have modified Ahn's right menu 420/1300 to incorporate Hinckley's radial menu as is required to arrive at the claimed features." DR Req. 9²; *see also id.* 6 ("to meet both requirements of the claimed 'first menu,' Petitioner ***must show*** a POSITA would have been motivated to modify Ahn's right menu 420/1300 to incorporate Hinckley's radial menu."). However, these contentions run perfectly counter to the law of obviousness.

² Emphasis added throughout unless otherwise noted.

The test for obviousness is whether “a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention,” not whether the physical features of one reference may be bodily incorporated into the structure of another reference.³ See *Allied Erecting & Dismantling Co. v. Genesis Attachments, LLC*, 825 F.3d 1373, 1381 (Fed. Cir. 2016); *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). “[A] determination of obviousness based on teachings from multiple references does not require an actual, physical substitution of elements.” *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012) (citations omitted); *In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973) (“Combining the teachings of references does not involve an ability to combine their specific structures.”). Indeed, whether one reference can be incorporated in another is “basically irrelevant.” *In re Etter*, 756 F.2d 852, 859 (Fed. Cir. 1985) (en banc). Instead, “[a] reference must be considered for everything that it teaches, not simply the described invention or a preferred embodiment.” *In re Applied Materials, Inc.*, 692 F.3d 1289, 1298 (Fed. Cir. 2012).

³ While Smith alleges that a “bodily incorporation” argument “is legally incorrect,” Smith makes no effort to support this allegation with citation to countervailing law or even explanation about its inapplicability to these facts. DR Req. 8.

In that regard, one with ordinary skill in the art is not compelled to follow blindly the teaching of one prior art reference over the other without the exercise of independent judgment. *Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984). The Federal Circuit repeatedly has explained that the inquiry into the existence of a motivation to combine is a flexible one and a person of ordinary skill in the art is a person of ordinary creativity with common sense, common wisdom, and common knowledge. *See Fleming v. Cirrus Design Corp.*, 28 F. 4th 1214, 1222-23 (Fed. Cir. 2022) (citing *Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (Fed. Cir. 2013); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007)). As *KSR* informs us, “in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *KSR*, 550 U.S. at 420. The rationale of *KSR* does not support a theory that a person of ordinary skill can “only perform combinations of a puzzle element A with a perfectly fitting puzzle element B.” *ClassCo, Inc. v. Apple, Inc.*, 838 F.3d 1214, 1219 (Fed. Cir. 2016).

Smith’s reliance on *InTouch* and *PersonalWeb* is misplaced. DR Req. 2. In the *InTouch* case, the Federal Circuit reversed a district court’s obviousness judgment because the patent challenger relied on expert testimony that “did not articulate reasons why a person of ordinary skill in the art at the time of the invention would combine these references.” *InTouch Techs., Inc. v. VGo Communs., Inc.*, 751 F.3d 1327, 1351 (Fed. Cir. 2014). In *PersonalWeb*, the Federal Circuit vacated the

Board’s obviousness finding because the motivation analysis implied “no more than that a skilled artisan, once presented with the two references, would have understood that they *could be* combined.” *PersonalWeb Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 993 (Fed. Cir. 2017) (original emphasis). Neither speaks to the combination advanced in the instant Petition and adopted in the FWD. Here, Smith does not argue that the Board somehow failed to find motivations to combine; Smith openly concedes that the Board “credited motivations” for combining Ahn and Hinkley. DR Req. 1; *see also id.* 10 (the “FWD also credits four benefits associated with Petitioner’s ‘first’ motivation...”). And Smith does not argue that the Board somehow implied only that a skilled artisan *could*, rather than *would*, have combined the references in question. Rather, Smith simply disagrees with the reach of the Board’s findings, based on record evidence from Petitioner, a factual dispute that *InTouch* and *PersonalWeb* do not govern.

Fundamentally, Smith’s request rests on a flawed understanding of the law that assumes it is proper to replace *KSR*’s expansive and flexible motivation-to-combine framework with a rigid requirement of motivating an “incorporation” of one reference into another, and ignores well-reasoned motivations adopted by the Board. Correctly read and properly applied, the caselaw fully supports the Board’s decision.

III. The Board’s Motivation Analysis Properly Addressed the Full Scope of the Petition’s Combination

A. Smith Mischaracterizes the Combination Articulated in the Petition and Endorsed by the Board

Smith asserts that, “[t]o meet the ‘blurring’ features described in Limitations [1.d.i-ii], Petitioner relies on Ahn’s right menu opening to blur the ‘clock widget’ in Ahn’s standby screen.” DR Req. 6. “Thus, only Ahn’s right menu 420/1300 can be the ‘first menu’ of Limitation [1.d.i].” *Id.* And because the Petition turned to the teachings of Hinckley with respect to Limitations [1.e.i-iii], Smith contends that “Petitioner must show a POSITA would have been motivated to modify Ahn’s right menu 420/1300 to incorporate Hinckley’s radial menu.” *Id.* Not so.

At no point did the Petition or FWD propose bodily incorporating only Hinckley’s radial menu into Ahn’s example embodiment of right menu 420/1300. To the contrary, the Petition argues—and the Board agreed—that “[a] POSITA would have been motivated to integrate [Hinckley’s] teachings about bezel gestures and associated user interface elements, including the bezel menus and radial menus, in conjunction with the Ahn-Chaudhri touch screen mobile device.” Pet. 23; *see also id.* 37; FWD, 21, 26-27. For example, the Petition explained “that Ahn’s menus would include the multiple selectable icons or slots described by [Hinckley] and that at least one of the selectable icons or slots would be associated with a radial menu icon as described by [Hinckley].” Pet. 52; FWD, 29 (endorsing same). That is,

while the “first menu” of the Ahn-Chaudhri-Hinckley combination would have been displayed similar to Ahn’s menu 420/1300 (*e.g.*, an open menu on the right side of the screen that would have resulted in blurring of the clock widget, as shown in Ahn’s Figs. 4B and 13(b)), the content of the menu and the user’s interaction with that content would have been implemented consistent with the teachings of Hinckley. *See* Pet. 37-39, 47-48, 52-53. Not once does the Petition or FWD use the word “incorporate” in the context of this combination, nor does it limit the combination to only Hinckley’s radial menus.

Importantly, in explaining how Ahn’s teachings render obvious Limitation [1.d.ii] in the context of the Ahn-Chaudhri-Hinckley combination, neither the Petition nor the FWD rely upon any of the specific menu items of Ahn’s right menu (*i.e.*, submenus 420a-420f), rendering their details and Smith’s reliance upon them irrelevant. *See* Pet. 39-45; FWD, 45-47. The first theory of obviousness for Limitation [1.d.ii] adopted by the FWD relies upon the translucency of the window in which the menu items are displayed. *See* Pet. 39-41, FWD, 45-46. This theory is not impacted by the specific menu items included in the menu, and is therefore not contingent on whether “Ahn’s sub-menus 420a-420f cannot be implemented by a radial menu,” as Smith insists. *See* DR Req. 7-8. There is no argument or evidence on this record that Hinckley’s multiple selectable icons or slots within its bezel menu are incompatible with Ahn’s translucent menu window. *See generally* DR Req.

The second theory of obviousness for Limitation [1.d.ii] adopted by the FWD relies upon “blurring at least a portion of background standby screen 300 (*e.g.*, a clock widget) as a result of a user opening one of the menus.” *See* Pet. 41-45, FWD, 46-47. This theory does not at all rely upon the implementation details of the menu itself, but rather on the effect that opening the menu has on the rest of the user interface. Thus, utilizing Hinckley’s bezel menus and radial menus, as discussed in the Petition and FWD, would not have had any impact on this theory. *See* EX1023, ¶26 (Dr. Terveen describing that “Hinckley’s bezel menus, slots, radial menu icons, and radial menus are all related to one another” and that he “relied upon those interconnected teachings in explaining a POSITA’s motivation” to combine the prior art).

Accordingly, none of the Board’s positions narrowly rests on “modify[ing] Ahn’s right menu 420/1300 to incorporate Hinckley’s radial menu,” as Smith’s theories require. DR Req. 6. Rather, the combination rests on considering all three references for all that they teach, consistent with the requirements of the law. *Applied Materials*, 692 F.3d at 1298.

B. The Board Made Evidence-Backed Findings on Motivation-to-Combine for the Combination Set Forth in the Petition

Smith argues that the FWD is flawed because it rests on “generic obviousness findings that would not have led to the claims.” DR Req. 1. Smith alleges, for

example, that the FWD “emphasizes generic ‘benefits of a radial menu over a linear menu’ and not[es] that the evidence ‘weighs advantages and disadvantages of a pie menu.’” DR Req. 12. According to Smith, “the claim does not recite merely a mobile device with a radial menu, but a ‘first menu’ that operates in the specific manner of Limitations [1.d.i]-[1.e.iii].” DR Req. 12. With these arguments, Smith erects and dispels a strawman. The credited motivations are not limited solely to Hinckley’s “radial menu,” as Smith alleges, but instead go to the full combination set forth in the Petition, which is commensurate with the claim language.

Specifically, the FWD found that:

altering Ahn’s device by substituting Hinckley’s bezel gestures and associated bezel and radial menus for Ahn’s technique of displaying menus does no more than yield the predictable results of (a) conserving screen real estate, (b) distinguishing bezel gestures from normal gestures so that the bezel gestures do not interfere with normal gestures and vice versa, (c) providing a novice mode to help a user learn the expert way of accessing the functionality of the bezel and radial menus, and (d) providing a user interface that creates an intuitive, efficient, and pleasing experience for the user as taught by Hinckley.

FWD, 26-28. These findings are directly aligned with the combination as it was set forth in the Petition. *See* §III.B, *supra*.

At no point has Smith provided any technical rationale regarding why the Ahn-Chaudhri-Hinckley combination must rigidly adhere to the specific

functionality of Ahn's menu items as they are illustrated in Ahn's figures. To the contrary, Ahn explicitly teaches that its menus need not be implemented exactly as shown. "FIGS. 4A and 4B illustrate sample screens for explaining a method of displaying a menu when a rightward direction key is selected in a mobile communication terminal in an implementation." EX1004, [0049]. Ahn only intends its menu to be a "sample" for the purposes of explaining the method of opening the menu (*i.e.*, "displaying a menu when a rightward direction key is selected"), which is consistent with the Petition turning to Hinckley for alternative details about how the items of a touchscreen menu would have been configured. *See id.* "In FIG.4B, the user menu 420 may comprise sub-menus such as" 420a-420f. Contrary to Smith's arguments, these example submenus are not only unimportant to the Ahn-Chaudhri-Hinckley combination, they are even unimportant to Ahn in isolation.

Smith's arguments unjustifiably require that the Petition and FWD show how and why "the functionality described in Ahn's sub-menus 420a-420f" (*i.e.*, the menu items Ahn illustrates in one example of a right menu 420/1300) would "be implemented by a radial menu." DR Req. 7-8. Yet, nowhere did the Petition or FWD rely upon Ahn's sub-menus 420a-420f in explaining why Limitations [1.d.i]-[1.e.iii] are obvious. *See* Pet. 35-55 (explaining how Ahn-Chaudhri-Hinckley renders Limitations [1.d.i]-[1.e.iii] obvious); FWD, 34-62 (finding and explaining the obviousness of Limitations [1.d.i]-[1.e.iii]).

For example, while the Petition's discussion of Limitation [1.e.i] begins by noting that Ahn's right menu 420 includes "various sub-menus" and that these are examples of "menu items," this discussion simply sets forth the context of Ahn relevant to the ultimate discussion of obviousness. *See* Pet. 46-47. Having set forth this context, the Petition immediately turns to the Ahn-Chaudhri-Hinckley combination by explaining that, "[f]or the reasons described in §VI.A.4, a POSITA would have found it obvious to utilize Hinkley's bezel gestures and associated user interface elements in the context of Ahn's mobile communication terminal 100." Pet., 47. The Petition then highlights numerous relevant teachings of Hinckley before explaining that, "a POSITA would have at least found it obvious to implement Ahn's mobile communication terminal 100 such that Ahn's menus would include the multiple selectable icons or slots described by Hinkley and that at least one of the selectable icons or slots would be associated with a radial menu icon as described by Hinkley." Pet. 52. Notably, the indicated conclusion does not rest on the specific implementation examples of Ahn or Hinckley, but instead on what a POSITA would have found obvious based on Ahn and Hinckley. Indeed, when mapping the claim language immediately thereafter, the Petition focuses on Hinckley's bezel menu 1710, not Ahn's right menu 420, underscoring that the specific sub-menus 420a-420f of Ahn's menu 420 were not central to either the Ahn-Chaudhri-Hinckley combination or how it renders obvious the relevant Limitations. Pet. 53.

C. There Is No “Undisputed Evidence” that Supports Smith’s Contention that the Combination is “Technically Unworkable”

Smith argues that “the combination that would have been required to actually include all claimed features, was shown by undisputed evidence to have been technically unworkable...” DR Req. 3. Smith asserts that “undisputed evidence shows that Ahn’s right and left menus are materially different” (DR Req. 5), and “[i]t is also undisputed that the functionality of Ahn’s *right* menu 420/1300 ‘cannot be implemented by a radial menu’” (DR Req. 4-5 (emphasis in original)). Not only is Smith wrong about the dispute, but Smith also tacitly acknowledges that these “undisputed” facts are not relevant.

To start, Smith fails to even acknowledge that the FWD directly addresses its arguments about the position and function of specific menu items. The FWD finds that “Patent Owner’s contention that several of the icons shown in Ahn’s menus would not benefit from a radial menu because of their assigned locations and functions (PO Resp. 42–51) do not address the Petition’s contention that a person of ordinary skill in the art would have used Hinckley’s bezel menu with icon 1712 that includes radial menu icon 1714 in Ahn’s device.” FWD , 29. That is, again, Ahn’s specific menu items and functions are not the focus of the combination nor required by the claims.

And the FWD goes further in finding that, “[w]ith respect to the specific locations assigned to the bezel menu icons and the radial menu icons, we agree with Petitioner that a person of ordinary skill would have assigned specific locations to icons in a manner that improves efficiency and usability, such as locating the radial menu icon away from the end points of the bezel menu as taught by figure 17 of Hinckley.” FWD, 29-30. In other words, both Apple and the Board dispute Smith’s contention that “the functionality of Ahn’s *right* menu 420/1300 ‘cannot be implemented by a radial menu’” (DR Req. 4-5 (emphasis in original)), because both Apple and the Board recognize that the operation of Ahn’s right menu 420/1300 is not contingent on the exact layout and functionality of the submenus 420a-420f illustrated in Ahn’s figures. *See* Pet. Reply, 11, 19-20; FWD, 29-30; *see also* EX1004, [0049] (describing the submenus 420a-420f as a “sample” layout of menu 420).

D. Nowhere Does the FWD Confuse the Claimed “First” and “Second” Menus, as Smith Alleges

Smith argues that “[t]he FWD articulated only a motivation to incorporate a radial menu into Ahn’s *left menu*—mapped to the claimed ‘second menu.’” DR Req. 5, 9-12 (emphasis in original). This is a mischaracterization of the FWD.

First, the vast majority of the Board’s conclusions regarding the motivations to combine Hinckley’s bezel menus and radial menus with Ahn and Chaudhri make

no mention of any specific menu items from Ahn. *See* FWD, 26-32. In nearly six pages of analysis of the numerous motivations to combine these references, the FWD only twice mentions icons/items described with respect to Ahn's left menu 820/1700. *See id.* Of these, Smith focuses conveniently on a single FWD sentence that mentions icon 830 of FIG. 8C (*i.e.*, the allegedly offending "icons in Ahn's left menu 820/1700"), but fails to acknowledge that this sentence is provided in the context of the FWD's broader conclusion that "a person of ordinary skill would have assigned specific locations to icons in a manner that improves efficiency and usability, such as locating the radial menu icon away from the end points of the bezel menu as taught by figure 17 of Hinckley." FWD, 29-30. In other words, Ahn's teachings regarding menu items illustrated in any specific "sample" layout shown in Ahn's figures are not confined to that location, but are more broadly relevant to any location and menu. *Id.*

Second, as described in greater detail in §§III.A-B, *supra*, at no point does either the Petition or FWD limit the Ahn-Chaudhri-Hinckley combination to "incorporat[ing] a radial menu into" any menu of Ahn. *See* DR Req. 9-12. As Smith recognizes "[t]he Petition contends that 'the implementation and operation of the bezel menus and radial menus[] would have been a simple substitution of one known element for another to obtain predictable results.'" DR Req. 7. In other words, Smith was aware that the Ahn-Chaudhri-Hinckley combination has never been

limited to only incorporating Hinckley’s radial menus into Ahn. *Id.* And while the Board focused on the operation of Hinckley’s radial menu and icon when specifically analyzing limitations [1.e.ii] and [1.e.iii] (*see* FWD 48-62), the FWD analyzed the Ahn-Chaudhri-Hinckley combination and its obviousness as incorporating Hinckley’s broader teachings of “bezel gestures and associated bezel menus,” rendering moot the specific contents and associated functionality of Ahn’s right menu 420/1300 and sub-menus 420a-420f. *See* FWD, 27 (“We find that altering Ahn’s device by substituting Hinckley’s bezel gestures and associated bezel and radial menus for Ahn’s technique of displaying menus does no more than yield the predictable results...”); 31.

IV. Conclusion

The Board’s decision correctly applied *KSR*’s “expansive and flexible” obviousness framework. At every turn, the Board anchored its conclusions in the evidentiary record, expressly crediting expert testimony that supported the Petition’s motivation to combine Ahn, Chaudhri, and Hinckley into a cohesive, advantageous, and superior user interface. By contrast, Smith’s request for Director Review relies on fabricated concessions, mischaracterizations of the record, and an overly rigid approach to obviousness that Federal Circuit caselaw forbids. Having failed to persuade the Board, Smith should not be permitted a do-over before the Director.

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4)(iii), the undersigned certifies that on March 5, 2026, a complete and entire copy of this Authorized Response to Director Review Request was provided via email to the Patent Owner by serving the email correspondence addresses of record as follows:

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