

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SONY COMPUTER ENTERTAINMENT AMERICA LLC,
Petitioner,

v.

APLIX IP HOLDINGS CORPORATION,
Patent Owner.

Case IPR2015-00229
Patent 7,667,692 B2

Before SALLY C. MEDLEY, BRYAN F. MOORE, and
JASON J. CHUNG, *Administrative Patent Judges*.

MOORE, *Administrative Patent Judge*.

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

I. INTRODUCTION

We have jurisdiction to hear this *inter partes* review under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed herein, Petitioner has shown by a preponderance of the evidence that claims 1–3, 5–13, and 15–20 of U.S. Patent No. 7,667,692 B2 are unpatentable.

A. Procedural History

Petitioner, Sony Computer Entertainment America LLC, filed a Petition requesting an *inter partes* review of claims 1–3, 5–13, and 15–20 of U.S. Patent No. 7,667,692 B2 (Ex. 1001, “the ’692 patent”). Paper 2 (“Pet.”). Patent Owner, Aplix Holdings Corporation, filed a Preliminary Response. Paper 14 (“Prelim. Resp.”). Upon consideration of the Petition and Preliminary Response, on May 29, 2015, we instituted an *inter partes* review of claims 1–3, 5–13, and 15–20, pursuant to 35 U.S.C. § 314. Paper 15 (“Dec.”).

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 18 (“PO Resp.”)) and Petitioner filed a Reply (Paper 24 (“Pet. Reply”)).

Patent Owner filed a Motion for Observations (Paper 29) and Petitioner filed a Response to the Observations (Paper 33).

An oral hearing was held on January 19, 2016, and a transcript of the hearing is included in the record (Paper 35 (“Tr.”)).

B. Related Proceedings

The ’692 patent is involved in the following lawsuit: *Aplix IP Holdings Corp. v. Sony Computer Entertainment, Inc.*, No. 1:14-cv-12745 (MLW) (D. Mass.). Pet. 59.

C. The ’692 Patent

The ’692 patent relates to hand-held electronic devices, such as cell phones, personal digital assistants (“PDAs”), pocket personal computers, smart phones, hand-held game devices, bar-code readers, and remote controls having a keypad or one or more input elements. Ex. 1001, 1:15–21. The hand-held device includes, on one surface, one or more software

configurable input elements that can be manipulated by a user's thumb(s) or stylus, and on the other surface, one or more software configurable selection elements that can be manipulated by a user's finger(s). *Id.* at Abstract.

D. Illustrative Claim

Of the challenged claims, claims 1 and 12 are the only independent claims. Claims 2, 3, 5–11, and 20 depend either directly or indirectly from claim 1 and claims 13, and 15–19 depend either directly or indirectly from claim 12.

Claim 1, reproduced below, is illustrative.

1. A method for configuring a human interface and input system for use with a host hand-held electronic device configured to run applications, wherein at least one of the applications is associated with multiple input functions, the method comprising:

selectively disposing on a first surface of the system a first input assembly having input elements configured to receive input from a human user through manipulation of the input elements, wherein at least one of the input elements of the first input assembly is further configured to map to one or more of the input functions associated with a selected one of the applications;

disposing on a second surface a second input assembly having one or more input elements configured to be manipulated by one or more of the human user's fingers, wherein at least one of the input elements of the second input assembly is further configured to selectively map to one or more of the input functions associated with the selected application; and

selectively arranging the first input assembly and the second input assembly in substantial opposition to each other.

Ex. 1001, 15:33–55.

E. Grounds of Unpatentability

We instituted an *inter partes* review of claims 1–3, 5–13, and 15–20 on the following grounds:

Claims	Basis	References
1–3 and 5–10	§ 103(a)	Liebenow ¹ and Armstrong ²
11–13 and 15–20	§ 103(a)	Liebenow and Hedberg ³

II. ANALYSIS

A. Level of Skill of Person in the Art

We find that the level of ordinary skill in the art is reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

B. Claim Interpretation

In an *inter partes* review, we construe claim terms in an unexpired patent according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *see also In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278–79 (Fed. Cir. 2015), *cert. granted sub nom. Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 890 (mem.) (2016). Consistent with the broadest reasonable construction, claim terms are presumed to have their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire

¹ US 2002/0118175 A1 (Aug. 29, 2002) (Ex. 1003).

² US 6,469,691 B1 (Oct. 22, 2002) (Ex. 1004).

³ WO 99/18495 (Apr. 15, 1999) (Ex. 1005).

patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Also, we must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (“limitations are not to be read into the claims from the specification”). However, an inventor may provide a meaning for a term that is different from its ordinary meaning by defining the term in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Petitioner proposes a construction for the claim term “delineated active area.” Pet. 7–8, 22. In our Decision to Institute, we determined that it was not necessary to construe “delineated active area” (claims 3, 5, and 13). Dec. 5. Neither party has indicated that our determination in that regard was improper and we do not perceive any reason or evidence that now compels any deviation from our initial determination. Additionally, no other terms need to be construed explicitly for the purpose of this Decision.

C. Obviousness Over Liebenow and Armstrong

Petitioner contends that claims 1–3 and 5–10 are unpatentable under 35 U.S.C. § 103 based on Liebenow and Armstrong. Pet. 27. To support its contentions, Petitioner provides a detailed showing mapping limitations of claims 1–3 and 5–10 to structures described by Liebenow and Armstrong. Pet. 10–30. Petitioner also relies upon the Declaration of Dr. Gregory F. Welch (Ex. 1008) to support its position. Patent Owner only makes substantive arguments specific to claims 3 and 5.

Liebenow describes an electronic hand-held information appliance having a display disposed on a first surface and an input device disposed on

a second surface opposed to the first surface for inputting information.

Ex. 1003, Abstract. Figure 1 of Liebenow is reproduced below.

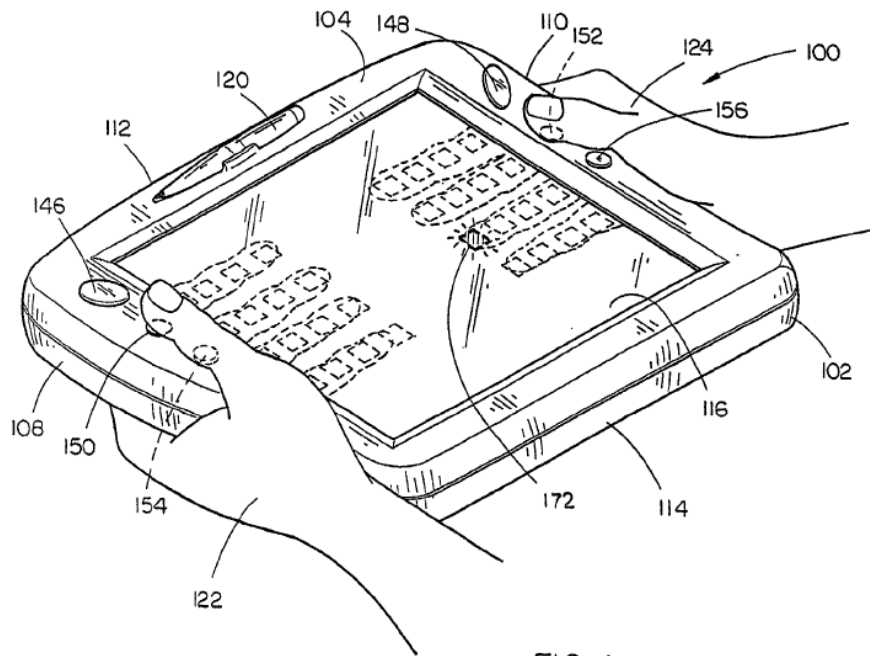


FIG. 1

As shown in Figure 1 of Liebenow, digital information appliance 100 is sized and shaped to be held by a user in both hands. Housing 102 includes front surface 104 and back surface. *Id.* ¶ 25. One or more function keys such as 150, 152, and 154 may be mounted on front surface 104. Display 116 may be a touch-screen for touch or pen input of information and data. *Id.* ¶¶ 26, 33. Figure 5 of Liebenow is reproduced below.

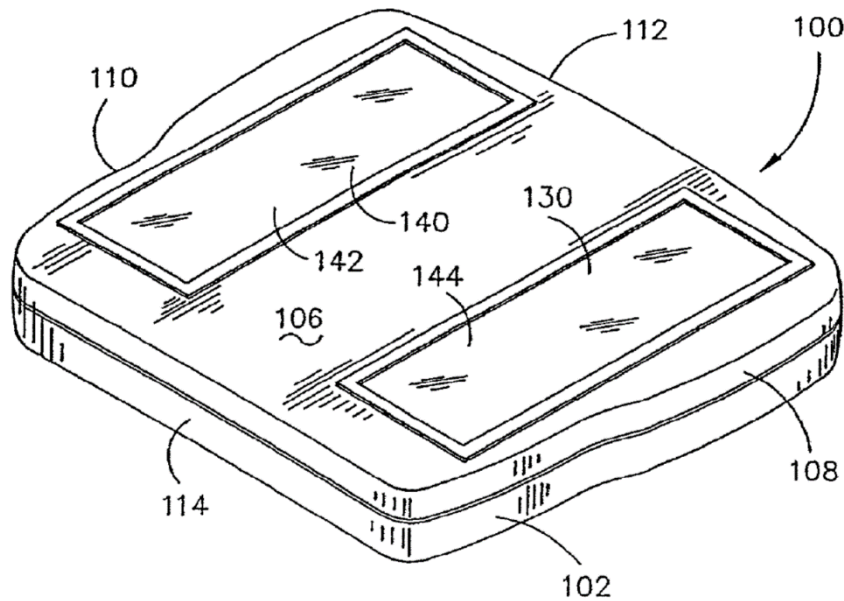


FIG. 5

As shown in Figure 5, back surface may be comprised of one or more touch sensitive panels 140. *Id.* ¶¶ 13, 36. Areas of panel 140 may be defined as keys of a keyboard (emulated as an electromechanical keyboard seen in Figure 2) so that a user touching the panel within such an area would accomplish actuation of a key. *Id.* In particular, panel 140 may be divided into left and right key ranges 142 and 144, such that fingers of a user's left and right hands may be positioned over the touch sensitive panel to be in position for typing. Various key configurations may be defined as desired by the user or as required by the applications executed by the digital information appliance. *Id.*

Armstrong teaches a handheld electronic device, such as a

PDA, with a display and a number of input elements for accepting user inputs. Ex. 1004, 2:5–15, 6:4–16.

*Claim 1*⁴

Claim 1 requires configuring a human interface and input system for use with a host hand-held electronic device configured to run applications, wherein at least one of the applications is associated with multiple input functions. Ex. 1001, 15:34–37. For these limitations, Petitioner contends that Liebenow discloses a hand-held device (Liebenow appliance 100) configured to process an application (Liebenow word processing application) having two or more functions (“Space Bar,” “Ctrl,” “Alt,” and “Shift” functions). Pet. 10–12 (citing Ex. 1003 ¶¶ 25, 34, 36, 44, 48, 56, 60, 66, 69, Figs. 2, 3, 8, 9, 12, 13, 15). We are persuaded by Petitioner’s showing, which we adopt as our own, that Liebenow discloses configuring a human interface and input system for use with a host hand-held electronic device configured to run applications, wherein at least one of the applications is associated with multiple input functions.

⁴ Patent Owner argues that we should not rely on Petitioner’s anticipation arguments to evaluate obviousness, but that we should observe that no evidence has been presented about how any proposed combination of prior art references renders obvious claims 1–3, 5, 7–10, 12, 13, 15–18, and 20. PO Resp. 3–5. We decline to do so. Although Petitioner alleges these claims are unpatentable as obvious, yet appears to present a case of anticipation, we determine that such a presentation is not a basis for dismissing the petition. It is axiomatic patent law that a disclosure that anticipates under 35 U.S.C. § 102 also may render the claim unpatentable under 35 U.S.C. § 103, because anticipation is the epitome of obviousness. *See In re McDaniel*, 293 F.3d 1379, 1385 (Fed. Cir. 2002) (“It is well settled that ‘anticipation is the epitome of obviousness.’” (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983))).

Petitioner also contends that Liebenow describes a first surface of a first input assembly (front surface 104 seen above) having input elements (e.g., 146, 148, 150, etc.) wherein at least one of the input elements of the first input assembly is further configured to map to one or more of the input functions (“Space Bar,” “Ctrl,” “Alt,” and “Shift” functions) associated with a selected one of the applications (word processing application) as recited per claim 1. Pet. 12–14. We are persuaded by Petitioner’s showing, which we adopt as our own, that Liebenow describes selectively disposing on a first surface of the system a first input assembly having input elements configured to receive input from a human user through manipulation of the input elements, wherein at least one of the input elements of the first input assembly is further configured to map to one or more of the input functions associated with a selected one of the applications.

Petitioner further contends with respect to claim 1 that Liebenow discloses a second surface of a second input assembly (Liebenow back surface 106) having one or more input elements configured to be manipulated by one or more of the human user’s fingers (back-surface input device 130) wherein at least one of the input elements of the second input assembly (touch sensitive panels 140) is further configured to map selectively to one or more of the input functions (Fig. 3 input of keys 132 and 134) associated with the selected application (word processing application). Pet. 14–18. We are persuaded by Petitioner’s showing, which we adopt as our own, that Liebenow describes disposing on a second surface a second input assembly having one or more input elements configured to be manipulated by one or more of the human user’s fingers, wherein at least one of the input elements of the second input assembly is further configured

to map selectively to one or more of the input functions associated with the selected application.

Petitioner further contends with respect to claim 1 that Liebenow discloses arranging selectively the first input assembly and the second input assembly in substantial opposition to each other (front surface 104 opposed to Liebenow back surface 106). Pet. 18–19. Based on the record before us, Petitioner has shown by a preponderance of the evidence that Liebenow describes arranging selectively the first input assembly and the second input assembly in substantial opposition to each other.

Claims 2 and 7–10

For claims 2, and 7–10 each of which depends directly from claim 1, Petitioner relies on Liebenow to meet the additional limitations of those claims. Pet. 28–29, 30. We agree with Petitioner’s showing, which we adopt as our own, that Liebenow discloses the additional limitations of claims 2, and 7–10. Patent Owner does not argue these claims separately. PO Resp. 15–25.

Claims 3 and 5

Claim 3 depends directly from claim 1 and includes “selectively disposing the second input assembly to include at least one sensor pad comprising a selectively configurable sensing surface that provides more than one delineated active area based on the selected application.” Ex. 1001, 15:61–66. Claim 5, which depends from dependent claim 3 further includes “selectively arranging the first delineated active area and the second delineated active area based on the user’s hand.” *Id.* at 16:3–5. Petitioner contends with respect to claims 3 and 5 that Liebenow discloses disposing selectively the second input assembly to include at least one sensor pad

(touch sensor 140) comprising a selectively configurable sensing surface (variety of key configurations, Ex. 1003 ¶ 48) that provides more than one delineated active area (a box, circle, etc. displayed over the key representation, Ex. 1003, ¶ 66) based on the selected application. Pet. 20–23.

Patent Owner disagrees that Liebenow discloses selectively configurable sensing surface that *provides* more than one delineated active area *based on the selected application* as required by claim 3. PO Resp. 16–20. In particular, Patent Owner argues that one skilled in the art would not have considered Liebenow to provide more than one delineated active area based on a selected application because the function of such keys are defined at the device or operating system level, and not at the application level. PO Resp. 18. We have considered the testimony to which we are directed in that regard. PO Resp. 18; Ex. 2003 ¶¶ 59–61. Dr. MacLean’s testimony, however, is based on her “view” that the claim language indicates that mapping is specified at the level of the application and not at the device or operating system level, resulting in different applications having different mappings, because, in part, of the use of the word “provides” rather than the word “selects.” Ex. 2003 ¶¶ 57–58. However, neither Patent Owner nor Dr. MacLean explains sufficiently why we should construe claim 3 or claim 5 that way. In particular, there is nothing in claim 3 or claim 5 that suggests how the mapping is specified, much less that the mapping is specified at the level of the application and not at the device or operating system level resulting in different applications having different mappings as asserted. The argument, and Dr. MacLean’s testimony in support of the argument, are

not commensurate in scope with the language of claims 3 and 5, and in any event are conclusory, not supported by record evidence.

For example, Patent Owner has not directed us to where in the '692 patent the language of claim 3 or claim 5 requires us to read into either claim that mapping is specified at the level of the application and not at the device or operating system level. The portion of the Specification of the '692 patent to which the parties direct our attention (PO Resp. 19; Pet. Reply 14) describes that the mapping of input elements to particular input functions for a given software application of “the pressure sensor pad 354 *may* be configured in software to represent one or more delineated active areas corresponding to different programmable functions depending on the application.” Ex. 1001, 9:24–27 (emphasis added). We disagree with Patent Owner that this passage would have indicated to a person of ordinary skill in the art that the selected application must be customized at the application level. The language “*may*” recited in the Specification of the '692 patent (*id.*) is not a special definition; rather, it is permissive such that the pressure sensor pad “*may* be configured” in software. A person of ordinary skill in the art would have understood that the functionality of the selected application may be programmed at the application level or when the hand-held device is manufactured, for example, at the device or operating system level. In any event, as noted above, the claim language does not include any specificity with respect to when or how the device is customized. Based on the record before us, Petitioner has shown by a preponderance of the evidence that Liebenow describes a first input element mapped to at least a first function of the selected application.

Claim 6

Petitioner relies on Armstrong for its description of positioning an input element with a “resilient dome cap(s) for providing tactile feedback to the finger depressing the depressible surface” on a hand-held electronic device. Pet. 28; Ex. 1004, 6:10–14, 9:11–15. Specifically, Petitioner relies on Armstrong’s input elements that provide tactile feedback to meet the limitation of claim 6 to “a palpable detent with at least one input element . . . so as to provide tactile feedback when manipulated by the human user.” Pet. 28–29. Petitioner concludes that one of ordinary skill in the art would have recognized that the hand-held device of Liebenow’s input elements could be replaced with input elements that provide tactile feedback, like Armstrong’s input elements, as a simple substitution of one known element for another known element. Pet. 28–29; Ex. 1008 ¶¶ 39–42. Based on the record before us, Petitioner has shown by a preponderance of the evidence that the combination of Liebenow and Armstrong describe a palpable detent with at least one input element of the first input assembly or the second input assembly so as to provide tactile feedback when manipulated by the human use.

D. Obviousness Over Liebenow and Hedberg

Petitioner contends that claims 11–13, and 15–20 are unpatentable under 35 U.S.C. § 103 based on Liebenow and Hedberg. Pet. 30. To support its contentions, Petitioner provides a detailed showing mapping limitations of claims 11–13, and 15–20 to structures described by Liebenow and Hedberg. *Id.* at 26–27, 30–32. Petitioner also relies upon the Declaration of Dr. Welch (Ex. 1008) to support its position.

Hedberg describes a hand-held display device that includes control buttons 3 on the display connected to control circuits and a gyroscope 6 incorporated in the display device and connected to the control circuits. Ex. 1005, Abstract. The display device is responsive to movements in the space for displaying an image in different magnification and/or in different parts. *Id.* Hedberg describes that an equilibrium of force accelerometer may be used in place of the gyroscope. *Id.* at 3:26–32.

Each of claims 11 and 20 depends directly from claim 1. Each of claims 13 and 15–19 depends directly from independent claim 12.

Analogous Art

We first address whether Hedberg is analogous art. Patent Owner argues that Hedberg is not analogous art because it is neither in the same field of endeavor as the '692 patent nor reasonably pertinent to the particular problem addressed by the '692 inventors. PO Resp. 6–12. We have considered Patent Owner's arguments, but do not find them persuasive.

The test for determining whether a prior art reference constitutes analogous art to the claimed invention is: (1) whether the prior art is from the same field of endeavor, regardless of the problem addressed, or (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. *See In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004).

Patent Owner conflates the two prong analogous art test. In defining the field of invention of the '692 patent, Patent Owner looks to the problems solved by the inventors and argues that the field of endeavor of the '692 patent is ergonomic and versatile data input on a hand-held device. PO

Resp. 12–15. Such a showing is insufficient to establish the field of endeavor.

In determining the field of endeavor, we look to the '692 patent's written description and claims, including the structure and function of the invention. *Bigio*, 381 F.3d at 1326. And, we agree with Petitioner that in defining the field of invention, and in determining the relevance of Hedberg to the obviousness inquiry, here a broad approach should be taken. Pet. Reply 6–7. Indeed, the Supreme Court provided guidance in determining the applicability of a reference's teachings in an obviousness inquiry. In *KSR Int'l Co. v. Teleflex Inc.*, the Court explained that if a feature has been used to improve one device, and a person of ordinary skill in the art would have recognized that it would improve a similar device in that field or another, implementing that feature on the similar device is likely obvious. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).

Here, the appropriate scope of the field of endeavor is hand-held devices with one or more input elements. Ex. 1001, 1:13–19, claim 12. Patent Owner characterizes Hedberg as being in the field of viewing or displaying systems. PO Resp. 12–14. But in arriving at that description, Patent Owner too narrowly characterizes the Hedberg invention. Hedberg is within the field of endeavor because it describes hand-held electronic devices, with one or more input elements. Ex. 1005, Title, 6:34–7:7, 7:15–20, Fig. 5.

Because we find that Hedberg is within the same field of endeavor as the claimed invention, we need not consider Patent Owner's arguments regarding whether Hedberg is reasonably pertinent to the particular problem with which the inventors are involved. PO Resp. 14–15.

Claim 11 and 19

Claims 11 and 19 recite that the hand-held device includes an accelerometer or gyroscope. Petitioner relies on Hedberg for its description of a gyroscope or accelerometer included in a hand-held device. Pet. 30–32. Petitioner concludes that one of ordinary skill in the art would have recognized that the addition of a gyroscope and/or an accelerometer would have increased the ability to control the Liebenow hand-held device. Pet. 31; Ex. 1008 ¶¶ 43–44. Thus, based on the record before us, Petitioner has shown by a preponderance of the evidence that Liebenow describes the limitations of claims 11 and 19.

As to claims 11 and 19⁵, Patent Owner argues that Liebenow and Hedberg should not be combined. PO Resp. 21–24. We have considered Patent Owner’s arguments regarding why Liebenow and Hedberg should not be combined. The arguments are not persuasive. In particular, Patent Owner argues that Hedberg focuses on displaying and viewing on an electronic device and is not concerned with data entry on an electronic device; whereas Patent Owner argues that Liebenow focuses on keyed data entry via a rear keyboard. PO Resp. 21–24. As such, Patent Owner argues, one would not want to incorporate Hedberg’s displaying and viewing that involve panning and zooming into the Liebenow data entry device with indicia displayed on a front-surface display screen. *Id.* Patent Owner, and Patent Owner’s expert Dr. McLean, focus too narrowly on the strict disclosures of the references and why the physical embodiments of the references could not be combined. *See, e.g.*, Ex. 2003 ¶ 76. Patent Owner’s

⁵ Patent Owner makes reference to claim 13 in this section of its Response but makes no arguments directed to claim 13.

arguments are not persuasive. The obviousness inquiry does not ask “whether the references could be physically combined but whether the claimed inventions are rendered obvious by the teachings of the prior art as a whole.” *In re Etter*, 756 F.2d 852, 859 (Fed. Cir. 1985) (en banc); *see also In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (“The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.”)

Based on the record before us, and weighing the evidence, we give substantial weight to Dr. Welch’s testimony that use of inertial sensors such as gyroscopes and accelerometers in handheld devices to enable device motion as input was known at the time of the invention and that using such sensors to control the display of a hand held device would increase the usability of the device. Ex. 1008 ¶¶ 43–44; Ex. 1041. We agree with Petitioner’s showing, which we adopt as our own, that Liebenow in combination with Hedberg discloses a gyroscope or accelerometer as recited in claims 11 and 19 and that adding a gyroscope or accelerometer to the Liebenow device would have been desirable for the reasons provided by Petitioner.

Claim 12

Independent claim 12 is similar in scope to independent claim 1. Petitioner argues these claims collectively, choosing claim 1 as representative and Patent Owner does not present separate arguments regarding claim 12. *See, e.g.*, Pet. 22; PO Resp. 15–25. Petitioner relies on Liebenow to meet the limitations of claim 12. Accordingly, the discussion

above with respect to claim 1 equally applies to claim 12. Thus, based on the record before us, Petitioner has shown by a preponderance of the evidence that Liebenow describes the limitations of claim 12.

Claim 13

Patent Owner's arguments regarding claim 13 are the same as those regarding claim 3 discussed above. PO Resp. 24–25. Thus, for the reasons stated above we are not persuaded by Patent Owner's arguments regarding claim 13.

Claims 15–18 and 20

For claims 15–18, and 20 each of which depends directly from either claim 1 or independent claim 12, Petitioner relies on Liebenow to meet the additional limitations of those claims. Pet. 28–29, 30. We agree with Petitioner's showing, which we adopt as our own, that Liebenow discloses the additional limitations of claims 15–18, and 20. Patent Owner does not argue these claims separately. PO Resp. 15–25.

E. Objective Evidence of Nonobviousness

Factual inquiries for an obviousness determination include secondary considerations based on evaluation and crediting of objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). Notwithstanding what the teachings of the prior art would have suggested to a person of ordinary skill in the art at the time of the claimed invention, the totality of evidence submitted, including objective evidence of nonobviousness, may lead to a conclusion that the claimed invention would not have been obvious to one with ordinary skill in the art. *In re Piasecki*, 745 F.2d 1468, 1471–1472 (Fed. Cir. 1984). Secondary considerations may include any of the following: long-felt but unresolved needs, failure of

others, unexpected results, commercial success, copying, licensing, and praise.

There must be a demonstrated “nexus” between the merits of the claimed invention and the evidence of secondary considerations before that evidence is accorded substantial weight in an obviousness determination. *Simmons Fastener Corp. v. Illinois Tool Works, Inc.*, 739 F.2d 1573, 1575 (Fed. Cir. 1984); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1539 (Fed. Cir. 1983); *see also In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996); *In re Fielder*, 471 F.2d 640, 642 (CCPA 1973). “Nexus” is a legally and factually sufficient connection between the objective evidence and the claimed invention, such that the objective evidence should be considered in determining nonobviousness. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988). In the absence of an established nexus with the claimed invention, secondary consideration factors such as commercial success, satisfaction of a long-felt but unresolved need, licensing and copying by others are not entitled to much, if any, weight and generally have no bearing on the legal issue of obviousness. *See In re Vamco Machine & Tool, Inc.*, 752 F.2d 1564, 1577 (Fed. Cir. 1985).

The burden of showing that there is a nexus lies with the Patent Owner. *Id.*; *see In re Paulsen*, 30 F.3d at 1482.

Patent Owner argues that secondary considerations show that the ’692 patent claims are not obvious. PO Resp. 25–28. In particular, Patent Owner argues that Petitioner has not pointed to a prior art reference meeting the limitations of the challenged claims. *Id.* at 26. Patent Owner’s argument is misplaced insofar as an inquiry into secondary considerations is concerned, and in any event, has been addressed. As explained above, Liebenow in

combination with Armstrong or Hedberg meet the limitations of the challenged claims.

Patent Owner also cites cases regarding “failed attempts by others.” PO Resp. 27–28. Patent Owner does not present any substantive argument regarding this issue.

Conclusion

We have considered the entirety of the evidence before us submitted by Patent Owner as indicia of nonobviousness. On balance, the evidence of obviousness outweighs the evidence of nonobviousness, with respect to the challenged claims. The evidence of obviousness is strong and the evidence of nonobviousness is weak, for the reasons discussed above. All of Patent Owner’s arguments have been considered. Petitioner has proved, by a preponderance of the evidence that claims 1–3 and 5–10 are unpatentable over the combination of Liebenow and Armstrong and claims 11–13 and 15–20 are unpatentable over the combination of Liebenow and Hedberg.

III. CONCLUSION

Based on the evidence and arguments, Petitioner has demonstrated by a preponderance of the evidence that claims 1–3 and 5–10 of the ’692 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Liebenow and Armstrong and claims 11–13 and 15–20 are unpatentable under 35 U.S.C. § 103(a) as obvious over Liebenow and Hedberg.

IV. ORDER

In consideration of the foregoing, it is

ORDERED that claims 1–3, 5–13, and 15–20 of the '692 patent are held 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.

For Petitioner:

Eric A. Buresh
eric.buresh@eriseip.com

Abran J. Kean
abran.kean@eriseip.com

For Patent Owner:

Michael Mauriel
mmauriel@mkwllp.com

Robert J. Gilbertson
BGilbertson@GreeneEspel.com

Sybil L. Dunlop
SDunlop@greeneespel.com

X. Kevin Zhao
kzhao@greeneespel.com

Sherman W. Kahn
skahn@mkwllp.com