

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE, INC.,
Petitioner,

v.

SMITH INTERFACE TECHNOLOGIES, LLC,
Patent Owner.

IPR2024-01088
Patent 10,656,758 B1

Before BARBARA A. BENOIT, NATHAN A. ENGELS, and
SHARON FENICK, *Administrative Patent Judges*.

FENICK, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background and Summary

Apple, Inc., (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting *inter partes* review of claims 1, 9, 12, 19–22, 24–32, 35–43, 47, 57–59, 63, 71, 74, 81–84, 86–94, 97–105, 109, 119–121, and 124 (the “challenged claims”) of U.S. Patent 10,656,758 B1 (Ex. 1001, “the ’758 patent”). Smith Interface Technologies, LLC, (“Patent Owner”) timely filed a preliminary response (Paper 6, “Prelim. Resp.”).

The Board has authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314(b); 37 C.F.R. § 42.4(a). Under 35 U.S.C. § 314(a), we may not authorize an *inter partes* review unless the information in the Petition “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 *inter partes* review as to the challenged claims of the ’758 patent on all grounds of unpatentability presented.

B. Real Parties in Interest

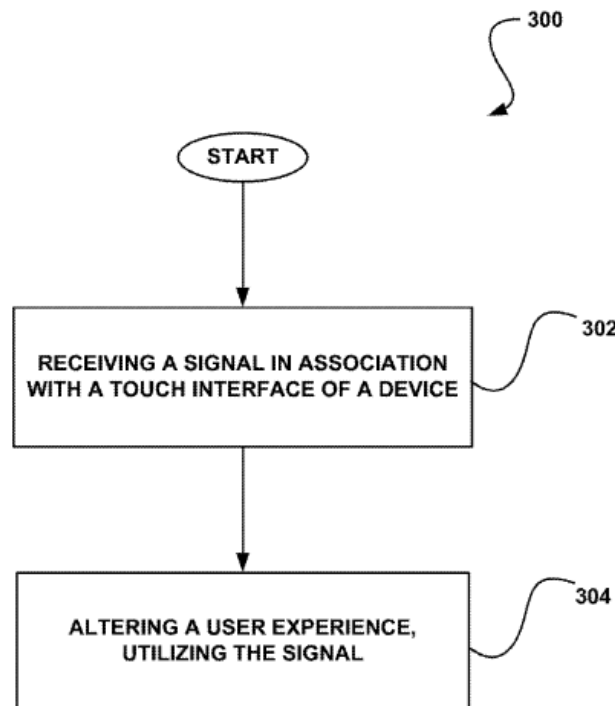
Petitioner names only itself as a real party in interest. Pet. 70. Patent Owner names only itself as a real party in interest. Paper 3 (Patent Owner’s Mandatory Notices), 1.

C. Related Matters

Petitioner and Patent Owner each informs us of the following related matters: *Smith Interface Technologies, LLC v. Samsung Electronics Co., Ltd*, 2-22-cv-00290 (EDTX) (terminated) and *Smith Interface Technologies, LLC v. Apple Inc.*, 3-23-cv-01187 (SDCA) (pending) (the “District Court Litigation”). Pet. 70; Paper 3, 1.

D. The '758 Patent

The '758 patent is entitled “Gesture-Equipped Touch Screen System, Method, and Computer Program Product,” and describes electronic devices with touch-sensitive surfaces (e.g., touch-sensitive screens). Ex. 1001, 1:39–40, codes (54), (57). Figure 3 of the '758 patent, reproduced immediately below, “shows a method for altering a user experience based on a received signal.” *Id.* at 4:65–67.



The two step method in Figure 3 includes a step of receiving a signal in association with a touch interface (element 302) and then altering a user experience utilizing that signal (element 304). *Id.* at 16:17–35. Figure 4, reproduced immediately below, describes “a method for defining a selection made within a user interface based in part on contact pressure” and illustrates that the application of a “sufficient pressure” can be used to select objects on the screen. *Id.* at 5:1–3, 28:20–30.

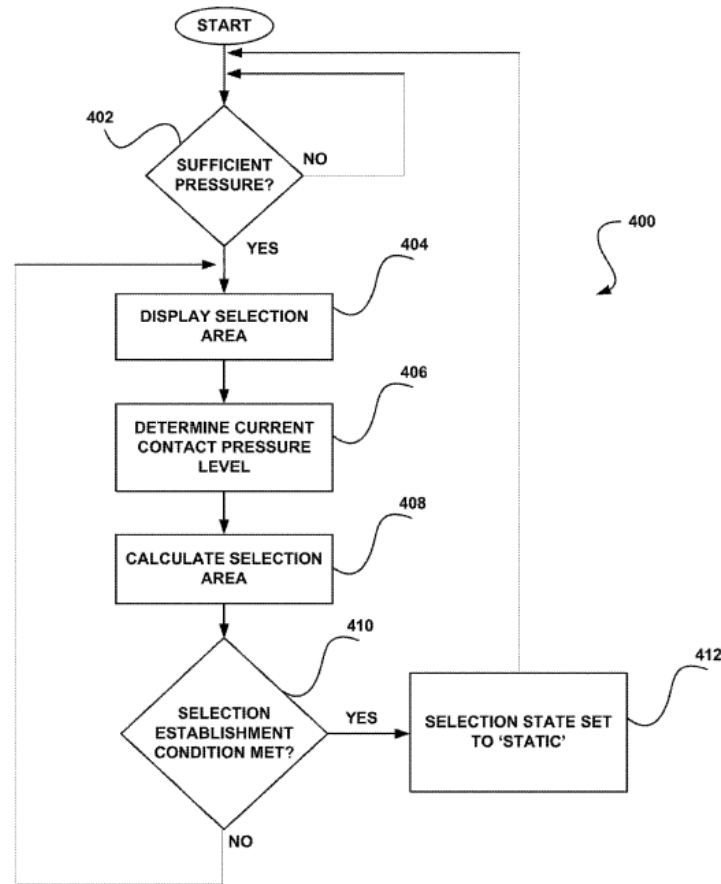


FIGURE 4

The method in Figure 4 describes a method which determines whether sufficient pressure has been used on the screen, and if it has, determines the contact pressure level and the selection area of the contact. *Id.* at 28:42–47, Figure 6. Based on the applied pressure, the context of touch from the user can be determined, for example, within a context determination zone that may be initially defined as a function of one or more elements of user input upon which the selection itself is based, such as the touch or pressure of that input. *Id.*

E. Illustrative Claim

Of the challenged claims, claims 1, 63, and 124 are independent claims. Claim 1 is illustrative of the challenged claims and is reproduced

immediately below, with identification of claim limitations in brackets corresponding to those used by the parties.

1. An electronic device, comprising:

[1.a] a display;

[1.b] a touch-sensitive surface;

[1.c] one or more processors;

[1.d] memory;

[1.e] and one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

[1.f] displaying, on the display, an application launching user interface that includes a plurality of application icons for launching corresponding applications;

[1.g] while displaying the application launching user interface, detecting a first single-finger touch input that includes detecting the first single-finger touch input at a location on the touch-sensitive surface that corresponds to a first application icon of the plurality of application icons, wherein the first application icon is for launching a first application that is associated with one or more corresponding action options; and

[1.h] in response to detecting the first single-finger touch input, determining a response to the first single-finger touch input based on evaluating the first single-finger touch input against at least one of a plurality of criteria, including evaluating a duration of the first single-finger touch input against at least one of: one or more application-launch criteria, one or more action-option-display criteria, or one or more operation criteria, and further including evaluating a movement of the first single-finger touch input against one or more movement criteria, for:

[1.i] in accordance with a determination that the first single-finger touch input meets the one or more application-

launch criteria that is met when the duration of the first single-finger touch input is evaluated to be less than a first time threshold, launching the first application,

[1.j] in accordance with a determination that the first single-finger touch input meets the one or more action-option-display criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than the first time threshold, displaying one or more action option objects associated with the first application without launching the first application,

[1.k] in accordance with a determination that the first single-finger touch input meets the one or more operation criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than a second time threshold that is greater than the first time threshold, performing an operation in connection with the first application icon, and

[1.l] in accordance with a determination that the first single-finger touch input meets the one or more movement criteria, moving the first application icon in a foreground virtual display layer so that the first application icon appears to float above a background virtual display layer.

Ex. 1001, 97:29–98:18.

F. Evidence

The Petitioner relies on the following published patent references as evidence.

Name	Patent Document	Exhibit
Martyn	US 2004/0051726 A1	Ex. 1005
Os	US 2011/0167382 A1	Ex. 1007
Griffin et al.	US 2011/0248948 A1	Ex. 1006
Chaudhri	US 2011/0252372 A1	Ex. 1004

G. Prior Art and Asserted Grounds of Unpatentability

Petitioner asserts that claims 1, 9, 12, 19–22, 24–32, 35–43, 47, 57–59, 63, 71, 74, 81–84, 86–94, 97–105, 109, 119–121, and 124 would have been unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 9, 12, 19–22, 24–32, 35–43, 47, 57–59, 63, 71, 74, 81–84, 86–94, 97–105, 109, 119–121, 124	103 ¹	Chaudhri, Martyn, Griffin
1, 9, 12, 19–22, 24–32, 35–43, 47, 57–59, 63, 71, 74, 81–84, 86–94, 97–105, 109, 119–121, 124	103	Chaudhri, Martyn, Griffin, Os

II. 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*,

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, 125 Stat. 284 (2011), amended 35 U.S.C. § 103, effective March 16, 2013. Petitioner asserts that the claims of the ’758 patent are not entitled to the earliest claimed priority date of August 5, 2011, while noting that all prior art applied precedes that date. Pet. 3, 6. Patent Owner does not address this contention. While Petitioner’s declarant describes obviousness “at the time of the alleged invention” (Ex. 1003 ¶ 21), which appears to relate to pre-AIA obviousness statute, it does not appear that the record at this time contains arguments relating to the specific date of the analysis or specific to which version of the statutes applies. Our analysis here does not depend on which version applies.

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,² i.e., secondary considerations. *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 asserts, citing the testimony of Dr. Andrew Cockburn (Ex. 1003) that a person of ordinary skill in the art (“POSITA”) would have had “a bachelor’s degree in computer science, computer engineering, or a comparable field and at least two years of professional experience working with graphical user interfaces and applications for computers” and that

² The present record contains no arguments regarding objective evidence of nonobviousness.

“[a]dditional years of experience could substitute for an advanced-level degree (and vice-versa).” Pet. 7 (citing Ex. 1003 ¶ 39). Petitioner adds that:

“the POSITA would have possessed extensive background knowledge and understanding of the pertinent technologies employed by the ’758 patent, including touch screen mobile devices, menus in computer graphical user interfaces, and duration-based touch gestures. These technologies were developed and commercially adopted before 2011.”

Pet. 7 (internal citations omitted) (citing Ex. 1003 ¶¶ 41–53). For the purposes of institution, Patent Owner did not dispute this level of skill. Prelim. Resp. 6 (“Patent Owner does not necessarily 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.”)

The portion of the definition proposed by the Petitioner requiring “a bachelor’s degree in computer science, computer engineering, or a comparable field and at least two years of professional experience working with graphical user interfaces and applications for computers” appears to be consistent with the problems and solutions in the ’758 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 the definition relating to the substitution of years of experience for a degree at this time. Additionally, we do not herein adopt Petitioner’s proposed additional requirement that one of ordinary skill “would have possessed extensive background knowledge and understanding of the pertinent technologies employed by the ’758 patent.” Pet. 7.

C. Claim Construction

Petitioner asserts that no claims require express construction. Pet. 8. Patent Owner also argues that no express construction is necessary. Prelim. Resp. 7.

1. Limitations 1.k and 1.l of Claim 1

Petitioner raises a claim construction issue in its discussion of whether “the Challenged Claims [should be] interpreted to require a single continuous touch” that meets both limitations 1.k and 1.l of claim 1. Pet. 38–39, 66–67. Patent Owner does not address this issue in its Preliminary Response.

Our institution includes a determination that Petitioner has sufficiently shown a reasonable likelihood of succeeding whether this continuous touch is required to meet both limitations (discussed with respect to the proposed combination of Chaudhri, Martyn, Griffin, and Os Section II.E) or not (discussed with respect to the combination of Chaudhri, Martyn, and Griffin, Section II.D).

Because we institute, we anticipate that this will be an issue for the parties during the proceeding. We request that arguments relating to this claim construction issue, or any other claim constructions the parties rely upon during trial, appear in a clearly designated section of briefing and note that such arguments should “point out the specific portions of the specification, prosecution history, and relevant extrinsic evidence” to be considered, with explanations of the relevancy of that evidence to the arguments presented. *See* Patent Trial and Appeal Board Consolidated Trial Practice Guide, at 46, 49 (Nov. 2019) (available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>).

2. District Court Litigation Terms

Patent Owner also notes that in the pending District Court Litigation, Petitioner contends that eight claim terms found in the challenged claims are indefinite: “performing an operation [in connection with / on] the first application icon,” “application-launch criteria,” “action-option-display criteria,” “operation criteria,” “movement criteria,” “action options,” “action option objects,” and “evaluating the first single-finger touch input against at least one of a plurality of criteria, including evaluating a duration of the first single-finger touch input against at least one of: one or more application-launch criteria, one or more action-option-display criteria, or one or more operation criteria, and further including evaluating a movement of the first single-finger touch input against one or more movement criteria.” Prelim. Resp. 6–7 (citing Ex. 2003, 9–75). Patent Owner further notes that, contrary to its position in the pending District Court Litigation, Petitioner does not assert that any of these terms are indefinite in this proceeding. *Id.*

For institution and on our present record, we determine that none of these claim terms require construction. *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)).

3. Other Terms

For institution and on our present record, no other claim terms require construction. *See Nidec*, 868 F.3d at 1017.

*D. Obviousness of Challenged Claims
Over the Combination of Chaudhri, Martyn, and Griffin*

Petitioner argues that 1, 9, 12, 19–22, 24–32, 35–43, 47, 57–59, 63, 71, 74, 81–84, 86–94, 97–105, 109, 119–121, and 124 would have been obvious over a combination of Chaudhri, Martyn, and Griffin. Pet. 15–61. Patent Owner counters that the Petitioner’s proposed combination of Chaudhri, Martyn, and Griffin lacks evidentiary support, that the Petitioner does not adequately show motivation to make the combination, and certain limitations of the claims are not taught or suggested by the cited portions of the relied-upon art. Prelim. Resp. 21–39.

We begin with a description of the prior art references and then discuss the parties’ contentions and provide our analysis.

1. Chaudhri

Chaudhri is entitled “Device, Method, and Graphical User Interface for Managing Folders,” and was published on October 13, 2011. Ex. 1004, codes (54), (43).

Chaudhri generally discloses an electronic device with a touch-sensitive surface. *Id.* at code (57). To facilitate “more efficient methods and interfaces for managing folders,” Chaudhri discloses “user interfaces for computing devices with touch-sensitive surfaces.” *Id.* ¶¶ 7–8.

Chaudhri discloses two modes: a “normal operation mode” and a “user interface reconfiguration mode.” *Id.* ¶¶ 217–218. In the “normal operation mode,” tapping on an application will launch the application. *Id.* ¶ 217. In “user interface reconfiguration mode,” a visual indication that the device is in the mode is displayed, and a user is able to rearrange applications and can reach a “pop-up dialogue” by touching a separate “object modification target.” *Id.* ¶¶ 218, 274.

Figures 5A and 5B, reproduced below, illustrate an embodiment of this visual indication, with Figure 5A showing a user interface with a plurality of selectable user interface objects and Figure 5B showing a user interface page after “the device detects a contact 5008 with the solitaire application icon 5002-4 for more than a predetermined period of time (e.g., 2 seconds) and, in response, the device enters a user interface reconfiguration mode.” *Id.* ¶¶ 59, 216–218.

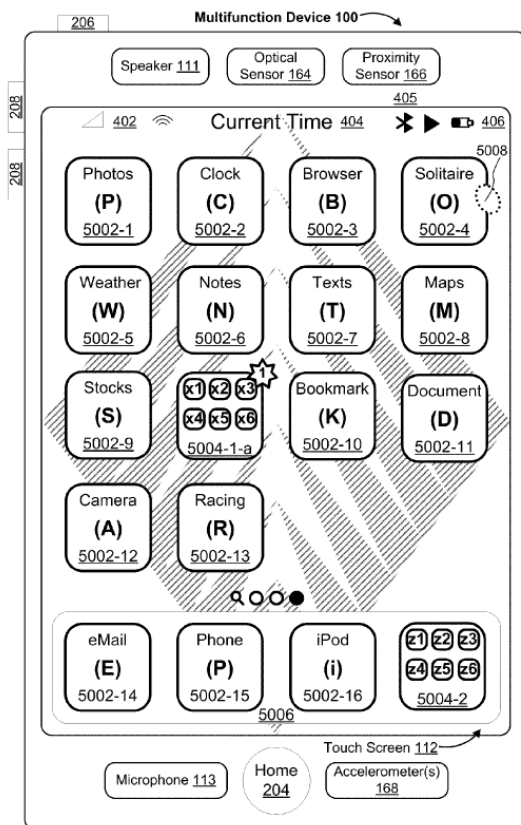


Figure 5A

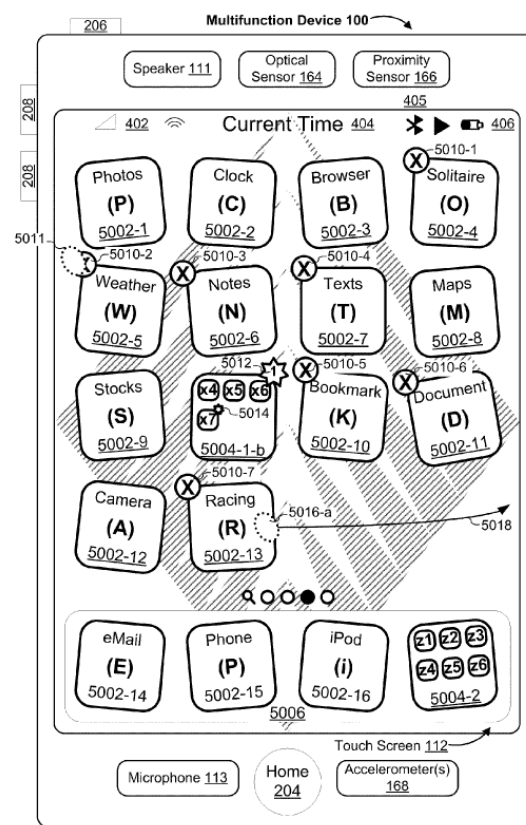


Figure 5B

As depicted in Figure 5B, once the device has entered a user interface reconfiguration mode, “the selectable user interface objects jiggle as though they are floating.” *Id.* ¶ 218. Chaudhri also discloses different gestures on the touch-sensitive surface with different contact patterns, including a drag gesture used to rearrange applications when in “user interface

reconfiguration mode.” *Id.* ¶¶ 101–102, 217–220, 273, 248–249, 328–38, Figs. 5B–C, 9A–9B, 5KK–5MM.

2. Martyn

Martyn is entitled “Computing Device with Improved User Interface for Applications,” and was published March 18, 2004. Ex. 1005, codes (54), (43).

Martyn describes that, in computing device with a small screen, different user functions in different applications may be available to a user. *Id.* at ¶¶ 2, 4. To assist a user attempting to locate a desired function, Martyn describes providing a “snap-shot” view of an application that brings together, in one summary window, a limited list of common functions and commonly accessed stored data. *Id.* ¶¶ 9–10, 15, 18. This “summary window,” which Martyn calls an “App Snapshot,” is accessible directly from the Martyn main view, which lists several applications, by selecting the name of the application. *Id.* ¶ 17. Figures 2 and 3 of Martyn, reproduced immediately below, show the summary window snap-shot view of functions in the screen of a device. *Id.*



Figure 2



Figure 3

As seen in these figures, a window associated with the Messages application includes links to common functions (e.g. “Create message”) and commonly

requested data associated with the application (e.g. “3 unread emails”). *Id.* ¶¶ 16–18, 25, Figs. 1–3.

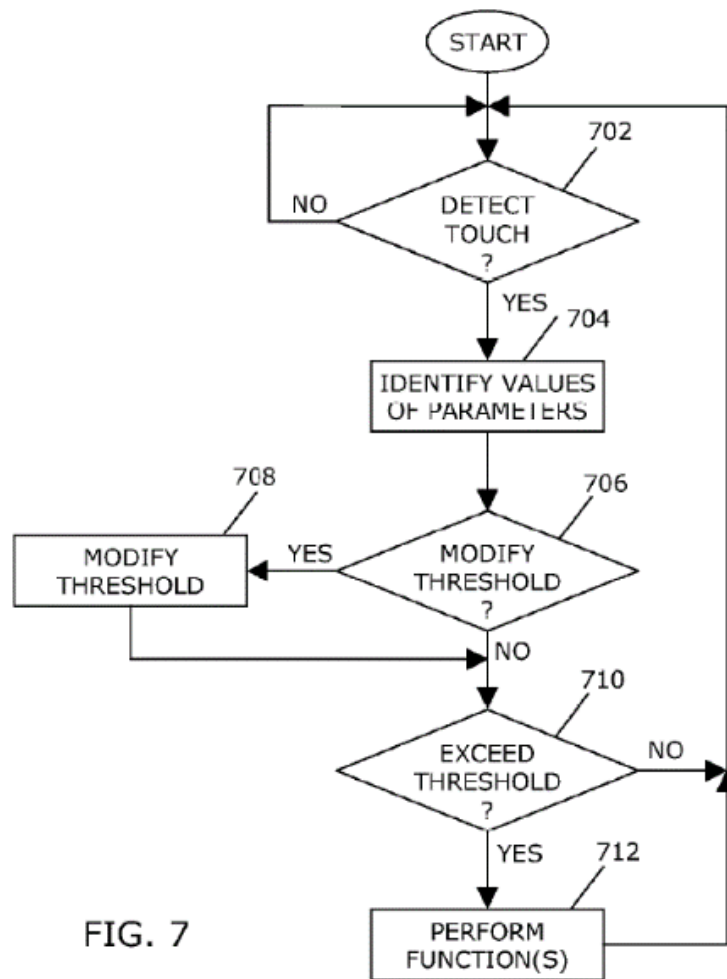
The selection of an item from the snap-shot window may be accomplished by using scrolling functionality to highlight the name of an application for a certain amount of time, by executing “a press and hold . . . when an application name is highlighted,” or by using a cursor key. *Id.* Highlighting is available for the list in the snap-shot window, and when an item in that list is selected, the required application may be automatically opened. *Id.* ¶ 18.

3. *Griffin*

Griffin is entitled “Computing Device with Improved User Interface for Applications,” and was published March 18, 2004. Ex. 1006, codes (54), (43).

Griffin discloses applying “touch thresholds” to certain monitored parameters of the user’s contact with the touch screen of a mobile device. *Id.* ¶¶ 3, 32, 40, 53. These parameters may be related to, e.g., the force imparted by a user’s touch, a displacement distance of a part of the display, an area of contact of a touch, or a time duration of a touch. *Id.* ¶ 32. Multiple touch thresholds may be applicable to a detected touch. *Id.* Different touch thresholds may be associated with different functions. *Id.*

Based on a comparison between the value of a touch parameter and a given threshold criterion, the device performs a corresponding functionality, illustrated in a flow chart below shown in Figure 7 of Griffin and reproduced immediately below. *Id.* at ¶ 53.



The flow chart of Figure 7 shows that when a touch is detected (step 702), values of parameters of the touch are identified and compared to a threshold (step 710) to determine if a function is to be performed (step 712). *Id.* at ¶¶ 39–40, 53. The comparison may be to multiple touch thresholds, and a detected touch may meet multiple thresholds. *Id.* ¶ 53.

For example, a light touch on a “ALT” virtual key 604 highlights the “ALT” virtual key 604 when the touch meets a first touch threshold, and when the touch stays in the same location and is more forcefully applied until a second touch threshold is met, an alternate set of characters is displayed on the keyboard 604. Optionally, a third touch threshold may also be applied, and when the touch meets the third threshold in this example, an “ALT” lock may be engaged, wherein a lock indicator is

displayed, and the alternate set of characters is displayed and characters from the set are entered until a subsequent touch or tap on the “ALT” key. Tactile feedback may also be provided when the second touch threshold is met, and alternatively when the third touch threshold is met.

Id.

4. Claim 1

a. Motivation to Combine Chaudhri, Martyn, and Griffin

i. Petitioner’s Contentions

Petitioner describes a combination of Martyn’s teachings regarding its snap-shot menu and Griffin’s teachings regarding evaluating user touch input with Chaudhri’s user interface teachings. Pet. 15–22.

Petitioner argues that one of ordinary skill would have integrated Martyn’s summary window with common application functions into Chaudhri’s touch screen user interface with selectable application icons, yielding a mobile device displaying a summary window in response to a touch-and-hold gesture. *Id.* at 15–16 (citing Ex. 1003 ¶¶ 63–69). Petitioner asserts that the summary window is a sub-menu of a type that was present in graphical user interfaces (GUIs) at the relevant time and was well-known to solve the problem of “presenting contextually relevant and available actions and functionalities for selection by the user based on the state of the device.” *Id.* at 16 (citing Ex. 1003 ¶¶ 43–48, 64–65). Petitioner additionally argues that this would have provided a predictable improvement for this purpose, and thus would have been superior “from a usability standpoint” and thus more attractive to consumers. *Id.* at 17–18 (citing Ex. 1005 ¶¶ 4–8, 15; Ex. 1003 ¶¶ 66–68). Petitioner notes that Chaudhri discloses “pop-up dialogue” sub-menus that provide the user with options for modifying a user interface object, and argues that one of ordinary skill would have been

prompted to seek out similar sub-menus to augment the Chaudhri user interface. *Id.* at 18–19 (citing Ex. 1004 ¶¶ 274, 317, Fig. 5LLL; Ex. 1003 ¶ 69).

Petitioner additionally asserts that one of ordinary skill would have sought additional details to supplement Chaudhri’s teaching of using different user touch duration (e.g. tap and touch-and-hold) for different functionalities, and would have sought Griffin’s teachings regarding process flows for evaluating the parameters of a user touch of a touch screen. Pet. 19–21 (citing Ex. 1004 ¶¶ 217, 218; Ex. 1002 ¶¶ 70–73, 75). Additionally, Petitioner contends that the third functionality added in the combination of Chaudhri and of Martyn would have required distinction between three duration-based touch gestures at an application icon, which would have further caused one of ordinary skill to look to Griffin for evaluating a duration parameter of a user’s touch. *Id.* at 21–22 (citing Ex. 1006 ¶¶ 32, 40, 53; Ex. 1003 ¶¶ 76–77).

ii. Patent Owner’s Contentions

Patent Owner argues that the Petition does not explain why one of ordinary skill would have selected Martyn’s press-and-hold input from among the other disclosed methods for activating Martyn’s snap-shot menu. PO Resp. 19–21, 24–26, 28–30. Patent Owner contends that, because Chaudhri uses a press-and-hold input for another function, one of ordinary skill would not have considered Martyn’s press-and-hold input over the other methods disclosed in Martyn for activating its snap-shot menu. *Id.* Patent Owner argues that the choice of the disclosed press-and-hold input from Martyn over other disclosed methods in Martyn would have created “an intractable conflict” in the combination “between two core functions being triggered by the same input.” *Id.* at 29. Thus, Patent Owner

concludes, one of ordinary skill would not have selected the press-and-hold input for activation of the snap-shot menu in the combination of Martyn and Chaudhri. *Id.* at 27–30. Patent Owner proposes that, instead, one would have selected a different touch point to the existing user interface of Chaudhri for the snap-shot menu in the Chaudhri/Martyn combination. *Id.* at 27–28 (citing Ex. 2001 ¶ 143).

Patent Owner additionally argues that Petitioner’s contentions that sub-menus were well-known and would have provided superior usability are conclusory and unsupported. *Id.* at 23–24 (citing Ex. 2001 ¶¶ 126–127, 129–139). Patent Owner contends that, because Chaudhri teaches a pop-up dialogue submenu, a user would not have redundantly considered adding Martyn’s snap-shot menu. *Id.* at 26–27.

With respect to the combination of Chaudhri and Martyn with Griffin, Patent Owner asserts that Griffin’s teachings “would have been unhelpful to a POSITA solving the problem of sequential durational touch thresholds.” *Id.* at 31–32. Patent Owner presents its declarant’s testimony that the time threshold from Griffin only “allows the discernment between a tap and a touch-and hold” but that there is no explanation of why one of ordinary skill would “bisect the touch-and-hold with another time threshold,” thus “expanding Chaudhri to include two duration thresholds for a single touch to result in any of three different actions.” *Id.* (citing Ex. 2001 ¶¶ 156, 162, 165, 166). Patent Owner additionally argues there is no motivation to combine, because Griffin’s disclosure of multiple thresholds does not in itself “convey that multiple thresholds are desirable or should be used in a particular application” where there is an alternative available. *Id.* at 32–33.

iii. Analysis – Motivation to Combine

We determine that, on this record and for the purposes of institution, Petitioner has made a sufficient showing regarding motivation for its proposed combination of Chaudhri, Martyn, and Griffin.

For the combination of Chaudhri and Martyn, we determine, on the present record and for the purposes of institution, that Petitioner has sufficiently shown support for the use of Martyn’s snap-shot menu with Chaudhri’s user interface. We acknowledge Patent Owner’s declarant’s examples of instances in which devices that incorporated “popular user interface features . . . did not achieve the same level of success because of poorly articulated design implementation.” Ex. 2001 ¶ 127 (cited at PO Resp. 23). However, on the present record, this evidence does not specifically address whether one of ordinary skill would have found such examples significant enough or relevant enough to the proposed combination to dissuade one of ordinary skill from considering such a combination to be reasonably likely to succeed, especially in light of the testimonial evidence before us that similar menus were often incorporated into GUIs similar to Chaudhri’s, which is adequately supported by reference to numerous examples. *See* Ex. 1003 ¶¶ 43–48, 64–65 (cited at Pet. 16). Additionally, we find compelling that Chaudhri describes a pop-up dialogue sub-menu for a different purpose (modifying the user interface object). *See* Ex. 1004 ¶¶ 274, 317, Figure 5LLL; Pet. 18–19; Ex. 1003 ¶ 69. On the present record, one of ordinary skill in the art would have found the use of the similar snap-shot menu from Martyn (offering different functionality) to be further prompted by this sub-menu, and not to have been redundant or “already solved” in Chaudhri, as Patent Owner argues (PO Resp. 26–27). *See* Pet. 18–19; Ex. 1003 ¶ 69.

Patent Owner properly raises concerns that Griffin has been introduced to the combination of Chaudhri and Martyn to address a conflict that arises because Petitioner proposes a combination of Chaudhri and Martyn that “create[s] a conflict of assigning two functions to the same gesture.” PO Resp. 20. However, Petitioner provides a number of rationales to combine, and Petitioner’s argument that one of ordinary skill would have sought details from Griffin to implement Chaudhri’s teachings describing different user functionality being launched by user touches of different user durations (Pet. 19–21) adequately supports the use of the material from Griffin in the proposed combination. *See* Ex. 1004 ¶¶ 217, 218; Ex. 1002 ¶¶ 70–73, 75; *see also* PO Resp. 24 (describing “multiple types of gestures” used Chaudhri). While the proposed combination of Chaudhri and Martyn would, as Petitioner asserts, result in “three distinct operations invoked by duration-based touch gestures at an application icon” (Pet. 21), two of these distinct operations are found in Chaudhri’s teachings, and thus, on the present record, the motivation to look to Griffin does not arise only from the proposed combination of Chaudhri with Martyn. On the present record and for the purposes of institution, we determine that Petitioner has adequately shown that one of ordinary skill would have looked to Griffin to supply additional information regarding implementation of Chaudhri’s (and the Chaudhri and Martyn combination’s) use of parameters of a user’s touch, including duration, to enable different functionalities. Ex. 1006 ¶¶ 40, 53, Fig. 7; Ex. 1002 ¶¶ 70–73, 75.

With respect to the use of the “press-and-hold” feature from Martyn, rather than other possibilities from Martyn for triggering its snap-shot menu and rather than adding a second touch point as Patent Owner suggests (PO Resp. 27–28, 32, 33 (citing Ex. 2001 ¶¶ 142–143, 156, 166, 172–173)), on

the present record, Petitioner sufficiently shows the “press-and-hold” feature to have been a suitable option. Pet. 15–16; Ex. 1003 ¶¶ 49–53, 63–64; *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 784, 799–800 (Fed. Cir. 2021) (determining that a showing of the obviousness in “predictable use of prior art elements according to their established functions” (as per *KSR*, 550 U.S. at 417) requires only a showing that the combination be a suitable option, rather than a showing that it is the best option).

b. Limitations of Claim 1

The preamble of claim 1 recites “[a]n electronic device,” and limitations 1.a and 1.b recite that this device comprises a display and a touch-sensitive surface. Ex. 1001, 97:29–31. Petitioner asserts that these limitations are taught by Chaudhri’s description of electronic devices that have a display and a touch-sensitive surface. Pet. 22–23 (citing Ex. 1004 ¶¶ 3, 9, 74, 78, 177, Figs. 1A, 1B, 2, 3; Ex. 1003 ¶¶ 79–80).

Claim 1 also recites, in limitations 1.c, 1.d, and 1.e, that the device comprises processor(s), memory, and program(s) including instructions for performing the steps of 1.f through 1.i. Ex. 1001, 97:32–37. Petitioner asserts that these limitations are disclosed in Chaudhri as well, citing Chaudhri’s multifunction device with a display, processors, memory, and programs. Pet. 23–24 (citing Ex. 1004 ¶¶ 15, 17, 80–81, 98, 127, 146, 177; Ex. 1003 ¶ 81).

With respect to limitation 1.f of claim 1, reciting the display of “an application launching user interface that includes a plurality of application icons for launching corresponding applications” (Ex. 1001, 97:38–40), Petitioner asserts that Chaudhri’s user interface pages displayed on its display present a menu of application icons for activating applications. Pet.

24–25 (citing Ex. 1004 ¶¶ 29, 179–180, 216, 217, Figs. 4A–5PPP; Ex. 1003 ¶ 82).

Limitation 1.g of claim 1 recites, while the application launching user interface (of limitation 1.f) is displayed, “detecting a first single-finger touch input” at a location on the surface of the device “correspond[ing] to a first application icon . . . for launching a first application that is associated with one or more corresponding action options.” Ex. 1001, 97:41–48. Petitioner asserts that Chaudhri teaches this, at least in its disclosure of an user interface icon that launches a solitaire application upon detection of contact with a specific icon and launches a photos application upon detection of contact with a photos action icon. Pet. 26 (citing Ex. 1004 ¶¶ 216–217, 276, Figs. 5A, 5OOO; Ex. 1003 ¶¶ 84–85). Petitioner argues that the contact described for this in Chaudhri is a “finger tap gesture” at the icon. *Id.* at 27 (citing Ex. 1004 ¶¶ 101, 102, 216–217, 276, 280, 302, 210–311; Figs. 5A, 5OOO, 7A, 7C; Ex. 1003 ¶ 86). For the “corresponding action options” with which the first application is associated, Petitioner argues that the functions in the applications disclosed in Chaudhri teaches these, as well as the application-specific functions present in Martyn’s snap-shot menu. *Id.* (citing Ex. 1004 ¶ 146; Ex. 1005 ¶¶ 15–19, Figs. 2–3; Ex. 1003 ¶ 87).

Limitation 1.h of claim 1 requires that a response to the detection of the single-finger touch input be determined “based on evaluating [that] touch input against at least one of a plurality of criteria, including evaluating a duration of [the] touch input” against at least one of an “application-launch criteria,” an “action-option-display criteria,” or an “operation criteria,” and evaluating movement of the touch input against at least one movement criteria. Ex. 1001, 97:49–59. Petitioner asserts that this is taught in Chaudhri’s detection of a tap gesture (the “single-finger touch input”) to

launch an application (launching an application in response to the detection of a tap touch), as discussed with respect to limitation 1.g, and that, among other criteria Petitioner asserts are taught in Chaudhri, this use of a tap gesture shows how Chaudhri teaches an application-launch criterion. Pet. 28, 29–30 (citing Ex. 1003 ¶¶ 89, 91). Petitioner additionally asserts that limitation 1.i, which recites that application-launch criteria is determined to be met when the touch is of a duration shorter than a first time threshold, and the application is launched (Ex. 1001, 97:60–64), is taught by Chaudhri for substantially the same reasons. Pet. 30–31 (citing Ex. 1003 ¶¶ 93–94). Returning to limitation 1.h, with respect to the evaluation of the first single-finger touch, Petitioner asserts that Griffin’s cyclical process flow describes the determination of parameters of a touch, evaluation of those parameters against criteria, and determination of responsive functions. *Id.* at 28–29 (citing Ex. 1006, ¶¶ 32, 37, 40, 42–43, 50, Fig. 7; Ex. 1003 ¶ 90).

Limitation 1.j requires that, upon a determination that the duration of the user’s touch input is greater than the first time threshold, one or more action option objects will be displayed, associated with the first application, without launching that application. Ex. 1001, 97:65–98:4. Petitioner argues that, in its proposed combination, the display of Martyn’s snap-shot menu upon a longer user touch teaches or suggests this limitation. Pet. 31–33 (citing Ex. 1005 ¶¶ 9–11, 17, Figs. 1–3; Ex. 1003 ¶¶ 95–96). Petitioner asserts that the distinction between a tap gesture (to launch an application) and a “touch-and-hold” gesture (to trigger the snap-shot menu) teaches or suggests the first time threshold, which distinguishes between these two gestures. *Id.* at 33 (citing Ex. 1003 ¶¶ 95–96).

For limitation 1.k, which requires that, upon a determination that the user’s touch input is greater in duration than a second time threshold, “an

operation in connection with the first application icon” is performed (Ex. 1001, 98:5–11), Petitioner argues that the “operation” of this limitation is taught or suggested by the entry into a user interface reconfiguration mode in Chaudhri. Pet. 33–35 (citing Ex. 1004 ¶¶ 180, 217–218, 313, Fig. 5B; Ex. 1003 ¶¶ 97–99). Petitioner asserts that one of ordinary skill would have understood that Chaudhri’s example of a touch lasting longer than two seconds causing the device to enter this mode, with the duration being outside of “normal” mode (where a tap or touch-and-hold gesture relate to launching or selecting functionality). *Id.* at 22–23, 34–35 (citing Ex. 1003 ¶¶ 77, 97–98).

Lastly, for limitation 1.l, which requires that when a touch meets movement criteria, an application icon is moved “in a foreground virtual display layer so that the first application icon appears to float above a background virtual display layer,” (Ex. 1001, 98:12–18), Petitioner asserts that when, during Chaudhri’s reconfiguration mode, an icon is moved with a touch that moves across the touch-sensitive surface, Chaudhri teaches that the icon moves in front of a background and in front of non-moving application icons. Pet. 35–38 (citing Ex. 1004 ¶¶ 87, 101–102, 218, 220, 282–283, 328–331, 368, Figs. 5A–5E, 5M–5N, 5JJ–5MM, 9A, 9B, 5KK, 5MM; Ex. 1003 ¶¶ 100–104).³

At this time, Patent Owner presents no additional arguments regarding these contentions, arguing only that the limitations are not found in the individual references and that Petitioner has not sufficiently shown a

³ We do not address or base our determination on Petitioner’s arguments regarding Chaudhri’s teaching of a continuous touch meeting both limitation 1.k and 1.l’s “first single-finger touch input.” *See* Pet. 38–39; *see supra* § II.C.

motivation to make its proposed combination. *See* PO Resp. 34–39. As discussed above, Section II.D.4.a.iii, we find, on the current record and for the purposes of institution, that Petitioner’s showing regarding the combination is sufficient.

On the current record and for the purposes of institution, we additionally find Petitioner’s showing regarding the teaching or suggestion of each of the limitations of claim 1 in Petitioner’s proposed combination, summarized above, to be sufficient for the purposes of institution. Thus, we determine that Petitioner has shown a reasonable likelihood of prevailing in showing claim 1 unpatentable over its proposed combination of Chaudhri, Martyn, and Griffin.

5. Additional Challenged Claims – Combination of Chaudhri, Martyn, and Griffin

a. Claims 63 and 124

Claim 63 is an independent method claim that includes steps similar to those claimed in limitations 1.f through 1.l of claim 1. Ex. 1001, 108:41–109:22. Claim 124 is an independent claim directed to a non-transitory computer readable storage medium storing programs that cause an electronic device to perform steps similar to those claimed in limitations 1.f through 1.l. of claim 1. Ex. 1001, 114:60–115:44. Petitioner argues these claims with reference to its arguments relating to claim 1. Pet. 61. Patent Owner makes no arguments specific to these claims.

For the same reasons discussed above, on the present record, we find Petitioner has sufficiently shown a reasonable likelihood of success of prevailing in a challenge of claims 63 and 124 as unpatentable over Chaudhri, Martyn, and Griffin.

b. Claims 9, 12, 19–22, 24–32, 35–43, 47, 57–59, 71, 74, 81–84, 86–94, 97–105, 109, and 119–121

With respect to the challenged claims that are dependent claims, we have reviewed Petitioner’s assertions. *See* Pet. 40–61. Patent Owner makes no arguments specific to the dependent claims.

In each case, on the present record, Petitioner has sufficiently shown a reasonable likelihood of success of prevailing in challenging these claims as unpatentable over Chaudhri, Martyn, and Griffin.

*E. Obviousness of Challenged Claims
Over the Combination of Chaudhri, Martyn, Griffin, and Os*

Petitioner additionally argues that the challenged claims are obvious over a combination of Chaudhri, Martyn, Griffin, and Os. Pet. 62–67. Petitioner contends that the addition of Os provides for a “continuous touch” teaching a “first single-finger touch input” that meets *both* the operation criteria of claim 1.k (“when the duration of the first single-finger touch input is evaluated to be greater than a second time threshold that is greater than the first time threshold”) and the movement criteria of claim 1.l (“a determination that the first single-finger touch input meets the one or more movement criteria”). Pet. 62. Petitioner appears to argue that this is not required by the claim, but provides both an argument that this is taught in the combination of Chaudhri, Martyn, and Griffin (Pet. 38–39) and in the combination with Os (Pet. 62–67). Patent Owner presents no additional argument specific to this combination, and, as discussed above (Section II.C.1), does not in the preliminary record provide any indication regarding this claim construction issue.

1. Os

Os is a entitled “Device, Method, and Graphical User Interface for Manipulating Selectable User Interface Objects,” and was published on July 7, 2011. Ex. 1007, codes (54), (43).

This publication describes a multifunction device displays a plurality of selectable user interface objects. Ex. 1007, code (57). Os discloses performing a function of the device (e.g., creating a calendar event on the device) by using different gestures, where the function changes based on contact applied to the device and whether this contact is maintained or “lift[ed] off” the device. *Id.* ¶ 182. Os describes “one continuous multipart gesture” including a detection of a touch and hold for more than a predetermined period of time along with a “subsequent movement of the contact” that creates a calendar event and establishes times for the event based on the movement. *Id.* ¶ 182, Fig. 5J.

2. All Challenged Claims – Combination of Chaudhri, Martyn, Griffin, and Os

Petitioner argues that the combination using Os’s multipart gestures in the Chaudhri/Martyn/Griffin device would have been motivated by a desire to make Chaudhri’s user interface more intuitive, to increase the efficiency of the user interface, and to better recognize a series of related touch commands. Pet. 63–65 (citing *inter alia* Ex. 1003 ¶¶ 109–110, 146–149). Petitioner further argues that the combination would teach a continuous multipart gesture by which a “user could . . . enter the ‘reconfiguration mode’ and subsequently . . . move an application icon without lifting their finger from the touch screen.” *Id.* at 66–67 (citing Ex. 1003 ¶¶ 145–149, 153). Petitioner argues that this would teach or suggest a “single-finger touch input” satisfying both limitation 1.k and limitation 1.l of claim 1. *Id.*

at 66. For all other elements of all of the challenged claims, Petitioner relies upon its arguments with respect to the combination of Chaudhri, Martyn, and Griffin. *Id.* at 62, 65 (citing Ex. 1003 ¶¶ 144, 150). Patent Owner presents no additional argument specific to this combination.

We determine that Petitioner sufficiently shows that one of ordinary skill would have combined Os with Chaudhri, Martyn, and Griffin and that the combination teaches or suggests a single-finger touch input that both (1) meets an operation criteria and performs an operation in connection with an application icon, and (2) additionally meets movement criteria and moves the first application icon. *See* Ex. 1007 ¶ 183, Fig. 5J; Ex. 1003 ¶¶ 109–110, 145–150, 153. On the present record, we find Petitioner has sufficiently shown a reasonable likelihood of success of prevailing in a challenge of the challenged claims as unpatentable over Chaudhri, Martyn, Griffin, and Os.

III. 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 ground 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).

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that *inter partes* review of all challenged claims of US Patent No. 10,656,758 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.

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Patent 10,656,758 B1

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