

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DELL TECHNOLOGIES INC., DELL INC., HP INC.,
ASUSTEK COMPUTER INC., and ASUS GLOBAL PTE. LTD.,
Petitioner,

v.

LITL LLC,
Patent Owner.

IPR2024-00481
Patent 9,563,229 B2

Before GARTH D. BAER, BRIAN D. RANGE, and DAVID COTTA,
Administrative Patent Judges.

RANGE, *Administrative Patent Judge.*

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

I. INTRODUCTION

Dell Technologies Inc., Dell Inc., HP Inc., ASUSTeK Computer Inc., and Asus Global Pte. Ltd. (collectively, “Petitioner”) filed a Petition requesting *inter partes* review of claims 12, 14, and 16–18 of U.S. Patent No. 9,563,229 B2 (Ex. 1001, “the ’229 patent”). Paper 1 (“Pet.”).¹ LiTL LLC (“Patent Owner”) filed a Preliminary Response. Paper 11 (“Prelim. Resp.”).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the petition “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Upon consideration of the Petition in view of the present record and for the reasons explained below, we determine that Petitioner has not shown a reasonable likelihood of prevailing with respect to at least one of the challenged claims. Accordingly, we do not institute an *inter partes* review on the grounds set forth in the Petition. *See* 37 C.F.R. § 42.108(a).

II. BACKGROUND

A. Related Matters

The parties identify four district court cases that involve the ’229 patent: *LiTL LLC v. Dell Technologies Inc. and Dell Inc.*, No. 1:23-cv-00121-RGA (D. Del.); *LiTL LLC v. HP Inc.*, No. 1:23-cv-00120-RGA (D. Del.); *LiTL LLC v. ASUSTeK Computer Inc., et al.*, No. 1:23-cv-00122-RGA

¹ Petitioner refers to this as “Petition 2.” *See* Paper 7 (Petitioner’s Notice Ranking Petitions and Explaining Material Differences between Petitions”), 1–2.

(D. Del.); and *LiTL LLC v. Lenovo (United States), Inc. et al.*, No. 1:20-cv-00689 (D. Del.). Pet. at xv; Paper 9, 2.

Patent Owner also identifies the following proceedings that challenge the '229 patent or related patents: IPR2021-00681; IPR2021-00800; IPR2021-00822; IPR2021-00786; IPR2021-00821; IPR2024-00404; IPR2024-00480; IPR2021-01011; IPR2024-00454; IPR2024-00455; IPR2024-00456; IPR2024-00457; IPR2024-00458; IPR2024-00532. Paper 9, 1–2. Patent Owner also indicates that patents related to the '229 patent were subject to the following reexamination proceedings: 90/015,035; 90/015,025; 90/014,965; and 90/014,958. *Id.*

B. The '229 patent

The '229 patent is titled “Portable Computer with Multiple Display Configurations.” Ex. 1001, code (54). The '229 patent describes a portable computer that is configurable between a plurality of display modes including a laptop mode and an easel mode. *Id.* at code (57). The portable computer includes a hinge that allows the display to be rotated about an axis along an interface between the display and the base to configure the portable computer between a closed position, laptop mode, and easel mode. *Id.*

Figure 1 of the '229 patent, reproduced below, illustrates a portable computer in a “laptop” configuration. *Id.* at 4:57–59.

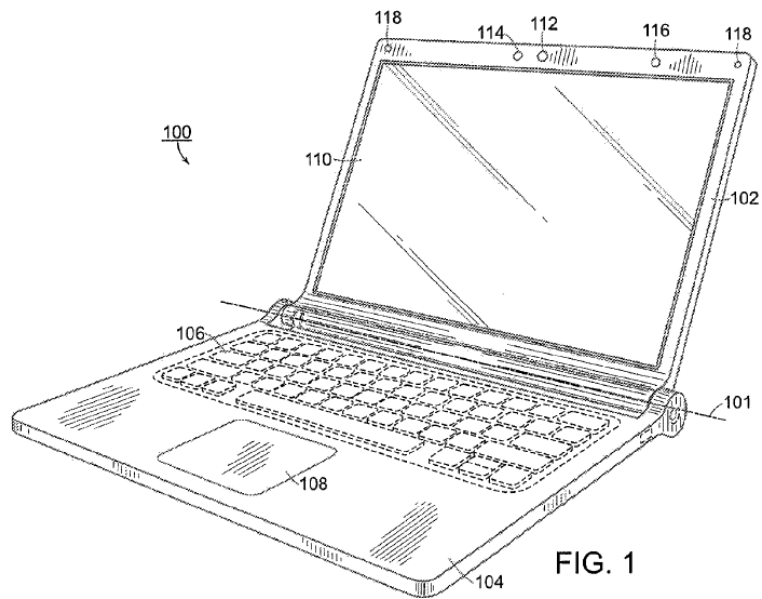


Figure 1 illustrates an example of a portable computer. *Id.* at 6:48–49.

Portable computer 100 illustrated in Figure 1 includes a display component 102 and a base 104. *Id.* at 6:49–52. The display component 102 is pivotably coupled to the base 104 by a hinge assembly that allows rotating the display component about a longitudinal axis 101 running along an interface between the display component and base. *Id.* at 6:52–63.

Figure 4 of the '229 patent, reproduced below, illustrates a portable computer in an “easel” configuration. *Id.* at 4:64–65.

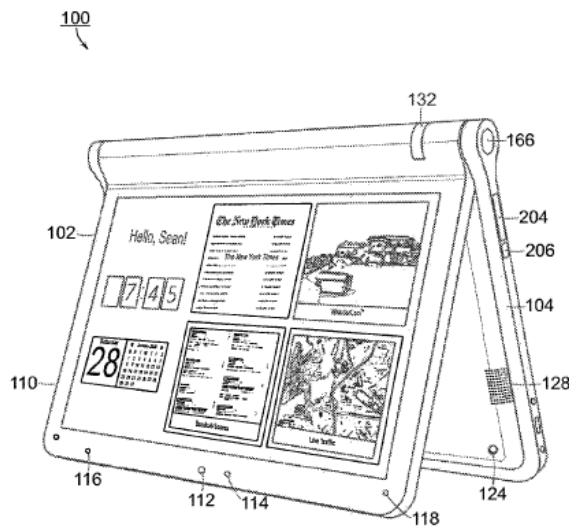


FIG. 4

Figure 4 illustrates portable computer 100 configured into an easel mode. *Id.* at 8:5–6.

Portable computer 100 illustrated in Figure 4 includes a display component 102 and a base 104. *Id.* at 8:6–9. The portable computer 100 is converted from a laptop mode to an easel mode by folding away from the base 104, in the same direction as to open the computer such that the base 104 and the display component 102 form an inverted “V” shape. *Id.* at 8:6–15.

Figure 7A of the ’229 patent, reproduced below, illustrates a portion of a portable computer in the laptop configuration. *Id.* at 5:3–5.

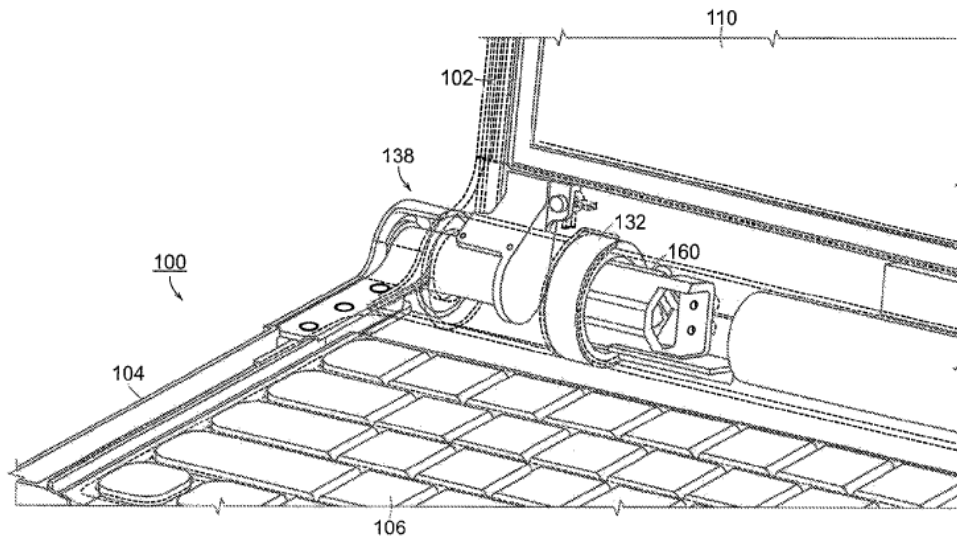


FIG. 7A

Figure 7A illustrates a portion of portable computer 100 and a hinge assembly 138. *Id.* at 9:46–48.

Portable computer 100 in Figure 7A includes a display component, 102, base 104, and a hinge assembly 138 that allows the portable computer to be configured into either a laptop or easel mode. *Id.* at 9:46–50. The hinge assembly 138 accommodates 0–320 degrees of rotation. *Id.* at 9:51–53.

The portable computer 100 also includes an orientation sensor that is configured to detect a relative orientation of the display component 102 and base 104. *Id.* at 9:58–61. The orientation sensor may be an accelerometer and may be incorporated into the base 104 or hinge assembly 138. *Id.* at 9:61–65. The orientation sensor may translate movement of the hinge into information about the relative orientation of the display component and base. *Id.* at 9:65–10:2.

C. Illustrative Claims

Challenged claims 12, 16, and 18 are independent claims. The other challenged claims (claims 14 and 17) depend from claims 12 and 16, respectively. *See* Ex. 1001, 19:10–64, 20:5–7, 20:15–22:6.

Claim 18 (with Petitioner’s identifiers of claim elements, *see* Pet. 21–44) is reproduced below.

18. [18pre] A portable computer configurable between a plurality of display modes including at least a laptop mode, a frame mode, and an easel mode, the portable computer comprising:

[18a] a display component;

[18b] a base;

[18c] an accelerometer configured to generate orientation information indicative of a current mode of operation;

[18d] a display manager configured to display computer content on the display component and vary the computer content displayed responsive to the orientation information indicating a transition between at least the laptop and easel modes, wherein the display manager is further configured to enlarge the computer content displayed on the display component responsive to a transition from the laptop mode to the easel mode;

[18e] an interface between the display component and the base defining a longitudinal axis running along the display component and the base about which the display component and the base are rotatable;

[18f] wherein the interface is constructed and arranged such that rotating either the display component or the base about the longitudinal axis up to approximately 180 degrees from a closed mode configures the portable computer into a laptop mode, wherein in the laptop mode the display component is oriented towards an operator and a keyboard

disposed within the base is oriented to receive input from the operator;

[18g] wherein the interface is constructed and arranged such that rotating either the display component or the base about the longitudinal axis beyond approximately 270 degrees from the closed mode transitions the portable computer for viewing in the frame mode or the easel mode, wherein during operation in the frame mode the display component is positioned toward the operator, the base contacts a substantially horizontal surface, and the keyboard is directed towards the substantially horizontal surface, and wherein during operation in the easel mode the display component is oriented facing the operator with the keyboard oriented away from the operator; and

[18h] wherein the portable computer is configured to detect a transition to at least one of the easel mode and the frame mode based on the orientation information, automatically determine a display orientation of content, and disable the keyboard in response to detecting the portable computer is in the frame mode.

Ex. 1001, 20:65–22:6.

D. Asserted Grounds of Unpatentability

Petitioner, supported by the declaration of Andrew Wolfe, Ph.D. (Ex. 1003), asserts the following grounds of unpatentability (Pet. 1):²

Claims Challenged	35 U.S.C. §	References/Basis
12, 14, 18	103(a)	Lane ³ , Fujinawa ⁴

² The relevant sections of the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, took effect on March 16, 2013. The ’229 patent was filed before this date. *See* Ex. 1001, code (22). For the purposes of this Decision, pre-AIA statutes apply.

³ Lane, WO 1995/24007 A1, publ. Sept. 8, 1995 (Ex. 1005 (“Lane”)).

⁴ Fujinawa, JP 2006-243137 A, publ. Sept. 14, 2006 (Ex. 1007 (“Fujinawa”)).

Claims Challenged	35 U.S.C. §	References/Basis
16, 17	103(a)	Lane, Fujinawa, Tonouchi ⁵
12, 14, 18	103(a)	Lane, Fujinawa, MIT ⁶ /Wehrenberg ⁷
16, 17	103(a)	Lane, Fujinawa, Tonouchi, MIT/Wehrenberg

III. ANALYSIS

A. *Legal Standard*

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 in evidence, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. *Level of Ordinary Skill in the Art*

In order to determine whether an invention would have been obvious at the time the application was filed, we consider the level of ordinary skill

⁵ Tonouchi et al., US 2005/0122318 A1, publ. June 9, 2005 (Ex. 1008 (“Tonouchi”)).

⁶ Ricciuti, *The \$100 Laptop Moves Closer to Reality*, C|Net, publ. Sept. 28, 2005 (Ex. 1048 (“MIT”)).

⁷ Wehrenberg et al., US 7,688,306, issued Mar. 30, 2010 (Ex. 1023 (“Wehrenbrg”)).

in the pertinent art at the critical time. *Graham*, 383 U.S. at 17. The resolution of this question is important because it allows us to “maintain[] objectivity in the obviousness inquiry.” *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991). In assessing the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (quotation omitted). Generally, it is easier to establish obviousness under a higher level of ordinary skill in the art. *Innovation Toys, LLC v. MGA Entm’t, Inc.*, 637 F.3d 1314, 1323 (Fed. Cir. 2011) (“A less sophisticated level of skill generally favors a determination of nonobviousness . . . while a higher level of skill favors the reverse.”).

Petitioner asserts that a person of ordinary skill in the art (POSITA) would have had (i) a bachelor’s degree (or equivalent) in electrical engineering, computer engineering, computer science, or a comparable subject and two to three years of experience in the design and architecture of laptop computers and other portable electronic devices, or (ii) an advanced degree (or equivalent) in electrical engineering, computer engineering, computer science, or a comparable subject and one year of post-graduate research or work experience in the field. Ex. 1003, ¶102. A POSITA would have been familiar with the structural hardware aspects of laptop computers and other portable electronic devices as well as designs of user interfaces employed and displayed by computer operating systems and their organization of content and functionality. *Id.*

Pet. 10–11. Patent Owner does not dispute the level of ordinary skill in the art. Prelim. Resp. 18.

For this Decision, we adopt Petitioner’s proposal as reasonable and consistent with the level of skill reflected in both the prior art and the ’229 patent. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art may reflect an appropriate level of skill in the art).

C. Claim Construction

In an *inter partes* review proceeding based on a petition filed on or after November 13, 2018, a patent claim shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b) (as amended Oct. 11, 2018). This rule adopts the same claim construction standard used by Article III federal courts, which follow *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc), and its progeny. Under this standard, the words of a claim are generally given their “ordinary and customary meaning,” which is the meaning the term would have to a person of ordinary skill at the time of the invention, in the context of the entire patent including the specification. *See Phillips*, 415 F.3d at 1312–13.

Petitioner proposes constructions for the following claim terms:

- “accelerometer”
- “means for rotating the display component relative to the base”

Pet. 11–13.

At this stage of the proceeding, Patent Owner does not propose that the Board explicitly construe any claim terms. Prelim. Resp. 18.

For this decision, we do not discern a need to construe explicitly any claim language because doing so would have no effect on our analysis below and will not assist in resolving the present controversy between the parties. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019)

(“The Board is required to construe ‘only those terms . . . that are in controversy, and only 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)).

D. Overview of the Asserted Art

1. *Lane (Exhibit 1005)*

Lane is titled “Modular, Reconfigurable Devices.” Ex. 1005, code (54). Lane describes a system adapted to rotate about two adjacent, parallel axes permitting components to be positioned throughout approximately 0-360 degrees. *Id.* at code (57).

Figure 1 of Lane, reproduced below, illustrates a modular device in a nominally “open” position. *Id.* at 3:31–34.

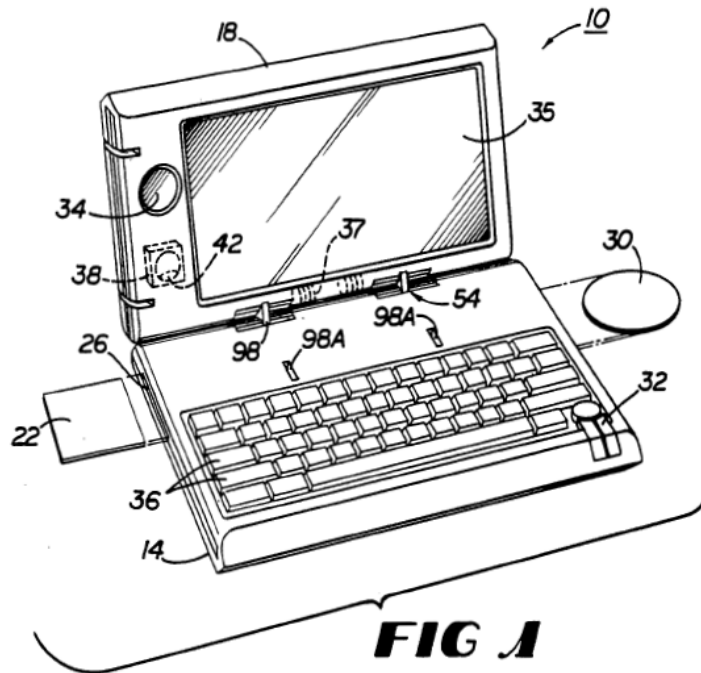


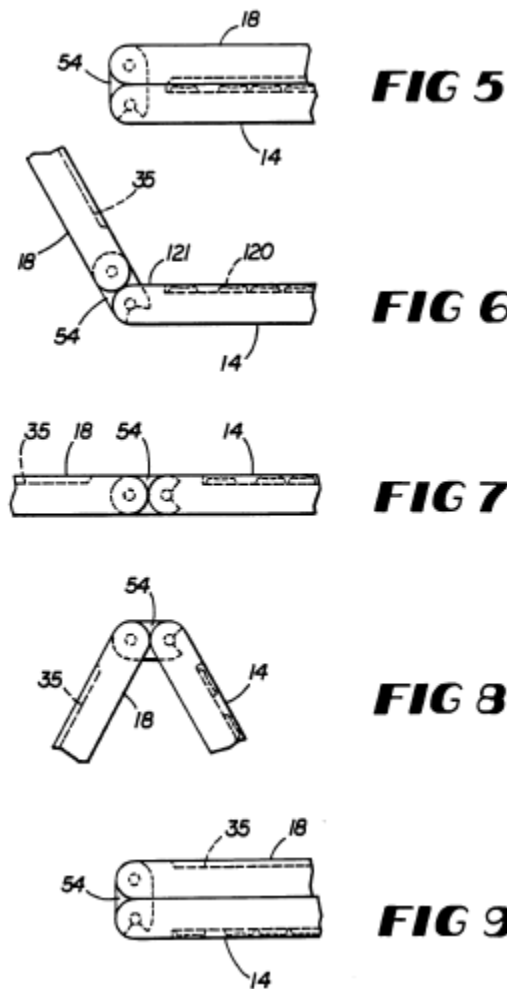
Figure 1 illustrates a module device in the open position. *Id.* at 3:31–34.

The modular device illustrated in Figure 1 includes a keyboard 14, a

display 18, and torque-generating device 37. *Id.* at 5:4–6. The torque-generating device 37 is designed to retain the display 18 in a selected position relative to the keyboard 14 when the modular device is in use. *Id.* at 5:19–22.

The modular device in Figure 1 also includes a position-indicating mechanism 38. *Id.* at 5:23–25. The position-indicating mechanism 38 includes a “moveable conductor 42 (such as liquid mercury) in a spherical cavity 46 having contacts 50 spaced above its periphery.” *Id.* at 5:25–27. The position-indicating mechanism 38 indicates the spatial orientation of the module and assists in determining “whether the information to appear on visual display 35 should be in ‘landscape’ or ‘portrait’ position.” *Id.* at 5:35–6:3.

Figures 5–9 of Lane, reproduced below, illustrate side cross-sectional views of the device of Figure 1. *Id.* at 4:5–8.



Figures 5–9 show device 10 in various configurations. *Id.* at 7:30–32.

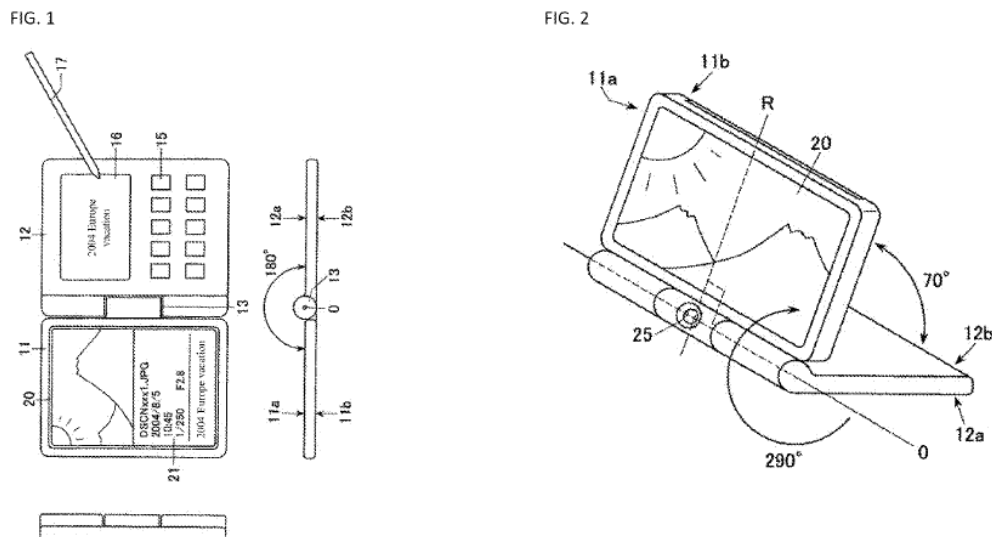
Figures 5–9 each illustrate a cross-sectional view of device 10, including first and second modules 14 and 18, and connector 54 attaching the first and second modules. *Id.* at 7:30–37. Figure 5, for example, shows an unrotated or “nominally closed” view of the device. *Id.* at 7:32–35. Figure 6 illustrates “second module 18 rotated about axis 62 to form an obtuse angle.” *Id.* at 8:2–5. Figure 7 illustrates a configuration where the “second module 18 has been rotated approximately 180° relative to first module 14.” *Id.* at 8:9–12. Figure 8 illustrates rotating the second module 18 to greater

than 270°, and Figure 9 illustrates rotating the second module 18 by approximately 360°. *Id.* at 8:12–19.

2. *Fujinawa (Exhibit 1007)*

Fujinawa is a certified English translation of JP 2006-243137 A, titled “Photo stand.” Ex. 1007, code (54). Fujinawa addresses a problem of reducing power consumption of a photo stand equipped with a display monitor. *Id.* at code (57).

Figures 1 and 2 of Fujinawa, reproduced below, each illustrate a photo stand. *Id.* ¶ 7.



Figures 1 and 2 illustrate a photo stand in a “book mode” and a “frame mode.” *Id.* ¶¶ 8, 12.

The photo stand of Figure 1 includes a liquid crystal display element 20, display part 11, operating part 12, and a hinge 13. *Id.* ¶ 8. The “hinge 13 is opened from a folded state (opening angle of 0 degrees) to approximately 180 degrees.” *Id.* In “book mode,” the photo stand “provides playback display of images” on display element 20. *Id.* ¶ 10. Exif information “is displayed as text in the blank space (code 21 in FIG. 1) in the short edge

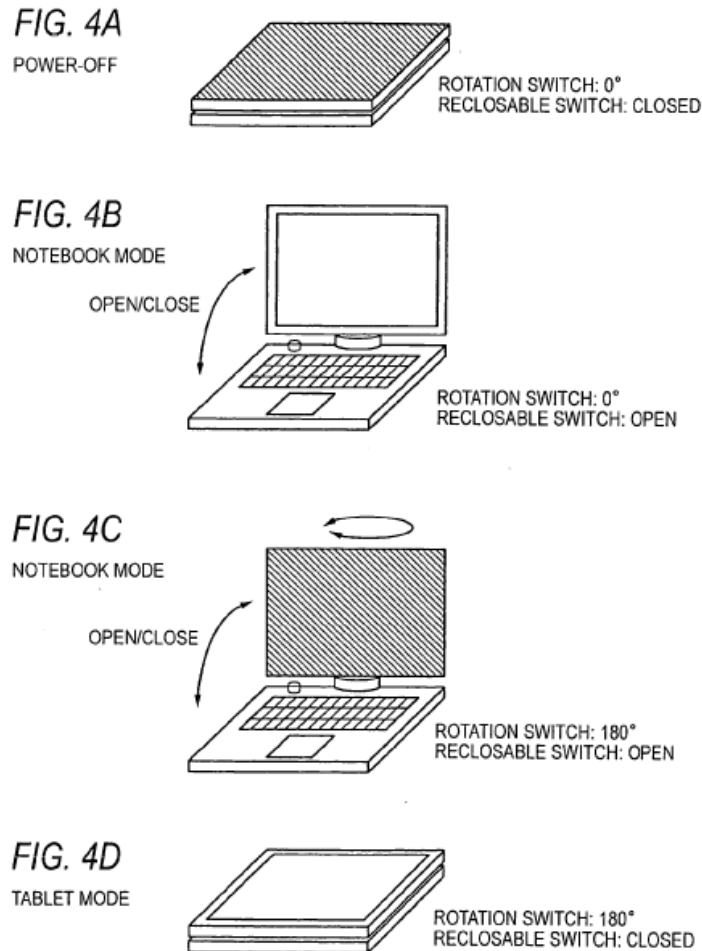
direction (vertical direction) of the playback display image.” *Id.*

The hinge 13 of Figure 2 “is opened from a folded state to approximately 290 degrees” and the operating part 12 “is faced down and placed on a flat surface.” *Id.* ¶ 12. “Text display of the Exif information is omitted and the display size of the playback display image is larger” than while in book mode. *Id.* ¶ 14.

3. *Tonouchi (Exhibit 1008)*

Tonouchi is titled “Data Processing Device.” Ex. 1008, code (54). Tonouchi describes a data processing device that includes multiple input modes and is capable of determining whether the device is in a notebook mode or a tablet mode. *Id.* at code (57). Tonouchi’s data processing device includes a screen display, reclosable switch, rotation switch, keyboard, and a touch-pad. *Id.* ¶ 25.

Figures 4A–4D of Tonouchi, reproduced below, illustrates diagrams showing switching between modes. *Id.* ¶ 21.



Figures 4A–4D show mode switching. *Id.* ¶ 30.

Figure 4A shows a data processing device in a power-off state where the screen 101 is folded as to face the keyboard 106 and touch-pad 108. *Id.* ¶ 30. Figure 4B depicts the device in a “notebook mode.” *Id.* Figure 4D depicts the device in a “tablet mode” after display 101 is rotated about its reclosable section by 180 degrees and then closed such that the surface opposite the screen faces the keyboard 106 and touch-pad 108. *Id.*

4. *MIT (Exhibit 1048)*

MIT is an Internet Archive webpage titled “The \$100 laptop moves closer to reality.” Ex. 1048, 1. MIT describes a “windup-powered laptop targeted at children in developing nations.” *Id.*

5. *Wehrenberg (Exhibit 1023)*

Wehrenberg is titled “Methods and Apparatuses for Operating a Portable Device Based on an Accelerometer.” Ex. 1023, code (54). Wehrenberg describes attaching an accelerometer to a portable device to detect movement of the portable device. *Id.* at code (57).

E. Unpatentability Grounds

1. *Unpatentability over Lane and Fujinawa (Ground 1)*

Petitioner asserts that claims 12, 14, and 18 are unpatentable under 35 U.S.C. § 103(a) as obvious over Lane in view of Fujinawa, citing the Declaration of Dr. Wolfe for support. Pet. 21–44 (citing Ex. 1003 ¶¶ 153–212). Claims 12 and 18 are independent. Petitioner first focuses on claim 18 (Pet. 21), so we also first focus on claim 18.

Claim 18. Claim 18 recites, in its preamble, “[a] portable computer configurable between a plurality of display modes including at least a laptop mode, a frame mode, and an easel mode.” Ex. 1001, 20:65–67. Claim 18 also recites an accelerometer (which Petitioner labels element [1c]):

[18c] an accelerometer configured to generate orientation information indicative of a current mode of operation;

Id. at 21:3–4.

Petitioner argues that Lane teaches this claim limitation. Pet. 26–29 (citing Ex. 1005, 5:23–6:6, Fig. 29; Ex. 1003 ¶¶ 168–182; Ex. 1027, 6:10–12; Ex. 1026, 3:14–16; Ex. 1028 ¶ 30; Ex. 1029, 1:15–19; Ex. 1024, 1:34–36). In particular, Petitioner persuasively establishes that Lane teaches a position-indicating mechanism 38 which, on this record, we find is an accelerometer. *Id.* at 26–27 (citing Ex. 1005, Fig. 29). Petitioner also persuasively establishes that Lane teaches that this accelerometer indicates “the spatial orientation” of the module and helps the Lane device determine whether to display information in landscape or portrait position. *Id.* at 28 (citing Ex. 1005, 5:32–6:6). Petitioner also persuasively establishes that Lane teaches its accelerometer could be positioned in the computer’s base. *Id.* at 28–29 (citing Ex. 1005, 5:35–6:6).

Petitioner argues that an accelerometer located in the base of Lane “would provide *orientation information indicative of a current mode of operation* because it would provide unique orientation information in each of the three claimed modes.” *Id.* at 29 (citing Ex. 1003 ¶ 179). Petitioner explains how the accelerometer would provide information for laptop, frame, and easel modes as follows:

In laptop mode, the *accelerometer* would *generate orientation information* indicating that the keyboard is horizontal and facing up (i.e., *orientation information indicative of laptop mode*). [Ex. 1003 ¶ 179.] In frame mode, the *orientation information* would indicate that the keyboard is horizontal and facing down (i.e., *orientation information indicative of frame mode*). *Id.* In easel mode, the *orientation information* would indicate that the keyboard is facing upward but at a diagonal angle (i.e., *orientation information indicative of easel mode*). *Id.*

Id.

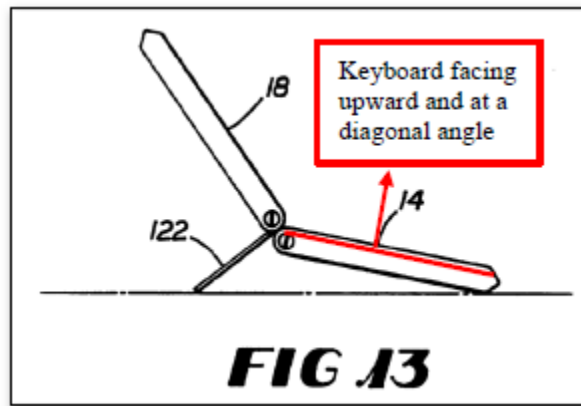
For the reasons explained below, we do not agree with Petitioner that Lane’s orientation information would generate information indicative of a current mode of operation as claim 18 requires. Instead, we agree with Patent Owner that Petitioner has not carried its burden to establish a reasonable likelihood of prevailing in showing that a person of ordinary skill in the art would have, based on the teachings of Lane or other cited art, used an accelerometer that generates orientation information indicative of the current mode of operation. *See* Prelim. Resp. 35–42.

Lane’s accelerometer provides information only on the “spatial orientation” of the first module (keyboard) or second module (screen). Ex. 1005, 5:23–6. “Spatial orientation,” as used in Lane, refers to the orientation of the first or second module relative to the earth’s gravity because Lane teaches that its accelerometer uses a “movable conductor” that “responds via gravitational forces” to reorientation. *Id.* Lane does not teach using the accelerometer to determine the orientation of the first and second modules relative to each other, and Petitioner does not suggest that Lane could be modified to determine the orientation of the first and second modules relative to each other. Rather, Petitioner argues that, for example, a determination that the keyboard is “facing upward but at a diagonal angle” (relative to the earth’s gravity) would be indicative of “easel mode.” Pet. 29.

The spatial orientation of Lane’s keyboard or screen relative to the earth’s gravity, however, does not reliably⁸ indicate the device’s current

⁸ While spatial orientation information could sometimes correspond with a current mode of operation, any correspondence would only be a matter of coincidence due to the device being held a certain way relative to earth’s gravity. While a broken clock may be correct twice a day, this does not mean that the clock is “indicative” of the time.

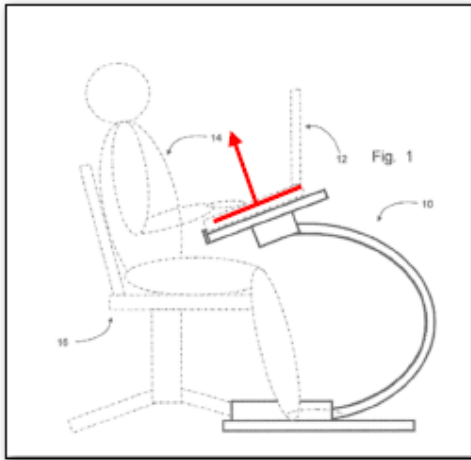
mode of operation because, at any given moment, the Lane device could be held at different angles such that orientation relative to gravity does not correlate with the mode of operation. For example, Lane Figure 13 teaches that its keyboard could be at an angle (relative to earth's gravity) while in laptop mode. Ex. 1005, Fig. 5; Prelim. Resp. 39–40. We reproduce Lane Figure 13 as annotated by Patent Owner below.



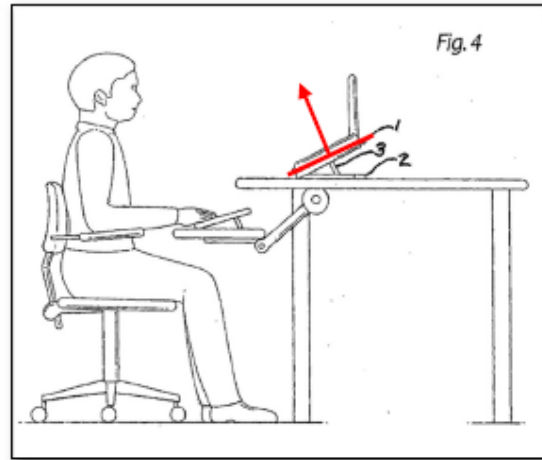
Lane Figure 13 is a side elevational view of the Lane device having a support. Ex. 1005, 4:8–14. As shown in Figure 13, Lane's computer is being used in laptop mode, but the base of Lane's computer (which includes the keyboard) is propped up at an angle by support 122.

Similarly, the evidence of record establishes that laptop desks that orientate the laptop computer at an angle diagonal relative to earth's gravity were ubiquitous at the time of the '229 patent application. Patent Owner annotates Figure 1 of Exhibit 2010, Figure 4 of Exhibit 2011, and Figures 5 and 6 of Exhibit 2012 to illustrate this point. Prelim. Resp. 40–43. We reproduce each of those figures, as annotated by Patent Owner, below.

Ex. 2010



Ex. 2011



Ex. 2012

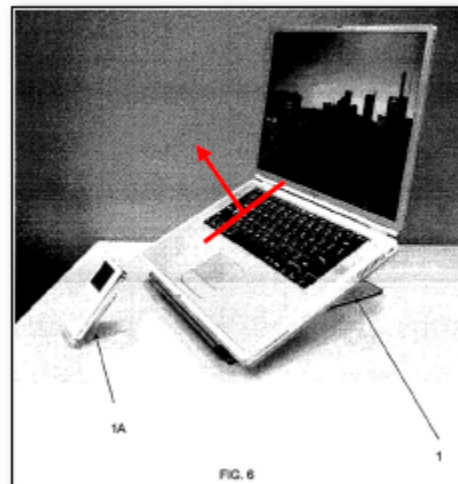
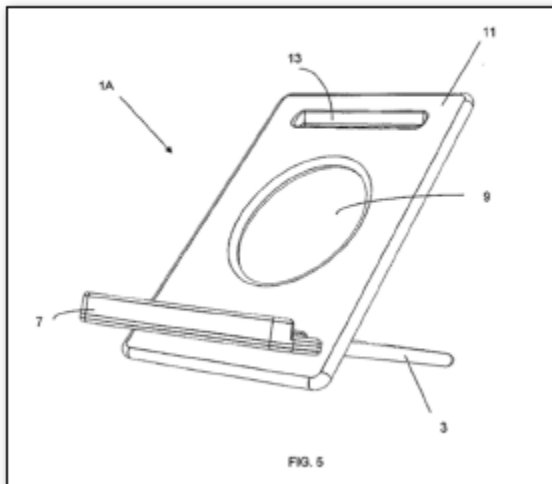


Figure 1 of Exhibit 2010 depicts a side elevation view of the laptop computer desk of U.S. Patent Application No. 2008/0035029 A1 “shown in use by a hypothetical user seated on a desk chair and with the laptop computer open.” Ex. 2010⁹ ¶ 9. Figure 4 of Exhibit 2011 depicts a person operating a laptop while using the laptop stand of U.S. Patent Application

⁹ Adams, US 2008/0035029 A1, Feb. 14, 2008.

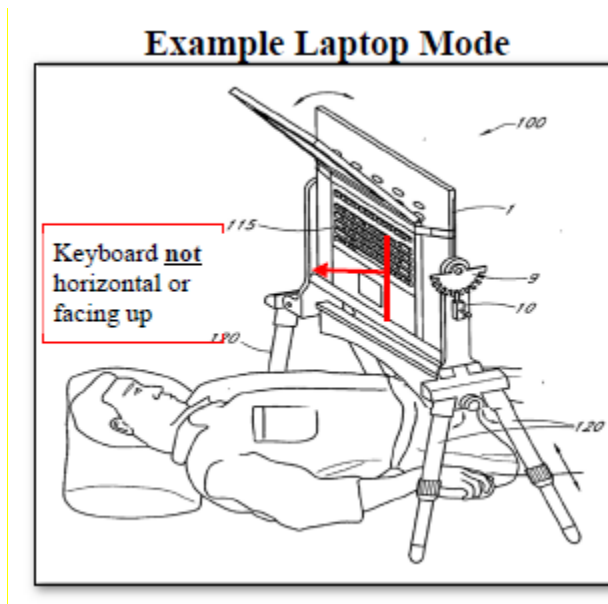
No. 2009/0179132 A1. Ex. 2011¹⁰ ¶ 23. Figure 5 of Exhibit 2012 depicts a perspective view of an assembled laptop stand according to an alternative embodiment of U.S. Patent Application No. 2008/0251680 A1. Ex. 2012¹¹ ¶ 21. Figure 6 of Exhibit 2012 depicts a perspective view of two stands while in use with one stand holding a portable entertainment device and the other stand holding a laptop computer. *Id.* ¶ 22. Each of these figures shows a desk or laptop stand that would position the base of a computer at an angle to the supporting surface while the computer was being used in laptop mode.

Patent Owner persuasively argues that if Lane were in the configuration of Lane Figure 13 or otherwise placed on a tilted laptop stand, the Lane device would be in laptop mode but, if the accelerometer were used as proposed in the Petition, the accelerometer would incorrectly indicate that the device is in easel mode because “the keyboard is facing upward but at an angle.” Prelim. Resp. 39–40 (citing Pet. 29). This example is illustrative of why Lane providing spatial orientation relative to the earth’s gravity is not the same as generating information indicative of a current mode of operation.

To further illustrate, a user might wish to use a laptop while lying flat in bed. In such a scenario, the computer would be in laptop mode but Lane’s spatial orientation information would not indicate laptop mode. Patent Owner illustrates this point by annotating Figure 1 of Exhibit 2013, and we reproduce that annotated illustration below.

¹⁰ Qin, et al., US 2009/0179132 A1, July 16, 2009.

¹¹ Matias, US 2008/0251680 A1, Oct. 16, 2008.



Prelim. Resp. 41–42. The figure above depicts a person using one embodiment of U.S. Patent Application No. 2007/0012827 A1 with a laptop keyboard positioned vertically while the user is lying down. Ex. 2013¹² ¶ 11.

The examples above illustrate why Lane’s information about spatial orientation does not generate information indicative of a current mode of operation. As such, Petitioner does not adequately establish that Lane teaches or suggests this claim element. Furthermore, Petitioner does not make use of Fujinawa or other evidence or argument as teaching or suggesting this claim element. Pet. 26–29. We thus agree with Patent Owner that Petitioner has not demonstrated a reasonable likelihood of success in establishing at trial that claim 18 would have been obvious over the ground 1’s asserted prior art. Prelim. Resp. 35–42.

Claim 12. Claim 12 recites, in its preamble, “[a] portable computer configurable between a plurality of display modes.” Ex. 1001, 19:10–12.

¹² Fu, et al., US 2007/0012827 A1, Jan. 18, 2007.

Claim 12 recites an accelerometer (which Petitioner labels element [12c]) but uses slightly different language than claim 18:

[12c] an accelerometer configured to generate orientation information indicative of a current display mode among the plurality of display modes of the portable computer;

Id. at 19:16–18. The Petition addresses this claim language by referring back to the Petition’s analysis of claim 18. Pet. 46. Moreover, Petitioner argues that claim 18’s recitation of “display modes” is “interchangeable” with claim 18’s recitation of “mode of operation.” *Id.*

Because Petitioner argues that claim 12, in relevant respects, has the same scope as claim 18 and because Petitioner addresses element [12c] in precisely the same manner as element [18c], Petitioner’s argument fails to establish a reasonable expectation of success in showing that Lane teaches or suggests element [12c] for the same reasons we provide when we address claim 18, *supra*. See also Prelim. Resp. 50. We thus agree with Patent Owner that Petitioner has not adequately demonstrated a reasonable likelihood of success in establishing at trial that claim 12 would have been obvious over the ground 1’s asserted prior art. *Id.*

Claim 14. Claim 14 depends from claim 12. Ex. 1001, 20:5–7. Petitioner’s treatment of claim 14 does not further address element [12c]. Pet. 53–54. Thus, for the reasons explained above, Petitioner has not adequately demonstrated a reasonable likelihood of success in establishing at trial that claim 14 would have been obvious over the ground 1’s asserted prior art.

2. *Unpatentability over Lane and Fujinawa (Ground 2)*

Petitioner asserts that claims 16 and 17 are unpatentable under 35 U.S.C. § 103(a) as obvious over Lane in view of Fujinawa, citing the Declaration of Dr. Wolfe for support. Pet. 54–65. Claims 16 is independent, and claim 17 depends from claim 16. Ex. 1001, 20:16–64.

Claim 16. Claim 16 recites, in its preamble, “[a] a method of managing user interaction with content displayed on a portable computer having a plurality of display modes.” Ex. 1001, 20:16–18. Claim 16 also recites use of an accelerometer (which Petitioner labels element [16c]): “generating, by an accelerometer, orientation information indicative of an orientation of the device.” *Id.* at 20:39–40. Claim 16 further recites determining a current display mode based on the orientation information (which Petitioner labels element [16d]):

determining a current display mode of the plurality of display modes based on the orientation of the device, including distinguishing between a first display mode and a second display mode of the plurality of display modes where either the display component or the base is rotated about the longitudinal axis beyond approximately 270 degrees from a closed state.

Id. at 20:41–47.

The Petition addresses recitation [16c] by referring to the discussion of element [18c]. Pet. 59. We address element [18c] *supra*. For claim [18d], the Petition argues that Lane teaches a position-indicating mechanism 38 (i.e., the alleged accelerometer), that this mechanism could be located in the base, and that the orientation of the base [relative to gravity] would allow Lane to distinguish between frame, tablet, and easel modes. Pet. 59–62.

Petitioner's argument fails to establish a reasonable likelihood of success in establishing that Lane teaches or suggest the combination of both element [16c] and element [16d] for the reasons we explain when addressing element [18c]. *See* Section III(E)(1), *supra*. Lane's accelerometer only provides spatial orientation information (orientation relative to Earth's gravity). Because, as we explain above, spatial orientation does not provide an indicator of a current display mode, Lane's accelerometer does not provide information sufficient to distinguish between the plurality of display modes as claim element [16d] requires. *Id.*; *see also* Prelim. Resp. 60–62. Moreover, Petitioner does not explain how Lane teaches or suggests actually using the accelerometer to distinguish between display modes. Prelim. Resp. 60–62.

Petitioner does not make use of Tonouchi or other evidence or argument as teaching or suggesting this claim element. Pet. 59–62. We thus agree with Patent Owner that Petitioner has not adequately demonstrated a reasonable likelihood of success in establishing at trial that claim 16 would have been obvious over the ground 2's asserted prior art.

Claim 17. Claim 17 depends from claim 16. Ex. 1001, 20:61–64. Petitioner's treatment of claim 17 does not further address elements [16c] and [16d]. Pet. 65. Thus, for the reasons explained above, Petitioner has not adequately demonstrated a reasonable likelihood of success in establishing at trial that claim 17 would have been obvious over the ground 2's asserted prior art.

3. *Unpatentability over Lane and Fujinawa or Lane and Tonouchi along with MIT and/or Wehrenberg (Grounds 3 and 4)*

For Petitioner's other grounds, Petitioner relies on Lane to reach recitations [12c], [16c] and [16d], and [18c]. Pet. 65–70. As we explain above, Petitioner does not adequately establish that Lane's information about spatial orientation would indicate or determine a current mode of operation. While Petitioner cites Wehrenberg as also teaching an accelerometer, Petitioner does not cite evidence or reasoning as to how Wehrenberg teaches or suggests generating orientation information indicative of or determining a current mode of operation. *Id.* at 69–70 (stating that “the combination of Lane and Wehrenberg discloses the accelerometer limitation in each of the challenged claims *for the same reasons discussed regarding position-indicating mechanism 38*” (emphasis altered and added)); *see also* Prelim. Resp. 79. As such, we agree with Patent Owner that Petitioner has not adequately demonstrated a reasonable likelihood of success in establishing at trial that any claim subject to grounds 3 or 4 would have been obvious over the asserted prior art. *Id.* at 77–79.

IV. CONCLUSION

After considering the evidence and arguments presented in the current record, we determine that Petitioner has not demonstrated a reasonable likelihood of success in proving that at least one of the challenged claims of the '229 patent is unpatentable. We therefore do not institute trial on any challenged claims or grounds raised in the Petition.

V. ORDER

For the foregoing reasons, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), no *inter partes* review is instituted for 12, 14, and 16–18 of the '976 patent on the unpatentability grounds asserted in the Petition.

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