

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LENOVO (UNITED STATES) INC.,
Petitioner,

v.

LITL LLC,
Patent Owner.

IPR2021-00822
Patent 8,624,844 B2

Before MICHELLE N. ANKENBRAND, GARTH D. BAER, and
BRIAN D. RANGE, *Administrative Patent Judges*.

BAER, *Administrative Patent Judge*.

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

I. INTRODUCTION

Lenovo (United States) Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1–16 and 18–22 of U.S. Patent No. 8,624,844 B2 (Ex. 1001, “the ’844 patent”). LiTL LLC (“Patent Owner”) filed a Preliminary Response. Paper 5 (“Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2020). The standard for institution is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted unless “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” As discussed below, we determine that Petitioner does not show a reasonable likelihood of prevailing with respect to the challenged claims. Accordingly, we deny institution of an *inter partes* review.

II. BACKGROUND

A. *Related Matters*

The parties identify the following as a related matter: *LiTL LLC v. Lenovo (United States), Inc. and Lenovo (Beijing) Limited*, 1:20-cv-00689-RGA (D. Del.). Pet. 2; Paper 4, 1. Patent Owner also identifies the following as related matters: IPR2021-00681, IPR2021-00786, IPR2021-00800, and IPR2021-00821. Paper 4, 2.

B. *The ’844 Patent (Ex. 1001)*

The ’844 patent is titled “Portable Computer with Multiple Display Configurations.” Ex. 1001, code (54). The computer system of the ’844 patent describes different profiles to customize the graphical user interface in different modes, including a laptop mode in which the portable computer

has a conventional laptop appearance, with the display inclined at a viewing angle from the base (*id.* at 6:26–28); an easel mode in which the base of the computer and its display stand upright forming an inverted “V,” and the display and keyboard are on opposite sides (*id.* at 7:48–61); and a frame mode in which the display and base are at a similar orientation and angle as in easel mode, but with the base lying flat on a surface and the keyboard facing down (*id.* at 16:3–13).

Figure 17 of the '844 patent, reproduced below, illustrates a portable computer in laptop mode. *Id.* at 5:13–15.

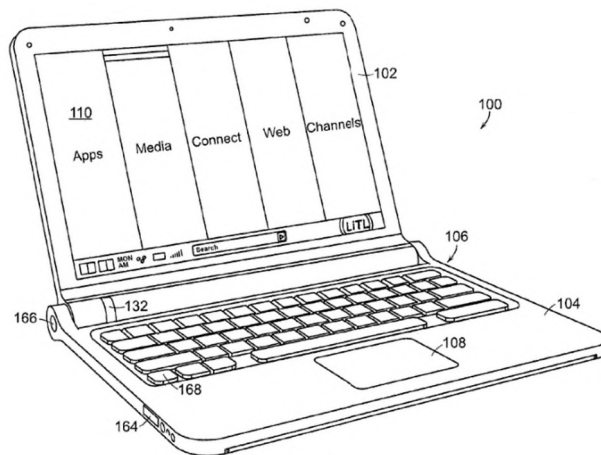


FIG. 17

Figure 4 of the '844 patent, reproduced below, illustrates the portable computer in easel mode. *Id.* at 4:47–48.

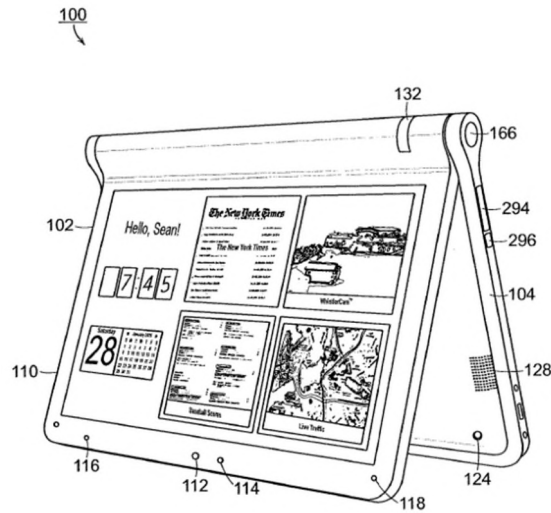


FIG. 4

Figure 26 of the '844 patent, reproduced below, illustrates the portable computer configured into frame mode. *Id.* at 5:35–37.

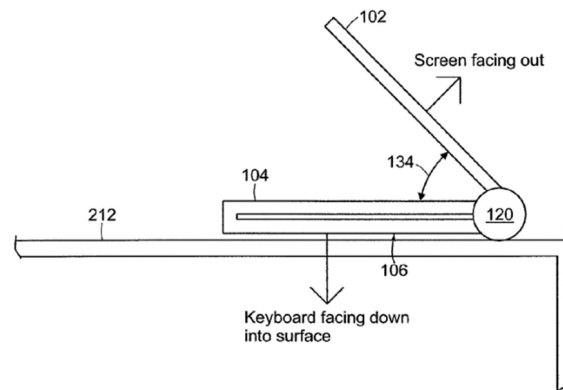


FIG. 26

The '844 patent explains that the display's orientation can change based on the different modes or in response to a user's input. *Id.* at 2:42–44.

C. Challenged Claims

Among challenged claims 1–16 and 18–22, claims 1, 10, and 18 are independent. Claim 1 is exemplary of the claimed subject matter and is reproduced as follows:

1. A portable computer configurable between a plurality of display modes including a laptop mode and an easel mode wherein transitions between the plurality of display modes allows an operator to interact with a single display screen in each of the plurality of display modes, the portable computer comprising:

a base including a keyboard;

a main display component rotatably coupled to the base such that the main display component and the base are rotatable with respect to one another about a longitudinal axis running along an interface between the main display component and the base to transition between at least the laptop mode and the easel mode, the main display component including the single display screen, wherein the transition between the laptop mode and the easel mode allows the operator to operate the portable computer while viewing the single display screen in each of the plurality of display modes, wherein

the laptop mode is configured to display to a user on the main display component a first content mode having a first content display orientation with the main display component oriented towards the user and the keyboard oriented to receive input from the user;

the easel mode is configured to display to the user on the main display component a second content mode having a second content display orientation with the main display component oriented towards the user and the keyboard oriented away from the user, wherein the first and second content display orientations are 180 degrees relative to each other, and wherein the portable computer is operable in the easel mode to enable the user to interact with displayed content without interacting with the keyboard; and

a navigation control disposed at least partially within the base and rotatable about the longitudinal axis, the navigation control configured to permit a user to control at least one of operating parameters of the portable computer and content displayed on the single display screen wherein the plurality of modes

includes a frame [mode¹] in which the main display component is oriented towards the operator, the base contacts a substantially horizontal surface, and the keyboard faces the substantially horizontal surface.

Ex. 1001, 17:9–51.

D. Asserted Grounds of Unpatentability

Petitioner asserts the challenged claims are unpatentable based on the following grounds:

Claim(s) Challenged	35 U.S.C. §²	Reference(s)/Basis
1, 3–5, 7–10, 13–16	103	Shimura, ³ Tsuji, ⁴ Pogue ⁵
6	103	Shimura, Tsuji, Pogue, Escamilla ⁶
2	103	Shimura, Tsuji, Pogue, Escamilla, Yeh ⁷
18, 22	103	Shimura, Tsuji, Pogue, Lin ⁸

¹ Original claim 1 recites a “frame” not a “frame mode.” Ex. 1001, 17:47. On April 1, 2014, the Office issued a Certificate of Correction that inserts the word “mode” after the word “frame” in claim 1. *Id.* at Certificate of Correction.

² The Leahy-Smith America Invents Act (“AIA”) amended 35 U.S.C. § 103. *See* Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011). As the application that issued as the ’844 patent was filed before the effective date of the relevant amendments, the pre-AIA version of § 103 applies.

³ JP1994-242853 (H6-242853), published September 2, 1994 (Ex. 1003). We refer to the Certified English translation (Ex. 1004, “Shimura”).

⁴ US 2005/0062715 A1, published Mar. 24, 2005 (Ex. 1005, “Tsuji”).

⁵ Windows XP Home Edition: The Missing Manual (2d ed.) (David Pogue, Pogue Press, LLC & O’Reilly Media, Inc. 2004) (Ex. 1006, “Pogue”).

⁶ US 6,724,365 B1, Apr. 20, 2004 (Ex. 1007, “Escamilla”).

⁷ US 6,396,419 B1, May 28, 2002 (Ex. 1008, “Yeh”).

⁸ US 2007/0013682 A1, published Jan. 18, 2007 (Ex. 1009, “Lin”).

Claim(s) Challenged	35 U.S.C. §²	Reference(s)/Basis
11, 12, 19, 21	103	Shimura, Tsuji, Pogue, Escamilla, Lin

Pet. 3–4. Petitioner supports the asserted grounds with the Declaration of Jean Renard Ward. Ex. 1010.

III. DISCUSSION

A. *Level of Ordinary Skill in the Art*

Petitioner contends that a person of ordinary skill in the art (“POSITA”)

would have had at least a Bachelor’s degree in Electrical Engineering, Computer Engineering, or Computer Science, plus two to three years of work experience in designing hardware and/or software aspects of the User Interface (UI) for portable computing devices; the POSITA would also be familiar with designs of the user interface employed and displayed by the operating system and its organization of content and functionality. Alternatively, the POSITA would have received a graduate degree such as a Master’s or PhD degree with at least one year of work experience related to hardware and/or software design aspects of the UI for portable computing devices; the POSITA would also be familiar with designs of the user interface employed and displayed by the operating system and its organization of content and functionality.

Pet. 15–16 (citing Ex. 1010 ¶ 26).

Patent Owner does not dispute Petitioner’s asserted level of ordinary skill in the art. *See generally* Prelim. Resp.

We find, based on the current record, that Petitioner’s contention is reasonable. For purposes of this Decision, we adopt the level of ordinary skill in the art Petitioner proposes.

B. Claim Construction

Petitioner proposes a claim construction for “content mode,” as well as several related terms, i.e., “first content mode,” “second content mode,” and “mode(s) of content.” Pet. 16–18. We determine we need not explicitly construe those terms to determine whether to institute an *inter partes* review. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“we need only construe 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))).

We determine, however, that construction is necessary for “frame mode.” Claim 1 recites, among other things, “[a] portable computer configurable between a plurality of display modes . . . wherein the plurality of modes includes a frame mode in which the main display component is orientated towards the operator, the base contacts a substantially horizontal surface, and the keyboard faces the substantially horizontal surface.” Ex. 1001, 17:9–51; *see id.* at Certificate of Correction. Independent claims 10 and 18 have similar “frame mode” limitations. *Id.* at 18:65–19:2, 20:25–29. The ’844 patent explains that frame mode is “illustrated in FIG. 26.” *Id.* at 16:2–3. Figure 26 is reproduced below.

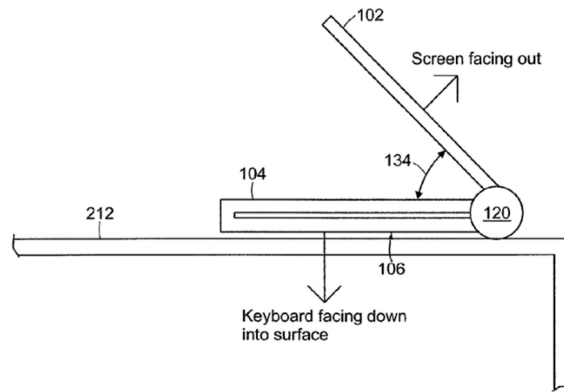


FIG. 26

Figure 26 and the accompanying text characterize frame mode as having the keyboard face down on a surface with the screen face up, and the base and display components forming a non-zero angle 134, similar to easel mode's inverted "V." *See id.* at 16:6–13.

Frame mode is distinct from "tablet mode," which the '844 patent acknowledges was known in the art. *See id.* at 1:32–55 (citing U.S. Patent Nos. 6,771,494 (Ex. 2009) and 6,266,236 ("the '236 patent") (Ex. 2010)). In tablet mode, the display is "rotated and folded against the base." *Id.* at 1:43–46. Tablet mode is depicted, for example, in the '236 patent's Figure 2, which is reproduced below.

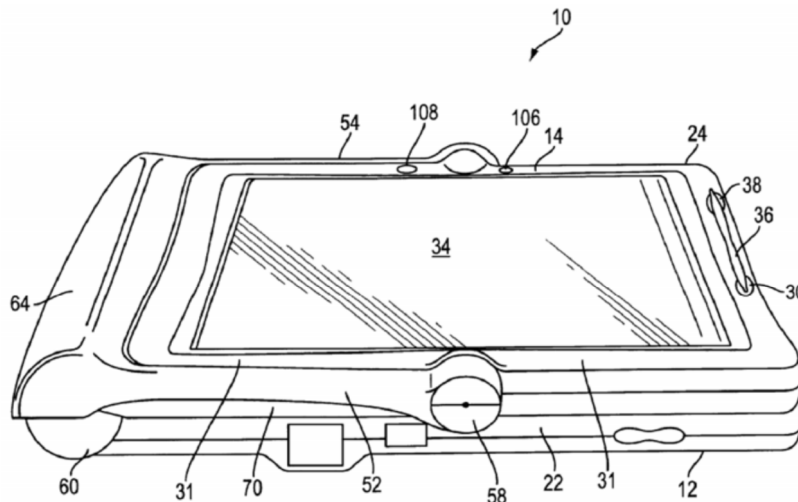


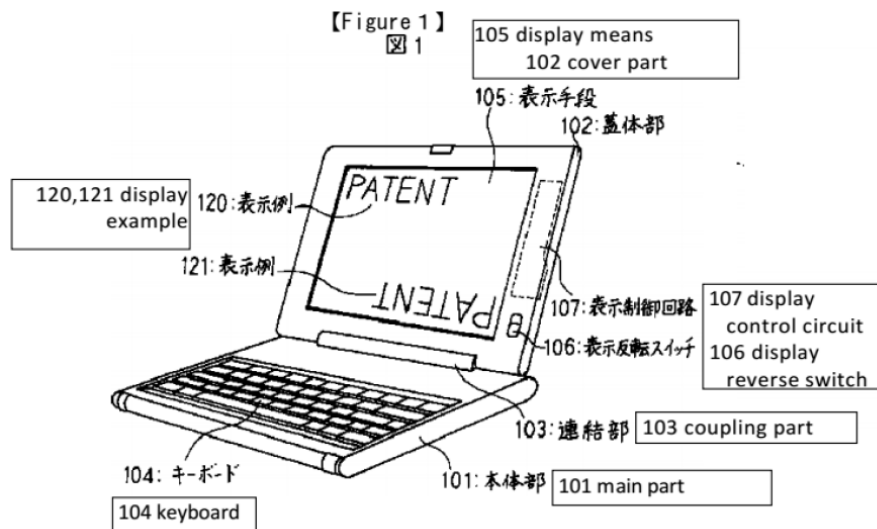
Figure 2

“[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Philips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005). Consistent with the ’844 patent’s specification, for purposes of this Decision, we construe “frame mode” as having the keyboard face down on a surface with the screen face up, and the base and display components forming a non-zero angle. Frame mode is distinct from “tablet mode,” where the display is flush against the base.

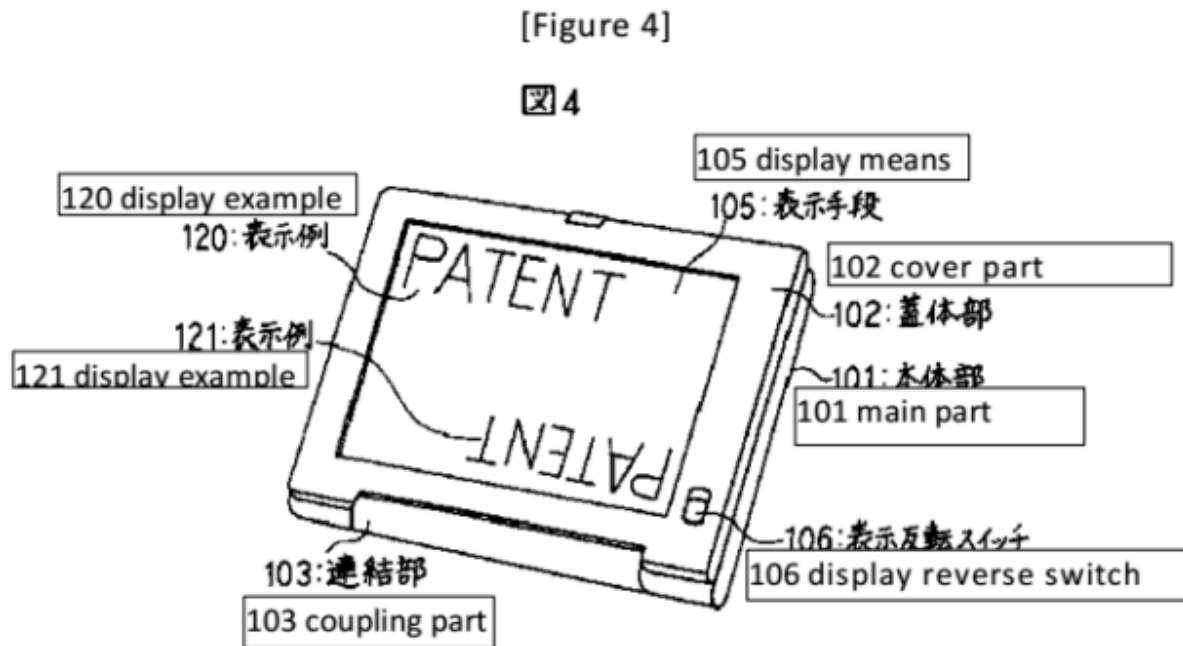
C. Analysis

1. Overview of Shimura (Exs. 1003 and 1004)

All grounds rely on Shimura. Shimura is a Japanese patent application publication (Ex. 1003), for which Petitioner provided a certified English translation (Ex. 1004). Shimura relates to a personal computer that “can adopt a mode suitable for a user environment centered on a pen input operation and a mouse input operation while retaining a mode which can use a keyboard.” Ex. 1004, code (57). Figure 1 of Shimura, reproduced below, illustrates an example of the personal computer. *Id.*



As shown in Figure 1, the personal computer includes main part 101 provided with keyboard 104 on the front; cover part 102 provided with display 105 on the front; and coupling mechanism 103, which enables the opening and closing of computer parts 101 and 102 and is used to couple one end of main part 101 and one end of cover part 102 with display 105 such that cover part 102 faces main part 101. *Id.* Coupling mechanism 103 is structured so that it can also open cover part 102 so that the orientation of cover part 102 exceeds 180° relative to main part 101. *Id.* Figure 4 of Shimura, reproduced below, shows an inclined view of the personal computer, with main part 101 rotated nearly 360° with respect to cover part 102. *Id.* ¶¶ 16–17, Fig. 4.



As shown in Figure 4, coupling mechanism 103 enables the rotation of cover part 102 with respect to main part 101. *Id.* ¶¶ 12–13. Coupling mechanism 103 is fastened by hinges to main part 101 and cover part 102. *Id.* ¶ 12.

2. Obviousness Analysis

Based on the present record, Petitioner does not demonstrate a reasonable likelihood of showing the asserted prior art would have rendered obvious the subject matter of challenged claims 1–16 and 18–22.

Independent claims 1, 10, and 18 require a “frame mode in which the main display component is oriented towards the operator, the base contacts a substantially horizontal surface, and the keyboard faces the substantially horizontal surface.” Ex. 1001, 17:47–51, 18:66–19:2, 20:27–30, Certificate of Correction. For all of its asserted grounds, Petitioner relies on Shimura’s Figure 4 for teaching the claimed “frame mode.” Pet. 57, 87, 102. We agree with Patent Owner that Shimura’s Figure 4 does not disclose or suggest a frame mode. *See* Prelim. Resp. 27–32.

Shimura’s Figure 4 (reproduced below, left) depicts the device’s display folded against the base—i.e., tablet mode—rather than in a frame mode where the base and display components form a non-zero angle similar to easel mode’s inverted “V,” as depicted in the ’844 patent’s Figure 26 (reproduced below, right).

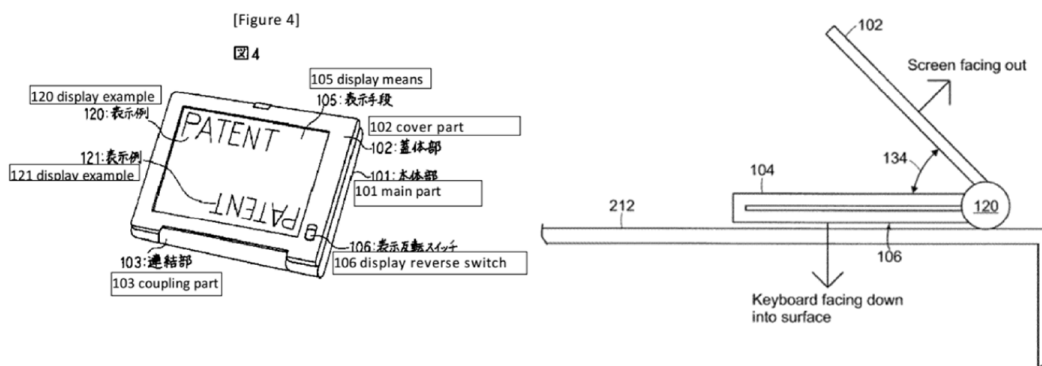


FIG. 26

Although, as Petitioner notes, Shimura teaches that its computer can be configured to any angle between 0° to 360°, *see* Pet. 22 n.1 (citing Ex. 1004

¶¶ 8, 10, 17), that too does not disclose frame mode. This is so because, as Patent Owner explains, beyond the required opening angle, frame mode additionally requires a hinge that “must support the display to prevent it from collapsing into tablet mode.” Prelim. Resp. 31. Petitioner points to nothing in Shimura that would indicate its hinge could support the display in frame mode. *See* Pet. 22, 41–42, 46–47, 53, 57, 59, 70. Thus, on the current record, Petitioner has not made a sufficient showing that the asserted combinations of Shimura and other references teach or suggest the claimed plurality of modes including a “frame mode” as required in all the challenged claims.

IV. CONCLUSION

For the reasons above, we determine that Petitioner has not established a reasonable likelihood that it would prevail in showing that at least one of the challenged claims is unpatentable.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is denied, and we do not institute an *inter partes* review of any claim of the ’844 patent based on a ground asserted in the Petition.

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