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Paper 10
Date: September 14, 2020

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC. and MICROSOFT CORPORATION,
Petitioner,

v.

NEODRON, LTD.,
Patent Owner.

IPR2020-00778
Patent 7,821,425 B2

Before MIRIAM L. QUINN, PATRICK M. BOUCHER, and CHRISTOPHER L. OGDEN, *Administrative Patent Judges.*

QUINN, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314, 37 C.F.R. § 42.4

I. INTRODUCTION

Apple Inc. and Microsoft Corporation (collectively "Petitioner"), filed a Petition requesting *inter partes* review of claims 1–40 of U.S. Patent No. 7,821,425 B2 (Ex. 1001, "the '425 patent"). Paper 1 ("Pet."). Neodron Ltd. ("Patent Owner"), timely filed a Preliminary Response. Paper 7 ("Prelim. Resp."). With our authorization, Petitioner filed a Reply to Patent Owner's Preliminary Response (Paper 8, "Reply"), and Patent Owner filed a Preliminary Response Sur-Reply (Paper 9, "Sur-Reply").

We have jurisdiction under 35 U.S.C. § 314. Upon considering the record developed thus far, for the reasons discussed below, we grant the Petition and institute *inter partes* review as requested.

A. Related Matters

The parties indicates that the '425 patent has been asserted in the following proceedings: *Neodron Ltd. v. Amazon.com, Inc.*, No. 6-20-cv-00115-ADA (W. D. Tex.); *Neodron Ltd. v. Apple Inc.*, No. 6-20-cv-00116-ADA (W.D. Tex.); *Neodron Ltd. v. AsusTek Computer Inc.*, No. 6-20-cv-00117-ADA (W.D. Tex.); *Neodron Ltd. v. LG Electronics, Inc.*, No. 6-20-cv-00118-ADA (W.D. Tex.); *Neodron Ltd. v. Microsoft Corporation*, No. 6-20-cv-00119-ADA (W. D. Tex.); and *Neodron Ltd. v. Samsung Electronics Co., Ltd. et al*, No. 6-20-cv-00121-ADA (W. D. Tex.). Pet. 67; Paper 5, 2. Petitioner additionally indicates that the '425 patent has been asserted in *Capacitive Touch-Controlled Mobile Devices, Computer, and Components Thereof*, No. 337-TA-1193 (ITC). Pet. 67. Patent Owner also indicates that the following district court matters may also be affected by a decision in this proceeding: *Neodron Ltd. v. Motorola Mobility LLC*, No. 5-20-cv-01179-

SVK (N. D. Ca.); and *Neodron Ltd. v. Sony Corporation*, No. 6-20-cv-00122-ADA (W. D. Tex). Paper 5, 2–3.

B. The '425 Patent[1]

The '425 patent relates to keyboards, keypads, and other data entry devices having capacitive keys. Ex. 1001, code (57). The '425 patent discloses that small keyboards suffer from a keying ambiguity problem, where, for example, a user's finger is likely to overlap from a desired key onto adjacent keys. *Id.* at 1:31–35. To address this problem, the '425 patent provides an iterative method of removing keying ambiguity. *Id.* at 2:3–4. The method involves measuring a detected signal strength associated with each key in an array, comparing the measured signal strengths to find a maximum, determining that the key having the maximum signal strength is the unique user-selected first key, and maintaining that selection (i.e., "winning key") until either the first key's signal strength drops below a threshold level or a second key's signal strength exceeds the first key's signal strength. *Id.* at 2:4–11.

The '425 patent further discloses that, when any key is selected, its signal strength value may be enhanced relative to all the other keys so as to deselect all other keys. *Id.* at 2:11–13. For instance, the '425 patent explains that the "winning" key is given a slight advantage in subsequent repetitions of the decision process. *Id.* at 2:58–64. For instance, the first

[1] The '425 patent is a continuation-in-part application claiming priority via a chain of several application to U.S. Provisional Application No. 60/395,368, filed July 12, 2002. Ex. 1001, (60), (63). Petitioner alleges the '425 patent is not entitled to its claimed priority date. Pet. 5–7. We find, however, that it is not necessary for us to decide this issue because the asserted prior art appear to have priority dates earlier than July 12, 2002.

key to "win" remains selected even when the maximal strength has shifted to a new key, if the first key has enough signal strength in excess of its associated threshold value. *Id.* at 5:25–40. That threshold value is further described as the "biasing or skewing" of the key selection method in favor of an already selected key. *Id.* at 5:38–50. According to the '425 patent, the "bias" may be provided in many ways in subsequent key selection decisions, such as "adding an incremental value to the signal associated with the selected key," and:

> multiplying the signal strength of the selected key by a value greater than one in subsequent selections; subtracting a respective incremental value from the signal strengths associated with each of the non-selected keys; or multiplying the signal strength of each of the non-selected keys by a respective value less than one.

Id. at 5:43–50. The biasing is further explained in connection with Figure 5A, reproduced below.

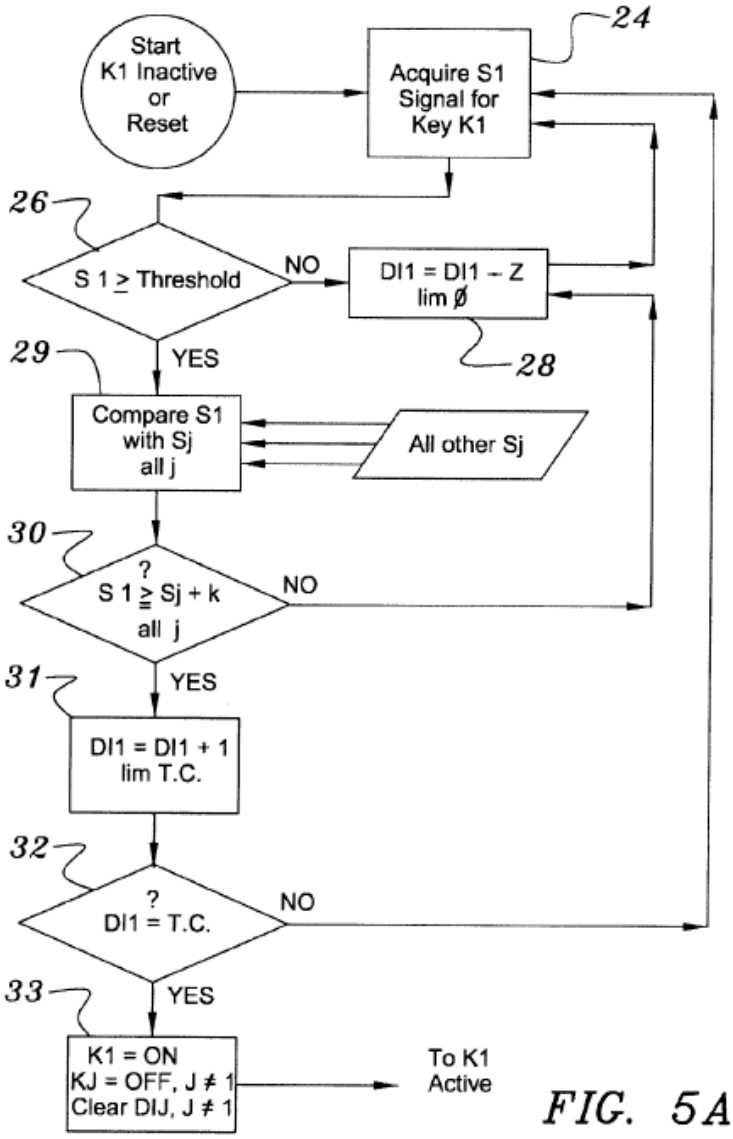


FIG. 5A

Figure 5A shows a flow chart of a method carried out when a Key 1 goes from inactive to active. *Id.* at 4:15–17. For example, when the signal acquired from Key 1 exceeds a certain threshold value at step 26, the acquired signal is compared against other acquired signals. *Id.* at 7:49–55. In determining whether Key 1 "wins" over other active key(s), the method introduces a non-dithering bias value "k," which is added to the active key at step 30. *Id.* at 7:55–58, 8:4–7. If the signal value of Key 1 exceeds the signal value of the active key by at least the bias "k" value, Key 1 will

become the active key when a counter is reached, and all other keys become inactive. *Id.* at 8:14–17.

C. Illustrative Claims

Of the challenged claims, claims 1, 7, 16, 25, and 33 are independent. Each of challenged claims 2–6, 8–15, 17–24, 26–32, and 34–40 depends from claim 1, 7, 16, 25, or 33.

Claims 1 and 7 are illustrative:

> 1. An apparatus for supplying a unique key output from an operating key board comprising a plurality of keys when a user is proximate two or more keys thereof, the apparatus comprising:
>
> a respective sensor uniquely associated with each of the two or more keys, each of the sensors connected to supply a respective output signal representative of the user's coupling thereto to a controller;
>
> the controller operable to iteratively compare all of the two or more output signals supplied thereto to respective threshold values and to each other, to initially select as the key for supplying the unique key output that one of the two or more keys having a maximum value of all the signal outputs that exceed their respective thresholds, and, on subsequent iterations, to bias the iterated comparison in favor of the previously selected key.

> 7. A method of providing a unique output representative of a key uniquely selected by a user from a plurality of keys in which each key is operable to provide a respective detected signal having a respective signal strength responsive to a presence of at least a portion of the user, the method comprising the sequentially executed steps of:
>
> (a) measuring the respective detected signal strength associated with each key in the plurality thereof;
>
> (b) comparing each of the measured signal strengths with a respective selected threshold value to form a subset of

> keys having associated signals greater than the respective threshold values;
>
> (c) determining that no key has been selected if the subset is empty, and otherwise determining that the key that is the subset and that is associated with a maximum signal strength is the current uniquely selected key;
>
> (d) subsequent to determining a uniquely selected key, modifying step (c) to bias subsequent determinations in favor of the uniquely selected key and then repeating steps (a), (b) and the modified step (c).

Ex. 1001, 8:52–67, 9:18–37.

D. Asserted Prior Art and Grounds of Unpatentability

The asserted grounds in this proceeding involve the following prior art references:

a) *Jahier*: US 5,525,980, issued June 11, 1996, filed as Exhibit 1007;

b) *QT60161*: Quantum Technologies Research Group QT60161, datasheet, (2002), filed as Exhibit 1008;

c) *Houston*: US 6,696,985, issued Feb. 24, 2004, filed as Exhibit 1009;

d) *Senk*: US 5,760,715, issued June 2, 1998, filed as Exhibit 1010; and

e) *West*: US 5,831,597, issued Nov. 3, 1998, filed as Exhibit 1011.

Petitioner asserts the following grounds of unpatentability (Pet. 8):

Claims Challenged	Statutory Basis	Reference(s)
1–2, 5–10, 14–19, 24–25, 29–37, 39–40	§ 103(a)	Jahier

Claims Challenged	Statutory Basis	Reference(s)
5, 14, 23, 26–28, 30, 36	§ 103(a)	Jahier, QT60161
4, 12, 13, 21, 22	§ 103(a)	Jahier, Houston
4, 12, 13, 21, 22	§ 103(a)	Jahier, Senk
3, 11, 20, 38	§ 103(a)	Jahier, West

Petitioner also relies on a Declaration of Dr. Tony Givaris, filed as Exhibit 1003 ("Givargis Declaration").

II. DISCUSSION

A. Claim Construction

There are no claim terms in dispute or that need construction for purposes of this Decision.

B. Level of Ordinary Skill in the Art

In determining whether an invention would have been obvious at the time it was made, we consider the level of ordinary skill in the pertinent art at the time of the invention. *Graham,* 383 U.S. 1, 17 (1966). "The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry." *Ryko Mfg. Co. v. Nu-Star, Inc., 950 F.2d 714, 718 (Fed. Cir. 1991).* The "person of ordinary skill in the art" is a hypothetical construct, from whose vantage point obviousness is assessed. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). "This legal construct is akin to the 'reasonable person' used as a reference in negligence determinations" and "also presumes that all prior art references in the field of the invention are available to this hypothetical

skilled artisan." *Id.* (citing *In re Carlson*, 983 F.2d 1032, 1038 (Fed. Cir. 1993)).

Petitioner proffers that a person having ordinary skill in the art "would have had at least a bachelor's degree in electrical engineering, computer engineering, computer science, or a related field, and at least two years of experience in the research, design, development and/or testing of touch sensors, human-machine interaction and interfaces, and/or graphical user interface, and related firmware and software, or the equivalent, with additional education substituting for experience and vice versa." Pet. 4–5 (citing Givargis Decl. ¶ 31–33). At this juncture, we do not find it necessary to define the level of skill with specificity save to note that the level of ordinary skill is evidenced by the prior art of record. *See Okajima v. Bourdeau,* 261 F.3d 1350, 1355 (Fed. Cir. 2001) (stating that the absence of specific findings on the level of skill in the art does not give rise to reversible error where the prior art itself reflects an appropriate level and a need for testimony is not shown).

C. Obviousness over Jahier

Petitioner asserts that claims 1–2, 5–10, 14–19, 24–25, 29–37, and 39–40 would have been obvious over Jahier. Pet. 11–42.

1. Overview of Jahier (Ex. 1007)

Jahier is entitled "Method and Apparatus for Operating a Capacitive Tactile Keyboard." Ex. 1005, code [54]. Jahier describes a process by which the position of an operator's finger on the keyboard and the pressure exerted are determined cyclically by measuring capacitance and pressure. *Id.* at 1:10–13. Jahier determines the differences between measured capacitance values and a reference capacitance. *Id.* at 2:39–41. This

difference capacitance value is compared to a low threshold and a high threshold. *Id.* at 2:44–46. Based on the comparison, Jahier determines the state of the keyboard. *Id.* at 2:41–43. The keyboard states and the transitions between states are depicted in Figure 3, reproduced below.

FIG. 3

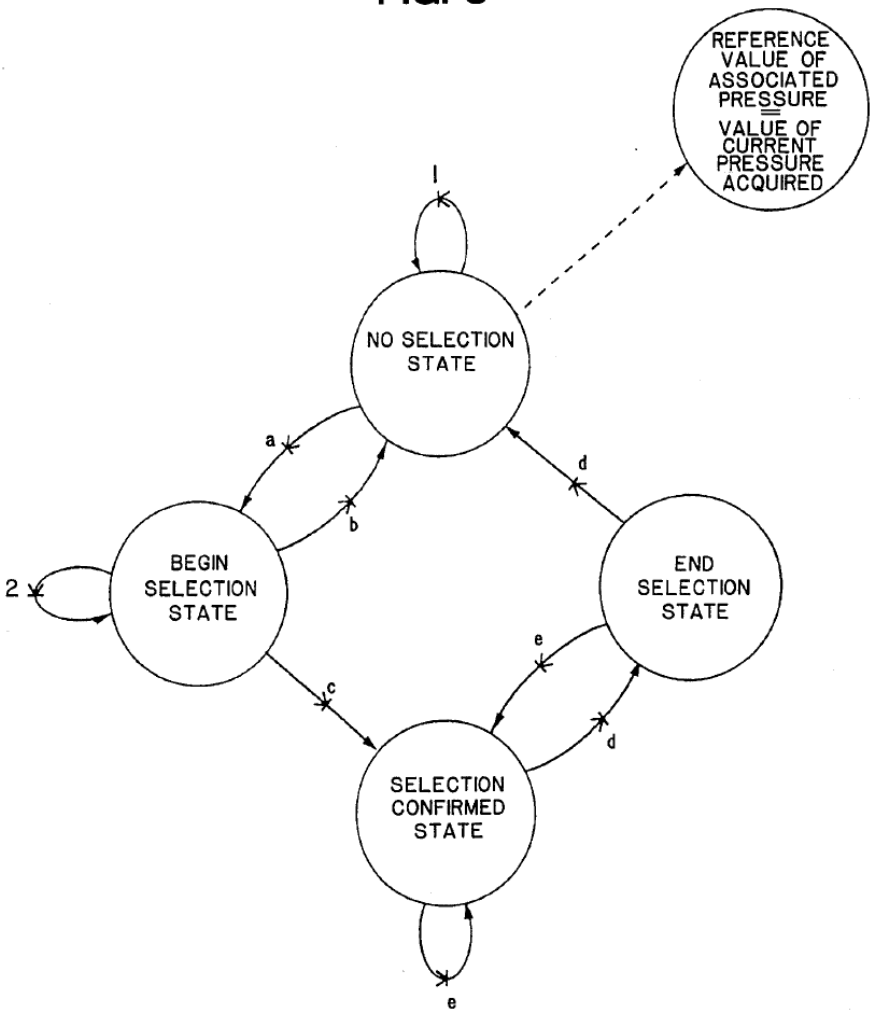


Figure 3 illustrates how the selection controller of Jahier operates to determine the state and transition between states. *Id.* at 3:61–64, 4:49–50. The states are: NO SELECTION, BEGIN SELECTION, SELECTION CONFIRMED, and END SELECTION. *Id.* at 5:5–8; Fig. 3. Jahier explains that a *key i* becomes a preselected *key I*—that is a transition from NO SELECTION to BEGIN SELECTION state occurs—when the capacitive

difference ("ECC") for *key i* is higher than a given threshold and above the ECC for any other key. *Id.* at 5:11–20. Once in the BEGIN SELECTION state, there are three options. *Id.* at 5:39–6:22. First, *key I* may be "confirmed" as the selected key (confirming that the user's finger is on *key I*), shown in Figure 3 as transition "c." *Id.* at 5:63–6:4. Second, *key I* may no longer be a preselected key if its ECC falls below a low threshold, a transition that is shown in Figure 3 as transition "b." *Id.* at 5:39–58. Such a transition may occur, for example, if the key was inadvertently touched. *Id.* Third, and most notably for purposes of this Decision, is transition "2," in which another key altogether may become the preselected key. *Id.* at 6:5–23. Jahier explains that if the ECC for *key I* is between a low and a high threshold, *key I* remains the preselected key. *Id.* at 6:5–12. But if the ECC of another key (read here a new *key i*) is equal to or higher than the high threshold, and the ECC of preselected *key I* stays below the high threshold, the new *key i* will become the preselected key. *Id.* at 6:13–27 (stating also that the controller remains in the BEGIN SELECTION with the new *key i* as the preselected key).

2. Reasonable Likelihood Determination

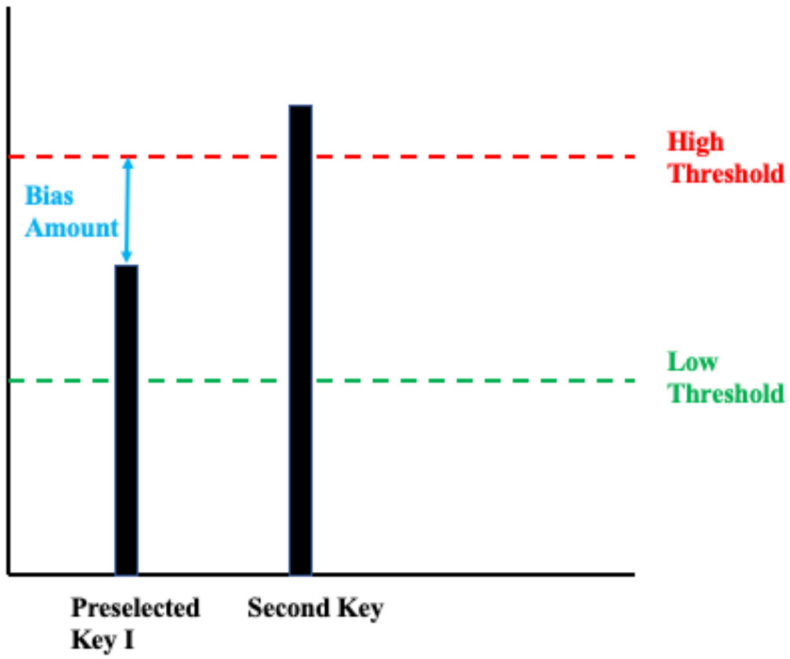
After considering Petitioner's contentions and Patent Owner's arguments in opposition, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on showing that claims 7–10, 14–19, 24–25, 29–37, and 39–40 would have been obvious over Jahier.

i. Independent Claim 1

Claim 1 recites a controller operable to "iteratively compare all of the two or more output signals supplied thereto to respective threshold values

and to each other." Ex. 1001, 8:56–59. This involves "initially select[ing] as the key for supplying the unique key output that one of the two or more keys having a maximum value of all the signal outputs that exceed their respective values." *Id.* at 8:62–65 (the "first iterative comparison" limitation). Claim 1 further requires that, on "subsequent iterations," the controller "bias the iterated comparison in favor of the previously selected key." *Id.* at 8:66–67 (the "subsequent iterative comparison" limitation). Petitioner relies on Jahier as teaching the first iterative comparison because Jahier's controller compares the capacitive difference value for each key ("ECC(i)"), to both (1) a low threshold and (2) a high threshold, and that the controller preselects the "key displaying the greatest difference." Pet. 18–19 (citing Ex. 1007, 5:11–20). We agree that because Jahier selects the key displaying the greatest difference, Jahier apparently has compared the values of the ECC(i) (for each key) to both thresholds, and then has compared the difference of those values. That is to say, Jahier appears to compare, albeit indirectly, the output signals to respective threshold values and to each other.

For the "subsequent iterative comparison" limitation, Petitioner argues that "a second key may displace preselected key I only if its capacitance difference value ECC(i) exceeds both preselected key I's ECC(i) and the High Threshold." *Id.* at 19 (citing Ex. 1007, 6:13–28). Petitioner proffers an annotated figure, reproduced below, showing Jahier's operation.



The figure above shows a Low Threshold (in green) and a High Threshold (in red) with the signal for the Preselected Key I falling between the Low and High Thresholds and with the signal for the Second Key exceeding the High Threshold. Pet. 20. According to Petitioner, the second key's ECC(i) signal exceeds the preselected key I by what is labeled a "bias amount" (shown in blue). *Id.* Jahier thus would select the Second Key as the new preselected key as the High Threshold is exceeded. *Id.* The language of claim 1, however, refers to a further comparison that Jahier does not appear to make. Claim 1's "subsequent iterative comparison" requires biasing the "iterated comparison." Ex. 1001, 8:66–67. The iterated comparison requires comparing the output signals to respective threshold values "and to each other." *Id.* at 8:60–62. Jahier's alleged "subsequent iterative comparison," however, does not appear to compare the output signals as recited. In other words, we do not see any argument by Petitioner, nor do we understand Jahier to teach, that the ECC of the second key is

compared with the ECC of the preselected key, or to any other ECC for that matter, when performing its biasing technique.

At this juncture in the proceeding, therefore, we are guided by the plain meaning of the claim language to determine that Petitioner has not demonstrated a reasonable likelihood of prevailing on its assertion that Jahier teaches the "subsequent iterative comparison" limitation of claim 1. To the extent either party contends that the plain language of the claim supports an interpretation of the "subsequent iterative comparison" that does not require a comparison between output signals, we request briefing on this as an issue of claim construction.

ii. Independent Claims 7, 16, 25, and 33

Claim 7 recites slightly different language than claim 1. For instance, claim 7 requires two comparisons, but the first comparison is of "each of the measured signal strengths with a respective selected threshold value." *Id.* at 9:26–27. In other words, claim 7 does not require a comparison between signal strengths (or outputs) as the plain language of claim 1 requires. The second comparison of claim 7, likewise, does not require such a comparison: "subsequent to determining a uniquely selected key, modifying step (c) to bias subsequent determinations in favor of the uniquely selected key and then repeating steps (a), (b), and modified step (c)." *Id.* at 9:34–37. Claim 16 similarly recites a first comparison that involves only a threshold comparison (*id.* at 10:6–11) and a second comparison that requires a bias "in favor of the initial user-selected key," without expressly requiring a comparison between signal values (*id.* at 10:21–24 (reciting a comparison of the "values retained for further consideration at the second instant to select the user-selected key at the second instant"). Claim 25 is even broader,

requiring only a controller operable "to bias a determination of a selected key as a function of a previously selected key." *Id.* at 10:57–59. And claim 33 tracks language similar to the controller operation recited in claim 25: "bias a determination of an active key as a function of a current active key." *Id.* at 11:16–18.

We agree that Petitioner has demonstrated that Jahier's threshold comparisons described above with respect to claim 1 appear to teach the comparison limitations described above for independent claims 7, 16, 25, and 33. Pet. 28 (relying for claim 7 on the analysis provided for claim 1), 33–35, 39. Patent Owner's arguments to the contrary are not persuasive on the present record. PO Resp. 10–18. First, Patent Owner's argument that Jahier only compares to thresholds does not take into account that the plain meaning of claims 7, 16, 25, and 33 fairly reads on a threshold comparison. Second, Patent Owner's argument that Petitioner mischaracterizes Jahier is rooted in an unpersuasive argument that the recited "bias" cannot be a threshold comparison. The implied argument is that the meaning of "bias" or "biasing" somehow conveys the distinction. But Patent Owner has not presented any claim construction analysis supporting such an interpretation and we fail see any support in the Specification to give credit to Patent Owner's contention. Lastly, Patent Owner relies on a previous Decision on Institution of the Board that involved the Jahier reference in connection with a patent related to the '435 patent. *Id.* at 17–18. That argument is unpersuasive because that Decision on Institution turned on claim language that is not at issue here: a "select amount." In contrast, the claims here do not require biasing by any particular amount.

Consequently, at this juncture, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its assertion that independent claims 7, 16, 25, and 33 are unpatentable as obvious over Jahier.

iii. Dependent claims

Petitioner has provided a mapping of the further limitations recited in dependent claims 2, 5–6, 8–10, 14–15, 17–19, 24, 29–32, 34–37, and 39–40 to disclosures in the cited reference. Pet. 23–26, 28–31, 34–38, 40–42. Patent Owner does not argue these claims in the Preliminary Response.

Having reviewed the information presented in the Petition we determine that, for claims 8–10, 14–15, 17–19, 24, 29–32, 34–37, and 39–40, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing in its challenge of unpatentability.

As to claims 2, 5, and 6, however, because they depend from claim 1, we determine that Petitioner has not demonstrated a reasonable likelihood of prevailing on the obviousness challenged based on Jahier.

D. Remaining Obviousness Grounds

Petitioner asserts the following: claims 5, 14, 23, 26–28, 30, and 36 would have been obvious over the combination of Jahier and QT60161; claims 4, 12, 13, 21, and 22 would have been obvious over the combination of Jahier and Houston; claims 4, 12, 13, 21, and 22 would have been obvious over the combination of Jahier and Senk; and claims 3, 11, 20, and 38 would have been obvious over the combination of Jahier and West. Pet. 42–66. Patent Owner does not argue these claims in the Preliminary Response.

Having reviewed the information presented in the Petition we determine that Petitioner, for claims 12–14, 20–23, 26–28, 30, 36, and 38, has demonstrated a reasonable likelihood of prevailing in its challenge of unpatentability. As to claims 3–5, because they depend from claim 1, we determine that Petitioner has not demonstrated a reasonable likelihood of prevailing in its challenge of unpatentability.

E. Discretion to Deny Under 35 U.S.C. § 314(a)

Patent Owner contends the Board should exercise its discretion under 35 U.S.C. § 314(a) and deny institution in light of the advanced stage of the parallel International Trade Commission ("ITC") proceeding involving the '425 patent. Prelim. Resp. 19–20, 31; Sur-Reply 1. Petitioner contends that the Board has never denied institution in view of a parallel ITC proceeding, and should not do so in the present proceeding. Reply 1. In assessing whether to exercise such discretion, the Board weighs the following factors:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board's exercise of discretion, including the merits.

Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 11 at 6 (PTAB Mar. 20, 2020) (precedential) ("*Fintiv"*). Recognizing that "there is some overlap

among these factors" and that "[s]ome facts may be relevant to more than one factor," the Board "takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review." *Id.* (citation omitted). We note Petitioner's arguments attempting to carve out ITC investigations from the exercise of authority to deny institution. Reply 1–3. However, *Fintiv* does not support such an argument, and, therefore, we are not persuaded by it. *See Fintiv*, 8 (stating that "even though the Office and the district court would not be bound by the ITC's decision, an earlier ITC trial date may favor exercising authority to deny institution . . . if the ITC is going to decide the same or substantially the similar issues to those presented in the petition.").

Although we have considered Patent Owner's argument in light of the *Fintiv* factors, we decline to exercise our discretion to deny the Petition. Related district court litigation involving the '425 patent has been stayed, and Patent Owner instead focuses on the ITC Investigation, which the parties agree is unlikely to be stayed. *See* Reply 4 (Petitioner acknowledging that "it is unlikely the ITC investigation will be stayed"); PO Resp. 23 (Patent Owner asserting that "it is extremely unlikely that an ITC case will be stayed pending IPR").

But notwithstanding Patent Owner's assertion, the record evidences that the ITC Investigation is only in a limited state of advancement. Notably, for example, in addressing the overlap between issues raised in the Petition and in the ITC Investigation, Patent Owner's Preliminary Response largely relies on speculation based on comparison with how issues have developed in a related but *different* ITC investigation, namely *In the Matter of Certain Touch-Controlled Mobile Devices, Computers, and Components Thereof*, No. 337-TA-1162 (ITC). Based on development in that different

proceeding, Patent Owner speculates that Petitioner is "likely to present the same prior art and invalidity theories." Prelim. Resp. 28. If the ITC Investigation were in a more advanced state, we expect Patent Owner would have been able to identify overlapping issues at the time it filed its Preliminary Response without resorting to such speculation.

That the ITC Investigation is not significantly advanced is also evident from the schedule provided by Patent Owner as Exhibit 2001. At this time, there has been no claim-construction hearing in the ITC Investigation, and an evidentiary hearing is not scheduled before February 16, 2021. Ex. 2001, 1–3. There has thus been limited investment in the ITC Investigation by the Commission or by the parties. Although Patent Owner emphasizes that an Initial Determination by the ITC is expected by June 18, 2021, the target date for completion of the ITC investigation is not until October 20, 2021, later than the deadline for issuing our Final Written Decision in this proceeding. These considerations impact *Fintiv* factors (2) and (3), which we find weigh against exercising our discretion to deny the Petition.

In addition, although Patent Owner asserts that "the same claims and claim construction standard are at issue in both proceedings," Petitioner observes that the ITC will not consider the validity of challenged claims 13 and 14. Prelim. Resp. 27; Reply 6 ("Thus, unless the Board institutes this proceeding and considers the merits of claims 1–24, when the district court lifts its stay, the district court will have to independently, and without guidance from the Board or the ITC, consider these issues."). This consideration impacts *Fintiv* factor (4), which we also find weighs against exercising our discretion to deny the Petition.

The combination of factors (2)–(4), together with the strength of Petitioner's position, as implicated by *Fintiv* factor (6), outweigh the remaining factors, such as the commonality of parties and the likelihood that no stay will be entered in the ITC Investigation. Accordingly, we conclude that efficiency and integrity of the system are best served by instituting review.

III. CONCLUSION

As explained above, we determine that Petitioner demonstrates a reasonable likelihood of prevailing on its challenge of claims 7–40 as unpatentable under 35 U.S.C. § 103(a). Accordingly, we institute review on all challenged claims and grounds as asserted in the Petition. *See SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018); *AC Techs. S.A. v. Amazon.com, Inc.*, 912 F.3d 1358, 1364 (Fed. Cir. 2019) ("[I]f the Board institutes an IPR, it must . . . address all grounds of unpatentability raised by the petitioner."); U.S. Patent and Trademark Office, *Guidance on the impact of SAS on AIA trial proceedings* (Apr. 26, 2018), https://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/trials/guidance-impact-sas-aia-trial ("*SAS* Guidance").

Accordingly, we institute trial on all challenged grounds and all claims as asserted (listed below).

Claims Challenged	Statutory Basis	Reference(s)
1–2, 5–10, 14–19, 24–25, 29–37, 39–40	§ 103(a)	Jahier
5, 14, 23, 26–28, 30, 36	§ 103(a)	Jahier, QT60161

Claims Challenged	Statutory Basis	Reference(s)
4, 12, 13, 21, 22	§ 103(a)	Jahier, Houston
4, 12, 13, 21, 22	§ 103(a)	Jahier, Senk
3, 11, 20, 38	§ 103(a)	Jahier, West

Our determination in this Decision is not a final determination on the patentability of any challenged claims and, thus, leaves undecided any factual issues necessary to determine whether sufficient evidence supports Petitioner's contentions by a preponderance of the evidence in the final written decision. *See TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1068 (Fed. Cir. 2016) (noting that "there is a significant difference between a petitioner's burden to establish a 'reasonable likelihood of success' at institution, and actually proving invalidity by a preponderance of the evidence at trial") (quoting 35 U.S.C. § 314(a) and comparing § 316(e)).

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that pursuant to 35 U.S.C. § 314(a) the Petition is granted; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a), *inter partes* review of the '425 patent is hereby instituted with trial commencing on the entry date of this decision, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of review.

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