# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE PATENT TRIAL AND APPEAL BOARD

ACER INC., ACER AMERICA CORPORATION, ASUSTEK COMPUTER INC., ASUS COMPUTER INTERNATIONAL, GOOGLE LLC, MICROSOFT CORPORATION, and MICROSOFT MOBILE INC., Petitioner,

v.

KONINKLIJKE PHILIPS ELECTRONICS N.V., Patent Owner.

> Case IPR2017-00386<sup>1</sup> Patent RE44,913

Before DAVID C. MCKONE, ROBERT J. WEINSCHENK, and KAMRAN JIVANI, *Administrative Patent Judges*.

JIVANI, Administrative Patent Judge.

FINAL WRITTEN DECISION *35 U.S.C. § 318(a) and 37 C.F.R. § 42.73* 

<sup>&</sup>lt;sup>1</sup> Microsoft Corporation and Microsoft Mobile Inc. (collectively, "Microsoft") filed a petition in IPR2017-01766, and Microsoft has been joined to the instant proceeding.

#### I. INTRODUCTION

Acer Inc., Acer America Corporation, ASUSTek Computer Inc., ASUS Computer International, and Google LLC requested an *inter partes* review of claims 1 and 3–16 (the "challenged claims") of U.S. Patent No. RE44,913 (Ex. 1001, "the '913 patent"). Paper 2 ("Petition" or "Pet."). Patent Owner Koninklijke Philips Electronics N.V. filed a Preliminary Response. Paper 7 ("Prelim. Resp."). Upon consideration of the Petition and Preliminary Response, we instituted an *inter partes* review pursuant to 35 U.S.C. § 314 of the challenged claims. Paper 8 ("Decision on Institution" or "Dec. on Inst."), 19.

After institution, Microsoft Corporation and Microsoft Mobile Inc. requested an *inter partes* review of the challenged claims and filed a motion for joinder to the instant proceeding. IPR2017-01766, Papers 2 and 3. Patent Owner, together with Microsoft Corporation and Microsoft Mobile Inc., filed a joint stipulation stating that Patent Owner did not oppose the requested joinder. IPR2017-01766, Paper 7, 3. We granted the motion and joined the Microsoft entities to the instant proceeding. IPR2017-01766, Paper 15, 10. Consequently, we refer herein to Acer Inc., Acer America Corporation, ASUSTek Computer Inc., ASUS Computer International, Google LLC, Microsoft Corporation, and Microsoft Mobile Inc. collectively as "Petitioner."

Petitioner and Patent Owner requested an oral hearing, and a hearing was held on February 28, 2018. Paper 20. A transcript of the oral hearing has been entered into the record. Paper 23 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

For the reasons discussed below, we determine that Petitioner has failed to show by a preponderance of the evidence that any of the challenged claims are unpatentable.

# II. BACKGROUND

# A. Asserted Grounds of Unpatentability

Petitioner advances the following grounds of unpatentability under 35 U.S.C. § 103(a) (Pet. 3–4):

1. Obviousness of claims 1 and 3-16 over Sakata II<sup>2</sup>; and

2. Obviousness of claims 1 and 3–16 over Sakata II and Buxton<sup>3</sup>.

B. Overview of the '913 patent

The '913 patent relates to entering characters on a handheld mobile device via a keypad. Ex. 1001, 1:18–21. Figure 1 of the '913 patent is reproduced below.



<sup>&</sup>lt;sup>2</sup> Sakata, Japanese Unexamined Patent Application No. 2000-148366 ("Sakata II") (Ex. 1004).

<sup>&</sup>lt;sup>3</sup> Buxton, U.S. 6,094,197; iss. July 25, 2000 ("Buxton") (Ex. 1006).

Figure 1 depicts a default display state of a keypad 100 with twelve keys 102, where each key is associated with a primary character 104 and a plurality of secondary characters 106. *Id.* at 3:25–28. The primary characters in Figure 1 are the numbers and symbols displayed on the keys of the keypad. *Id.* at 3:28–31. The secondary characters in Figure 1 are the letters displayed in groups below each key. *Id.* at 3:31–37.

In one embodiment, a user selects a primary character by initiating a "quick tapping" of the corresponding key for a pre-determined time period, for instance 0.2 seconds. *Id.* at 6:1–6. If the user's tap is longer than the pre-determined time period, the keypad responds to the user's tap by entering into a second state, wherein secondary characters associated with the selected key are made available. *Id.* at 4:4–6, 6:3–6. Figure 2 of the '913 patent is reproduced below.



Figure 2 depicts a second display state of the keypad after a first key selection by a user. *Id.* at 3:42–43. In this instance, the user has selected the

key associated with primary character '5', causing the primary character '5' to remain displayed on the selected key and causing the associated secondary characters 'j', 'k', and 'l' each to be displayed on an adjacent key. *Id.* at 3:44–52. The user may now select any of the displayed characters by tapping on the corresponding key, thereby providing "quick and accurate character input wherein secondary characters are available with only two key selections." *Id.* at 3:63–65, 4:4–6. "Following a character input, the keypad of [Figure] 2 is returned to the default display state as shown in [Figure] 1." *Id.* at 3:60–62.

### C. Prosecution History

The '913 patent is a reissue of U.S. Patent No. 6,885,318. Ex. 1001, 1. During prosecution of the reissue application and pursuant to a request for continued examination, Patent Owner submitted an information disclosure statement (IDS) disclosing Japanese Patent No. 4,019,512 to Sakata (the "Sakata '512 patent"), which results from Japanese Unexamined Patent Application No. 2000–56912 ("Sakata I"). Ex. 1008, 522. The IDS does not identify the secondary reference, Buxton, and Buxton was not before the Examiner during prosecution. *Id.*; see also Pet. 15 n. 4. Moreover, the translation of Sakata II upon which Petitioner relies appears to be materially different from the translation of the Sakata '512 patent before the Examiner. Compare, e.g., Ex. 1004, ¶ 55 (Sakata II describing, "when a user wants to select and enter a special character or symbol that is not displayed on the soft keyboard 20, a user touches the key position of the group of similar characters and symbols with the touch pen 4 for longer than the threshold time.") with Ex. 1008, 289 (Sakata '512 patent stating, "[o]n the other hand, when changing the character classification displayed on a

soft keyboard 6, as for a user, the drag|drug menu 18 is displayed in the place which touched arbitrary characters and passed for a fixed time with the pointing device 3 like FIG. 19.").

# D. Illustrative Claim

Claims 1, 3, and 4 are independent. Claim 1 is illustrative of the claimed subject matter and is reproduced below.

1. A method for inputting a character to a device, the device including a keypad, the keypad including a plurality of keys, at least one of the keys has a primary character, a plurality of secondary characters and an associated display area, the keypad in a default state displaying the primary character associated with the at least one key in the associated display area, the method comprising acts of:

in the default state,

- returning the primary character as an input character in response to selection of the at least one key for a period shorter than a predetermined time period;
- switching to a second state after detecting a first key selection of the at least one key for a period longer than the predetermined time period;

in the second state:

displaying each of the secondary characters associated with the first selected key in a respective display area;

detecting a second key selection;

selecting for the input character the secondary character associated with the second key selection; and

returning the keypad to the default state.

# E. Related District Court Proceedings

Petitioner identifies several actions for infringement of the '913 patent pending in the United States District Court for the District of Delaware. Pet. 3.

# F. Testimony

Petitioner supports its challenges with the declaration of Dr. Andrew Cockburn. Ex. 1002. Dr. Cockburn testified by deposition on August 29, 2017, and a transcript of his testimony has been entered into evidence. Ex. 2006.

Patent Owner supports its challenges with a declaration of Dr. Adam Porter. Ex. 2005. Dr. Porter testified by deposition on November 29, 2017, and a transcript of his testimony has been entered into evidence. Ex. 1029.

# III. ANALYSIS

# A. Principles of Law

Petitioner bears the burden of proving unpatentability of the challenged claims, and the burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail on its challenges, Petitioner must demonstrate by a preponderance of the evidence that the challenged claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d).

A claim is unpatentable under 35 U.S.C. § 103(a) 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 at the time of the invention to a person having ordinary skill in the art. *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis

of 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, if presented, (4) objective evidence of nonobviousness, i.e., secondary considerations such as commercial success, long felt but unsolved needs, and failure of others. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). The obviousness inquiry further requires an analysis of "whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (requiring "articulated reasoning with some rational underpinning to support the legal conclusion of obviousness")).

B. Claim Construction

### 1. Applicable Standards and Principles of Law

In an *inter partes* review, claim terms are given their broadest reasonable interpretation in light of the specification in which they appear.<sup>4</sup> *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016); 37 C.F.R. § 42.100(b). We presume that claim terms have their ordinary and customary meaning. *See TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1061–62 (Fed. Cir. 2016) ("Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification and prosecution history." (citation omitted)); *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re* 

<sup>&</sup>lt;sup>4</sup> We would construe the claim terms discussed below the same under *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

*Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a special definition or other consideration, "limitations are not to be read into the claims from the specification." *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). Only those terms that are in controversy need to be construed and only to the extent necessary to resolve the controversy. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs. Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

The parties' claim construction dispute at trial focuses on the meaning of the terms "primary character" and "secondary character," as recited in each of independent claims 1, 3, and 4. *See, e.g.*, Tr. 32:23–25, 33:10–12 (counsel for Patent Owner arguing that its constructions were offered "in anticipation of potential new arguments" and that those arguments were in fact presented in Petitioner's Reply). We interpret claim terms to the extent necessary to resolve the controversy before us. *See Nidec Motor Corp.*, 868 F.3d 1013 at 1017. Accordingly, we construe below the terms "primary character" and "secondary character" in order to resolve the parties' claim construction dispute. We further determine that construction of additional terms is not necessary for our analysis and, therefore, do not construe any additional terms. *See id.* 

#### 2. Primary character and secondary character

Patent Owner asserts the term "primary character" should be construed as "a key character assigned to be selectable in a default state." PO Resp. 21–23 (citing Ex. 2005 ¶¶ 30–38); Tr. 35:1–22. Patent Owner further asserts the term "secondary character" should be construed as "a key character assigned to be selectable only in a second state." *Id*.

Petitioner contends that "the plain meaning is appropriate" for the terms "primary character" and "secondary character." Reply 24. Petitioner elaborates, "their plain meaning . . . is that the primary characters are ones that appear in the default state, and the secondary characters are ones that appear in the secondary state." Tr. 4:25–5:2.

In determining the broadest reasonable construction of a claim term, we begin with the language of the claim itself. In re Power Integrations, Inc., 884 F.3d 1370, 1376 (Fed. Cir. 2018) (quoting Amgen Inc. v. Hoechst Marion Roussel, Inc., 457 F.3d 1293, 1301 (Fed. Cir. 2006)) ("[C]laim construction must begin with the words of the claims themselves."); In re NTP, Inc., 654 F.3d 1279, 1288 (Fed. Cir. 2011) (citing Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc)) ("As with any claim construction analysis, we begin with the claim language."). Here, claim 1 recites at least one key of a keypad having "a primary character" and "a plurality of secondary characters." Ex. 1001, 6:50–51. The claim continues by defining a "default state" in which the "the primary character" is displayed and is returned "in response to selection of the ... key." Id. at 6:53–60. Thus, consistent with Patent Owner's proposed construction, claim 1 defines a primary character as one that is selectable in the default state. See PO Resp. 21–23 (citing Ex. 2005 ¶¶ 30–38). With respect to "secondary characters," claim 1 recites a "second state" wherein each of the secondary characters associated with a key is selectable. Ex. 1001, 6:61– 7:2. Thus, consistent with Patent Owner's proposed construction, claim 1 recites a secondary character as one that is selectable in the secondary state. See PO Resp. 21–23 (citing Ex. 2005 ¶¶ 30–38).

Central to the parties' claim construction dispute is a question of whether primary and secondary characters are limited to being selectable *only* in particular states. According to Patent Owner, the Specification describes primary characters as selectable in both the default and secondary states, whereas secondary characters "are only selectable after the keypad has entered the second state." PO. Resp. 22. In support of its position, Patent Owner asserts, "[a]s shown in Figures 1 and 2, primary character '5' is selectable in both the default state (via a selection of short duration), and the second state (via a selection of long duration). . . . However, secondary character 'j' is *only* selectable after the keypad has entered the second state." *Id.* (citing Ex. 1001, 3:25–62; 5:10–14; 5:54–66; 6:1–14; Figs. 1, 2).

Conversely, Petitioner contends that primary characters are those that are selectable in the default state, secondary characters are those that are selectable in the secondary state, and the Specification provides as an example the character '5' that is both a primary and secondary character. Reply 24. Petitioner directs our attention to Table 2 of '913 Patent, which is reproduced below.

KEY	DISPLAY SECONDARY CHARACTER	
1	!	
2	k	
3	н	
4	i	
5	5	
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TABLE 2

Table 2 depicts "the characters displayed upon a first key selection corresponding to key 5 thereby providing a second keypad display state as shown in FIG. 2." Ex. 1001, 3:34–36. At oral hearing, Petitioner's counsel noted that the character '5' is listed in the second column and asserted that, "Table 2 clearly labels all of those as secondary characters." Tr. 5:23–24.

The Specification describes primary and secondary characters—as well as Table 2 upon which Petitioner relies—with respect to Figures 1 and 2, which are reproduced below again for ease of reference.



Figure 1 depicts a default display state of a keypad 100 with twelve keys 102, where each key is associated with a primary character 104 and a plurality of secondary characters 106. Ex. 1001, 3:25–28. The primary characters in Figure 1 are the numbers and symbols displayed on the keys of the keypad. *Id.* at 3:28–31. The secondary characters in Figure 1 are the letters displayed in groups below each key. *Id.* at 3:31–37. Significantly, although "[t]he secondary characters 106 associated with each key are

shown in groups adjacent the respective key," the secondary characters are not shown as selectable in the default state (i.e., Figure 1). *Id.* at 3:31–33. Rather, consistent with Patent Owner's argument, the secondary characters are only shown in Figure 1 as becoming selectable upon entering the second state, depicted in Figure 2. *Id.* at 3:41–52; 4:3–6 ("The dynamic keypad states illustrated in FIG. 1 and FIG. 2 provide a method of quick and accurate character input *wherein secondary characters are available with only two key selections.*") (emphasis added).

Figure 2 depicts a second display state of the keypad after a first key selection by a user. *Id.* at 3:42–43. The Specification describes the second state shown in Figure 5 as depicting secondary characters 'j', 'k', and 'l' each to be displayed on keys adjacent to "the key associated with the primary character '5'." *Id.* at 3:44–52. Contrary to Petitioner's argument, this passage of the Specification does not describe the character '5' as a secondary character. The character '5' in Figure 2 bears the label 104, which the Specification designates "a primary character 104." *Id.* at 3:27. The Specification continues, "the remaining keys have displayed upon them further characters 200 which are useful for text entry." *Id.* at 3:52–57. Thus, the Specification discloses that the second state shown in Figure 2 depicts a primary character, secondary characters, and "further characters."

Turning to Table 2, the Specification's textual description of this table refers to its contents broadly as characters, and not merely as secondary characters. *See*, *e.g.*, *id*. at 3:34–36 (Table 2 depicts "the *characters* displayed upon a first key selection corresponding to key 5 thereby providing a second keypad display state as shown in FIG. 2") (emphasis added); *see also id*. at 3:42–44 ("the appropriate *characters* to be displayed

are retrieved from an appropriate stored KCT (e.g. Table 2) by the microprocessor") (emphasis added). This usage of the broader term "characters" with regard to the second keypad display state is consistent with the Specification's description of the second display state shown in Figure 2 as depicting a primary character, the associated secondary characters of that primary character, and further characters-all of which appear in the second column of Table 2 under the heading "DISPLAY SECONDARY CHARACTER." It further stands in contrast to the immediately preceding description of Table 1, which identifies the *primary* and *secondary* characters associated with each key under the headings "PRIMARY CHARACTER" and "SECONDARY CHARACTER," respectively. Id. at 5:10–14 ("Table 1 thereby provides primary and secondary characters to the microprocessor which, under the guidance of PRG instructs the touchscreen to display these characters in the appropriate locations to build up a default keypad display state corresponding to FIG. 1 and Table 1."). Contrary to Petitioner's argument regarding the character "5" as being both a primary character and a secondary character, Table 1 identifies that key character only as a "PRIMARY CHARACTER" and not a "SECONDARY CHARACTER." Id. at 4:64.

In light of the foregoing disclosures, we are not persuaded by Petitioner's argument that one of ordinary skill would understand the Table 2 column heading as defining the character "5" as a secondary character. Rather, we agree with Patent Owner that the Specification only discloses secondary characters that are selectable in the second state. Reading these terms in light of how they are described in the '913 patent, we agree with and adopt Patent Owner's construction of the term "primary

character" as "a key character assigned to be selectable in at least a default state" and the term "secondary character" as "a key character assigned to be selectable only in a second state."<sup>5</sup>

# C. Level of Ordinary Skill in the Art

Petitioner states that a person of ordinary skill in the art for the technology in the '913 patent "would have at least an undergraduate degree in computer science or computer engineering, or the equivalent" and "at least two years of experience in designing and/or implementing user interfaces, or equivalent academic experience." Pet. 22 (citing Ex. 1002 ¶ 30). Patent Owner does not dispute Petitioner's formulation, presents an analysis based on Petitioner's formulation, and argues that, even under Petitioner's formulation, Petitioner has failed to show the challenged claims are unpatentable. PO Resp. 20.

In view of the foregoing, we adopt Petitioner's formulation of the level of ordinary skill in the art. Further, this level of ordinary skill is reflected by the prior art of record. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art itself can reflect the appropriate level of ordinary skill in the art).

# D. Asserted Obviousness of Claims 1 and 3–16 over Sakata II 1. Overview of Sakata II

Sakata II is a certified translation of a Japanese published patent application directed at a device and method for inputting text using a

<sup>&</sup>lt;sup>5</sup> Because the Specification describes and depicts primary character "5" as selectable in the second state shown in Figure 2, we modify slightly Patent Owner's proposed construction to recite explicitly "at least" and thus not arguably limited to only a default state.

software keyboard shown on a display screen. Ex. 1004, Abst. Figure 8 of Sakata II is reproduced below.

[FIG. 8]

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(B') The dragment appeared after the key remained touched for a certain period of time

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Figure 8 depicts a display of a "soft keyboard" wherein a user may touch and immediately release a key using pen 4 to select the character displayed on the key. *Id.* at ¶¶ 52–54. If, however, the user touches the key for longer than a "preset threshold time, for example, longer than two seconds," then drag menu 23 is displayed over the location of the key. *Id.* at ¶¶ 52, 53, 55. The user may then drag pen 4 over the menu 23 to select a character. *Id.* at ¶ 55. The newly-selected character is input and replaces the character previously-displayed on the key. *Id.* at ¶¶ 40, 41, 55, Figs. 5–8.

# 2. Analysis of Independent Claim 1 and Dependent Claims 9–12

The final limitation of claim 1 recites: "returning the keypad to the default state." Ex. 1001, 7:3. The parties agree that Sakata II does not meet this limitation and dispute whether one of ordinary skill in the art would have modified Sakata II to return the keypad to a default state, as claimed. *Compare* Reply 3 (citing Ex. 1002 ¶ 143) *with* PO Resp. 16 (citing Ex. 2005 ¶¶ 68, 81–87).

Petitioner contends that "[t]he Sakata II invention performs an extra step" beyond the method of claim 1 because "[r]ather than return to the keyboard's original 'default' state, it substitutes the just selected character key for the initial primary key." Pet. 38. According to Petitioner, this character substitution is "[t]he only distinction between Sakata II and the '913 patent." Reply 3. Petitioner and Dr. Cockburn assert, "[o]mitting this extra step is an insubstantial change, and would have been obvious to the [person of ordinary skill in the art]." *Id.* at 38–39 (citing Ex. 1002 ¶¶ 144–48, 171–81). This is because one of ordinary skill in the art would find it obvious to try an implementation of Sakata II that omits the extra step in

light of "general notions of consistency" and a desire to improve efficiency. Pet. 40–43, 53; Reply 15–16.

Patent Owner responds that Sakata II does not teach the final limitation of claim 1 because it never returns to the claimed default state. PO Resp. 16 ("Following character selection from a drag menu, the keypad in Sakata II does not return to a default state. That is because, by purposeful design, Sakata II's keypad does not have a default state."). According to Patent Owner, "Sakata II is explicitly directed to an adaptive keyboard, in which, following the selection of a special character from a group associated with a particular key, the selected character is displayed on that key after the drag menu disappears, regardless of what was previously displayed on the key." Id. Patent Owner asserts that this functionality is "designed for a particular need—increased speed and efficiency through personal customization"-and "having a default state as disclosed in the RE'913 patent would effectively destroy Sakata II's intended purpose, as the keyboard would no longer be adaptable to the preferences of the user." Id. at 31–32 (citing Ex. 2005 ¶¶ 85–89). Patent Owner continues that Sakata II teaches away from the modification Petitioner proposes and that "[i]n essence, Petitioner improperly attempts to use the RE'913 patent as a roadmap to modify Sakata II in a manner that was never contemplated or intended." Id. at 33-34.

Having considered the complete trial record, we determine that Petitioner has failed to establish by a preponderance of the evidence that one of ordinary skill in the art would have modified Sakata II to return the keypad to a default state, as claimed. Applying our constructions of the terms "primary character" and "secondary character" set forth above, we

find Sakata II does not return to a "default state" because it does not return after selection of a secondary character to a state in which the primary character is displayed. *See* Ex. 1004 ¶¶ 40, 41, 55, Figs. 5–8. For instance, Figure 8 of Sakata II depicts the process when a user selects the dynamic key 22 bearing the character 'mm' for a longer than a preset threshold time.<sup>6</sup> Ex. 1004 ¶¶ 52, 53. Upon reaching the threshold time, drag menu 23 is displayed over the location of the key (i.e., entering the second state). *Id.* at ¶ 55. If the user then selects, for instance, the character 'mg' (i.e., a secondary character) from the drag menu, Sakata II removes the drag menu and replaces the 'mm' character previously displayed on the key (i.e., the primary character) with the newly-selected 'mg' character (i.e., a secondary character). *See id.* at ¶¶ 51, 55, 56. Thus, rather than return to the claimed default state, in which secondary characters are not selectable, Sakata II moves to a third state wherein the selected key displays the most recently selected *secondary* character instead of the associated primary character.

This third state is explicitly designed to meet Sakata II's stated goal of efficient, user specific character recognition. As Patent Owner correctly states, "Sakata II explains that there was a 'heavy burden' associated with requiring users to search for desired characters from a large list of characters." PO Resp. 29 (citing Ex. 1004 ¶¶ 7–8; Ex. 2006, 151:16–152:5). Given this burden, Sakata II states that its objective "is to enable a selective input of the special characters and symbols described above by an easy operation." Ex. 1004 ¶ 8. Sakata II attributes improved efficiency in part to its character substitution because "when the same special character or

<sup>&</sup>lt;sup>6</sup> For purposes of this illustration only, we assume, but do not find, that the character 'mm' meets the claimed "primary character."

symbol is selected again, selective input can be carried out quickly without having to perform [the] dragging operation." *Id.* at  $\P$  51.

It is against this backdrop that we evaluate Petitioner's argument that one of ordinary skill in the art would have found it obvious to try an implementation of Sakata II omitting its character substitution. In so doing, we are particularly mindful of the danger of relying on impermissible hindsight. *See, e.g., In re NTP, Inc.*, 654 F.3d 1279, 1299 (Fed. Cir. 2011) (cautioning against the use of hindsight).

Petitioner's obvious-to-try rationale is predicated upon its assertion that one of ordinary skill would have been motivated to try the proposed modification for two reasons: (i) "general notions of consistency" and (ii) a desire to improve efficiency. Pet. 40–43, 53; Reply 15–16. With regard to consistency, Petitioner argues that an artisan of ordinary skill at the time would have been familiar with the "golden rule" of interface design, which according to Petitioner, states that "[t]he same information should be presented in the same location on all screens' in order to 'facilitate recognition' of a particular design element." Reply 8 (citing Ex. 1021, 132). Petitioner, relying on Dr. Cockburn, asserts that Sakata II's dynamic keys "violate" this rule because "[i]f the set of characters displayed on the keyboard are changing, then at least some element of consistency is being compromised and a designer would be wary of that." Id. at 10–11 (citing Ex. 2006, 241:14–23, 37:6–23). Conversely, Patent Owner, relying on its declarant Dr. Porter, states that an artisan of ordinary skill at the time would have "understood 'consistency' to refer to a wide variety of concepts, including consistent responses when pressing the same button, consistent

actions when carrying out a particular function, and consistent navigation methods across all features." PO Resp. 62 (citing Ex. 2005 ¶¶ 161–163).

Having considered the complete trial record, we determine Petitioner and Dr. Cockburn do not explain persuasively why an ordinarily-skilled artisan would have considered Sakata II's character substitution to be a "violation" of the "golden rule" of consistency. For instance, a reference cited by Dr. Cockburn for this golden rule states merely, "Strive for consistency.... Consistent sequences of actions should be required in similar situations, identical terminology should be used in prompts, menus, and help screens, and consistent commands should be employed throughout." Ex 1020, 61. Petitioner and Dr. Cockburn fail to explain persuasively why Sakata II's consistent operation of entering the selected character and thereafter displaying the newly-selected character on the associated key would violate this rule. See Reply 8–12, Ex. 1002 ¶¶ 54–61, 64, 65. Similarly, Petitioner asserts that another reference relied upon by Dr. Cockburn states that "[t]he same information should be presented in the same location on all screens' in order to 'facilitate recognition' of a particular design element." Reply 8 (citing Ex. 1021, 132). But, here too, Petitioner fails to explain why one of ordinarily skill in the art would have understood Sakata II's consistent display of the same group of characters in the same location to be insufficient to satisfy this rule. See PO Resp. 62-63. For instance, Sakata II describes:

In the present invention, special characters and symbols are divided into one [of] a plurality of similar character and symbol groups and allocated to the specific key positions . . . And one character or symbol from the similar character and symbol group is displayed on the specific key position of the software keyboard.

Ex. 1004 ¶ 11. Sakata II continues, "only one character or symbol in each similar character and symbol group is displayed in the list display that constitutes the software keyboard, so the area that occupies the display screen of the software keyboard is not that large." *Id.* at ¶ 13. Sakata II, thus, describes presenting access to the same group of characters consistently from the same location on the keyboard. Petitioner and Dr. Cockburn fail to explain persuasively why an ordinarily-skilled artisan nevertheless would have understood this consistent presentation to be inconsistent. *See* PO Resp. 62–63.

Accordingly, we are not persuaded by Petitioner's argument that "general notions of consistency" support its obvious-to-try rationale and turn next to Petitioner's efficiency argument.

Petitioner and Dr. Cockburn assert that Sakata II's character substitution would create efficiency in some instances and inefficiency in other instances. *Compare* Pet. 40 (citing Ex. 1002 ¶ 145) (stating character substitution "would certainly improve efficiency in contexts where a user repeatedly enters the same characters, as the user would be able to employ 'short presses' to repeatedly enter the desired character") *with id.* (citing Ex. 1002 ¶¶ 146, 177) (stating Sakata II "could, at times, promote inefficient character entry"). According to Petitioner, "[t]he point is a simple and obvious one to a [person of ordinary skill in the art]: sometimes character substitution helps, sometimes it does not." Reply 13. Petitioner does not adduce sufficient evidence in support of this argument, despite asserting in its Petition that "[i]t is *well known* in the art that, *from a statistical standpoint*, certain characters are used far more often than others." Pet. 41 (emphasis added). Instead, Petitioner contends in its Reply, without citation

in support, that "[a] statistical analysis is not needed to credit the truism that a [person of ordinary skill in the art] would recognize that certain characters are used more frequently than others." Reply 15–16. Petitioner thus relies solely on the testimony of Dr. Cockburn to support its assertion that, because of a desire to increase efficiency, one would have been motivated to omit Sakata II's character substitution and discount its explicit teaching that this substitution improves efficiency. *See* Pet. 40–42.

Patent Owner asserts, *inter alia*, that Petitioner's reliance on Dr. Cockburn's testimony is misplaced because his testimony represents only "his own personal, unsupported opinions regarding what a [person of ordinary skill in the art] might believe," ungrounded in any analytical methods and predicated on misunderstandings of the Japanese characters appearing in Sakata II. PO Resp. 45–52.

Having considered the complete trial record, we determine Petitioner's reliance on Dr. Cockburn's testimony is insufficient to establish by a preponderance of the evidence that one of ordinary skill would have been motivated to try the proposed modification. Dr. Cockburn identifies two examples of characters in Sakata II that he contends an ordinarily skilled artisan would recognize as more frequently used than others, such that substituting out these characters would create inefficiency. Pet. 40–41 (citing Ex. 1002 ¶¶ 146, 178). In particular, Dr. Cockburn identifies the '(' character as more frequently used than the ' $\bigcirc$ ' number character. Ex. 1002 ¶¶ 146, 178. Dr. Cockburn bases his testimony for both examples on "common sense." *Id.* ("it would be apparent to the person of ordinary skill (and a matter of common sense) that the most frequently used number

would be a '①'''); *see also* Ex. 2006, 221:25–222:16 (discussing his open-parenthesis example: "I think common sense is sufficient").

Our reviewing court cautions that although "'common sense' can be invoked, even potentially to supply a limitation missing from the prior art, it must still be supported by evidence and a reasoned explanation." *Arendi v. Apple*, 832 F.3d 1355, 1363 (Fed. Cir. 2016). The *Arendi* court continues:

In cases in which 'common sense' is used to supply a missing limitation, as distinct from a motivation to combine, moreover, our search for a reasoned basis for resort to common sense must be searching. And, this is particularly true where the missing limitation goes to the heart of an invention.

Arendi, 832 F.3d at 1363.

The *Arendi* court's cautions are particularly salient in this proceeding. Here, Dr. Cockburn's numerical and open-parenthesis examples are mere unsubstantiated testimony, not grounded in underlying facts or data. *See* Ex. 2006, 206:18–207:23; 208:9–211:3; *see also* Ex. 2005 ¶ 135 (Dr. Porter's critique of Dr. Cockburn's testimony). Such ipse dixit is insufficient to establish a preponderance of evidence. *Securus Techs. Inc. v. Glob. Tel\*Link Corp.*, 701 F. App'x 971, 974–976 (Fed. Cir. 2017) (affirming the Board's determination that conclusory testimony by an expert witness was insufficient to satisfy Petitioner's burden of proving by a preponderance of the evidence that the skilled artisan would have modified the references as asserted.); *see also* 37 C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight."). Further, Dr. Cockburn's openparenthesis example is predicated on a fundamental misunderstanding of the

characters about which he testifies. Sakata II describes the Japanese character ' $\lceil$ ' as a "left quotation mark;" however, Dr. Cockburn fails to recognize this explicit teaching and testifies that it "would be inefficient and a waste of a user's time—to change the displayed character on the input key associated with that character group to a ' $\lceil$ '." Ex. 1002, ¶ 146; Ex. 1004 ¶ 64 ("[w]hen a user drags a left quotation mark ' $\lceil$ ' from this drag menu 23"); Fig. 10.

In light of the foregoing defects in Dr. Cockburn's testimony, we determine Dr. Cockburn's testimony on these two examples and his reliance on common sense is insufficient to establish by a preponderance of the evidence that one of ordinary skill would be motivated to try the proposed modification for reasons of increasing efficiency. *Securus Techs. Inc.*, 701 F. App'x at 974–976; 37 C.F.R. § 42.65(a). In particular, we find Dr. Cockburn's testimony is insufficient to overcome Sakata II's explicit teaching that its substitution improves efficiency. Ex. 1004 ¶ 51 (attributing improved efficiency to character substitution because "when the same special character or symbol is selected again, selective input can be carried out quickly without having to perform [the] dragging operation"). We, therefore, are not persuaded on the complete record by Petitioner's argument that one of ordinary skill in the art would have been motivated by a desire to increase efficiency to try omitting Sakata II's character substitution.

Accordingly, having considered the parties' positions in light of the full trial record, we determine for the reasons set forth above that Petitioner has failed to show by a preponderance of the evidence that independent claim 1 and its dependent claims 9–12 are rendered obvious over Sakata II.

# *3.* Analysis of Independent Claims 3 and 4 and Dependent Claims 5–8 and 13–16

Commensurate with the final limitation of claim 1, independent claim 3 recites "returning the keypad to the default state" and independent claim 4 recites "means for returning the keypad to the default state." Ex. 1001, 7:34, 8:5. With respect to these limitations, Petitioner relies on the same arguments and testimony discussed above in the context of claim 1. Accordingly, having considered the parties' positions in light of the full trial record, we determine for the reasons set forth above in the context of claim 1 that Petitioner has failed to show by a preponderance of the evidence that independent claim 3, and its dependent claims 13–16, as well as independent 4, and its dependent claims 5–8, are rendered obvious over Sakata II.

# *E.* Asserted Obviousness of Claims 1 and 3–16 over Sakata II and Buxton

# 1. Overview of Buxton

Buxton is directed to a system and method for a graphical keyboard that "responds differently to different kinds of pen strokes." Ex. 1006, Abst. Figure 15 of Buxton is reproduced below.



FIG. 15.

Figure 15 depicts the operation of the keyboard when the user presses and holds the pen on a key of the graphical keyboard, in this instance the key displaying the character 'a'. *Id.* at 11:59–60. A radial menu comprising four choices of modifying functions appears on the screen, centered above the selected key. *Id.* at 11:64–12:2. The user moves the pen toward the desired modifying function and then lifts the pen off of the screen, thereby inputting the selected character and modifying function, in this case, '^a.' *Id.* at 12:6–13. Thereafter, the "radial menu disappears, as does the key highlighting, leaving the keyboard image as it originally appeared." *Id.* at 12:13–15.

# 2. Analysis of Claims 1 and 3–16

As an alternative ground, Petitioner contends that claims 1 and 3–16 are rendered obvious over the combination of Sakata II and Buxton. More specifically, Petitioner asserts that Buxton meets the limitation "returning the keypad to the default state," as recited in the independent claims, because Buxton teaches that "upon entering a secondary character, '[t]he

radial menu disappears, as does the key highlighting, leaving the keyboard image as it originally appeared." Pet. 67–68 (citing Ex. 1006, 12:13–15) (emphasis omitted). Petitioner contends that, in light of this disclosure in Buxton, one of ordinary skill in the art would have been motivated to implement Sakata II without its "extra step" of character substitution and thereby leaving the keyboard image as it originally appeared. *Id.* at 69 (citing Ex. 1002 ¶ 208). Relying on Dr. Cockburn's testimony, Petitioner contends:

By following Buxton's teachings that one should return the keyboard to its "original[]," state to promote efficiency, one could promote more efficient character entry in Sakata II because (1) doing so could retain a default display of the more frequently used characters in Sakata II (as discussed above), and (2) retaining a consistent display would ensure that the Sakata II interface remains familiar to the user, which would also promote input efficiency.

*Id.* at 69–70 (citing Ex. 1006, 24:37–42; Ex. 1002 ¶¶ 144–148, 171–181). With respect to consistency and familiarity, Dr. Cockburn and Petitioner assert that Buxton's display of a familiar QWERTY keyboard and radial overlay "*allows a user to make use of existing knowledge of keyboard entry*." Ex. 1002 ¶ 207; *see also* Pet. at 68–69.

Patent Owner contends that "Sakata II does not describe any particular 'familiar' keypad layout, or indicate that a particular character would be used more than others within the same character group across all users or situations." Pet 35. Patent Owner further asserts that Dr. Cockburn fails to demonstrate knowledge of Japanese characters and keyboard layouts, and

adduces no evidence in support of his testimony regarding efficiency and consistency concerns. *Id.* at 35–39.

Having considered the complete trial record, we determine Petitioner has failed to show by a preponderance of the evidence that one of ordinary skill would have been motivated to modify Sakata II in light of Buxton. The teachings of Buxton upon which Petitioner and Dr. Cockburn rely demonstrate the disappearance of a radial menu after entry of character modifier. Pet. 67–68 (citing Ex. 1006, 12:13–15) ("upon entering a secondary character, '[t]he radial menu disappears, as does the key highlighting, leaving the keyboard image as it originally appeared") (emphasis omitted). These teachings do not repair the deficiencies in Dr. Cockburn's testimony regarding Sakata II's consistency in design and efficiency obtained through character substitution, as discussed above. *See supra* Section II.D.2.

Regarding efficiency, Dr. Cockburn states one of ordinary skill in the art would "follow[] Buxton's teachings that one should return the keyboard to its 'original[],' state to promote efficiency," (Pet. 69–70; Ex. 1002 ¶¶ 144–148, 171–181), but fails to explain how or why Buxton's disappearing radial menu would teach or suggest that certain Japanese characters are more frequently used than others such that continuing to display them instead of the most recently selected characters would improve efficiency, despite Sakata II's teaching to the contrary. *See* Pet. 64–71; Reply 18–20. Indeed, Dr. Cockburn admitted during deposition that he is not familiar with Japanese characters or keyboard layouts. Ex. 2006, 107:24–108:12, 110:12–112:6, 112:20–113:5, 118:24–119:7, 120:7–11.

Petitioner and Dr. Cockburn's reliance on Buxton to establish motivation based on a desire to improve efficiency, therefore, is unpersuasive.

Similarly, Petitioner and Dr. Cockburn assert that one of ordinary skill would understand Buxton to teach that "retaining a consistent display would ensure that the Sakata II interface remains familiar to the user," (Pet. 69–70; Ex. 1002 ¶¶ 144–148, 171–181), but fail to explain why one of ordinary skill in the art would have understood Sakata II's consistent display of the same group of characters in the same location to be inconsistent. See Pet. 64–71; Reply 18–20. As discussed above, Sakata II describes dividing special characters and symbols into groups and presenting access to each group consistently from the same location on the keyboard. Ex. 1004 ¶¶ 11–13. Further, Dr. Cockburn admits that he is unfamiliar with whether a standard or familiar keyboard existed for Japanese text entry, such that a user of Sakata II's keyboard would be more familiar with a particular layout. See Ex. 2006, 107:24–108:12, 110:12–112:6, 112:20–113:5,114:12–115:4, 120:7–11, 315:8–16. Petitioner and Dr. Cockburn's reliance on Buxton to establish motivation based on a desire to improve user interface consistency, therefore, is unpersuasive.

Accordingly, having considered the parties' positions in light of the full trial record, we determine for the reasons set forth above that Petitioner has failed to show by a preponderance of the evidence that independent claims 1, 3, and 4 as well as their dependent claims 5–12 are rendered obvious over Sakata II and Buxton.

# IV. ORDER

It is, therefore,

ORDERED that Petitioner has not demonstrated by a preponderance of the evidence that claims1 and 3–16 of US Patent RE44,913 are unpatentable; and

FURTHER ORDERED that because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

# **PETITIONER:**

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# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION and MICROSOFT MOBILE INC., Petitioner,

v.

KONINKLIJKE PHILIPS ELECTRONICS N.V., Patent Owner.

> Case IPR2017-01766 Patent RE44,913

Before DAVID C. MCKONE, ROBERT J. WEINSCHENK, and KAMRAN JIVANI, *Administrative Patent Judges*.

JIVANI, Administrative Patent Judge.

DECISION Granting Institution of *Inter Partes* Review 35 U.S.C. § 314(a); 37 C.F.R. § 42.108 Granting Motion for Joinder 35 U.S.C. § 315(c); 37 C.F.R. § 42.122 Denying Motion for Additional Discovery 37 C.F.R. § 42.51(b)(2)

### I. INTRODUCTION

Microsoft Corporation and Microsoft Mobile Inc. (collectively, "Microsoft" or "Petitioner") requested an *inter partes* review of claims 1 and 3–16 (the "Challenged Claims") of U.S. Patent No. RE44,913 ("the '913 patent"). Paper 2 ("Petition" or "Pet."). Microsoft also filed a Motion for Joinder (Paper 3, "Joinder Motion" or "Joinder Mot.") requesting that it be joined to IPR2017-00386 ("the 386 IPR"), a pending *inter partes* review involving claims 1 and 3–16 of the '913 patent.

Koninklijke Philips N.V. ("Patent Owner") did not file a Preliminary Response to the Petition. With our authorization, however, Patent Owner filed a Motion for Additional Discovery (Paper 12, "Discovery Motion" or "Discovery Mot."). Microsoft filed an Opposition to the Motion for Additional Discovery. Paper 14 ("Discovery Opposition" or "Discovery Opp."). Together with Microsoft and with our authorization, Patent Owner also filed a Joint Stipulation on the Motion for Joinder, wherein Patent Owner states that it does not oppose Microsoft's Joinder Motion. Paper 7 ("Joinder Joint Stipulation"), 3.

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless it is determined that there is "a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." Based on the information presented in the Petition, we are persuaded that there is a reasonable likelihood Petitioner would prevail with respect to claims 1 and 3–16. Accordingly, we institute an *inter partes* review of claims 1 and 3–16 on the grounds specified below. We further grant Petitioner's Joinder Motion and deny Patent Owner's Discovery Motion for the reasons discussed below.

### II. ANALYSIS OF PETITION

A. Overview of the '913 patent (Ex. 1001)

The '913 patent relates to entering characters on a handheld mobile device via a keypad. Ex. 1001, 1:18–21. Figure 1 of the '913 patent is reproduced below.



Figure 1 depicts a default display state of a keypad 100 with twelve keys 102, where each key is associated with a primary character 104 and a plurality of secondary characters 106. *Id. at* 3:25–28. The primary characters in Figure 1 are the numbers and symbols displayed on the keys of the keypad. *Id. at* 3:28–31. The secondary characters in Figure 1 are the letters displayed in groups below each key. *Id. at* 3:31–37.

In one embodiment, a user selects a primary character by initiating a "quick tapping" of the corresponding key for a pre-determined time period, for instance 0.2 seconds. *Id. at* 6:1–6. If the user's tap is longer than the pre-determined time period, the keypad responds to the user's tap by

entering into a second state, wherein secondary characters associated with the selected key are made available. *Id. at* 4:4–6, 6:3–6. Figure 2 of the '913 patent is reproduced below.



Figure 2 depicts a second display state of the keypad after a first key selection by a user. *Id. at* 3:42–43. In this instance, the user has selected the key associated with primary character '5', causing the primary character '5' to remain displayed on the selected key and causing the associated secondary characters 'j', 'k', and 'l' each to be displayed on an adjacent key. *Id. at* 3:44–52. The user may now select any of the displayed characters by tapping on the corresponding key, thereby providing "quick and accurate character input wherein secondary characters are available with only two key selections." *Id. at* 3:63–65, 4:4–6. "Following a character input, the

keypad of [Figure] 2 is returned to the default display state as shown in

[Figure] 1." Id. at 3:60-62.

# B. Illustrative Claim

Claims 1, 3, and 4 are independent claims. Claim 1 is illustrative of the claimed subject matter and is reproduced below.

1. A method for inputting a character to a device, the device including a keypad, the keypad including a plurality of keys, at least one of the keys has a primary character, a plurality of secondary characters and an associated display area, the keypad in a default state displaying the primary character associated with the at least one key in the associated display area, the method comprising acts of:

in the default state,

- returning the primary character as an input character in response to selection of the at least one key for a period shorter than a predetermined time period;
- switching to a second state after detecting a first key selection of the at least one key for a period longer than the predetermined time period;

in the second state:

displaying each of the secondary characters associated with the first selected key in a respective display area;

detecting a second key selection;

selecting for the input character the secondary character associated with the second key selection; and

returning the keypad to the default state.

C. Related Proceedings and Asserted Grounds of Unpatentability

Petitioner identifies several actions for infringement of the '913 patent pending in the United States District Court for the District of Delaware. Pet. 3.

The '913 patent is also the subject of the 386 IPR, which we instituted on June 12, 2017 on the following two grounds of unpatentability:

1. Obviousness of claims 1 and 3–16 over Sakata II<sup>1</sup>; and

Obviousness of claims 1 and 3–16 over Sakata II and Buxton<sup>2</sup>.
 386 IPR, Paper 8, 19. We incorporate herein our analysis from the Decision on Institution in the 386 IPR.

The instant Petition challenges the same claims on identical grounds of unpatentability, and relies on the same evidence and arguments as presented in the 386 IPR. Pet. 1; Joinder Mot. 1–2. Petitioner states:

This Petition proposes the same grounds of rejection that were proposed in the [386] IPR and that were instituted by the Board in the [386] IPR. In fact, the Petition is entirely similar to [the 386 IPR]'s petition with respect to the adopted grounds, including the same analysis, prior art, exhibits, and expert testimony.

Joinder Mot. 3. Patent Owner did not file a Preliminary Response and has not presented any arguments regarding the merits of the Petition beyond the argument raised in its Discovery Motion, in which Patent Owner alleges that "HTC" (collective of HTC Corp. and HTC America Inc.) may be a real party interest to the instant Petition. As discussed below, we deny Patent Owner's Discovery Motion. *See infra* Section IV. Because Patent Owner raises no

<sup>&</sup>lt;sup>1</sup> Sakata, Japanese Unexamined Patent Application No. 2000-148366 ("Sakata II") (Ex. 1004).

<sup>&</sup>lt;sup>2</sup> Buxton, U.S. 6,094,197; iss. July 25, 2000 ("Buxton") (Ex. 1006).

further arguments against the Petition and because the Petition is virtually identical to the 386 IPR petition, we determine Petitioner has demonstrated sufficiently under 35 U.S.C. § 314 that an *inter partes* review should be instituted in this proceeding on the same grounds of unpatentability as the grounds on which we instituted *inter partes* review in the 386 IPR.

### III. ANALYSIS OF PETITIONER'S JOINDER MOTION

An *inter partes* review may be joined with another *inter partes* review, subject to certain statutory provisions:

(c) JOINDER.—If the Director institutes an *inter partes* review, the Director, in his or her discretion, may join as a party to that inter partes review any person who properly files a petition under section 311 that the Director, after receiving a preliminary response under section 313 or the expiration of the time for filing such a response, determines warrants the institution of an inter parties review under section 314.

35 U.S.C. § 315(c); *see also* 37 C.F.R. § 42.122 (A request for joinder must be filed, as a motion under 37 C.F.R. § 42.22, no later than one month after the institution date of any *inter partes* review for which joinder is requested).

A motion for joinder should (1) set forth reasons why joinder is appropriate; (2) identify any new grounds of unpatentability asserted in the petition; (3) explain what impact (if any) joinder would have on the trial schedule for the existing review; and (4) address specifically how briefing and discovery may be simplified. *See, e.g., Kyocera Corp. v. Softview LLC*, Case IPR2013-00004, Paper 15. Petitioner, as movant, bears the burden of proving that it is entitled to the requested relief. 37 C.F.R. § 42.20(c).

As an initial matter, the present Joinder Motion meets the timing requirements of 37 C.F.R. § 42.122(b) because it was filed on July 12, 2017,

which is not later than one month after the 386 IPR was instituted on June 12, 2017. *Compare* Joinder Mot. 8–10, *with* 386 IPR, Paper 8.

Additionally, the present Petition challenges the same claims of the same patent as those under *inter partes* review in the 386 IPR, and the Petition also asserts the same grounds of unpatentability based on the same prior art and the same evidence, including the same testimony by the same declarant. *See, e.g.*, Joinder Mot. 4 ("Microsoft's Petition is not only limited to the same grounds adopted by the Board in the [386] IPR, but also relies on exactly the same analysis, prior art, exhibits, and expert testimony as that submitted [in the 386 IPR]."). The Petition does not assert any other grounds of unpatentability not already of record in the 386 IPR. *Id.* at 6. Petitioner asserts that granting joinder will not impact negatively the existing scheduling order in the 386 IPR. Mot. 6–7. According to Petitioner, joinder will promote the efficient determination of validity of the challenged claims of the '913 patent, as well as simplify briefing and discovery. *Id.* at 5. Finally, Petitioner states that it "does not oppose Microsoft's motion to join IPR2017-01766 with IPR2017-00386." Joinder Joint Stipulation 3.

In their Joinder Joint Stipulation, the parties agree on a proposal for how the 386 IPR would proceed if Microsoft is joined to that proceeding. Specifically, the parties agreed that:

 2. The joint proceeding will be based exclusively on the petition and evidence filed by Google[<sup>3</sup>] in IPR2017-00386[;]
 3. If Microsoft receives any time for cross and re-direct examination of any witness or for oral argument, at Google's discretion, such time will be taken from the time allotted to Google in IPR2017-00386[; and]

<sup>&</sup>lt;sup>3</sup> The parties identify Google Inc. as the lead petitioner in the 386 IPR. *See generally* Joinder Joint Stipulation.

4. The submissions, page limits and word counts currently allotted in IPR2017-00386 for any written work product will not be affected by joinder, with the exception that, within 5 business days following the filing of any brief containing argument by Google, Microsoft may separately file up to five pages directed only to points of disagreement it may have with Google, and [Patent Owner] may thereafter respond within 5 business days with a corresponding number of pages. Microsoft may not separately advance any arguments in furtherance of those advanced by Google in the proceeding.

Joinder Joint Stipulation 3. The parties state that the lead petitioner in the 386 IPR, Google, does not oppose joinder generally, but does oppose the parties' proposal that would allow Microsoft to file a separate brief of up to five pages directed to points of disagreement with Google. *Id.* at 2.

Based on the facts and circumstances discussed above, we determine Petitioner has established good cause for joining this proceeding with the 386 IPR. Specifically, we determine that Patent Owner will not be prejudiced unduly by the joinder of these proceedings, and joining Petitioner's identical challenges to those in the 386 IPR will lead to greater efficiency, while conserving the resources of both the parties and the Board. Consequently, granting the Joinder Motion under these circumstances would help "secure the just, speedy, and inexpensive resolution" of these proceedings. *See* 37 C.F.R. § 42.1(b). For the above reasons, we conclude that the Joinder Motion should be granted.

We also determine that, after the joinder of Microsoft, the proceeding in the 386 IPR generally will be conducted in accordance with the parties' agreement discussed above. Specifically, the proceeding in 386 IPR will be based exclusively on the petition and evidence submitted by the current petitioners in that case, and the parties will adhere to the existing schedule in

the 386 IPR. All filings by Microsoft in the 386 IPR shall be consolidated with the filings of the current petitioners in that case, and the page limits and word counts set forth in 37 C.F.R. § 42.24 shall apply to all consolidated filings. If, however, Microsoft has a point of disagreement related to a consolidated filing, Microsoft may request authorization from the Board to file a separate brief of no more than five pages.<sup>4</sup> If we authorize Microsoft to file a separate brief, Patent Owner may request authorization to file a response of no more than five pages. If an oral hearing is scheduled in the 386 IPR, all petitioners shall present a consolidated argument at the hearing.

Microsoft is bound by any discovery agreements, including any deposition arrangements, between Patent Owner and the current petitioners in the 386 IPR, and Microsoft shall not seek any discovery beyond that sought by the current petitioners in the 386 IPR without first seeking permission from the Board. Patent Owner shall not be required to provide any additional discovery or deposition time as a result of the joinder. We expect Microsoft, the current petitioners in the 386 IPR, and Patent Owner to meet and confer regarding any disputes between them and to contact the Board only if such matters cannot be resolved.

Accordingly, Petitioner's Joinder Motion is granted.

<sup>&</sup>lt;sup>4</sup> Because Microsoft is required to request authorization from the Board before filing a separate brief in the 386 IPR, Google and the other current petitioners will have an opportunity to indicate to the Board whether they oppose the requested brief.

### IV. ANALYSIS OF PATENT OWNER'S DISCOVERY MOTION

Patent Owner asserts in its Discovery Motion that "[t]he evidence indicates, beyond mere possibility, that evidence may exist to establish that, at least, (i) earlier IPR filers (Google, Acer, ASUS, and/or HTC) funded, in part, the current challenge, and (ii) at least one of Acer, ASUS, and HTC directed this IPR." Discovery Mot. 1. Petitioner responds that, although Patent Owner "wants to argue that Microsoft is a real-party-in-interest ('RPI') with a third party," Patent Owner's "requested discovery is based on nothing more than speculation." Discovery Opp. 1.

In our authorization of this Discovery Motion, we "direct[ed] Patent Owner to *Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC*, Case IPR2012-00001, slip op. at 6–16 (Paper 26) (PTAB Mar. 5, 2013), for an explanation of the factors that we consider in connection with a motion for additional discovery." Paper 11, 3. More specifically, we required that Patent Owner "identify in its motion the discovery being requested and explain why the discovery is necessary in the interest of justice, specifically identifying the evidence already in Patent Owner's possession tending to show beyond mere speculation that something useful will be uncovered by the requested discovery." *Id.* Having reviewed Patent Owner's Discovery Motion and Petitioner's Opposition thereto, we determine Patent Owner has not made the requisite showing.

Our procedures are designed "to secure the just, speedy, and inexpensive resolution of every proceeding" and thus provide for limited discovery during *inter partes* reviews. 37 C.F.R. §§ 42.1(b), 42.51. "The test for a party seeking additional discovery in an *inter partes* review is a strict one." *Symantec Corp. v. Finjan, Inc.*, Case IPR2015-01545, slip op. at

4 (PTAB Dec. 11, 2015) (Paper 9). "The moving party must show that such additional discovery is in the interest of justice." 37 C.F.R. § 42.51(b)(2)(i). The Board has identified various factors to be considered in determining whether requested discovery is necessary in the interests of justice. *See Garmin Int'l, Inc.*, Case No. IPR2012-00001, Paper 26, slip op. at 6–7. These factors include whether the requested discovery: (1) is based on more than a mere possibility of finding something useful; (2) seeks the other party's litigation positions or the basis for those positions; (3) seeks information that reasonably can be generated without the discovery requests; (4) is easily understandable; and (5) is overly burdensome to answer. *Id.* The first of these factors weighs decisively in our consideration of Patent Owner's Discovery Motion:

*More Than a Possibility and Mere Allegation*—The mere possibility of finding something useful, and mere allegation that something useful will be found, are insufficient to demonstrate that the requested discovery is necessary in the interest of justice. The party requesting discovery should already be in possession of evidence tending to show beyond speculation that in fact something useful will be discovered. [In this context, "useful" means "favorable in substantive value to a contention of the party moving for discovery."]

### Id.

Much of Patent Owner's Discovery Motion addresses the purported relationships between Microsoft, Google, Acer, and ASUS, arguing that Microsoft fails to explain in the Petition why "neither Acer nor ASUS (both Microsoft OEMs) is named as an RPI in the present IPR." Discovery Motion 1–2, 4, 6–8. Patent Owner does not explain persuasively how information related to any relationships between Microsoft, Google, Acer,

and ASUS would be "useful" to this specific proceeding. As best we can discern from Patent Owner's argument, Patent Owner contends that the additional discovery it seeks might show that Acer and ASUS are real parties in interest to the instant proceeding and thus necessary parties. See, e.g., id. at 8 ("These interrelationships and action are threshold evidence that documents and other things may exist to establish that Acer and ASUS are RPIs, e.g., that Acer or ASUS directed/requested that Microsoft mount a challenge against the patent."). But Petitioner's Joinder Motion, to which Patent Owner consents, seeks to join Microsoft to the 386 IPR, in which Google, Acer, and ASUS are already current petitioners. Even assuming arguendo Patent Owner obtained additional discovery sufficient to show Acer and ASUS are necessary to this proceeding, Petitioner's unopposed Joinder Motion would remedy any defect by adding Microsoft into the 386 IPR with Acer and Asus. Petitioner's Discovery Motion thus fails to establish that the requested discovery as to Acer, ASUS, and Google is based on more than a mere possibility of finding something useful, as required under the first Garmin factor.

Finally, we consider Patent Owner's argument that additional discovery is warranted to establish that HTC is a real party in interest to this proceeding. Whether a non-identified party is a real party in interest is a highly fact-dependent question. *Office Patent Trial Practice Guide*, 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012). "A common consideration is whether the non-party exercised or could have exercised control over a party's participation in a proceeding." *Id.* Significantly, the first *Garmin* factor requires that "[t]he party requesting discovery should already be in possession of evidence tending to show beyond speculation that in fact

something useful will be discovered." *Garmin Int'l, Inc.*, Case No. IPR2012-00001, Paper 26, slip op. at 7. Thus, to establish that its discovery requests are in the interests of justice, Patent Owner must "provide evidence in its possession tending to show beyond speculation that a non-party

exercised or could have exercised control over a party's participation in a proceeding." *CaptionCall, LLC, v. Ultratec*, Inc., IPR2015-00636, slip op. at 5 (Feb. 23, 2015) (Paper 42).

Here, Patent Owner contends that the instant Petition was filed by Microsoft "after expiration of HTC's 1-year filing window under § 315(b)" and, therefore, "HTC was time-barred when Microsoft filed its petition in this IPR." Discovery Mot. 3, 8. Patent Owner further argues that "HTC and Microsoft teamed up" to jointly bring a different petition on a different patent "using the same law firm that represents Microsoft in the present petition." *Id.* Patent Owner continues:

Finally, the fact that Google/Acer/ASUS also pursued challenges against 9 of the asserted patents, with no overlap in patents being challenged (until Microsoft filed follow-on petitions to try to remedy failures in the first round of filings) suggests a level of coordination in which Google, HTC, Acer, ASUS, and Microsoft divided responsibilities in collectively attacking the asserted patents.

### Id. at 9.

We are not persuaded by Patent Owner's arguments. First, even if HTC were a petitioner in this proceeding, the time limit set forth in § 315(b) would not prohibit joinder of HTC to the 386 IPR. 35 U.S.C. § 315(b) ("The time limitation set forth in the preceding sentence shall not apply to a request for joinder under subsection (c)."). Thus, the issue of whether nonparty HTC is subject to the time limit set forth in 35 U.S.C. § 315(b) does

not establish that Patent Owner's requested discovery as to HTC is based on more than a mere possibility of finding something useful, as required under the first *Garmin* factor.

Second, Patent Owner does not explain why its observation that Microsoft and HTC previously used the same law firm in a petition on a different patent amounts to evidence in its possession tending to show *beyond speculation* that HTC exercised or could have exercised control over Microsoft's participation *in this proceeding*. *See* Discovery Mot. 8. To the extent Patent Owner contends HTC may be indemnified by Microsoft, Patent Owner fails to explain how or why indemnification of HTC by Microsoft would result in HTC—not Microsoft—exercising control over this proceeding. *See id.* at 4.

Third, Patent Owner's assertion that the instant Petition constitutes Microsoft's "follow-on petition" in an attempt "to try to remedy failures in the first round of filings" is unsupported in current record. *Id.* at 9. Rather than seeking to "remedy failures," the instant Petition "is not only limited to the same grounds adopted by the Board in the [386] IPR, but also relies on exactly the same analysis, prior art, exhibits, and expert testimony as that submitted [in the 386 IPR]." Joinder Mot. 4.

Accordingly, we determine Patent Owner has failed to show that it is already in possession of evidence tending to show beyond speculation that in fact something useful will be discovered by its request in the Discovery Motion. Patent Owner's Discovery Motion is, therefore, *denied*.

### V. ORDER

It is, therefore,

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of the '913 patent is hereby instituted on the following grounds:

A. Obviousness of claims 1 and 3-16 over Sakata II; and

B. Obviousness of claims 1 and 3–16 over Sakata II and Buxton.

FURTHER ORDERED that Petitioner's Joinder Motion is *granted* and that Microsoft is joined to IPR2017-00386;

FURTHER ORDERED that the asserted grounds of unpatentability on which the proceeding in IPR2017-00386 was instituted are unchanged;

FURTHER ORDERED that the proceeding in IPR2017-00386 is based on the petition and supporting evidence submitted therein;

FURTHER ORDERED that the proceeding in IPR2017-00386 is governed by the previously-issued Scheduling Order (Paper 9);

FURTHER ORDERED that all petitioners shall file all papers in IPR2017-00386 as a single, consolidated filing;

FURTHER ORDERED that Microsoft is bound by any discovery agreements between the parties in IPR2017-00386;

FURTHER ORDERED that, if an oral hearing is requested and scheduled in IPR2017-00386, all petitioners will present a consolidated argument at the oral hearing;

FURTHER ORDERED that the caption in IPR2017-00386 shall be changed to reflect the joinder of Microsoft, as in the attached example;

FURTHER ORDERED that the Discovery Motion is denied; and

FURTHER ORDERED that this proceeding is *terminated* under 37 C.F.R. § 42.72, and all further filings will be made in IPR2017-00386.

# **PETITIONER:**

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PATENT OWNER:

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Paper 15 Entered: January 16, 2018

# Example Case Caption

# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE PATENT TRIAL AND APPEAL BOARD

ACER INC., ACER AMERICA CORPORATION, ASUSTEK COMPUTER INC., ASUS COMPUTER INTERNATIONAL, GOOGLE INC., MICROSOFT CORPORATION, and MICROSOFT MOBILE INC., Petitioner,

v.

KONINKLIJKE PHILIPS N.V., Patent Owner.

> Case IPR2017-00386<sup>1</sup> Patent RE44,913

<sup>&</sup>lt;sup>1</sup> Microsoft Corporation and Microsoft Mobile Inc. ("Microsoft") filed a petition in IPR2017-01766, and Microsoft has been joined to the instant proceeding.