Trials@uspto.gov
571-272-7822

Paper 9
Date: February 13, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

SMITH INTERFACE TECHNOLOGIES, LLC,
Patent Owner.

IPR2024-01115
Patent 10,656,754 B1

Before NATHAN A. ENGELS, SHARON FENICK, and JULIET MITCHELL DIRBA, *Administrative Patent Judges*.

FENICK, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

Apple Inc. ("Petitioner") filed a petition requesting an *inter partes* review of claims 2, 27, 37, 58, 60–64, 67–79, and 223 (the "challenged claims") of U.S. Patent No. 10,656,754 B1 (Ex. 1001, "the '754 patent"). Paper 2 ("Petition" or "Pet."). With its Petition, Petitioner filed a Declaration of Dr. Loren Terveen (Ex. 1003) and a paper (Paper 3; "Ranking Notice") ranking seven petitions filed by Petitioner that each challenge claims of the '754 patent. Smith Interface Technologies, LLC ("Patent Owner") timely filed a Preliminary Response. Paper 7 ("Prelim. Resp."). With its Preliminary Response, Patent Owner filed a Declaration of Marc Davis, Ph.D. (Ex. 2001) and a response to Petitioner's Ranking Notice (Paper 8; "Ranking Response").

Pursuant to 35 U.S.C. § 314(a), the Director may not authorize an *inter partes* review unless the information in the petition and preliminary response "shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." For the reasons that follow, we institute an *inter partes* review as to the challenged claims of the '754 patent on all grounds of unpatentability presented in the Petition.

I. BACKGROUND

A. Real Parties-in-Interest

Petitioner identifies itself as its sole real party-in-interest. Pet. 76. Patent Owner identifies itself as its sole real party-in-interest. Paper 4 (Patent Owner Mandatory Notices), 1.

B. Related Matters

The parties indicate that the '754 patent has been asserted in *Smith Interface Technologies, LLC v. Apple Inc.*, 3:23-cv-01187 (S.D. Cal.) ("the related litigation"). Pet. 76; Paper 4, 1.

The '754 patent is also the subject of various proceedings at the United States Patent and Trademark Office, all initiated by Petitioner. Specifically, on June 28, 2024, Petitioner filed this Petition as well as petitions in IPR2024-01086, IPR2024-01114, IPR2024-01116, IPR2024-01117, IPR2024-01118, and IPR2024-01119. Ranking Notice 1–2. In addition, on September 5, 2024, Petitioner filed an *ex parte* reexamination request for selected claims of the '754 patent in Reexamination Control No. 90/019,646, and reexamination was ordered on November 14, 2024. *See* Ex. 2004 (October 2, 2024 order in the related litigation) 4, 9–10 n.4.[1]

C. The '754 Patent

The '754 patent is titled "Devices and Methods for Navigating Between User Interfaces." Ex. 1001, code (54). The application leading to this patent was filed on June 11, 2019, claiming priority to several applications, including a provisional application filed on August 5, 2011. *Id.* at codes (22), (60), (63).

The '754 patent includes a description of a method in which a signal is received in association with a touch interface of a device, and the user experience for the user of the device is altered utilizing the signal. *Id.* at

[1] Neither Petitioner nor Patent Owner identified this related matter to the Board; however, both parties are obligated to update their mandatory notices within 21 days of any relevant change. 37 C.F.R. §§ 42.8(a)(3), 42.8(b)(2). Appropriate correction is required.

3:4–6, 14:31–53, 15:12–18, Fig. 3. The touch interface of a device may be combined with a display of the device, and thus may be a touch screen for the device. *Id.* at 14:57–65. The signal may include a pressure signal that is indicative of a magnitude of pressure applied to a touch screen. *Id.* at 15:39–43.

The '754 patent describes that a user's touch may be analyzed to determine if it is a gesture based on touch event attributes. *Id.* at 56:32–38; Fig. 18. The '754 patent notes that "[s]ome gestures may be able to be identified solely from initial touch event attributes" while "[o]ther gestures may only be identified after the gesture has been performed for some period of time." *Id.* at 56:53–56. A user may be given feedback, such as a display of a representation of the gesture, as a gesture is performed. *Id.* at 59:48–51. "Once the gesture has been identified, the corresponding operation is performed." *Id.* at 57:9–10, Fig. 18. The association between gesture and operation may be context-dependent or context-independent. *Id.* at 59:28–29, 59:35–38, 59:41–44.

Gesture dynamics are aspects of a gesture that may vary without changing the identity of the gesture, such as contact point velocity, contact point acceleration, contact pressure velocity, contact pressure acceleration, time to complete gesture, or other aspects. *Id.* at 59:18–27. Gesture magnitude refers to the magnitude of gesture dynamics. *Id.* at 61:1–3. "For example, in one embodiment, the gesture magnitude of a swipe gesture may include the length of the swipe and/or the contact pressure exerted during the swipe." *Id.* at 61:3–5.

An interface may include multiple layers, which may be physical layers or virtual display layers. *Id.* at 68:30–47. Virtual display layers may be given the appearance of depth through the use of 3D depth cues. *Id.* at

68:58–60. "[A] 3D depth cue refers to an effect, manipulation, transformation, animation or operation which gives a visual indication of a simulated depth." *Id.* at 68:60–63. "[A] 3D depth cue may be a blur operation, such that layers located at successively greater depths may appear blurrier than those closer to the user." *Id.* at 68:63–66. "As an option, 3D depth cues may be used to indicate 'moving' through the display layers as the contact pressure is changed (i.e. magnifying and fading display layers as they are passed by, sharpening previously blurry display layers as they grow closer, etc." *Id.* at 71:4–9.

D. Challenged Claims

In this Petition, Petitioner challenges claims 2, 27, 37, 58, 60–64, 67–79, and 223 of the '754 patent. Of these, only claim 2 is independent. Claim 2 is reproduced below:

> 2.[2.a] An apparatus, comprising:
>
> at least one non-transitory memory;
>
> a touch screen; and
>
> one or more processors in communication with the at least one non-transitory memory, and the touch screen, wherein the one or more processors execute instructions in the at least one non-transitory memory, to cause the apparatus to:
>
> [2.b] display an object and at least one other object;
>
> [2.c] detect at least part of a gesture on the touch screen; and
>
> [2.d] during detection of at least a portion of the gesture before a completion thereof is detected, blur, based on a change in a magnitude of the gesture being detected on the touch screen, at least a portion of the at least one other object.

Ex. 1001, 95:35–49 (Petitioner's reference designations added).

E. Petition's Asserted Ground

Petitioner asserts the following grounds of unpatentability (Pet. 1):

Claim(s) Challenged	35 U.S.C.[2] §	Reference(s)/Basis
2, 27, 37, 58, 60–64, 67–79, 223	103(a)	Ahn[3], Chaudhri[4]

II. DISCRETIONARY DENIAL

Petitioner concurrently filed seven petitions challenging various claims of the '754 patent. *See* Ranking Notice 1–2. Patent Owner argues that we should exercise our discretion to deny all but two of them. Ranking Response 2.

Having considered the parties' arguments and the specific situation presented in these proceedings, we are persuaded to consider the merits of the top three ranked petitions and to discretionarily deny the other four. Because this Petition is ranked third (*see* Ranking Notice 1–2), we do not exercise our discretion to deny institution of this proceeding.

A. Framework

"[I]n most situations," one petition is sufficient to challenge a patent's claims, and additional "petitions filed against the same patent at or about the

[2] The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011), revised 35 U.S.C. §§ 102 and 103 effective March 16, 2013. We refer the pre-AIA version of the statute because the '754 patent claims priority to at least one application filed before that date. We additionally note that each party's declarant refers to the pre-AIA version of § 103. Ex. 1003 ¶ 12; Ex. 2001 ¶ 16. Our findings and analysis herein would be the same under the current statute.

[3] US 2008/0207188 A1, published August 28, 2008 (Ex. 1004).

[4] US 2007/0150842 A1, published June 28, 2007 (Ex. 1005).

same time . . . may place a substantial and unnecessary burden on the Board and the patent owner and could raise fairness, timing, and efficiency concerns." Trial Practice Guide 59. There are, however, situations where more than one petition is necessary. *Id.* For example, a patent owner may have "asserted a large number of claims in litigation." *Id.* "In such cases two petitions by a petitioner may be needed, although this should be rare." *Id.* "Further, based on prior experience, the Board finds it unlikely that circumstances will arise where three or more petitions by a petitioner with respect to a particular patent will be appropriate." *Id.*

"To aid the Board in determining whether more than one petition is necessary," the Trial Practice Guide authorizes a petitioner to file a paper that ranks the petitions, identifies their differences, and explains "why the Board should exercise its discretion to institute additional petitions if it identifies one petition that satisfies petitioner's burden under 35 U.S.C. § 314(a)." Trial Practice Guide 59–60; *see* Ranking Notice. The Trial Practice Guide authorizes a patent owner to file a response to the petitioner's paper. Trial Practice Guide 60–61; *see* Ranking Response. "The Board will consider the parties' submissions in determining whether to exercise its discretion to institute *inter partes* review under 35 U.S.C. § 314(a)." Trial Practice Guide 61.

B. The Parallel Petitions

Petitioner submitted a Ranking Notice that ranks its petitions and identifies the claims challenged by each petition.[5] *See* Ranking Notice 1–2.

[5] Petitioner's Ranking Notice includes several typographical errors in the listing of challenged claims (Ranking Notice 1–2), but we have corrected these errors in the table provided in this section.

All seven petitions challenge independent claim 2, and four of the petitions challenge dependent claim 27; however, no other claims are challenged in more than one petition. As for the substance of the petitions, all contend that the challenged claims would have been obvious over a combination of Ahn and Chaudhri (alone or with one or two additional references). In addition, there are no grounds presented that are not based on a combination of Ahn and Chaudhri.

The following table identifies Petitioner's ranking and the claims challenged by each petition. In addition, the rightmost column identifies the number of unique claims challenged by each additional petition.[6]

Rank	Petition	Challenged Claims	Unique Claims
1	IPR2024-01119	1, 2, 208–216	11
2	IPR2024-01116	2, 27, 186, 187, 189, 191, 192, 197, 199–204, 225, 230	15
3	IPR2024-01115	2, 27, 37, 58, 60–64, 67–79, 223	21
4	IPR2024-01114	2, 27–30, 32–36, 38, 40, 42–44, 46, 47, 52, 54, 57, 59	19
5	IPR2024-01117	2, 25, 27, 65, 66, 101, 104, 117, 122	7
6	IPR2024-01118	2, 80–83, 88, 90, 94, 95, 97–100	12
7	IPR2024-01086	2, 8, 10, 16, 24, 26, 224	6

[6] Specifically, although claims 2 and 27 are challenged in multiple petitions, these claims are only counted for the IPR2024-01119 and IPR2024-01116 petitions, respectively.

C. Parties' Arguments

Petitioner contends that the seven petitions are necessary in order to address all 91 challenged claims.[7] Ranking Notice 1. Petitioner states that the patent includes 365 claims in total, and that Patent Owner is asserting 166 claims in the co-pending district court litigation. *Id.* at 2. Petitioner submits that its petitions are each directed to different claims and rely on "only one single ground," i.e., a combination of Ahn and Chaudhri. *Id.* at 1.

In addition, Petitioner argues that seven petitions are required because "the nature and relationship of the Challenged Claims demand significant overlap across the petitions." Ranking Notice 2. Specifically, the '754 patent includes only three independent claims (claims 1, 2, and 225), and nearly all challenged claims depend from claim 2. *See id.* at 3. As a result, Petitioner was required to repeat its contentions for claim 2 in each petition before addressing the other challenged claims. *Id.* Petitioner contends the sections common to the petitions (which analyze claim 2; summarize the '754 patent, Ahn, and Chaudhri; identify the level of ordinary skill in the art; evaluate claim construction; and address other potential sources of discretionary denial) "require[] approximately **8,350** words," leaving Petitioner "only about 5,650 words per petition with which to present any invalidity arguments specifically directed to any Challenged Claims." *Id.* According to Petitioner, this limited-word-count problem is further compounded by the fact that most of the challenged claims include multiple dependencies and many claims include features recited in other claims. *Id.* at 4–5; *see also id.* at 2 (characterizing the claims as "verbose").

[7] Petitioner states that it challenges "99" claims (Ranking Notice 1 (emphasis omitted)); however, the petitions collectively challenge only 91 unique claims. We have corrected this error as well.

Patent Owner responds that the Board should discretionarily deny all but two of these petitions. Ranking Response 2, 5. Patent Owner quotes the Trial Practice Guide and argues that, "[w]hile this may be one of the 'rare' situations that requires 'two petitions,' this is not such an 'unlikely … circumstance[]' that three petitions are appropriate, let alone the seven petitions asserted here." *Id.* at 2 (alterations in original). Patent Owner observes that "Petitioner challenges an average of just 13 claims per petition," and Patent Owner represents that "Petitioner only challenges just over half (87) of the[] 166 claims" asserted in litigation. *Id.*; *cf.* Ex. 2004, 3 (district court stating that the petitions "challenge[] the validity of 85 of the 166 asserted claims (including all independent claims)"), 9 (stating that the petitions do not challenge 81 of the asserted claims).

In addition, Patent Owner argues that Petitioner fails to show that there are material differences between the petitions. Ranking Response 3–5. Specifically, Patent Owner contends that "Petitioner admits that each petition includes over 8,000 words of identical text that 'cover no actual Challenged Claim,'" and "[n]othing in the petitions shows that Petitioner attempted to organize or consolidate its arguments to efficiently challenge the claims." *Id.* at 3. According to Patent Owner, Petitioner's contentions "could have been distilled into only a few petitions." *Id.* In support, Patent Owner submits that Petitioner removed nearly 1,000 words from the common sections of at least one petition (*id.* at 3–4), and that the petitions include other "inefficiencies," such as challenging claim 27 and its dependent claims in different petitions, repeating the same sentences within different portions of the same petition, and repeating large swaths of argument between petitions (*id.* at 4–5). According to Patent Owner,

"Petitioner's failure to organize and draft its arguments in a succinct manner is not a reason to institute additional petitions." *Id*. at 3.

D. Analysis

As a starting point, we agree with the parties that more than one petition is warranted given the number of claims at issue. *See* Trial Practice Guide 59 (identifying situations where "two petitions . . . may be needed"). Patent Owner has asserted 166 claims in the co-pending district court litigation, and Petitioner challenges 91 unique claims in these petitions. *See* Ranking Notice 2; Ranking Response 2. Also, the vast majority of the challenged claims are asserted in litigation. *See* Ranking Response 2; Ex. 2004, 3. As a result, we agree that this is the type of "rare" situation where multiple parallel petitions are necessary.

We do not agree, however, that seven petitions are justified.[8] Petitioner's primary argument is that seven petitions were required because the common sections needed to be repeated in each petition, which left few words for arguments directed to new claims (given word count limits). *See* Ranking Notice 2–3. But this argument is premised on an assumption that these common sections "require[d] approximately **8,350** words" (*id.* at 3), and Petitioner has not persuasively shown that so many words were actually required for these sections. Petitioner includes no explanation or

[8] A petitioner is not entitled to an unlimited number of petitions (*see* Trial Practice Guide 59–61); instead, we determine whether the circumstances justify additional petitions (*see id.* at 59–60). This approach conforms with the rationale behind imposing a word count limit on petitions. *See id.* at 39 (discussing the reasons for establishing word count limits and urging parties to present "concise, well-organized, easy-to-follow arguments supported by readily identifiable evidence of record.").

justification of the length of the sections, but instead, it simply assumes that the words used were required. Having reviewed the analysis in those sections, we do not agree. In other words, although we agree that the common sections needed to be repeated in each petition (and that this reduced the number of words available for other analysis), we are not persuaded that the common sections required approximately 8,350 words. A petitioner is certainly entitled to allocate its words as it sees fit, and we typically have no reason to evaluate those strategic decisions; however, we agree with Patent Owner (*see* Ranking Response 3) that Petitioner cannot justify a large number of petitions by claiming that it needed additional words for its analysis (given the Board's word count limits) unless Petitioner's analysis was concise.

As a consequence, we reviewed the content of the common sections—i.e., the analysis of claim 2, the summary of the '754 patent and prior art, the articulation of the level of skill in the art and claim construction, and the other preliminary comments—and we are not persuaded that they are sufficiently concise to support Petitioner's argument. Claim 2 is only fifteen lines long, and its technology is relatively simple, yet Petitioner's analysis of this claim stretches for seventeen pages. *See* Pet. 23–40. Petitioner provides no general information about the technology and submits that no claims need to be construed (*id.* at 7), yet Petitioner provides a five-page summary of the '754 patent and its prosecution history (*see id.* at 2–6). Also, Petitioner provides a eleven-page summary of Ahn and Chaudhri (*see id.* at 7–18), despite the fact that neither reference is particularly long. Indeed, as Patent Owner notes, Petitioner was able to remove nearly 1,000 words from these common sections in at least one of the petitions. *See* Ranking Response 3–4. Because Petitioner's analysis in the common sections does not appear to be

concise, we are not persuaded that Petitioner's use of approximately 8,350 words in those sections justifies the large number of petitions.

Petitioner also argues that seven petitions were required to address all of the claims given their "nature and relationship" (Ranking Notice 2), but this argument is largely premised on the unpersuasive assumption that Petitioner needed to repeat 8,350 words for independent claim 2 and other preliminary matters. Petitioner argues that use of the remaining word count was complicated by the claims' "multiple dependencies"[9] and tendency to "mix and match terms to create different combinations" (*id.*), but Petitioner also does not persuasively show that it organized the challenged claims efficiently in view of these constraints. For example, Petitioner argues that the analysis of claim 27 is repeated in four petitions[10] because forty-four of the challenged claims depend from claim 27 (*see* Ranking Notice 4); however, as Patent Owner notes (*see* Ranking Response 4), one of these four petitions (i.e., the IPR2024-01116 petition) does not challenge *any* of claim 27's dependent claims. Petitioner also argues that ten challenged claims depend from claim 186, and similar subject matter is recited in "other claims" challenged in other petitions (*see* Ranking Notice 4); however,

[9] The vast majority of challenged claims depend directly from dependent claims 27, 83, 101, 186, or 208, which each depend directly from independent claim 2. Also, there are about a dozen challenged claims with an additional layer of dependency (i.e., the claim depends from a claim that depends from a claim that depends from an independent claim), and one claim (claim 59) adds a fourth layer of dependency.

[10] Although Petitioner asserts that the analysis of this claim is repeated in "five petitions" (Ranking Notice 4), this claim only appears in the IPR2024-01116, IPR2024-01115, IPR2024-01114, and IPR2024-01117 petitions. We have corrected this typographical error.

Petitioner does not explain why those other claims were not included in the petition challenging claim 186 (*see* Ranking Response 4–5).

Nevertheless, we are persuaded that this group of cases is somewhat extraordinary and, consequently, that more than two petitions are justified. Petitioner challenges 91 claims, and the vast majority of these claims are asserted in litigation. Separating the claims into different petitions is complicated by the '754 patent's unusual claiming structure (which includes several layers of dependencies) and by the presence of substantially similar limitations in different claims. However, the challenged claims do not appear to be excessively long or technologically complex. As a result, having reviewed the specific circumstances, we are persuaded that institution of three of the seven petitions is appropriate.

Accordingly, we are persuaded to exercise our discretion to deny all but the top three ranked petitions. Because Petitioner ranks this Petition third (Ranking Notice 1–2), we do not discretionarily deny institution of this proceeding.

III. ANALYSIS

A. Legal Standards

"In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify "with particularity . . . the evidence that supports the grounds for the challenge to each claim")). This burden of persuasion does not shift to Patent Owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (*citing Tech. Licensing Corp. v.*

Videotek, Inc., 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review).

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are "such that the subject matter as a whole would have been obvious . . . to a person having ordinary skill in the art to which said subject matter pertains." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved based on underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective evidence of nonobviousness, i.e., secondary considerations.[11] *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

"To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

B. Level of Ordinary Skill in the Art

Petitioner contends that one of ordinary skill in the art would have had "a Bachelor of Science degree in computer science, computer engineering, electrical engineering, human-computer interaction, or a comparable field and at least two years of professional experience in the design and development of graphical user interfaces (GUIs), human-computer interfaces, or equivalents thereof," and that "[a]dditional years of experience

[11] The present record contains no arguments regarding objective evidence of nonobviousness.

could substitute for an advanced-level degree (and vice versa)." Pet. 6 (citing Ex. 1003 ¶¶ 29–30).

Patent Owner "does not agree with all aspects of Petitioner's proposed level of ordinary skill but does not believe that resolving that level is necessary to resolve the issues raised in this preliminary response." Prelim. Resp. 7.

The portion of the definition proposed by the Petitioner requiring a bachelor's degree in computer science, computer engineering, human-computer interaction, or a comparable field and at least two years of professional experience working with graphical user interfaces and applications for computers (Pet. 6) appears to be commensurate with the problems and solutions in the '754 patent and prior art of record and is supported by declarant testimony. We adopt this as the definition of one of ordinary skill in the art for the purposes of this Decision. We note that since it is unclear whether the bachelor's degree in the proposed definition is considered by Petitioner to be "an advanced-level degree" we do not adopt the portion of Petitioner's proposed definition relating to the substitution of years of experience for "an advanced-level degree" at this time.

C. Claim Construction

Petitioner argues that no claim terms need to be construed. Pet. 6.

Patent Owner also does not propose that we construe any claim terms. Prelim. Resp. 7. Patent Owner reports that in the related litigation, Petitioner proposes some claim constructions that Petitioner does not raise here. *Id.* at 6–7 (citing Ex. 2003, 9–31).

We note that Petitioner presents arguments and evidence regarding "blur[ring] . . . at least a portion of" an object, as recited in independent

claim 2, and argues that displaying less detail in a portion of a background object because of the display of a semitransparent foreground object would have been "a type of blurring". Pet. 32–33 (citing Ex. 1001, 99:51–53; Ex. 1004 ¶ 70; Ex. 1009, 3, 6; Ex. 1003 ¶ 93). Petitioner asserts that one of ordinary skill would have understood "blur" to mean "make or become unclear or less distinct" and that the '754 patent, in a dependent claim, recites that a blur "includes changing a translucency" of an overlaying object. *Id.* (citing Ex. 1001, 99:51–53). Patent Owner does not address this contention. On the present record, Petitioner's proposed construction appears correct and, for purposes of institution, we construe the blurring of an object as displaying that object with less detail.

Otherwise, for institution and on the present record, we determine that none of the claim terms from the related litigation require construction, and neither do any other claim terms. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (only those terms that are in controversy need be construed, and only to the extent necessary to resolve the controversy) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

D. Obviousness of Claims 2, 27, 37, 58, 60–64, 67–79, and 223 over Ahn and Chaudhri

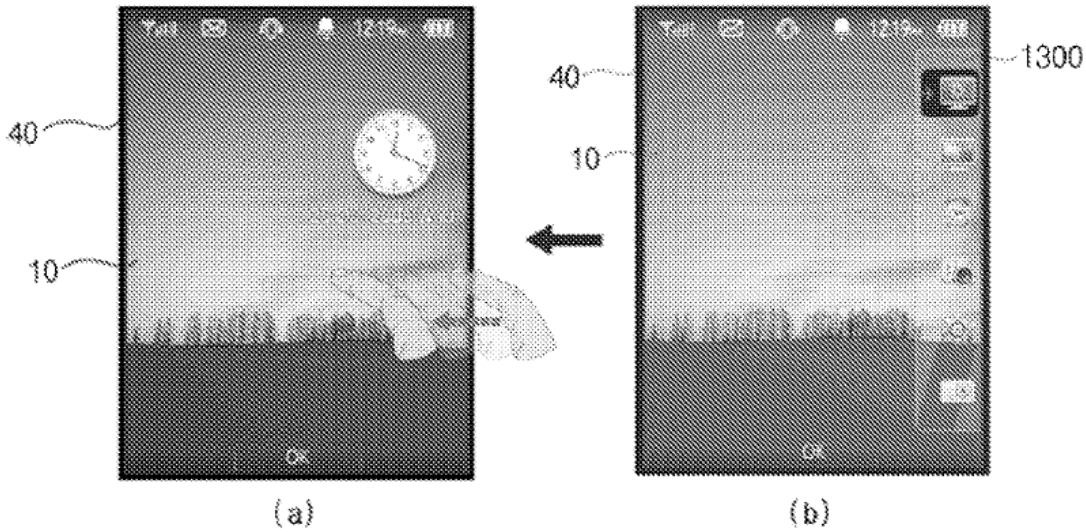
Petitioner argues the challenged claims would have been obvious over a combination of Ahn and Chaudhri. Pet. 18–72. Patent Owner argues that Ahn does not teach or suggest limitation 2.d of claim 2, including that one of ordinary skill would not have made the proposed combination of Ahn and Chaudhri. Prelim. Resp. 16–48.

1. Ahn

Ahn is a publication of a U.S. patent application, titled "Method of Displaying Menu in a Mobile Communication Terminal." Ex. 1004, codes (23), (54). Ahn's abstract describes displaying a menu in a mobile terminal by selecting a specific direction through an input device of the terminal and displaying a menu corresponding to the selected specific direction. *Id.*, code (57).

Ahn describes a device with a screen that may receive input, including via a touch screen. *Id.* ¶¶ 27–28, 72. A standby screen may be displayed on the device. *Id.* ¶¶ 21, 36, 96, 97, Figs. 3A, 12. Ahn describes that, upon user input, e.g., an upward motion or direction key selection, a menu may be displayed, such as by transparent display of a pop-up menu window. *Id.* ¶¶ 10, 11, 35–51, Figs. 3A–3E, 4A–4B. Ahn further describes that the detection of a touch and drag operation may cause the display of an item list matched to a direction in the display, such as a menu list or file list. *Id.* ¶¶ 98–99, Fig. 11. For example, according to Ahn, if the user touches a specific position of the touch screen and drags the touch in a left direction, a menu list matched to the left direction is displayed in the display; a sequence that is depicted in Figure 13a and 13b, reproduced below. *Id.* ¶ 102, Figs. 13a, 13b.

FIG. 13

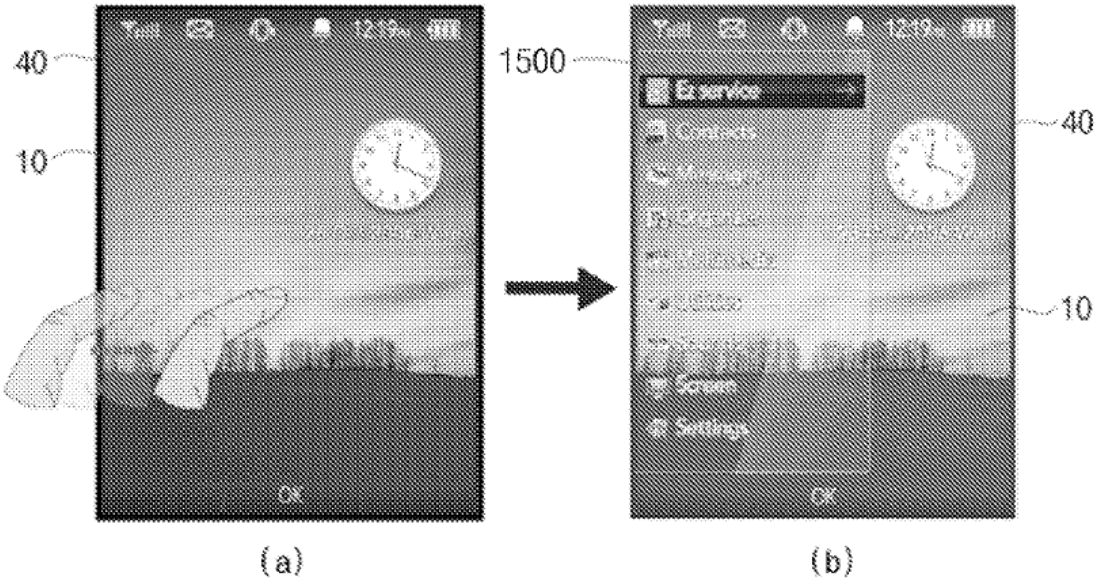


Ex. 2005,[12] 71. As shown in Figures 13a and 13b, when the user touches a right side of touch screen 10 and drags the touch in a left direction, menu list 1300 matched to the left direction is displayed in the display 40. Ex. 1004 ¶¶ 102, 104. Menu list 1300 shown in Figure 13b is displayed over a clock widget. *Id.* ¶ 70; Figs. 13a, 13b.

Figures 15a and 15b, reproduced below, illustrate a screen for displaying a menu list according to a touch and drag operation in the rightward direction. *Id.* ¶¶ 101, 103.

[12] Patent Owner files EP "the counterpart European application" (EP 08101835.0) to Ahn as Exhibit 2005, and uses figures from this Exhibit "[f]or improved clarity." Prelim. Resp. 21–22 n.5. We agree, on the present record, that the figures from Exhibit 2005 appear to be clearer while also identical in all respects, and use figures from Exhibit 2005 herein. Ex. 1004; Ex. 2005; *compare* Ex. 1004, code (30), ¶¶ 1–3 (claiming priority to KR 10-2007-0018175, KR 10-2007-0033308, and KR 10-2007-0043067), *with* Ex. 2005, 78 (listing the same applications in the priority declaration).

FIG. 15



Ex. 2005, 73. As seen in these figures, "if the user touches screen 10 and drags the touch in a rightward direction, a menu list 1500 matched to a right direction is displayed in the display 40." Ex. 1004 ¶ 103. Ahn additionally teaches that a user may be notified of the start position for a touch and drag operation by a graphic shadow, and that, if so, "as the user drags the graphic shadow 1800, the menu list 1500 can be displayed along the dragged graphic 1800." *Id.* ¶ 118.

2. Chaudhri

Chaudhri describes how a device with a touch-sensitive display may be unlocked via gestures performed on the touch-sensitive display. Ex. 1005, code (57), ¶ 2. Chaudhri describes "a need for more efficient, user-friendly procedures for transitioning" devices "between user interface states (e.g. from a user interface state for a first application to a user interface state for a second application, between user interface states in the same application, or between locked and unlocked states.)" *Id.* ¶ 6.

Chaudhri describes a device in a first state detecting progress towards satisfaction of an input condition needed to transition to a second state. *Id.* ¶ 81, Fig. 6. While still in the first user-interface state, progress is indicated by "transitioning an optical intensity of one or more user interface objects associated with the second user-interface state." *Id.* ¶¶ 82, 91–93, Figs. 6, 91–93. Chaudhri teaches that "[t]he optical intensity of a user-interface object, as used herein, is the object's degree of visual materialization." *Id.* ¶ 85. "In some embodiments, the optical intensity may be perceived by users as a transparency effect (or lack thereof) applied to the user-interface object." *Id.* ¶ 85, *see also id.* ¶¶ 79, 82.

The optical intensity may be the visual differentiation between the user interface object and the background, based on color, hue, color saturation, brightness, contrast, transparency, and any combination thereof. *Id.* The optical intensity of the user interface objects to be displayed in the second user interface state may be increased smoothly. *Id.* ¶ 86. The indication of progress towards completion of the user input condition is a function of the user's satisfaction of the condition. *Id.* ¶ 87. The user may perceive the optical intensity transition as a fading in of the user interface objects as the unlock action is performed. *Id.*

If the user input condition includes a predefined gesture, then the indication of progress of the gesture may be defined in terms of how much of the gesture is completed. Ex. 1005 ¶ 88. For example, if the gesture includes moving the finger from one edge of the screen to the opposite edge horizontally, then the indication of progress may be defined in terms of the distance between the two edges. *Id.* If the user input condition includes dragging an image to a predefined location, then the indication of progress

may be defined in terms of the distance between the initial location of the image and the predefined location. *Id.* ¶ 89.

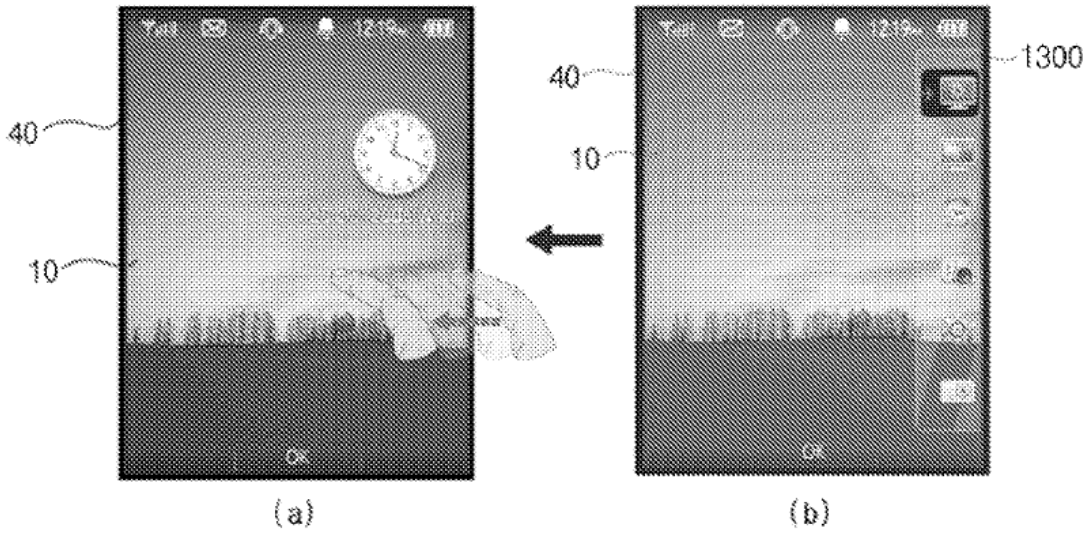
3. Claim 2 – Petitioner's Arguments

Petitioner argues that Ahn teaches or suggests the apparatus, memory, touch screen, and processors of limitation 2.a, citing Ahn's mobile communication terminal with a memory, touch input device, and controller. Pet. 23–27 (citing, *inter alia*, Ex. 1004 ¶¶ 27–29, 32, 99–104, Fig. 1; Ex. 1003 ¶¶ 78–82).

With respect to limitation 2.b, reciting that the apparatus is caused to "display an object and at least one other object," Petitioner argues that Ahn teaches the display of a standby screen by the Ahn device, and that its standby screen includes a clock widget and icons for menu items in an indicator area. *Id.* at 27–30 (citing Ex. 1004 ¶¶ 36, 40, Figs. 3A, 12, 13a; Ex. 1003 ¶¶ 83–87). Petitioner contends that an icon in the indicator area teaches the "an object" recitation of limitation 2.b, and that the clock widget on the standby screen teaches the "at least one other object." *Id.* at 29–30 (citing Ex. 1003 ¶ 86).

Limitation 2.c of claim 2 requires that the apparatus is caused to "detect at least part of a gesture on the touch screen." Ex. 1001, 95:44. Petitioner contends that this is taught or suggested by Ahn, which describes a method of displaying a menu in response to a touch and drag operation. Pet. 30–32 (citing Ex. 1004 ¶¶ 95–99, 102, Figs. 13a, 13b; Ex. 1003 ¶¶ 88–90). Petitioner describes Figure 13, reproduced below, as illustrating an example of this teaching from Ahn.

FIG. 13



Ex. 2005, 71 (Fig. 13). Figure 13 illustrates touch screen 10, in which a user touches a specific portion of touch screen 10 and drags the touch in a left direction (in (a)) and menu list 1300 containing icons is consequently displayed on the left side of touch screen 10 (in (b)). Ex. 1004 ¶¶ 101–102. Petitioner contends that one of ordinary skill would have understood the "touch and drag" operation illustrated in Figure 13 to teach or suggest the gesture, and Ahn to teach or suggest the detection of a gesture in its Figure 13 disclosure. Pet. 31–32 (citing Ex. 1003 ¶¶ 90–91).

Limitation 2.d of claim 2 recites that the apparatus is caused to, "during detection of at least a portion of the gesture before a completion thereof is detected, blur, based on a change in a magnitude of the gesture being detected on the touch screen, at least a portion of the at least one other object." Ex. 1001, 95:45–49.

Petitioner contends that Ahn teaches that its displayed menus may be displayed in translucent form overlaying the standby screen 300, and contends that this teaches "semitransparent" menus that would blur the

standby screen, including objects displayed on it, such as the clock widget. Pet. 32–35 (citing Ex. 1004 ¶ 70; Ex. 1003 ¶¶ 93, 95). Petitioner argues that Ahn's teachings describe a menu list displayed along a graphic shadow that begins on a first edge of the display and is dragged with a user gesture. Pet. 33 (citing Ex. 1004 ¶¶ 118–119, Fig. 18; Ex. 1003 ¶ 94). Thus, Petitioner argues, in Ahn, the sliding of the menu onto the screen corresponds with the magnitude of the touch and drag gesture as it progressively blurs the portion of the background over which it is being displayed, teaching or suggesting the recitation of limitation 2.d of claim 2.

Petitioner further argues, with respect to limitation 2.d, that one of ordinary skill would have noted in other teachings of Ahn that a portion of the background standby screen including the clock widget is blurred as a result of the opening of a menu. Pet. 35–36 (citing Ex. 1004 ¶¶ 36, 97, 103, Figs. 3A, 4B, 10, 12, 13a, 13b; Ex. 1003 ¶ 96). Petitioner argues that one of ordinary skill would have looked to Chaudhri to determine how to transition between the prior state of the standby screen and the blurred state. Pet. 18–23, 36–40.

Petitioner contends that Chaudhri's teaching of transitioning optical intensity to provide visual feedback regarding the progress of a transition between user interface states would have been used in the context of Ahn's terminal, resulting in a device that would indicate the progress of a gesture through the optical intensity of user interface objects, including the visual differentiation between a user interface object (such as a pull-down menu) and the background. Pet. 36–39 (citing Ex. 1005 ¶¶ 60, 80–82, 85, 87–88; Ex. 1003 ¶¶ 97–100). Petitioner argues a combination of Ahn's teachings of the blurring of a portion of the background standby screen and the teachings of Chaudhri regarding changing an optical intensity to indicate the user's

progress in completing a gesture, and contends that this combination would have yielded a device that would vary the optical intensity of the standby screen to indicate to a user the progress in completing the gesture and to help a user differentiate between the user-interface object and the background. *Id.* at 39–40 (citing Ex. 1003 ¶¶ 101–102).

With respect to the combination of Ahn and Chaudhri, Petitioner argues that each of the disclosures is directed to improving the usability of mobile devices with small display screens, and that one of ordinary skill would have expected the combination to yield predictable and expected results. Pet. 18 (citing Ex. 1003 ¶ 61). Petitioner contends that Ahn shows a process of opening menus that ends in a blurred background screen, but does not describe the implementation, and that one of ordinary skill would have found it obvious to consult Chaudhri for an example of such implementation details. *Id.* at 18–20 (citing Ex. 1003 ¶¶ 62–64). Additionally, Petitioner argues that Chaudhri teaches specific benefits to a user that one of ordinary skill would have looked to provide in an implementation of Ahn's device. *Id.* at 20–21 (citing Ex. 1003 ¶ 65). Petitioner contends that one of ordinary skill would also have known that similar visual cuing techniques would have been used to draw the user's attention to the most relevant objects and help a user navigate through multi-layer user interfaces. *Id.* at 21–22 (citing Ex. 1008, 1–2; Ex. 1003 ¶ 66).

4. Claim 2 – Patent Owner's Arguments

Patent Owner presents arguments relating to Petitioner's argument that limitation 2.d is taught or suggested by Ahn alone (Prelim. Resp. 16–28), and additionally relating to Petitioner's argument that this limitation is

taught by Ahn and Chaudhri, including relating to the motivation for the proposed combination of Ahn and Chaudhri (Prelim. Resp. 29–48).

a) Ahn and Limitation 2.d

Patent Owner argues that Ahn teaches displaying a menu in response to a swipe, and that Ahn's display of the menu thus happens "in response to the *completion* of a touch and drag gesture, not '***during detection*** of at least a portion of the gesture ***before a completion*** thereof is detected,' as required" in limitation 2.d. Prelim. Resp. 17, 18–24. Broadly, Patent Owner contends that the Petition conflates two embodiments of Ahn, a first in which no change occurs to the screen until a gesture is completed (and thus any blurring does not occur "during detection of at least a portion of the gesture before a completion thereof is detected"), and a second in which the appearance of the clock widget is not altered. *Id.*

With respect to Ahn's disclosure relating to Ahn's Figure 13(a), according to Patent Owner, Ahn displays its menu only after a user's touch and drag operation (gesture) is completed, thus the alleged "blurring" is not "during detection of at least a portion of the gesture' and 'before a completion [of the gesture] is detected." *Id.* at 20–24 (citing Ex. 1004 ¶¶ 102, 107–109, 116, Fig. 4B, 13, 16; citing Ex. 2001 ¶¶ 60–63); 23 ("A POSITA would therefore understand that Ahn's display of menu list 1300/420 is a binary operation—the full menu will open if a user enters an input . . . and the menu will stay closed otherwise." (citing Ex. 1004 ¶¶ 106–109, Fig. 16)). Patent Owner further argues Ahn's Figure 18 is irrelevant to Petitioner's mapping, as it is a different embodiment with no explanation of reasons for combining Ahn's distinct embodiments, and that the Petition is internally inconsistent in mapping to different gestures—a drag right from

one embodiment and a drag left from a different embodiment. *Id.* at 24–28 (citing Ex. 1004 ¶¶ 66, 118, 119, Figs. 13a, 13b, 18; Ex. 2001 ¶ 71).

b) Ahn and Chaudhri – Limitation 2.d

Addressing Petitioner's limitation 2.d arguments based on a combination of Ahn and Chaudhri, Patent Owner contends that Chaudhri discloses adjusting the optical intensity of user interface objects in the foreground, not the background of a screen, and notes that "Ahn's clock widget is part of the background." Prelim. Resp. 31 (citing Ex. 1005 ¶85; Ex. 1003 ¶¶ 75, 76); *see id.* at 45–46. Patent Owner argues varying the optical intensity or translucency of the background is "nonsensical," and "a POSITA would have understood that varying the transparency of the *background* standby screen is pointless because there is nothing below the background (e.g., underlying layers) that would be revealed by altering its transparency." *Id.* at 31–32 (citing Ex. 2001 ¶ 77).

Next, Patent Owner argues Chaudhri teaches an optical intensity that increases as a user gestures, while "Petitioner's Ahn-Chaudhri combination relies on *reducing* the optical intensity of Ahn's background (the alleged *first* user interface state)." *Id.* at 34. Patent Owner also argues "Petitioner's modification to change the appearance of Ahn's clock widget (of the ***first*** user-interface state) is inconsistent with Chaudhri[]'s teaching to 'transition[] an optical intensity of one or more user interface objects associated with the ***second user-interface state***" and "Petitioner's alleged modification does the opposite of what Chaudhri teaches." *Id.* at 35. Further, Patent Owner argues Petitioner's proposed modification would not have made sense in the context of Chaudhri and a POSITA would not have made such a conflicting modification. *Id.* at 35–36 (citing Ex. 2001 ¶¶ 81,

82). Further still, Patent Owner argues that "once the touch and drag operation is complete and the menu subsequently deployed, the clock widget also cannot be interacted with (i.e., selected) in the second interface, meaning that the alleged *decreasing* the optical appearance of the clock widget fails to serve the purpose set forth in Chaudhri[] for *increasing* the optical intensity of Chaudhri[]'s virtual buttons." *Id.* at 37 (citing Ex. 2001 ¶ 83).

Finally, Patent Owner argues flaws in the motivation to combine provided by Petitioner. *Id.* at 37–48. Patent Owner notes that Chaudhri gives a user feedback by the distance an indicator has moved relative to the total length of a slide channel and by *increasing* the optical intensity of virtual buttons to an opaque end point with solid outlines. *Id.* at 39 (citing Ex. 1005 ¶¶ 87, 90–93). But in Petitioner's combination, Patent Owner argues, the user would only see the alleged blurring of the clock widget without any indication of progress of the user's gesture and the user would not know when the gesture would reach its end state nor when or if the menu would appear. *Id.* at 40–42 (citing Ex. 2001 ¶¶ 90, 92). According to Patent Owner, "this change in appearance would indicate only that a gesture is happening" and "the user would only know the gesture is complete once the menu list 1300/420 appears, ***upon completion of the gesture***" and so Petitioner's motivation of indicating "progress" towards completion of the gesture would not have led a POSITA to made the alleged modification of Ahn. *Id.* at 42. Patent Owner also argues that because Ahn's menu is not displayed until after the gesture is complete, the menu would not be displayed while the appearance of Ahn's clock widget is progressively changing such that "[w]ithout the display of the menu there can be no differentiation between the menu and the clock widget, as Petitioner

alleges." *Id.* at 43 (citing Ex. 2001 ¶ 95). According to Patent Owner, "a POSITA reading Chaudhri[] would have understood that progressively changing the appearance of Ahn's background would not improve visual differentiation of Ahn's menu" and would not have led a POSITA to make the asserted modification of Ahn. *Id.* at 44; *see id.* at 46–48.

5. Claim 2 – Our Analysis

On the present record, and for the purposes of institution, we determine that Petitioner has sufficiently shown how Ahn teaches or suggests limitation 2.d of claim 2, and that the proposed combination of Ahn and Chaudhri teaches or suggests this limitation.

First, with respect to limitations 2.a through 2.c of claim 2, and to the presently undisputed assertions regarding limitation 2.d, we determine that Petitioner sufficiently shows, in its contentions summarized above, how Ahn teaches or suggests these recitations in its descriptions of the hardware of its touch input device, including the display of objects on the touch screen, the detection of touch input gestures, and the display of menus on a standby screen in translucent form.

With respect to the balance of limitation 2.d, we find Petitioner sufficiently shows Ahn teaches that its standby screen elements, including the clock widget on the standby screen, are blurred as a result of the display of menu elements. Ex. 1004 ¶ 36, Figs. 4B, 10, 13b; Ex. 1003 ¶ 96. With respect to Patent Owner's contention that Figure 18 cannot be relied upon because it describes a dragging gesture in a different direction from the one in Figure 13 (Prelim. Resp. 24–28), on the present record and for the purposes of institution, we disagree. We credit Dr. Terveen's testimony that one of ordinary skill in the art would have understood Ahn to teach or

suggest that a translucent menu would blur the background over which the menu is displayed (Ex. 1003 ¶¶ 37, 38, 93, 95), and we understand Ahn to indicate that Figure 18 is a variation of the embodiment described in Figures 13 to 15. Moreover, we do not, on the present record, understand Ahn to contain any indication that this is dependent on the direction of a gesture or to be specific to certain embodiments.

Patent Owner cites Ahn's paragraph 116 as showing Ahn does not teach the display of a menu until a touch and drag operation has been completed. Prelim. Resp. 20–24 (citing Ex. 1004 ¶ 116). But this paragraph of Ahn describes a second implementation of the Figure 17 embodiment of Ahn in which different menus are displayed based on the distance of a touch and drag gesture. Ex. 1004 ¶¶ 115–116, Fig. 17). In the first implementation described in Ahn, a first menu is displayed during a gesture once a first drag distance has been detected, with a second menu appearing after a second distance of the same touch operation has been reached. Ex. 1004 ¶¶ 111–112. Paragraph 116 of Ahn, cited by Patent Owner, describes a different implementation, in which only one menu is displayed, based on the drag distance, and only after the completion of the touch and drag operation. *Id.* ¶¶ 115–116. While this second implementation describes the display of a menu only after a gesture is completed, on the present record Ahn does not teach that menus are only displayed after the completion of a gesture, and in fact, teaches the opposite, in the first implementation. *Id.* ¶¶ 111–112.

We additionally determine that Petitioner sufficiently shows that Ahn teaches a dragging gesture causing a translucent menu to progressively be displayed (by sliding onto the display) as a function of the magnitude of the user's dragging gesture, and that this occurs as the dragging is occurring.

Ex. 1004 ¶¶ 118–119; Ex. 1003 ¶ 94; *see* Pet. 33. While Patent Owner contends that the examples provided with the cited portions of Ahn do not show the clock widget being blurred, on the present record and for the purposes of institution, Petitioner sufficiently shows that Ahn teaches (or at least suggests), even if it does not depict, that this progressive display of a menu would blur a portion of the standby screen. We do not, on the present record, understand the portions of Ahn relied upon by Petitioner to be two separate embodiments, and we do not discern any specific direction or specific portion of the standby screen is specifically contemplated or excluded in the cited embodiment. *See* Pet. 36; Ex. 1003 ¶ 97. Consistent with our construction of blurring as encompassing displaying an object with less detail, we determine that Petitioner has sufficiently shown that Ahn's display of the menu on top of the standby screen blurs the elements of the standby screen, including the clock widget. *See supra* § III.C.

Additionally, we determine that Petitioner sufficiently shows limitation 2.d to be taught in the combination of Ahn and Chaudhri. On the present record, Ahn teaches that the opening of a menu blurs a clock widget. Ex. 1004 ¶ 51, Fig. 4B. Chaudhri teaches a transition of optical intensity to provide visual feedback during a gesture transitioning between user interface states. Ex. 1005 ¶¶ 80–82, 85, 88; Ex. 1003 ¶¶ 98–100. On the present record, and for the purposes of institution, Petitioner sufficiently shows that one of ordinary skill in the art would have been motivated to provide implementation details for Ahn's Figure 4B menu opening, and to use Chaudhri's discussion of using varying optical intensity to indicate user progress and help a user differentiate between the user-interface object and the background. Ex. 1005 ¶¶ 82, 85; Ex. 1003 ¶¶ 63–66, 101.

While we understand Patent Owner's contention that in Chaudhri, an object in the foreground changes, rather than an object in the background (e.g. the clock widget) (Prelim. Resp. 31), our understanding is that the blurring in Ahn and Chaudhri each teach a foreground object that covers a background object, and that in each case this results in background objects being displayed with progressively less detail. Ex. 1004, Fig. 4B; Ex. 1005 ¶ 85, Ex. 1003 ¶63; *supra* § III.C. Chaudhri teaches increasing the "visual differentiation" between the user interface object and background, and on the present record Petitioner shows that Ahn and Chaudhri both describe such visual differentiation. Thus on the present record it does not appear that one of ordinary skill would have understood the differentiation to require that a background object (or an object of a first user-interface state) is reduced in optical intensity rather than a foreground object (or object of a second user-interface state) increasing in optical intensity (*see* Prelim. Resp. 34–37). Additionally, we understand Petitioner's argument to be that the blurring of the widget on the standby screen would occur in a transition between the standby screen user interface state and the menu list display user interface state, progressively to differentiate between an appearing menu and the standby screen clock widget. Pet. 39. Thus, on the present record, Patent Owner's argument that the user would see progressive blurring of a clock widget and then the appearance of a menu only on completion of a gesture (Pet. 40–44) does not appear to be commensurate with Petitioner's assertions.

For these reasons, we determine that Petitioner has sufficiently shown that Ahn teaches or suggests each limitation of claim 2. We also determine that the combination of Ahn and Chaudhri teaches or suggests each limitation of claim 2, and that the motivation to combine has been

sufficiently shown. Therefore, we determine that Petitioner has shown a reasonable likelihood of prevailing in showing claim 2 to be unpatentable.

6. Claim 27

Claim 27 depends from claim 2, and further requires that "the apparatus is configured such that, when the magnitude, including a distance magnitude, of the gesture detected on the touch screen is detected to increase above a distance threshold, a menu is displayed with at least one option." Ex. 1001, 97:34–38.

Petitioner argues that Ahn's description of displaying specific menu lists depending on the distance of a touch and drag teaches or suggests this limitation. Pet. 40–41 (citing Ex. 1004 ¶¶ 108–109, Fig. 16; Ex. 1003 ¶¶ 132–134). Patent Owner presents no additional arguments for claim 27.

Petitioner sufficiently shows the additional recitations of claim 27 as, on the present record and for the purposes of institution, we determine that Ahn describes a detected gesture (touch and drag operation) that displays a menu (first menu list) when the distance magnitude of a gesture (gesture drag distance) is more than a distance threshold (first drag distance). Ex. 1004 ¶ 109, Fig. 16.

Therefore, we determine that Petitioner has shown a reasonable likelihood of prevailing in showing claim 27 to be unpatentable.

7. Claim 37

Claim 37 depends from claim 27, and further recites that "the apparatus is configured such that the menu is sharpened and magnified when displayed." Ex. 1001, 98:12–14.

Patent Owner presents no additional arguments for claim 37.

We find Petitioner sufficiently shows the additional recitations of claim 37. In particular, Petitioner argues that Chaudhri teaches that its transitions in optical intensity may be based on multiple simultaneous optical effects, and that one of ordinary skill in the art would have found that these would teach or suggest sharpening of a display of a menu as it fades in along with the fading out of a background object. Pet. 42–43 (citing Ex. 1005 ¶¶ 79, 85, 87; Ex. 1003 ¶¶ 161). Petitioner additionally asserts that "focus and context" techniques would include blur and magnification, and that one of ordinary skill in the art would have found it obvious to combine Chaudhri's "sharpening" effect with a magnification, in order to better draw a user's attention to the menu. *Id.* at 43–44 (citing Ex. 1008, 1, 2, 4; Ex. 1003 ¶ 162).

Therefore, we determine that Petitioner has shown a reasonable likelihood of prevailing in showing claim 37 to be unpatentable.

8. Claim 58

Petitioner argues that claim 58 is obvious over Ahn and Chaudhri. Pet. 44–45. Claim 58 depends from claim 52. Ex. 1001, 99:40–41. Petitioner does not address the patentability of claim 52. *See* Pet. v (listing of challenged claims), 1 (listing grounds of unpatentability asserted).

At this time, we determine that Petitioner has not shown a likelihood of success in showing the obviousness of claim 58 over Ahn and Chaudhri.

9. Claims 60, 61, and 223

Due to certain similarities between claims, we address claim 223 with claims 60 and 61.

Claim 60 depends from claim 27, and further recites that "the apparatus is configured such that the blur includes changing a transparency of the at least [a] portion of the at least one other object." Ex. 1001, 99:48–50. Claim 61 is identical except for reciting that "the blur includes changing a *translucency* . . . ." *Id.* at 99:51–53. Claim 223 depends from claim 2 and further recites that "the apparatus is configured such that the blur is accompanied by a fading." *Id.* at 119:39–40.

With respect to claim 60, Petitioner argues that Ahn's figures illustrate that a clock widget portion of the standby screen becomes more "blurred and transparent" as a menu is opened. Pet. 45 (citing Ex. 1004, Figs. 3A, 4B, 10, and 13B; Ex. 1003 ¶ 195). Additionally, Petitioner argues that it was well known to use "focus and context" visual cues including transparency to help direct a user's attention to the most relevant information. *Id.* at 46 (citing Ex. 1005 ¶ 85; Ex. 1008, 2; Ex. 1003 ¶ 196); *see id.* at 44–45.

With respect to claim 61, Petitioner contends that translucence includes allowing light but not detail to pass through, and thus that translucence is a type of blurring. *Id.* at 47 (citing Ex. 1009, 3, 6; Ex. 1003 ¶ 199). Petitioner additionally argues that Ahn's teaching is that the clock widget portion of the standby screen becomes more translucent as a menu is opened. *Id.* at 47–48 (citing Ex. 1004, Figs. 3A, 4B, 10, 13B; Ex. 1003 ¶ 199). Additionally, Petitioner makes the same "focus and context" "visual cue" argument as with respect to claim 60. *Id.* at 48–49.

With respect to claim 223, Petitioner references its arguments relating to claim 58, which are also referenced in the arguments for claims 60 and 61. Pet. 46, 48–49, 72. These arguments are the similar to the "focus and context" arguments described in connection with claim 60.

Patent Owner does not present any additional arguments with respect to these claims.

We have reviewed Petitioner's contentions, as summarized above, regarding these claims and find them to sufficiently show a reasonable likelihood of prevailing with respect to claims 60, 61, and 223.

10. Claims 62 and 64

Due to certain similarities between claims, we address claim 64 with claim 62.

Claim 62 depends from claim 27 and further recites that "the apparatus is configured such that the object includes a battery-related icon." Ex. 1001, 99:54–56. Claim 64 also depends from claim 27 and further recites that "the apparatus is configured such that the menu fades-in, and includes a wide area network option, a local area network option, and a volume option." *Id.* at 99:62–65.

With respect to claim 62, Petitioner argues that Ahn teaches or suggests an indicator area with a battery residual quantity display icon. Pet. 49–50 (citing Ex. 1004 ¶ 50; Ex. 1003 ¶¶ 202–204). With respect to claim 64, we are persuaded that Petitioner sufficiently shows that Ahn and/or Ahn and Chaudhri teach the configuration of an apparatus "such that the menu fades-in," for the reasons discussed above with respect to claim 2 (*supra* Section III.D.5). *See also* Pet. 52–53. Additionally, Petitioner argues that Ahn teaches a list or menu that may include wide area network , local area network, and volume options. *Id.* at 53–54 (citing Ex. 1004, Figs. 3E, 7B, 7C; Ex. 1003 ¶ 210).

Patent Owner does not present any additional arguments with respect to these claims.

We have reviewed Petitioner's contentions, as summarized above, regarding these claims and find them to sufficiently show a reasonable likelihood of prevailing with respect to claims 62 and 64.

11. Claims 63 and 67–79

Claims 63 and 67–79 depend directly or indirectly from claim 27. Patent Owner does not present any additional arguments with respect to these claims.

We have reviewed Petitioner's contentions (Pet. 50–52, 54–72) regarding these claims and find them to sufficiently show a reasonable likelihood of prevailing with respect to these claims.

IV. CONCLUSION

On the present record, and for the purpose of institution, we determine that Petitioner has shown a reasonable likelihood of prevailing in its challenge with respect to at least one of the challenged claims. Therefore, we institute on all grounds raised and all challenges in the Petition. 37 C.F.R. § 42.108(a); see *SAS Inst. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018).

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that *inter partes* review of all challenged claims of US Patent 10,656,754 B1 is *instituted* with respect to all grounds of unpatentability set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a) and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is given of the institution of a trial commencing on the entry date of this Decision.

FOR PETITIONER:

W. Karl Renner
David Holt
FISH & RICHARDSON P.C.
axf-ptab@fr.com
dth@fr.com

FOR PATENT OWNER:

Eagle H. Robinson
Daniel S. Leventhal
Chad Wallis
NORTON ROSE FULBRIGHT US LLP
eagle.robinson@nortonrosefulbright.com
daniel.leventhal@nortonrosefulbright.com
chad.wallis@nortonrosefulbright.com