

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

IMMERSION CORPORATION,
Patent Owner.

Case IPR2018-01468
Patent 6,429,846 B2

Before WILLIAM V. SAINDON, PATRICK R. SCANLON, and
NEIL T. POWELL, *Administrative Patent Judges*.

SCANLON, *Administrative Patent Judge*.

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

I. INTRODUCTION

Samsung Electronics Co., LTD., (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review of claims 1, 3, 5–7, 16, 18, and 19 of U.S. Patent No. 6,429,846 (Ex. 1001, “the ’846 patent”). Immersion Corporation (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). Petitioner filed a Reply to Patent Owner’s Preliminary Response. Paper 7 (“Reply”). Patent Owner filed a Sur-Reply. Paper 8 (“Sur-Reply”).¹ We have authority under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a).

To institute an *inter partes* review, we must determine that the information presented in the Petition shows “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). For the reasons set forth below, upon considering the Petition, Preliminary Response, Reply, Sur-Reply, and evidence of record, we determine that the information presented in the Petition establishes a reasonable likelihood that Petitioner will prevail with respect to at least one challenged claim. We thus institute *inter partes* review on all challenged claims and all asserted grounds. *See SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018); U.S. Patent and Trademark Office, *Guidance on the impact of SAS on AIA trial proceedings*, <https://www.uspto.gov/patents-application-process/patent-trial-and-appealboard/trials/guidance-impact-sas-aia-trial> (Apr. 26, 2018) (“SAS Guidance”).

¹ The arguments presented in the Reply and Sur-Reply were limited to the issue of whether the Petition was filed timely under 35 U.S.C. § 315(b).

Our factual findings and conclusions at this stage of the proceeding are based on the evidentiary record developed thus far. This is not a final decision as to the patentability of claims for which *inter partes* review is instituted. Our final decision will be based on the record as fully developed during trial.

II. BACKGROUND

A. Related Matters

The parties identify the following related matters:

Immersion Corp. v. Samsung Elecs. Am., Inc., Case No. 2:17-cv-00572 (E.D. Tex.); *Immersion Corp. v. Samsung Elecs. Am., Inc.*, Case No. 2:18-cv-00055 (E.D. Tex.); and *Immersion Corp. v. Motorola Mobility LLC*, Case No. 1:17-cv-01081 (D. Del.). Pet. 73; Paper 4, 2. Additionally, Petitioner challenges the '846 patent on different grounds in IPR2018-01467. Pet. 73; Paper 4, 2. Patent Owner also identifies four other petitions for *inter partes* review, two reexamination proceedings, and 22 patent applications and patents as related to this proceeding. Paper 4, 3–5.

B. Real Parties-in-Interest

Petitioner identifies itself and Samsung Electronics America, Inc. as the real parties-in-interest. Pet. 73. Patent Owner identifies itself as the real party-in-interest. Paper 4, 2.

C. The '846 patent

The '846 patent, titled “HAPTIC FEEDBACK FOR TOUCHPADS AND OTHER TOUCH CONTROLS,” issued August 6, 2002, with claims 1–43. Ex. 1001, (54), (45), 17:18–20:46. Two Certificates of Correction have been issued in connection with the '846 patent, with the

second Certification of Correction (issued July 31, 2018) superseding the first. *Id.* at 17–25. The '846 patent is directed to “devices used to interface with computer system[s] and electronic devices and which provide haptic feedback to the user.” *Id.* at 1:20–22. Figure 1 of the '846 patent is reproduced below.

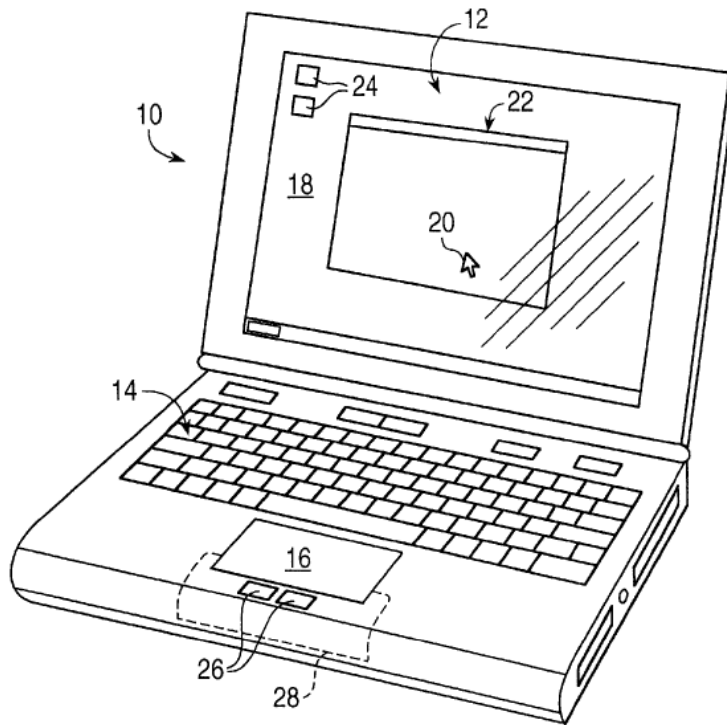


FIG. 1

Figure 1 is a perspective view of portable computer 10 including a haptic touchpad. *Id.* at 3:31–32. Portable computer 10 includes display device 12, keyboard 14, and touchpad 16. *Id.* at 3:39–43. Touchpad 16 inputs coordinate data to the main processor of computer 10 based on the sensed location of an object on or near the touchpad. *Id.* at 4:6–8.

“[T]ouchpad 16 is provided with the ability to output haptic feedback such as tactile sensations to the user who is physically contacting the touchpad.”

Id. at 4:65–67. For instance, “one or more moveable portions 28 of the housing of the computer device 10 can be included which is contacted by the user when the user operates the touchpad 16 and which can provide haptic feedback.” *Id.* at 5:56–60.

In one embodiment, one or more piezoelectric actuators 42 are coupled to the underside of touchpad 16 to provide haptic feedback to the user. *Id.* at 7:21–25, Fig. 3.

D. Challenged Claims

Of the challenged claims, claim 1 is independent. Claim 1 is illustrative of the claimed subject matter and is reproduced below:

1. A haptic feedback touch control for inputting signals to a portable computer and for outputting forces to a user of the touch control, the touch control comprising:

a touch input device integrated into a housing of said portable computer, said touch input device including an approximately planar touch surface operative to input a position signal to a processor of said computer based on a location on said touch surface which said user contacts, said position signal representing a location in two dimensions, wherein said computer positions a cursor in a graphical environment displayed on a display device based at least in part on said position signal; and

at least one actuator coupled to said touch input device, said actuator outputting a force on said touch input device to provide a haptic sensation to said user contacting said touch surface, wherein said actuator outputs said force based on force information output by said processor, said actuator outputting a force directly on said touch input device.

Id. at 17:18–35, 21.

E. The Prior Art

Petitioner’s asserted ground of unpatentability for the challenged claims rely on the following references:

Gemmell	WO 92/00559 A1	Jan. 9, 1992	Ex. 1008
Maddalozzo	US 7,768,501 B1	Aug. 3, 2010	Ex. 1009
Blouin	US 5,977,867	Nov. 2, 1999	Ex. 1010

Petitioner also relies on the Declaration of Jean Renard Ward (Ex. 1003).

F. Asserted Ground of Unpatentability

Petitioner challenges claims 1, 3, 5–7, 16, 18, and 19 of the ’846 patent on the following ground:

References	Basis	Claims Challenged
Gemmell, Maddalozzo, and Blouin	§ 103	1, 3, 5–7, 16, 18, and 19

III. ANALYSIS

A. Level of Ordinary Skill in the Art

Petitioner contends that a person having ordinary skill in the art to which the ’846 patent pertains “would have had a Bachelor of Science degree in an academic area emphasizing electrical engineering, computer engineering, haptic feedback design, user-interface design, or an equivalent field” and also “would have had two or more years of experience in the design of devices or user-interface systems including touchpads and touchscreens.” Pet. 14 (citing Ex. 1003 ¶¶ 38–40). Patent Owner does not dispute this contention at this stage of the proceeding, nor does Patent Owner offer its own definition of the level of ordinary skill in the art.

We find, based on our review of the record before us, that Petitioner’s stated level of ordinary skill in the art is reasonable because it appears consistent with the evidence at this stage of the proceeding, including the asserted prior art. Accordingly, for the purposes of this Decision, we adopt Petitioner’s definition.

B. Claim Construction

In this *inter partes* review, we give claim terms their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b) (2018)²; *see also* *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2142–46 (2016) (concluding that 37 C.F.R. § 42.100(b) “represents a reasonable exercise of the rulemaking authority that Congress delegated to the Patent Office”). “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.” *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016).

Petitioner contends that all terms of the challenged claims should be given their plain meaning consistent with the specification of the ’846 patent. Pet. 12. To “promote transparency and consistency between the co-pending proceedings,” Petitioner also lists the agreed and disputed claim constrictions submitted by the parties in their related district court

² A recent amendment to this rule does not apply here, because the Petition was filed before November 13, 2018. *See* “Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board,” 83 Fed. Reg. 51340, 51340 (Oct. 11, 2018) (amending 37 C.F.R. § 100(b) effective November 13, 2018) (to be codified at 37 C.F.R. pt. 42).

proceeding. *Id.* at 12–13 (citing Exs. 1012, 1013). The agreed claim construction for the claim 1 phrase “position signal representing a location” is “signal comprising coordinates of a location.” *Id.* at 12 (citing Ex. 1012, 2).

After noting that Petitioner does not provide a construction for any claim term, Patent Owner asserts that Petitioner applies the agreed-upon construction and agrees with Petitioner that “position signal representing a location” should be construed as “signal comprising coordinates of a location.” Prelim. Resp. 12 (citing Pet. 47–48). As an initial point, we disagree with Patent Owner’s assertion that Petitioner “applies” the agreed-upon construction. The portion of the Petition cited by Patent Owner states Petitioner’s assertion that Blouin’s disclosure demonstrates obviousness of “said position signal representing a location in two dimensions” under the parties’ agreed-upon district court construction but does not state explicitly that this construction should apply in this proceeding Pet. 47–48. Moreover, although Petitioner indicates that it has agreed to the construction in the related district court proceeding, it does not contend that this construction applies here, as noted above.

Patent Owner provides three reasons in support of its assertion that “position signal representing a location” should be construed as “signal comprising coordinates of a location.” Prelim. Resp. 12–18. First, Patent Owner argues that “multiple parties and Courts have already agreed upon this construction.” *Id.* at 12 (citing Ex. 2004, 1; Ex. 2005, 8; Ex. 2006, 2). Patent Owner, however, concedes that the Board is not bound by these agreed-upon constructions. *Id.* at 13 (citing *Power Integrations, Inc. v. Lee*,

797 F.3d 1318, 1326 (Fed. Cir. 2015)). This point is particularly apt here, where the agreed-upon construction of “position signal representing a location” from the district court proceeding is merely the product of a prior agreement between the parties in that forum and not the result of a judicial interpretation of a disputed claim term.

Second, Patent Owner argues that, because the parties have agreed on the construction for “position signal representing a location,” there is no controversy to resolve and no need for the Board construe the phrase anew in this Decision. *Id.* at 13–14. Patent Owner is mistaken, however, that the parties are in agreement as to the construction of “position signal representing a location” *in this proceeding*. As noted above, Petitioner does not assert that “position signal representing a location” should be construed as “signal comprising coordinates of a location” in this proceeding; instead, Petitioner proposes that this phrase, and all claim terms, should be given their plain meaning consistent with the specification. Pet. 12.

Third, Patent Owner argues that “signal comprising coordinates of a location” is the proper construction for “position signal representing a location” under the broadest reasonable construction standard. Prelim. Resp. 14. In support of this argument, Patent Owner points to four passages in the ’846 patent. *Id.* at 14–16 (citing Ex. 1001, 4:6–8, 4:32–36, 6:24–29, 15:27–30; Ex. 2001 ¶¶ 40, 41).³ Each of the first three of these passages refers to input from the *touchpad* as a whole. Ex. 1001, 4:6–8, 5:32–36,

³ Although the Preliminary Response cites lines 32–38 in column 4 of the ’846 patent for the second cited passage, it appears that the passage Patent Owner actually refers to is at lines 32–38 in column 5 of the ’846 patent.

6:24–29. The “position signal” of the phrase at issue, however, refers to a signal that is input by the “touch surface.” *Id.* at 17:21–23. The touch surface is described in the ’846 patent as an element of the touchpad and distinct from other touchpad structure such as “sensing apparatus.” *See id.* at 4:39–42 (“[T]he term ‘touchpad’ preferably includes the surface of the touchpad 16 as well as any sensing apparatus included in the touchpad unit.”). Indeed, the third passage cited by Patent Owner describes touchpad 16 including “circuitry” and “appropriate sensors,” rather than the touch surface, as producing control signals that report the position of a user’s finger on the touchpad. *Id.* at 6:24–29. Thus, these three passages are not particularly informative in construing the phrase “signal comprising coordinates of a location.”

In addition, these three passages refer to the touchpad inputting “coordinate data,” sending “position information,” and reporting “control signals” to computer 10. *Id.* at 4:6–8, 5:32–36, 6:24–29. The terms “coordinate data,” “position information,” and “control signals” are broader than “coordinates” per se and are not necessarily constrained to only refer to a pair of numbers describing a location in Cartesian space. For instance, “coordinate data” could refer to data about coordinates, or data usable to derive a location.

The fourth passage cited by Patent Owner states: “That is, the entire touchpad 16 surface need merely provide coordinates of user contact to the processor of the computer and software on the computer can designate where different regions are located.” *Id.* at 15:27–30. Although this passage describes the touchpad *surface* providing *coordinates* to the computer, it

does so in the context of discussing regions 62 and 64, which (as discussed below) are not used for positioning a cursor on the display. *Id.* at 15:26–27.

Specifically, the '846 patent discloses that touchpad 16 can comprise different regions that provide different functions. *Id.* at 11:15–17. For instance, in one embodiment, touchpad 16 includes central cursor control region 70 in which a user moves a finger or other object to position cursor 20. *Id.* at 11:20–27, Fig. 7. This embodiment of touchpad 16 further includes scroll or rate control regions 62a, 62b that are “used to provide input to perform a rate control task, such as scrolling documents, adjusting a value (such as audio volume, speaker balance, monitor display brightness, etc.) or panning/tilting the view in a game or virtual reality simulation.” *Id.* at 14:27–32, Fig. 7.⁴ Touchpad 16 also can include regions 64 that provide “a small rectangular area, like a button, which the user can point to in order to initiate a function associated with the pointed-to region,” including functions such as “running a program, opening or closing a window, going ‘forward’ or ‘back’ in a queue of web pages in a web browser, powering the computer 10 or initiating a ‘sleep’ mode, checking mail, firing a gun in a game, cutting or pasting data from a buffer, selecting a font.” *Id.* at 14:54–63, Fig. 7.⁵ Accordingly, regions 62 and 64 do not function to position cursor 20 on the display.

With this distinction in mind, we note that the fourth passage cited by Patent Owner relates to interpreting the coordinates to determine whether a

⁴ Scroll or rate control regions 62a, 62b are denoted with reference numerals 72a, 72b in Figure 7.

⁵ Regions 64 are denoted with reference numerals 74 in Figure 7.

“touchpad input signal” is a cursor control signal or a different type of signal. *Id.* at 15:31–34. The passage does not specify that the “touchpad input signal” itself comprises a pair of numbers describing coordinates. As such, it is not clear that this portion of the specification describes providing coordinates to define a position signal that represents a location of contact on a touch surface and is used to position a cursor on a display. And even if this passage does disclose providing a pair of numbers describing coordinates to define such a position signal, the passage relates to only one embodiment and does not suggest that every embodiment disclosed in the ’846 patent uses only a pair of numbers describing coordinates to produce a position signal for position the cursor.

Patent Owner also argues that its proposed claim construction is consistent with extrinsic evidence. Prelim. Resp. 17 (citing Ex. 2005, 223; Ex. 2007, 794).⁶ The extrinsic evidence identified by Patent Owner is dictionary definitions for “position” and “coordinates.” *Id.* These definitions, however, are not particularly informative with respect to construing the phrase “position signal representing a location.” The issue raised by Patent Owner’s assertion that the phrase should be construed as “signal comprising coordinates of a location” is not so much whether “position” refers to coordinates, but why the signal should be “comprising” position or coordinates rather than “representing” position or coordinates. The arguments and evidence submitted by Patent Owner do not support this contention adequately.

⁶ Although the Preliminary Response cites page 223 of Exhibit 2005, it appears that Patent Owner intended to cite page 223 of Exhibit 2007.

For the above reasons, we are not persuaded on the current record that the construction for “position signal representing a location” proposed by Patent Owner should be adopted. Furthermore, in view of our analysis discussed below, we do not discern a need to construe explicitly the phrase “position signal representing a location,” or any other claim term of the ’846 patent, because construing these terms is not necessary for us to assess the asserted grounds of unpatentability. *See Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) (“[C]laim terms need only be construed ‘to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

The parties are hereby given notice that claim construction, in general, is an issue to be addressed at trial and claim constructions expressly or implicitly addressed in this Decision are *preliminary* in nature. The parties are expected to assert all of their claim construction arguments and evidence in the Petition, Patent Owner’s Response, Petitioner’s Reply, or otherwise during trial, as permitted by our rules.

C. Section 315(b)

Institution of *inter partes* review is barred when the petition is filed more than one year after the petitioner is served with a complaint alleging infringement of the patent. 35 U.S.C. § 315(b); 37 C.F.R. § 42.101(b). The one-year bar, however, does not apply to a request for joinder. 35 U.S.C. § 315(b) (final sentence); 37 C.F.R. § 42.122(b).

Patent Owner argues the Board lacks authority to institute this proceeding because Petitioner was served with a complaint asserting infringement of the ’846 patent on August 4, 2017, but the Petition was not

filed until August 6, 2018. Prelim. Resp. 2 (citing Ex. 2003, 1). According to Patent Owner, “the Federal Circuit has repeatedly refused to create exceptions to Section 315(b) that are not found in the text of that provision.” *Id.* at 3 (citing *Click-to-Call Techs., LP v. Ingenio, Inc.*, 899 F.3d 1321, 1329–32 (Fed. Cir. 2018) (en banc); *WesternGeco LLC v. ION Geophysical Corp.*, 889 F.3d 1308, 1317–19 (Fed. Cir. 2018)).

Patent Owner also notes that because August 4, 2018, was a Saturday, and the Petition was filed on Monday, August 6, 2018, Petitioner may attempt to excuse its alleged untimeliness by invoking 35 U.S.C. § 21(b). *Id.* at 5. Patent Owner asserts that such an argument “should be rejected because Section 21(b)’s general standard must yield to Section 315(b)’s specific jurisdictional limitations.” *Id.* at 5. According to Patent Owner, § 21(b) “provides a general rule that allows parties to take certain actions (*e.g.*, paying fees) on the next business day when a deadline falls on a weekend or holiday,” while § 315(b) “is a specific jurisdictional limitation, requiring that *inter partes* review petitions be filed no more than one year after service of a complaint and barring the PTO from instituting *inter partes* review unless that timeliness precondition is satisfied.” *Id.* at 6 (citing 35 U.S.C. §§ 21(b), 315(b)).

Patent Owner further argues that “[b]ecause ‘Congress demonstrated that it knew how to provide an exception to the time bar’ in Section 315(b), Congress’s intentional decision to limit that exception to certain joinder decisions of the PTO Director and nothing else, should foreclose any further exceptions.” *Id.* at 7 (citing *Click-to-Call*, 899 F.3d at 1331). Patent Owner asserts that “Section 315(b)’s unqualified reference to ‘1 year’ must mean

365 days—without exception—not 365 *business* days or 365 days *unless the last day is a weekend or holiday.*” *Id.* at 8 (citing 35 U.S.C. § 315(b); *Reid v. Universal Mar. Serv. Corp.*, 41 F.3d 200, 201-03 (4th Cir. 1994) (Wilkinson, J.)).

In addition, Patent Owner argues that “Section 21(b) was intended to apply to deadlines falling on days the PTO is ‘not [able] to receive papers,’ which in 1952 included Saturdays, Sundays and legal holidays,” but “with the advent of electronic filing, the PTO is effectively *never* closed for business.” *Id.* at 9 (citing *Ferwerda v. Coakwell*, 121 F. Supp. 334, 336 (N.D. Ohio 1953), *aff’d*, 220 F.2d 752, 752–53 (6th Cir. 1955)). Thus, Patent Owner contends that Petitioner *could have* filed its Petition on Saturday, August 4, 2018, but made the “deliberate and imprudent choice” not to do so. *Id.*; *see also* Sur-Reply 4 (“[N]othing prevented [Petitioner] from filing its petitions on Section 315(b)’s Saturday Deadline ‘given that filings with the Board may be made electronically . . . twenty-four hours a day and seven days a week.’”) (citing *Olympus Am., Inc. v. Perfect Surgical Techs., Inc.*, Case IPR2014-00233, slip op. at 42–43 (PTAB 2015) (Paper 56)).

In its Reply to Patent Owner’s Preliminary Response, Petitioner does rely on § 21(b) in asserting that its Petition was filed timely. Reply 1. Specifically, Petitioner notes that § 21(b) provides:

(b) When the day, or the last day, for taking any action or paying any fee in the United States Patent and Trademark Office falls on Saturday, Sunday, or a Federal holiday within the District of Columbia, the action may be taken, or the fee paid, on the next succeeding secular or business day.

Id. (citing 35 U.S.C. § 21(b)). Petitioner argues that “Section 21(b) unambiguously establishes that deadlines ‘for taking any action’ otherwise falling on a weekend or holiday (*e.g.*, through provisions like Section 315(b)) are extended to the first subsequent business day,” and “nothing in Title 35 pertaining to *inter partes* review (IPR) suggests that its provisions are exempt from the effect of Section 21(b).” *Id.* at 2.

Regarding Patent Owner’s argument that the general standard of § 21(b) must yield to the specific jurisdictional limitations of § 315(b), Petitioner contends this “argument is a strawman that unjustifiably suggests the existence of ‘tension’ between Sections 21(b) and 315(b).” *Id.* Instead, Petitioner argues that “[n]o such tension exists” because “Section 21(b) is complementary to deadline-setting provisions such as those found in Section 315(b), which inevitably produce weekend and holiday deadlines of the type addressed by Section 21(b).” *Id.*

Petitioner also argues that various courts and tribunals have held that § 21(b) applies to 35 U.S.C. §§ 102(b), 119(a), 133. *Id.* at 3–4 (citing *ArQule, Inc. v. Kappos*, 793 F. Supp. 2d 214, 220-25 (D.D.C. 2011); *Orion IP, LLC v. Mercedes-Benz USA, LLC*, 485 F. Supp. 2d 745, 746-47 (E.D. Tex. 2007); *Wingrove v. Langen*, 230 U.S.P.Q. 353, 355 (BPAI 1985); *Protein Foundation, Inc. v. Brenner*, 260 F. Supp. 519, 521 (D.D.C. 1966); *Ex parte Olah & Kuhn*, 131 U.S.P.Q. 41, 41-42 (BPAI 1960)). According to Petitioner, “[l]ike Section 315(b), these other statutory deadlines do not mention Section 21(b) expressly—and yet, Section 21(b) has still been held to apply because the deadline relates to ‘an action’ at the Office.” *Id.* at 4 (citing *ArQule*, 793 F. Supp. 2d at 224). Petitioner additionally cites

Samsung Elecs. Co., Ltd., v. ELM 3DS Innovations, LLC, Case IPR2016-00393, slip op. at 4–5 (PTAB June 30, 2016) (Paper 11) as a Board decision interpreting § 315(b) to be covered by § 21(b). *Id.* at 4–5.

As for Patent Owner’s arguments based on the *Click-to-Call* decision, Petitioner argues “[a]pplication of Section 21(b)’s pre-existing statutory grace period to Section 315(b)’s time bar is not the same as erecting a non-statutory exception to 315(b), as was the case in *Click-to-Call*.” *Id.* at 4 (citing *Click-to-Call*, 899 F.3d at 1331).

Last, Petitioner asserts that “neither the Federal Circuit nor the Board has ever held or even suggested that Section 315(b)’s time bar should be excluded from the extensive reach of Section 21(b)’s grace period.” *Id.* at 5.

Patent Owner’s arguments do not persuade us that the Petition was untimely. More specifically, we are not persuaded on the current record that the provisions of § 21(b) should not apply in this situation. Instead, we agree with Petitioner that § 21(b)’s provisions regarding due dates for taking “any action” before the PTO include the timing of filing petitions for *inter partes* review, and nothing in the Patent Act suggests that the filing of such petitions is exempt from the provisions of § 21(b). *See* Reply 2.

Upon considering the parties’ arguments, we also are not persuaded that the *Click-to-Call* decision precludes application of § 21(b) when determining whether a petition is filed timely. In *Click-to-Call*, the court rejected the argument that § 315(b) did not bar institution of a petition filed more than one year after service of a complaint because the complaint was voluntarily dismissed. *See Click-to-Call*, 899 F.3d at 1336 (“[W]e conclude that a defendant served with a complaint as part of a civil action that is

voluntarily dismissed without prejudice remains ‘served’ with the ‘complaint.’”). The *Click-to-Call* decision is limited to these facts and does not support Patent Owner’s contention that any “exceptions” (other than certain joinder decisions) are foreclosed. We agree with Petitioner that the argument rejected in *Click-to-Call* was an attempt to create a non-statutory exception to § 315(b), while § 21(b) creates a statutory grace period that applies to “any action” in the PTO. Contrary to Patent Owner’s contention, this difference is not a “distinction without a difference.” *See* Sur-Reply 2. Rejection of a proposed exception that has no statutory basis is not a reason to preclude application of an otherwise applicable statutory provision.

In addition, we are not persuaded by Patent Owner’s argument that “Section 21(b)’s general standard must yield to Section 315(b)’s specific jurisdictional limitations.” *See* Prelim. Resp. 5. We do not discern these sections as creating conflicting general and specific provisions. Rather, we agree with Petitioner that § 21(b) “is complementary to deadline-setting provisions such as those found in Section 315(b).” *See* Reply 2.

Furthermore, Patent Owner’s argument that § 21(b) should not apply here because the Petition could have been filed electronically on Saturday, August 4, 2018 is not persuasive. Because most, if not all, filings in the PTO now can be made electronically, Patent Owner’s contention would render § 21(b) essentially obsolete. In other words, if § 21(b) does not apply to filing petitions because they can be filed electronically, then § 21(b) would not apply to any action in the PTO that could be accomplished via electronic filing. We decline to conclude that § 21(b) is obsolete.

For the above reasons, we determine that the Petition is not untimely under 35 U.S.C. § 315(b).

D. Asserted Obviousness based on Gemmell, Maddalozzo, and Blouin

Petitioner contends claims 1, 3, 5–7, 16, 18, and 19 are obvious over Gemmell, Maddalozzo, and Blouin. Pet. 27–71. Patent Owner provides arguments addressing this asserted ground of unpatentability. Prelim. Resp. 18–24.

1. Principles of Law

A patent 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 the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved 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 ordinary skill in the art; and (4) when available, 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). We analyze this ground based on obviousness in accordance with the above-stated principles.⁷

⁷ We address the level of ordinary skill in the art in Section III.A., *supra*. The record does not include any evidence of secondary considerations of nonobviousness at this point in the proceeding.

2. *Overview of Gemmell*

Gemmell relates to a computer system having means for displaying output to a user and means for enabling a user to provide input, which includes means for providing tactile feedback to the user. Ex. 1008, 1:34–2:2.⁸ Figure 1 of Gemmell is reproduced below.

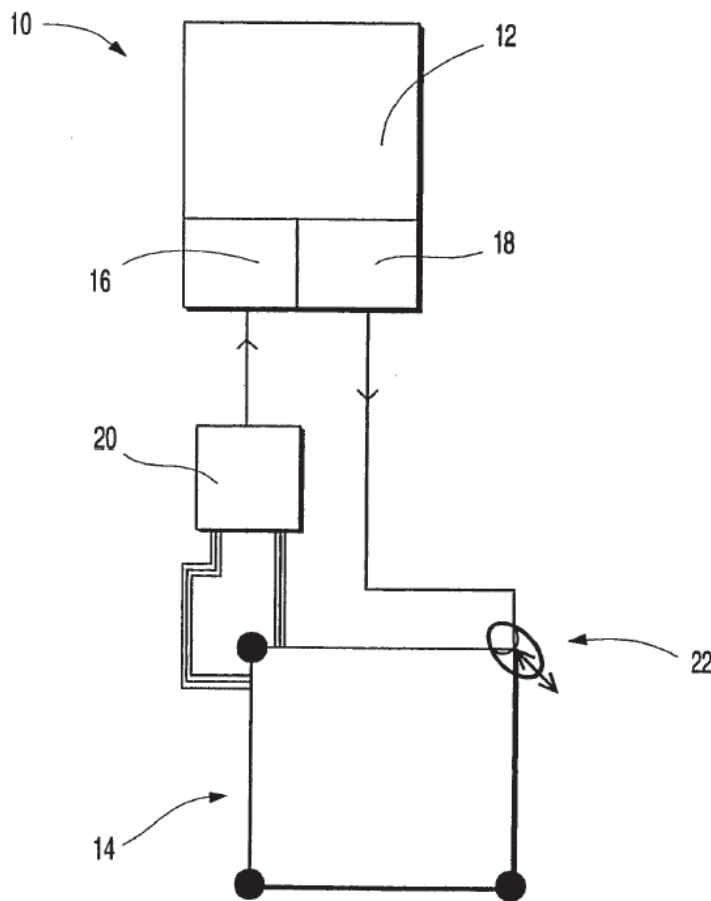


FIG 1

⁸ We follow Petitioner's convention of citing to the page numbers found at the top of the pages in Ex. 1008.

Figure 1 shows a computer system according to a first embodiment. *Id.* at 4:1–2. Computer system 10 includes work station 12 and touch sensitive input means 14. *Id.* at 4:13–15. Touchscreen driver 20 is connected between input means 14 and serial i/o card 16 of work station 12. *Id.* at 4:17–18.

Input means 14 is a touch sensitive transparent plate mounted at three corners and having vibrating mechanism 22 attached to the other corner. *Id.* at 4:20–22. Tactile feedback is provided to a user by selectively vibrating input means 14 according to choices made by the user. *Id.* at 4:31–33.

3. *Overview of Maddalozzo*

Maddalozzo discloses computer system 20 that includes system unit 21 and video display 23. Ex. 1009, 3:30–32, Fig. 1. Maddalozzo also discloses merging the display area and a keyboard input area using touchscreen technology. *Id.* at 5:40–42. That is, the touch screen display displays a translucent keyboard when a user places his or her hands over a portion of the display, such that the text or graphics displayed on the display will still be seen through the keyboard. *Id.* at 5:42–46.

4. *Overview of Blouin*

Blouin relates to touchpads or touch screens that provide a tactile feedback to the user. Ex. 1010, 1:5–7. Figure 2 of Blouin is reproduced below.

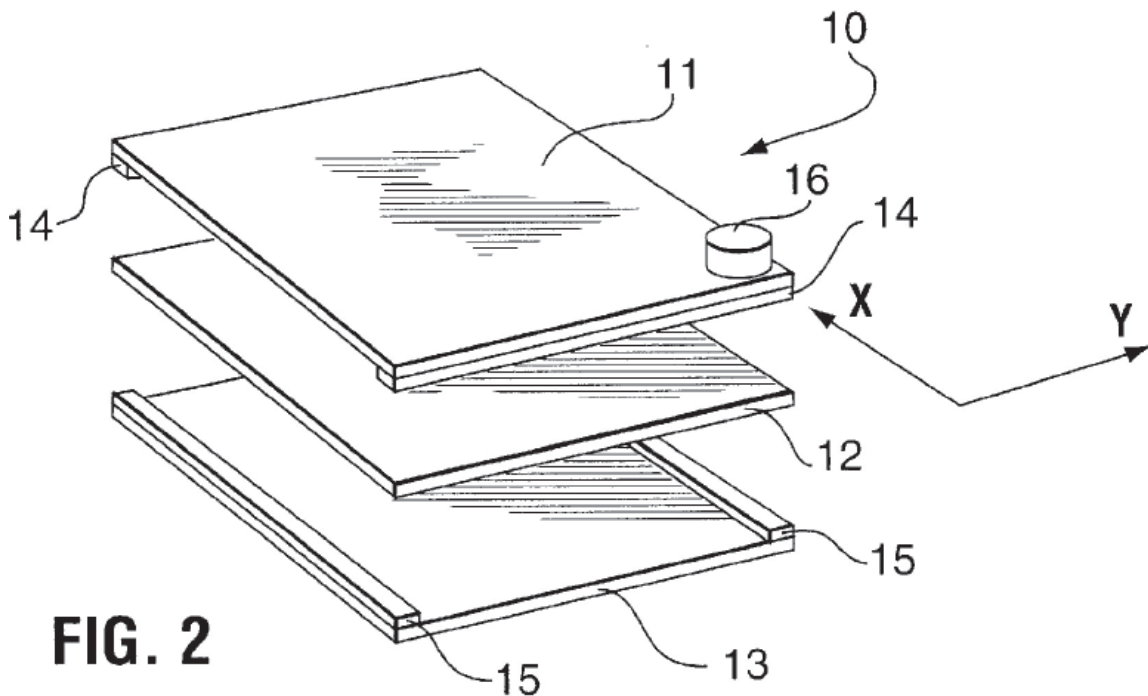


Figure 2 shows a touch screen having a vibrator fixed thereto to achieve tactile feedback. *Id.* at 2:13–14. Touch screen 10 includes top layer 11, spacer 12, and bottom layer 13. *Id.* at 2:57–59. A pair of bus bars 14 measure the voltage gradient in the x-direction, and a pair of bus bars 15 measure the voltage gradient in the y-direction. *Id.* at 2:59–62. Vibrator 16 is fixed to top layer 11 so as to impart a vibration to touch screen 10. *Id.* at 2:67–3:4. CPU 3 (shown in Figure 1) controls the pulse width and amplitude of the mechanical vibrations produced by vibrator 16. *Id.* at 3:24–26.

5. *Independent Claim 1*

For independent claim 1, Petitioner contends that the proposed combination of Gemmell, Maddalozzo, and Blouin discloses each of the limitations. Pet. 28–65. To support its arguments, Petitioner identifies certain passages in the cited references and explains the significance of each

passage with respect to the corresponding claim limitation. *Id.* We have reviewed Petitioner’s contentions with respect to the limitations of claim 1 and, at this stage of the proceeding, we agree with Petitioner’s analysis and adopt it as our own for purposes of this Decision.

Patent Owner argues that the challenged claims would not have been obvious in view of Gemmell, Maddalozzo, and Blouin. Prelim. Resp. 18–24. In particular, Patent Owner argues that the combination of Gemmell, Maddalozzo, and Blouin is deficient with respect to the limitation “said position signal representing a location in two dimensions.” *Id.* at 20–24. To support its arguments, Patent Owner relies on the Declaration of Allison Okamura, Ph.D. (Ex. 2001).

Regarding this limitation, Petitioner argues that the Gemmell-Maddalozzo-Blouin combination provides a touch input device in the form of a touch screen that inputs a position signal to a processor of the computer based on the location of the user’s touch. And, as to the additional feature of “said position signal representing a location in two dimensions,” Blouin’s disclosure demonstrates its obviousness in the context of this combination. Pet. 46 (citing Ex. 1003 ¶ 98). Petitioner argues that Blouin’s touch screen 10 includes two bus bars 14 that measure voltage gradient in the x-direction and two bus bars 15 that measure voltage gradient in the y-direction. *Id.* (citing Ex. 1010, 2:57–62, Fig. 2). According to Petitioner, one of ordinary skill in the art would have understood that bus bars 14, 15 would output analog signals including X,Y coordinates corresponding to the location of the user’s touch. *Id.* at 46–47 (citing Ex. 1003 ¶¶ 95–97). Petitioner then argues that “Blouin’s touch controller 2 then converts these analog coordinate signals into a digital X,Y coordinate signal by

‘execut[ing] a predefined series of conversion computations.’” *Id.* at 47 (citing Ex. 1003 ¶¶ 95–97; Ex. 1010, 2:38–46, Fig. 1). Petitioner contends that these disclosures of Blouin render the claim limitation obvious. *Id.* at 47–48 (citing Ex. 1003 ¶ 98).

Patent Owner argues that the signals output by Blouin’s touchpad are not referred to as “Analog X,Y Coordinates,” as denoted in Petitioner’s annotated version of Figure 1 (*see* Pet. 47), and one of ordinary skill in the art would understand the signals from touchpad 1 in the terms used by Blouin: “voltage in the x-direction” and “voltage in the y-direction.” Prelim. Resp. 21 (citing Ex. 2001 ¶ 55). According to Patent Owner, one of ordinary skill in the art “would understand analog voltage signals, on the one hand, and coordinates of a location, on the other, to be different from each other in Blouin,” and, thus, the inputted analog signals of Blouin are not “signals comprising coordinates of a location.” *Id.* at 21–22 (citing Ex. 2001 ¶ 56).

We do not find this argument persuasive. First, the argument relies on Patent Owner’s assertion that “position signal representing a location” should be construed as “signal comprising coordinates of a location,” including Patent Owner’s implication that the coordinates must be two numbers encoded in some (unspecified) digital format. *See* Prelim. Resp. 12–18. We did not adopt this proposed claim construction, however, for the reasons discussed above. *See supra* § III.B. As noted by Petitioner, Blouin discloses that bus bars 14 measure voltage gradient in the x-direction and bus bars 15 measure voltage gradient in the y-direction. Ex. 1010, 2:57–62.

On the current record, we determine that the signals based on the x-direction and y-direction gradients *represents* a location in two dimensions.

Second, we are not persuaded by this argument even if we were to apply Patent Owner's proposed construction. Namely, we are not persuaded that analog voltage signals and coordinates of a location are necessarily different from each other in Blouin. Rather, we find Petitioner's assertion, which is supported by the testimony of Mr. Ward, that the analog signals output by bus bars 14, 15 and based on the measured x-direction and y-direction gradients include X,Y coordinates corresponding to the location of the user's touch. *See* Pet. 46–47 (citing Ex. 1003 ¶¶ 95–97).

Patent Owner also argues that U.S. Patent No. 4,763,356 (“Day”; Ex. 1045), which is relied on by Mr. Ward to explain Blouin's disclosure of analog signals (*see* Ex. 1003 ¶ 96), further exemplifies and confirms the alleged distinction between analog voltage signals and coordinates in Blouin. Prelim. Resp. 22. We have reviewed Patent Owner's description of Day's disclosure and the arguments based thereon, but we do not find these arguments persuasive. Although Day may provide some insight to the state of the art, it does not alter the disclosure of Blouin, which, as discussed above, provides that the analog signals output by bus bars 14, 15 include X,Y coordinates.

Patent Owner does not offer any arguments specifically addressing the remaining limitations of claim 1. We have reviewed Petitioner's contentions with respect to the remaining limitations of claim 1, and determine that the Petition provides the requisite showing, at this stage of the proceeding, that

the combination of Gemmell, Maddalozzo, and Blouin discloses the subject matter of these limitations. *See* Pet. 28–46, 51–65.

For the foregoing reasons, we determine that the information presented in the Petition establishes that there is a reasonable likelihood that Petitioner would prevail in its assertion that claim 1 is unpatentable over the proposed combination of Gemmell, Maddalozzo, and Blouin.

6. *Dependent Claims 3, 5–7, 16, 18, and 19*

Because Petitioner has demonstrated a reasonable likelihood of success in proving that at least one claim of the '846 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See SAS*, 138 S. Ct. at 1359–60; *SAS* Guidance. Further, Patent Owner offers no particular arguments for us to consider at this stage of the proceeding. Therefore, it is not necessary for us to assess every ground raised by Petitioner. Nevertheless, we note that Petitioner provides reasonable and detailed explanations supported by the testimony of Mr. Ward and specific citations to Gemmell, Maddalozzo, and Blouin indicating where in the references the limitations of claims 3, 5–7, 16, 18, and 19 are disclosed. Pet. 65–71. For purposes of this Decision, we adopt Petitioner's analyses of claims 3, 5–7, 16, 18, and 19 as our own. We determine that the information presented in the Petition establishes that there is a reasonable likelihood that Petitioner would prevail in its assertion that claims 3, 5–7, 16, 18, and 19 are unpatentable over the proposed combination of Gemmell, Maddalozzo, and Blouin.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review claims 1, 3, 5–7, 16, 18, and 19 of the '846 patent is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '846 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

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Patent 6,429,846 B2

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