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Title of Invention:	Portable Computer with Multiple Display Configurations
First Named Inventor/Applicant Name:	8624844
Customer Number:	23628
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1		L203970001US10-RESP-GBH.pdf	1244535 9cf4ff5fe6806fe1893c4531a1b3f0545f40b741	yes	24

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/014,965	02/25/2022	8624844		3442

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EXAMINER	
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ART UNIT	PAPER NUMBER
3991	

MAIL DATE	DELIVERY MODE
12/08/2022	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. *90/014,965* .

PATENT UNDER REEXAMINATION *8624844* .

ART UNIT *3991* .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Ex Parte Reexamination Interview Summary	Control No.	Patent Under Reexamination	
	90/014,965	8624844	
	Examiner	Art Unit	AIA (FITF) Status
	Christina Y Leung	3991	No

All participants (USPTO personnel, patent owner, patent owner's representative):

(1) Christina Leung (primary examiner)	(3) Gerald Hrycyszyn; Rich Giunta (attorneys for PO)
(2) Rachna Desai; SPE Timothy Speer (conferees)	(4) Eric Bear (technical expert for PO)

Date of Interview: 30 November 2022

Type: a) ☐ Telephonic b) ☑ Video Conference
c) ☐ Personal (copy given to: 1) ☐ patent owner 2) ☐ patent owners representative)

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☑ No.
If Yes, brief description: _____

Agreement with respect to the claims f) ☐ was reached. g) ☑ was not reached. h) ☐ N/A.
Any other agreement(s) are set forth below under "Description of the general nature of what was agreed to..."

Claim(s) discussed: 10 and 16 .

Identification of prior art discussed: Ledbetter .

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:
See Continuation Sheet .

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims patentable, if available, must be attached. Also, where no copy of the amendments that would render the claims patentable is available, a summary thereof must be attached.)

A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION MUST INCLUDE PATENT OWNER'S STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. (See MPEP § 2281). IF A RESPONSE TO THE LAST OFFICE ACTION HAS ALREADY BEEN FILED, THEN PATENT OWNER IS GIVEN **ONE MONTH** FROM THIS INTERVIEW DATE TO PROVIDE THE MANDATORY STATEMENT OF THE SUBSTANCE OF THE INTERVIEW
(37 CFR 1.560(b)). THE REQUIREMENT FOR PATENT OWNERS STATEMENT CAN NOT BE WAIVED.
EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).

/CHRISTINA Y. LEUNG/ Primary Examiner, Art Unit 3991		/TIMOTHY M SPEER/ Supervisory Patent Examiner, Art Unit 3991

cc: Requester (if third party requester)

Continuation of Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Patent Owner's representatives (PO) argued that Ledbetter does not teach displaying the "content modes" recited in the claims. PO argued that 844 Patent discloses that "content mode" is not the content organized within the mode and does not merely refer to a type of content. Rather, it is a visual representation of the grouping of content within the mode in a hierarchical interface, e.g., elements 172a-e shown in Figures 11, 12, and 17 of 844 Patent. Examiners acknowledged that the term "content mode" is associated with element 172 but did not necessarily agree that 844 Patent limits the term "content mode" to PO's interpretation without also meaning a type of content more generally. Agreement was not reached on the claims, but Examiners will fully consider PO's arguments presented in the next response.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	Yves Behar
Application No.:	90/014,965
Confirmation No.:	3442
Filed:	February 25, 2022
For:	PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS
Examiner:	C. Y. Leung
Art Unit:	3991

INTERVIEW AGENDA

Patent Owner, LiTL, thanks Examiner Leung and the Conferees for scheduling a video conference interview on November 30, 2022 at 1 pm Eastern to discuss the outstanding Office Action (dated October 12, 2022) in the above-referenced reexamination of Patent No. 8,624,844 ("the '844 Patent"). The arguments and evidence to be discussed during the interview are summarized below.

I. INTRODUCTION

Third Party Requester, Lenovo (United States) Inc. ("Lenovo") filed its Request for *Ex Parte* Reexamination ("Request") seeking a second bite at the apple after its petition seeking *inter partes review* (IPR) of the '844 Patent was denied because Lenovo failed to show any claim unpatentable. The Grounds in Lenovo's reexamination request fared no better and failed to establish unpatentability of a single challenged claim. The Office Action adopts a single one of the Request's grounds and makes a single rejection – claims 10 and 16 are rejected as allegedly being obvious over Lane and Ledbetter.

As explained in more detail below, the Office Action ("OA") relies on Ledbetter to purportedly disclose a laptop mode "configured to ***display*** to a user on the main display component

a first content mode" and an easel mode "configured to ***display*** to the user on the main display component a second content mode" as required by claims 10 and 16.[1] OA at 6-7. The Office Action alleges that the claimed content modes are met by Ledbetter's various "software operating modes" ("media consumption mode," "tablet mode," "walk-up mode" and "workstation mode") that correspond to different physical configurations of Ledbetter's computer monitor. Even if these software operating modes were content modes (which Patent Owner does not concede), none of them is "display[ed] to the user." Thus, the Lane/Ledbetter combination fails to disclose a computer configured to "display to a user" a content mode as claimed.

II. '844 PATENT

Before the LiTL Webbook commercialized an embodiment of the '844 Patent, home computers were essentially the same as office computers and home users struggled with complex interfaces designed in pre-web times. LiTL worked for years to develop its Webbook, recruited leading user experience design ("UXD") experts and worked closely with some of the world's leading technology and UXD consultancies. This design effort led to the filing of provisional application no. 61/041,365 on April 1, 2008, to which the '844 Patent claims priority. Ex. 1001, 1.

The inventions described and claimed in the '844 Patent were groundbreaking in 2008. They earned substantial contemporaneous praise and have become industry standards that are ubiquitous today. They were anything but in the timeframe relevant to this reexamination.

[1] Emphasis added throughout unless otherwise noted.

A. Embodiments

1. Physical Configuration Modes

The '844 Patent describes, and challenged claims 10 and 16 require, a "portable computer configurable between a plurality of display modes including a laptop mode and an easel mode." '844 Patent, claim 10. Laptop and easel are just two of several display modes the specification discloses, including: a "tablet mode" (*id.*, 1:35), "a closed mode, a laptop mode, an easel mode, a flat mode and a frame mode" (*id.*, 2:20-23). Some of these are illustrated in the figures reproduced below. The "portable computer has a conventional laptop appearance" in the "laptop mode," whereas in the "easel mode" the "base of the computer and its display component stand upright forming an inverted 'V.'" *Id.*, 1:61-64. "The portable computer may include integrated 'navigation' hardware" such as "a scroll wheel 132 that allows a user to control, adjust and/or select various functionality of the portable computer" or navigate "through information, such as menus, icons, etc., displayed on the display screen 110, as discussed … with reference to FIG. 17." *Id.*, 10:54-65.

Closed Mode

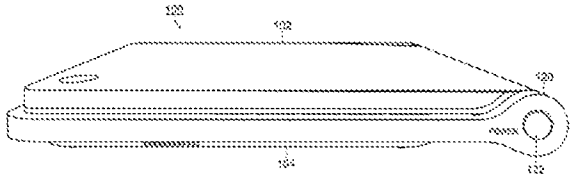


FIG. 2

Laptop Mode

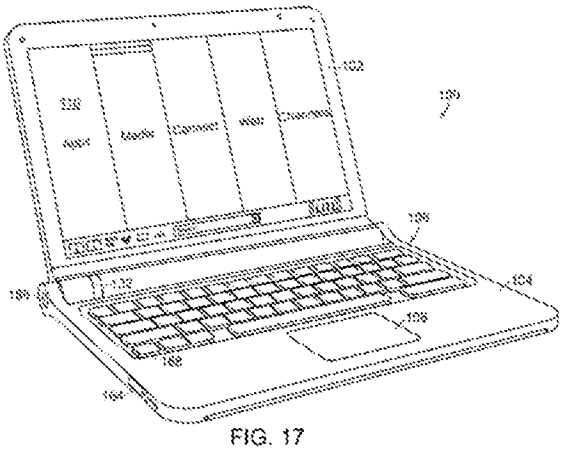


FIG. 17

Easel Mode

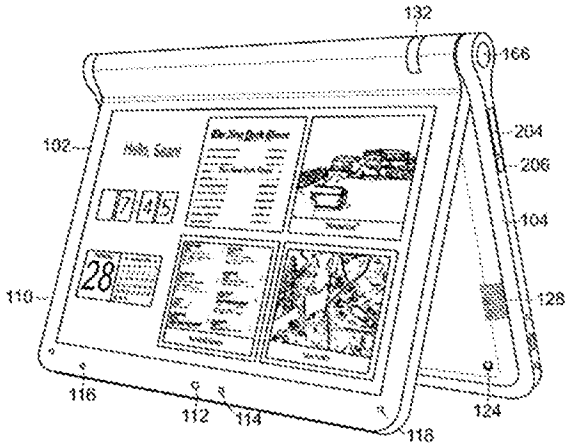


FIG. 4

Frame Mode

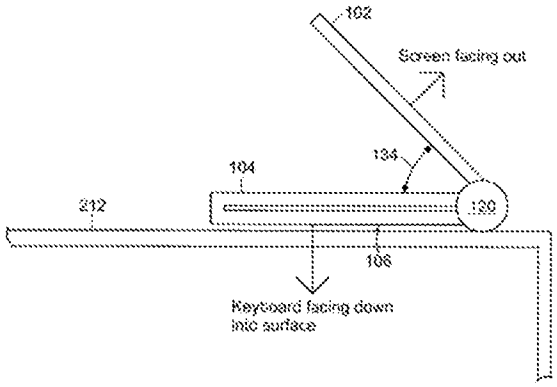


FIG. 26

Flat Mode

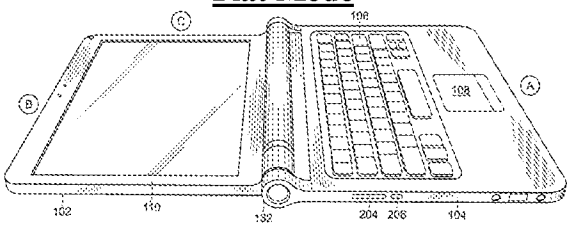


FIG. 27

2. Streamlined GUI Supporting Hierarchical "Map" Navigation

The '844 Patent describes a "streamlined graphical user interface [GUI] that supports 'map' navigation. The map user interface provides a clear overview of the entire computing environment and searching capability within the environment that may be accessed using" the scroll wheel 132 and/or navigation buttons 166, 168 on the computer's base (see Fig. 17 below). *Id.*, 11:10-19. "[T]he map mode of navigation is a hierarchical mode that reduces the number of items to select amongst at any stage of navigation, thereby facilitating user access with the scroll wheel 132, and optionally, the navigation button(s) 166, 168." *Id.*, 11:19-24. This "streamlined" GUI is advantageous when the laptop is in a mode (*e.g.*, easel mode) where the keyboard is not readily accessible to the user because the streamlined GUI facilitates navigation using other hardware (*e.g.*, scroll wheel 32).

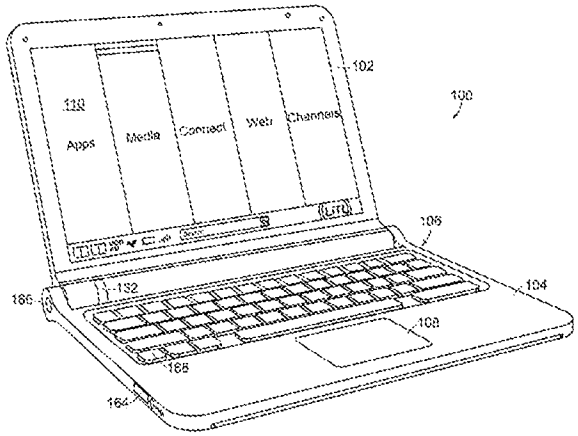


FIG. 17

3. "Content Modes" Support Hierarchical Navigation

The above-discussed hierarchical navigation mode is achieved by using "content modes." "Using the map user interface, ***information, programs, features, functions, applications may be grouped into [] various modes of content*** 172." *Id.*, 11:37-40. Figure 11 shows a user interface

home screen 170 that "displays a plurality of modes of content 172." *Id.*, 11:30. "Some or all of the modes of content 172 may access, retrieve and/or store information on the Internet 174." *Id.*, 12:4-5. Five content modes are shown in FIG. 11: "media 172a, connect 172b, web 172c, applications 172d, and channels 172e." *Id.*, 11:37-38.

"[**M]edia content mode** 172a may provide access to a medial player to play, view, search and organize media such as music, video, photos, etc." *Id.*, 11:44-46.

"[C]onnect mode 172b may provide access to features such as, for example, email, voice-over-IP instant messaging, etc." *Id.*, 11:46-48.

"[W]eb mode 172c may provide access to internet browsing and searching." *Id.*, 11:49-50.

"[A]pplication mode 172d may provide access to, for example, computer applications or programs, such as word processor, spreadsheet, calculator, etc." which may be "web-based services rather than programs or applications. *Id.*, 11:50-55.

"[C]hannels mode 172e may provide access to different functionality of the portable computer, with the different functions or features defined as different channels," examples of which include "an alarm clock channel" that displays a clock and can be programmed to set an alarm, a "photo frame channel" that can display one or more preselected images, and a "television channel" configured to stream Internet television. *Id.*, 11:55-67).

FIGs. 12 and 17 show those five content modes "***displayed*** as a series of bars across the display screen." *Id.*, 12:6-7.

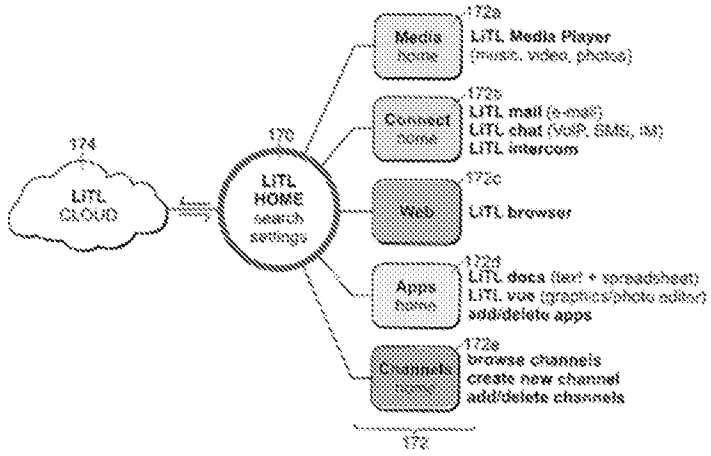


FIG. 11

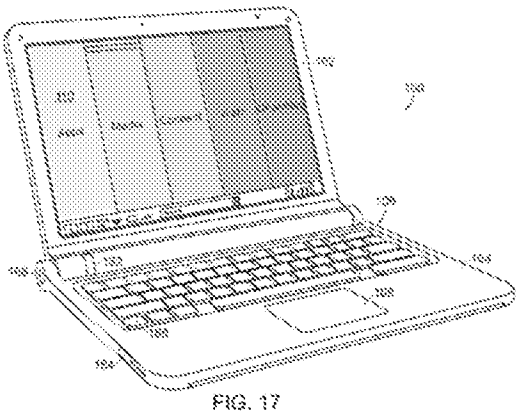


FIG. 17

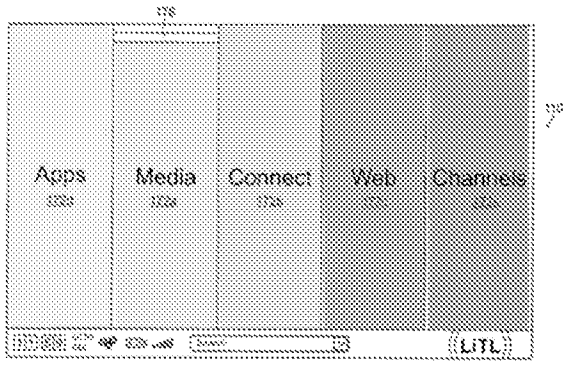


FIG. 12

Scroll wheel 132 and navigation buttons 166, 168 "may be used to navigate the user interface. … scrolling the scroll wheel may sequentially highlight different ones of the modes of content 172. … A highlighted mode 172 may be selected by pressing the scroll wheel, thereby bringing up a new "page' or screen on the user interface corresponding to the selected mode. Once within a selected mode of content 172, the scroll wheel may similarly be used to select ***particular functions, features or applications*** within that mode." *Id.*, 12:22-35. For example, if the user initially selected the connect mode 172b, the user can then use the scroll wheel to select among "features such as, for example, email, voice-over-IP instant messaging, etc." *Id.*, 11:46-48. While

FIGs. 12 and 17 display the different modes of content as a series of bars, other display configurations (*e.g.*, desktop and icon configuration, a dashboard configuration) are possible. *Id.*, 12:6-21.

B. The Challenged Claims All Require a Computer Configured To Display First and Second Content Modes

Claims 10 and 16 (like every other claim in the '844 Patent) require a "portable computer configurable between a plurality of display modes including a laptop mode and an easel mode … wherein the laptop mode is configured to ***display to a user*** … ***a first content mode*** … [and] the easel mode is configured to ***display to the user*** … ***a second content mode.***"

Thus, every claim requires that the portable computer be configured to group its "information, programs, features, functions, [and] applications" into at least a first and a second content mode, and to ***display to the user*** as information on the computer's display component the first content mode (when the computer is in laptop mode) and the second content mode (when the computer is in easel mode). *Id.*, 10:62-64, 11:27-40, 12:22-35. The Lane/Ledbetter combination fails to meet these requirements.

III. The Lane/Ledbetter Combination Fails to Meet Any Challenged Claim

A. Ledbetter's Alleged Content Modes Are Never Displayed to the User

The Office Action alleges that Ledbetter "teaches different content modes ***displayed*** in different display modes," citing Ledbetter [0023], [0026], and [0057]. OA at 6. The cited Ledbetter paragraphs teach that the computer's monitor arm can be configured in different physical "usage modes" where the monitor arm is positioned in different physical positions. Ledbetter, [0026]. Ledbetter discloses that "the computer providing the content to display can change ***software operating modes*** to match the corresponding monitor position." *Id.*, [0055]. The operating system

"loads a corresponding shell user interface and/or other program or programs (e.g., 1386_1) as necessary to configure the computer system user interface display 1388 and running programs to match the current mode." Ledbetter, [0056].

Ledbetter describes four operating modes: (1) a "**media consumption mode** [in which] media player software may be loaded and automatically executed"; (2) a "**tablet mode** [in which] tablet operating system components such as including handwriting recognition software may be loaded and automatically executed"; (3) a "**walk-up mode** [in which] a touch-screen shell program configured to provide convenient access to walk-up types of information (e.g., weather, messages, the internet and so forth)" is loaded; and (4) a "**workstation mode** [in which] typical shortcuts and other information used for working/productivity or other computer usage (e.g., gaming) may be displayed." Ledbetter, [0057].

Thus, Ledbetter discloses that when the computer arm is in different physical configurations ("usage modes"), the computer enters different "software operating modes" (*id.*, [0055]) where different programs may be run and/or different information displayed on the display.

The Request alleged that Ledbetter's software operating modes "constitute the claimed content modes." Request, 98-99. The Office Action adopts this mapping of the claimed content modes to Ledbetter, alleging that "Ledbetter further teaches different content modes displayed in different display modes," where the Office Action identifies – via italics – the "*media consumption mode*," "*tablet mode*," "*walkup mode*" and "*workstation mode*" as meeting the claimed content modes. OA at 6 (emphasis original).

Even if Ledbetter's "software operating modes" could be considered content modes (which Patent Owner does not concede), the computer being configured to run different software operating

modes does not meet the claimed requirement that the computer be configured to ***display*** first and second content modes. The specification makes clear that "information, programs, features, functions, [and] applications may be grouped into [] various modes of content 172" (*id.*, 11:37-40), and that the content modes can be "***displayed*** as a series of bars across the display screen" (*id.*, 12:6-7) as shown in FIGs. 12 and 17. After a desired content mode is selected from the display, the "***particular functions, features or applications*** within" that content mode can be displayed and a desired function, feature or application can be selected. *Id.*, 12:22-35. Thus, displaying a content mode requires displaying some "information, such as menus, icons, etc. … on the display screen 110" ('844 Patent, 10:54-65) that represents the content mode, not merely displaying one or more functions, features or applications grouped into a content mode.

Thus, the Lane/Ledbetter combination is not "configured to ***display to a user***" the things – software operating modes – the Office Action alleges are first and second content modes. Thus, the Lane/Ledbetter combination does not meet any challenged claim, because the claims do not simply require first and second content modes, they require that the computer be configured to "display to a user" those content modes.

B. Displaying Functions, Features and/or Applications When Leadbetter's Computer Is In One of Its Software Operating Modes Does Not Meet The Claims

The only things in Ledbetter that the Office Action alleges are displayed to the user are particular functions, features and/or applications that are displayed when the computer is in a particular software operating modes. Specifically, the Office action identifies "media player software [] loaded and automatically executed" in media consumption mode, "handwriting recognition software [] loaded and automatically executed" in tablet mode, "walk-up types of

information (e.g., weather, messages, the internet and so forth) may be loaded" in walk-up mode, and "typical shortcuts and other information used for working/productivity … may be displayed" in workstation mode. OA at 6. The '844 Patent specification refers to these as "***particular functions, features or applications***" that may be grouped within a content mode ('844 Patent, 12:22-35), and makes clear that displaying the "particular functions, features or applications within" a content mode is not the same thing as displaying the content mode itself. *Id.*, 11:37-40, 12:6-7, 12:22-35. Thus, to the extent the Office Action suggests that functions, features and/or applications displayed by Ledbetter when in its display modes could meet the claimed content modes, that would be inconsistent with the specification of the '844 Patent.

1. Claim Interpretation – Content Mode Cannot Be Interpreted More Broadly Than The Way It is Used in the Specification

Despite having already filed (and lost) an IPR petition challenging the '844 patent and filing a 176-page Request challenging just two claims, Lenovo never acknowledged where the specification describes what "content modes" are, and Lenovo cited no evidence of any use of this term in the art that differs from the meaning the specification gives to this term that is coined therein. Like the Request, the Office Action did not affirmatively construe "content mode."

"[T]he best source for determining the meaning of a claim term" under the broadest reasonable interpretation (BRI) standard "is the specification." MPEP § 2111.01. A claim interpretation under BRI "cannot be divorced from the specification and the record evidence." *In re NTP, Inc.*, 654 F.3d 1279, 1288 (Fed. Cir. 2011). The interpretation "must be consistent with the one that those skilled in the art would reach." *In re Cortright*, 165 F.3d 1353, 1358 (Fed. Cir. 1999). Indeed, the claims must be interpreted "in light of the specification as it would be interpreted

by one of ordinary skill in the art." MPEP § 2111 (quoting *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004)).

As a matter of law, when "terms have no plain or established meaning to one of ordinary skill in the art," "they ordinarily cannot be construed broader than the disclosure in the specification." *Indacon, Inc. v. Facebook, Inc.*, 824 F.3d 1352, 1357 (Fed. Cir. 2016); *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004) ("[A]bsent such an accepted meaning [in the art], we construe a claim term only as broadly as provided for by the patent itself."). In such circumstances, the specification must be used to ascertain the meaning and scope of the claim term, even when it is not expressly defined. *Irdeto*, 383 F.3d at 1300 ("Even when guidance is not provided in explicit definitional format, 'the specification may define claim terms "by implication"' such that the meaning may be 'found in or ascertained by a reading of the patent documents.'").

Because the Office Action established no accepted meaning in the art for the term "content mode," the specification's meaning controls and this term cannot be interpreted more broadly than the specification's disclosure. *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010) ("The broadest-construction rubric … does not give the PTO an unfettered license to interpret claims to embrace anything remotely related to the claimed invention. Rather, claims should always be read in light of the specification and teachings in the underlying patent."); *In re NTP*, 654 F.3d at 1288 (Even under the "broadest reasonable construction, the construction cannot be divorced from the specification and the record evidence."); MPEP § 2111 ("The broadest reasonable interpretation does not mean the broadest possible interpretation." Rather, it "must be consistent with the use of the claim term in the specification").

2. Displaying Functions, Features and/or Applications Grouped Within a Content Mode is Different than Displaying the Content Mode

The '844 Patent could not be clearer that there is a difference between a content mode and "the content organized within that mode." '844 Patent, 11:40-43. A content mode is displayed with other content modes as shown in Figs. 12 and 17. *Id.*, 12:6-8 (the different ***modes of content 172 may be displayed … as illustrated in Fig. 12***"). The content modes support "hierarchical" navigation ('844 Patent, 11:19-24) not only because they group together "information, programs, features, functions, [and] applications" *(Id.*, 37-40), but because the content groups are ***displayed to the user***. "[T]he ***different modes of content 172 may be displayed*** as a series of bars across the display screen 110, as illustrated in Fig. 12." '844 Patent, 12:6-8; *see also* Fig. 17.

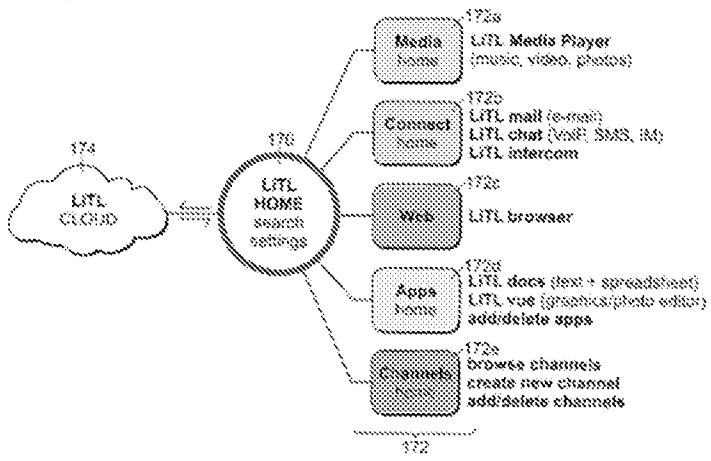


FIG. 11

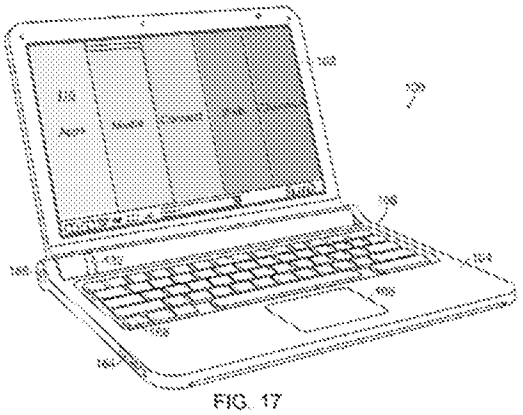


FIG. 17

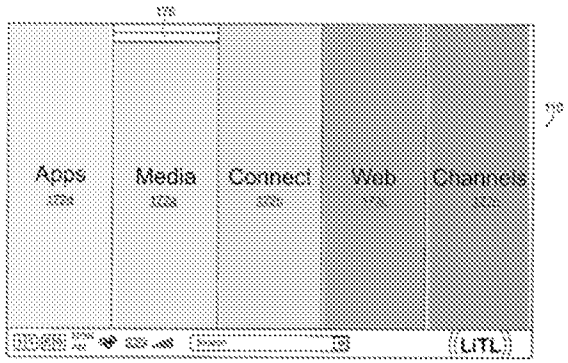


FIG. 12

The user may "navigate" a user interface that displays one or more content modes, and in one embodiment may "select" a particular content mode by pressing the scroll wheel when the desired content mode is highlighted. *Id.*, 12:23-29. In one embodiment, after the user has selected a particular content mode on the user interface, "a new 'page' or screen on the user interface corresponding to the selected mode" is brought up that displays to the user the "***particular functions, features or applications*** within that [previously-selected content] mode" so that the user may select a desired function, feature or application. *Id.*, 12:32-35. Thus, according to the specification, displaying a content mode means displaying some "information, such as menus, icons, etc. … on the display screen 110" (*id.*, 10:54-65) that represents the content mode, and is distinct from displaying any functions, features and/or applications grouped within that content mode.

As noted above, the Office Action relies on Ledbetter's disclosure of "media player software [] loaded and automatically executed" in media consumption mode, "handwriting recognition software [] loaded and automatically executed" in tablet mode, "walk-up types of information (e.g., weather, messages, the internet and so forth) may be loaded" in walk-up mode, and "typical

shortcuts and other information used for working/productivity … may be displayed" in workstation mode. OA at 6. The '844 Patent specification refers to these as "***particular functions, features or applications***" that may be grouped within a content mode ('844 Patent, 12:22-35), and makes clear that displaying the "particular functions, features or applications within" a content mode is not the same thing as displaying the content mode itself. *Id.*, 11:37-40, 12:6-7, 12:22-35; *see also e.g.,* Fig. 11 (the LiTL media player is an application program that is displayed separately from the "Media" content mode 172a displayed on Figs. 12 and 17).

IV. Conclusion

LiTl appreciates the examiner's consideration of this interview agenda and looks forward to discussing these and any other issues the examiners would like to address during the interview.

Dated: November 18, 2022

/ Gerald B. Hrycyszyn /
Edward J. Russavage, Reg. No. 43,069
Richard F. Giunta, Reg. No. 36,149
Gerald B. Hrycyszyn, Reg. No. 50,474
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
617.646.8000

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §1.248 and §1.550(f), the undersigned hereby certifies that a copy of this INTERVIEW AGENDA IN EX PARTE RE-EXAMINATION, in Reexamination No.: 90/014,965, including all attachments, exhibits, and documents filed therewith, will be served by first-class mail upon:

KLARQUIST SPARKMAN, LLP
121 SW SALMON STREET
SUITE 1600
PORTLAND, OR 97204

Dated: November 18, 2022

/ Gerald B. Hrycyszyn /
Gerald B. Hrycyszyn
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Doc Code: ECOMM.AUTH/ECOMM.WTDW
Doc Description: Internet Communications Authorized/Internet Communications Authorization Withdrawal

PTO/SB/439 (11-15)

AUTHORIZATION FOR INTERNET COMMUNICATIONS IN A PATENT APPLICATION OR REQUEST TO WITHDRAW AUTHORIZATION FOR INTERNET COMMUNICATIONS		
	Application No.	90/014,965-Conf. #3442
	Filing Date	February 25, 2022
	First Named Inventor	Yves Behar
	Art Unit	3991
	Examiner Name	C. Y. Leung
	Practitioner Docket No.	L2039.70001US10

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I. To authorize permission for Internet Communications.

[x] Recognizing that Internet communications are not secure, I hereby authorize the USPTO to communicate with the undersigned and practitioners in accordance with 37 CFR 1.33 and 37 CFR 1.34 concerning any subject matter of this application via video conferencing, instant messaging, or electronic mail. I understand that a copy of these communications will be made of record in the application file. (MPEP 502.03)

II. To withdraw authorization for Internet Communications.

[ ] The authorization given on _____, to the USPTO to communicate with the undersigned and any practitioner in accordance with 37 CFR 1.33 and 37 CFR 1.34 concerning any subject matter of this application via Internet communications such as video conferencing, instant messaging, or electronic mail is hereby withdrawn. I understand that the withdrawal is effective when approved rather than when received.

I am the

[ ] applicant.

[x] attorney or agent of record. Registration number 36,149.

[ ] attorney or agent acting under 37 CFR 1.34. Registration number _____.

/Richard Giunta/ — Signature

November 14, 2022 — Date

Richard F. Giunta — Typed or printed name

617.646.8000 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Juristic entities must be represented by a patent practitioner (see 37 CFR 1.31, which is applicable to any paper filed on or after September 16, 2012, that is presented on behalf of a juristic entity, regardless of application filing date). Submit multiple forms if more than one signature is required, see below*.

[ ] * Total of 1 forms are submitted.

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UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/014,965	02/25/2022	8624844		3442

23628 7590 10/12/2022
WOLF GREENFIELD & SACKS, P.C.
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206

EXAMINER
LEUNG, CHRISTINA Y

ART UNIT	PAPER NUMBER
3991	

MAIL DATE	DELIVERY MODE
10/12/2022	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
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KLARQUIST SPARKMAN, LLP
121 SW SALMON STREET
SUITE 1600
PORTLAND, OR 97204

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. *90/014,965* .

PATENT UNDER REEXAMINATION *8624844* .

ART UNIT *3991* .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Office Action in Ex Parte Reexamination	**Control No.** 90/014,965	**Patent Under Reexamination** 8624844	
	Examiner Christina Y Leung	**Art Unit** 3991	**AIA (FITF) Status** No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

a. ☑ Responsive to the communication(s) filed on 25 February 2022.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

b. ☐ This action is made FINAL.

c. ☑ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire 2 month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).** If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892.
2. ☐ Information Disclosure Statement, PTO/SB/08.
3. ☐ Interview Summary, PTO-474.
4. ☐ _____.

Part II SUMMARY OF ACTION

1a. ☑ Claims 10 and 16 are subject to reexamination.

1b. ☑ Claims 1-9,11-15 and 17-22 are not subject to reexamination.

2. ☐ Claims _____ have been canceled in the present reexamination proceeding.

3. ☐ Claims _____ are patentable and/or confirmed.

4. ☑ Claims 10 and 16 are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ The drawings, filed on _____ are acceptable.

7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.

8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. 119(a)-(d) or (f).

   a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have

   1 ☐ been received.

   2 ☐ not been received.

   3 ☐ been filed in Application No. _____.

   4 ☐ been filed in reexamination Control No. _____.

   5 ☐ been received by the International Bureau in PCT application No. _____.

   * See the attached detailed Office action for a list of the certified copies not received.

9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.

10. ☐ Other: _____

cc: Requester (if third party requester)

DETAILED ACTION

Reexamination

1. On April 4, 2022, *ex parte* reexamination was ordered for claims 10 and 16 of US 8,624,844 B2 ("844 Patent"). Claims 10 and 16 are being reexamined in this proceeding. The remaining claims of 844 Patent (claims 1-9, 11-15, and 17-22) are not subject to reexamination.

2. Patent Owner (PO) did not timely file a Patent Owner Statement in response to the Order.

3. The present application is being examined under the pre-AIA first to invent provisions.

4. This is a first, non-final action.

References and Documents Cited in this Action

844 Patent (US 8,624,844 B2)

Order (order for *ex parte* reexamination of 844 Patent mailed on April 4, 2022)

Lane (WO 95/24007)

Ledbetter (US 2007/0058329 A1)

Claim Rejections - 35 USC § 103

5. The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented 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. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 10 and 16** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **Lane** in view of **Ledbetter**.

Independent claim 10 is directed to a portable computer including a keyboard, a display, and a hinge that is configurable between a plurality of display modes including a laptop mode (keyboard oriented to receive user input), an easel mode (keyboard oriented away from user),

and a frame mode (keyboard oriented down on a horizontal surface). As discussed below, Lane discloses almost all of the limitations of claim 10 including a portable computer with a laptop mode, an easel mode, and a frame mode. Ledbetter is relied upon to further teach different content modes displayed in different display modes.

Regarding **claim 10**, Lane discloses a portable computer (i.e., Figure 1; page 5, lines 4-6) configurable between a plurality of display modes including a laptop mode (i.e., Figure 20) and an easel mode (i.e., Figure 28) wherein transitions between the plurality of display modes permit an operator to interact with a single display screen in each of the plurality of display modes (page 3, lines 7-14; page 8, lines 18-19; page 10, lines 10-31), the portable computer comprising:

a base including a keyboard (i.e., first module 14 including keyboard with keys 36; Figure 1; page 5, lines 4-18);

a main display component rotatably coupled to the base and including the single display screen which displays content (i.e., second module 18 including a display 35, which is rotatably coupled to the base; Figure 1; page 3, lines 5-14; page 5, lines 4-18; page 10, line 24 to page 11, line 16; see also Figures 19-28);

a hinge assembly (i.e., an assembly including connector 54 and axles 102 and 86; Figures 3 and 4) disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode, 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 (page 6, line 7 to page 7, line 19; see also Figures 5-9, 20, 25, and 29), wherein

the laptop mode (i.e., Figure 20) is configured to display to a user on the main display component content 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 (i.e., Figure 20 shows a first display orientation wherein the *bottom* of the displayed content would be along the hinge side of the display, and mechanism 38 determines the orientation of the device; page 5, line 23 to page 6, line 6);

the easel mode (i.e. Figure 28) is configured to display to the user on the main display component content 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, (i.e., Figure 28 shows a second display orientation wherein the *top* of the displayed content would be along the hinge side of the display, and mechanism 38 determines the orientation of the device; page 5, line 23 to page 6, line 6), 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 (i.e., in the easel mode shown in Figure 28, "only the visual display 35 need be accessible"; page 10, lines 29-31; and display 35 functions as "a tablet for pen-based computing"; page 3, lines 13-14; page 8, lines 18-19; and page 10, lines 19-20); and

a navigation control accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen (i.e., Lane discloses a navigation control at least in the form of touch-sensitive display 35 receiving pen-based input from the user to operate the device; page 3, lines 13-14; page 8, lines 18-19; and page 10, lines 19-31)

wherein the plurality of modes includes a frame mode (i.e., Figure 25) 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 (i.e., Figure 25 shows the display facing out, and given the additional details and context shown in Figures 5-9, one in the art would understand that in the orientation shown in Figure 25, the keyboard of the base would be facing the horizontal surface upon which it rests).

The following figures from Lane show Lane's laptop mode (Figure 20); easel mode (Figure 28); and frame mode (Figure 25), respectively, wherein the dashed lines indicate the surface of the display that is directed to a user:

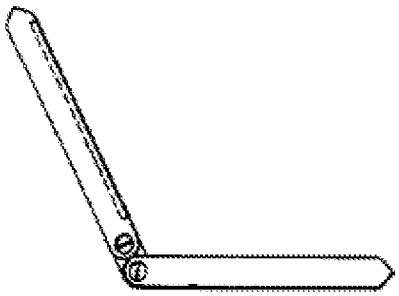


FIG 20
(Lane)

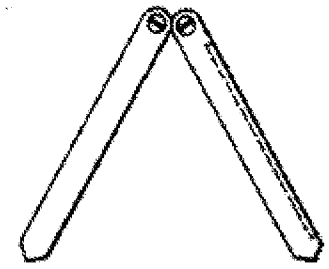


FIG 28
(Lane)

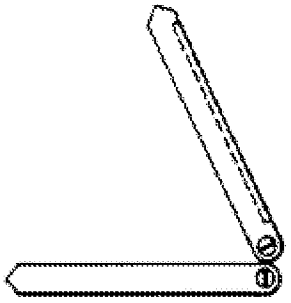


FIG 25
(Lane)

Further regarding claim 10, Lane generally discloses displaying content in the laptop mode and the easel mode (in first and second content display *orientations* as discussed above) but does not specifically disclose displaying a *first content mode* in the laptop mode and a *second content mode* in the easel mode. However, Ledbetter teaches a system that is related to the one disclosed by Lane, including a computer 120 configurable between a plurality of display modes wherein transitions between the plurality of display modes permit an operator to interact with a single display screen in each of the plurality of display modes (Ledbetter, Figures 1-5; paragraphs [0023] and [0026]). Ledbetter further teaches different content modes displayed in different display modes. For example, Ledbetter teaches "in the *media consumption mode*, media player software may be loaded and automatically executed. In the *tablet mode*, tablet operating system components such as including handwriting recognition software may be loaded and automatically executed. In the *walk-up mode*, a touch-screen shell program configured to provide convenient access to walk-up types of information (e.g., weather, messages, the internet and so forth) may be loaded. In the *workstation mode*, typical shortcuts and other information used for working/productivity or other computer usage (e.g., gaming) may be displayed." Ledbetter, paragraph [0057], emphasis added. Regarding claim 10, it would have been obvious to a person of ordinary skill in the art to provide first and second content modes as taught by Ledbetter displayed in the laptop and easel modes disclosed by Lane in order to advantageously optimize

the content for the chosen display mode and orientation, e.g., productivity applications in laptop mode and media in easel mode when the keyboard is unavailable.

Regarding **claim 16**, which depends on claim 10, in the system taught by Lane in view of Ledbetter, Lane further discloses that an operating display mode is selected from the plurality of display modes based on a physical orientation of the portable computer. Specifically, Lane discloses that mechanism 38 detects the physical orientation of the portable computer and determines the corresponding operating display mode based on the physical orientation, e.g., by rotating the content on the display and/or disabling the keyboard (Lane, page 5, line 23 to page 6, line 6).

Conclusion

7. In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 CFR 1.116, after final rejection and 37 CFR 41.33 after appeal, which will be strictly enforced.

8. The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 8,624,844 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

9. **All** correspondence relating to this *ex parte* reexamination proceeding should be directed:

By mail to: Mail Stop *Ex Parte* Reexam
Central Reexamination Unit

Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

By fax to: (571) 273-9900
Central Reexamination Unit

By hand to: Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

/CHRISTINA Y. LEUNG/

Primary Examiner, Art Unit 3991

Conferees:

/RSD/

/JCW/

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/014,965	8624844
	Examiner	Art Unit
	Christina Y Leung	3991

CPC - Searched*		
Symbol	Date	Examiner

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Reviewed patent's prosecution history and cited references.	03/23/2022	/CL/
Reviewed patent's prosecution history, including PTAB, and cited references.	10/05/2022	/CL/

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/CHRISTINA Y. LEUNG/ Primary Examiner, Art Unit 3991	

Reexamination	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/014,965	8624844
	Certificate Date	Certificate Number

Requester Correspondence Address: ☐ Patent Owner ☑ Third Party
KLARQUIST SPARKMAN, LLP 121 SW SALMON STREET SUITE 1600 PORTLAND, OR 97204

LITIGATION REVIEW ☑	/CL/ (examiner initials)	23 March 2022 (date)
Case Name		Director Initials
1:20cv689, Litl LLC v. Lenovo (United States), Inc. et al.		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	**NUMBER**
ex parte reexamination request for related patent US 9,880,715 B2	90/014,958

/CHRISTINA Y. LEUNG/ Primary Examiner, Art Unit 3991	

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7418604

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	AMENDMENT N0. 6 TO PATENT SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
LITL LLC	06/30/2022

RECEIVING PARTY DATA

Name:	WELLS FARGO CAPITAL FINANCE, LLC
Street Address:	125 HIGH STREET
Internal Address:	11TH FLOOR
City:	BOSTON
State/Country:	MASSACHUSETTS
Postal Code:	02110

PROPERTY NUMBERS Total: 9

Property Type	Number
Application Number:	16997718
Application Number:	90014965
Application Number:	90015025
Application Number:	16722760
Application Number:	90014958
Application Number:	16938852
Application Number:	16865893
Patent Number:	11265510
Application Number:	17576207

CORRESPONDENCE DATA

Fax Number: (800)914-4240

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 8007130755
Email: eric.edwards@wolterskluwer.com
Correspondent Name: CT CORPORATION
Address Line 1: 4400 EASTON COMMONS WAY
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Address Line 4: COLUMBUS, OHIO 43219

NAME OF SUBMITTER:	JESSICA HILDEBRANDT

SIGNATURE:	/Jessica Hildebrandt/
DATE SIGNED:	07/06/2022
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 7
source=IP filing#page1.tif
source=IP filing#page2.tif
source=IP filing#page3.tif
source=IP filing#page4.tif
source=IP filing#page5.tif
source=IP filing#page6.tif
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OMB No. 0651-0027 (exp. 04/30/2015)

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United States Patent and Trademark Office

RECORDATION FORM COVER SHEET
PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

LITL LLC

Additional name(s) of conveying party(ies) attached? ☐ Yes ■ No

2. Name and address of receiving party(ies)

Name: Wells Fargo Capital Finance, LLC
Internal Address:
Street Address: 125 High Street, 11th Floor
City: Boston
State: MA
Country: USA Zip: 02110

Additional name(s) & address(es) attached? ☐ Yes ■ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) June 30, 2022

☐ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other Amendment No. 6 to Patent Security Agreement

4. Application or patent number(s):

☐ This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

See attached Schedule I

B. Patent No.(s)

See attached Schedule I

Additional numbers attached? ■ Yes ☐ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Jessica Hildebrandt
Internal Address: Otterbourg P.C.
Street Address: 230 Park Ave.
City: New York
State: NY Zip: 10169
Phone Number: 212-905-3670
Docket Number:
Email Address: jhildebrandt@otterbourg.com

6. Total number of applications and patents involved: 9

7. Total fee (37 CFR 1.21(h) & 3.41) $

☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number
Authorized User Name

9. Signature:

Signature — Date: 7/6/2022

Jessica Hildebrandt
Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 6

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

AMENDMENT NO. 6 TO PATENT SECURITY AGREEMENT

This AMENDMENT NO. 6 TO PATENT SECURITY AGREEMENT (this "Amendment") is dated as of June 30, 2022, by and between LITL LLC, a Delaware limited liability company ("Grantor"), and WELLS FARGO CAPITAL FINANCE, LLC, a Delaware limited liability company, in its capacity as agent for Secured Parties (as hereinafter defined) (in such capacity, "Agent").

W I T N E S S E T H:

WHEREAS, Grantor and Agent, acting on behalf of lenders and certain other parties (Agent and such lenders and other parties, collectively "Secured Parties") are parties to the Patent Security Agreement, dated February 16, 2010, and recorded with the Assignment Recordation Branch for Patents of the United States Patent and Trademark Office ("USPTO") on February 22, 2010, at Reel/Frame 023966/0954, as amended by (a) Amendment No. 1 to Patent Security Agreement, dated as of June 17, 2015, and recorded with the Assignment Recordation Branch for Patents of the USPTO on June 23, 2015, at Reel/Frame 036015/0940, (b) Amendment No. 2 to Patent Security Agreement, dated as of January 7, 2016, and recorded with the Assignment Recordation Branch for Patents of the USPTO on January 8, 2016, at Reel/Frame 037461/0396, (c) Amendment No. 3 to Patent Security Agreement, dated as of May 16, 2016, and recorded with the Assignment Recordation Branch for Patents of the USPTO on June 14, 2016, at Reel/Frame 038992/0349, (d) Amendment No. 4 to Patent Security Agreement, dated as of September 6, 2017, and recorded with the Assignment Recordation Branch for Patents of the USPTO on September 6, 2017, at Reel/Frame 043495/0521 and (e) Amendment No. 5 to Patent Security Agreement, dated as of December 6, 2019, and recorded with the Assignment Recordation Branch for Patents of the USPTO on December 6, 2019, at Reel/Frame 051241/0765[1] (as amended hereby and as the same may hereafter be further amended, modified, supplemented, extended, renewed, restated or replaced, the "Patent Security Agreement");

WHEREAS, pursuant to the Patent Security Agreement, Grantor has, among other things, granted to Agent a security interest in all present and future Patents and Patent applications of Debtor, together with certain related assets, and has agreed to execute and deliver to Agent all agreements and documents as requested by Grantor to evidence the security interests of Agent therein;

WHEREAS, Grantor has adopted, used and is using, and is the owner of the entire right, title, and interest in and to a new patent and patent applications filed with the USPTO described in Schedule I hereto and made a part hereof (collectively, the "Additional Patents"); and

WHEREAS, Grantor is obligated to grant a security interest in and pledge all such Additional Patents and Additional Patent Collateral (as hereinafter defined) to Agent, as provided by the terms and conditions of the Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor and Agent hereby agree as follows:

1. Definitions. All initially capitalized terms used but not otherwise defined herein have the meanings given to them in the Patent Security Agreement or, if not defined therein, in the Security Agreement, and this Amendment shall be subject to the rules of construction set forth in the Security Agreement, which rules of construction are incorporated herein by this reference, mutatis mutandis.

[1] A corrective assignment was filed to amend the recordal of the receiving party's name at Reel Frame 051711/0073

2. Grant of Security Interest. In addition, and not in limitation, of the security interests and other interests granted to Agent (for itself and the benefit of Secured Parties) pursuant to the Patent Security Agreement, as collateral security for the prompt performance, observance and indefeasible payment in full of all of the Secured Obligations, Grantor hereby grants to Agent (for itself and the benefit of Secured Parties) a continuing security interest in and a general lien upon, and a conditional assignment, and hereby confirms, reaffirms and restates the prior grant thereof to Agent (for itself and the benefit of Secured Parties) pursuant to the Patent Security Agreement, of the following, whether presently existing or hereafter arising or acquired (being collectively referred to herein as the "Additional Patent Collateral"):

(a) all of the Additional Patents referred to on Schedule 1 to this Amendment and any Additional Patent licensed under any Intellectual Property License referred to on Schedule 1 to this Amendment;

(b) all divisionals, continuations, continuations-in-part, reissues, reexaminations, or extensions of the foregoing; and

(c) all products and proceeds (as that term is defined in the UCC) of the foregoing, including any claim by such Grantor against third parties for past, present or future (i) infringement or dilution of any Additional Patent or any Additional Patent licensed under any Intellectual Property License, including right to receive any damages, (ii) injury to the goodwill associated with any Additional Patent or any Additional Patent licensed under any Intellectual Property License, or (iii) right to receive license fees, royalties, and other compensation in connection with any Additional Patent or any Additional Patent licensed under any Intellectual Property License.

3. Security for Secured Obligations. This Amendment and the security interest created hereby and in the Patent Security Agreement secures the payment and performance of the Secured Obligations, whether now existing or arising hereafter. Without limiting the generality of the foregoing, this Patent Security Agreement secures the payment of all amounts which constitute part of the Secured Obligations and would be owed by any Grantor to Agent or Secured Parties, whether or not they are unenforceable or not allowable due to the existence of a case under any Insolvency Proceeding involving any Grantor.

4. Confirmation of Grant of Security Interest. Without limiting the grant of the security interest to Agent set forth in Section 2 of the Patent Security Agreement or any other provisions thereof, Grantor hereby confirms, reaffirms and restates its prior grant of Patent Collateral to Agent, for itself and on behalf of the other Secured Parties, and hereby grants to Agent, for itself and on behalf of the other Secured Parties, a continuing security interest in and a general lien upon the Additional Patent Collateral.

5. Supplement and Amendment to Patent Security Agreement.

(a) Without limiting any of the Patent Collateral otherwise described in the Patent Security Agreement,

(i) Schedule I to the Patent Security Agreement is hereby amended and supplemented to include, in addition and not by way of limitation, the Additional Patents,

(ii) all references to the term "Patents" in the Patent Security Agreement or the Security Agreement are hereby amended to include, in addition and not in limitation, the Additional Patents, and

(iii) all reference to the term "Patent Collateral" in the Patent Security Agreement and the Security Agreement are hereby amended to include, in addition and not in limitation, the Additional Patent Collateral.

(b) The security interests granted pursuant to this Amendment and the Patent Security Agreement are granted in conjunction with the security interests granted to Agent, for itself and the benefit of the Secured Parties, pursuant to the Security Agreement. Grantor hereby acknowledges and affirms that the rights and remedies of Agent with respect to the security interest in the Additional Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. To the extent there is any inconsistency between the Patent Security Agreement as amended by this Amendment and the Security Agreement, the Security Agreement shall control.

6. Representations, Warranties and Covenants. All of the representations, warranties and covenants with respect to the Patent Collateral set forth in the Patent Security Agreement shall apply to the Additional Patent Collateral and other assets described in Section 2 of this Amendment.

7. Effect of this Amendment. Except as expressly amended pursuant hereto, no other changes or modifications to the Patent Security Agreement or waivers of or consents under any provisions thereof are intended or implied, and in all other respects the Patent Security Agreement is hereby specifically ratified, restated, and confirmed by all parties hereto as of the effective date hereof. This Amendment and the Patent Security Agreement to be read and construed as one agreement.

8. Counterparts; Electronic Execution. This Amendment may be executed by means of (a) an electronic signature that complies with the federal Electronic Signatures in Global and National Commerce Act, state enactments of the Uniform Electronic Transactions Act, or any other relevant and applicable electronic signatures law; (b) an original manual signature; or (c) a faxed, scanned, or photocopied manual signature. Each electronic signature or faxed, scanned, or photocopied manual signature shall for all purposes have the same validity, legal effect, and admissibility in evidence as an original manual signature. Agent reserves the right, in its sole discretion, to accept, deny, or condition acceptance of any electronic signature on this Amendment. This Amendment may be executed in any number of counterparts, each of which shall be deemed to be an original, but such counterparts shall, together, constitute only one instrument. Delivery of an executed counterpart of a signature page of this Amendment will be as effective as delivery of a manually executed counterpart of this Amendment.

9. Governing Law. The validity, interpretation and enforcement of this Amendment and any dispute arising out of the relationship between parties hereto, whether in contract, tort, equity or otherwise, shall be governed by the internal laws of the Commonwealth of Massachusetts, but excluding any principles of conflict of laws or other rule of law that would cause the application of the law of any jurisdiction other than the laws of the Commonwealth of Massachusetts.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed and delivered as of the day and year first above written.

GRANTOR:

LITL, LLC

By: _____
Name: John Chuang
Title: President and CEO

AGENT:

WELLS FARGO CAPITAL FINANCE, LLC,

By: _____
Name: Melissa Provost
Title: Vice President

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed and delivered as of the day and year first above written.

GRANTOR:

LITL LLC

By:_____
Name: John Chuang
Title: President and CEO

AGENT:

WELLS FARGO CAPITAL FINANCE, LLC,

By:_____
Name: Melissa Provost
Title: Vice President

HP Inc. - Exhibit 1005 - Page 3613

SCHEDULE I
to
AMENDMENT NO. 6 TO PATENT SECURITY AGREEMENT

United States Patents and Patent Applications

Patent	Application No.	Application Date	Patent No.	Issue Date
PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS	16/997718	08/19/2020		
PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS	90/014965	02/25/2022		
PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS	90/015025	05/06/2022		
SYSTEM AND METHOD FOR STREAMLINING USER INTERACTION WITH ELECTRONIC CONTENT	16/722760	12/20/2019		
SYSTEM AND METHOD FOR STREAMLINING USER INTERACTION WITH ELECTRONIC CONTENT	90/014958	02/16/2022		
METHOD AND APPARATUS FOR PROVIDING CONTEXTUAL SERVICES	16/938852	07/24/2020		
METHOD AND APPARATUS FOR MANAGING DIGITAL MEDIA CONTENT	16/865893	05/04/2020		
VIDEO INTEGRATION	16/682579	11/13/2019	11265510	03/01/2022
VIDEO INTEGRATION	17/576207	01/14/2022		

HP Inc. - Exhibit 1005 - Page 3614

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/014,965	02/25/2022	8624844		3442

23628 7590 04/04/2022

WOLF GREENFIELD & SACKS, P.C.
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BOSTON, MA 02210-2206

EXAMINER	
LEUNG, CHRISTINA Y	

ART UNIT	PAPER NUMBER
3991	

MAIL DATE	DELIVERY MODE
04/04/2022	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

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(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

KLARQUIST SPARKMAN, LLP
121 SW SALMON STREET
SUITE 1600
PORTLAND, OR 97204

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. *90/014,965* .

PATENT UNDER REEXAMINATION *8624844* .

ART UNIT *3991* .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Order Granting Request For Ex Parte Reexamination	Control No. 90/014,965	Patent Under Reexamination 8624844	
	Examiner Christina Y Leung	Art Unit 3991	AIA (FITF) Status No

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

The request for *ex parte* reexamination filed 02/25/2022 has been considered and a determination has been made. An identification of the claims, the references relied upon, and the rationale supporting the determination are attached.

Attachments: a)☐ PTO-892, b)☑ PTO/SB/08, c)☐ Other: ____

1. ☑ The request for *ex parte* reexamination is GRANTED.

RESPONSE TIMES ARE SET AS FOLLOWS:

For Patent Owner's Statement (Optional): TWO MONTHS from the mailing date of this communication (37 CFR 1.530 (b)). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

For Requester's Reply (optional): TWO MONTHS from the **date of service** of any timely filed Patent Owner's Statement (37 CFR 1.535). **NO EXTENSION OF THIS TIME PERIOD IS PERMITTED.** If Patent Owner does not file a timely statement under 37 CFR 1.530(b), then no reply by requester is permitted.

/CHRISTINA Y. LEUNG/ Primary Examiner, Art Unit 3991		

cc:Requester (if third party requester)

DECISION GRANTING EX PARTE REEXAMINATION

Decision on the Request

The present request for *ex parte* reexamination raises a substantial new question of patentability with respect to claims 10 and 16 of United States Patent 8,624,844 B2 to Behar et al. ("844 Patent").

References Cited in the Request

The Request cites six references that support specific alleged substantial new questions of patentability with respect to claims 10 and 16:

Lane (WO 95/24007 A1)

Kamikakai (US 6,154,359 A)

CN 170 (CN 2627170 Y; see English translation filed by 3PR on February 25, 2022)

Shimura (JP1994-242853 [H06-242853]; see English translation filed by 3PR on February 25, 2022)

Ledbetter (US 2007/0058329 A1)

Hisano (US 2006/0034042 A1)

The Request also includes citations to the following additional references as part of a discussion of the state of the art. These references are not part of any specific alleged substantial new question of patentability, and accordingly, these references are not included as part of the basis for ordering *ex parte* reexamination of 844 Patent:

Valikangas (GB 2321982 A)

Kanamori (JP 2005-71297 A)

Podwalny (US 5,644,516 A)

Schweizer (US 7,061,472 B1)

Tsuji (US 2005/0062715 A1)

Shigeo (JP H08-179851)

Nobuchi (US 6,492,974 B1)

Ording (US 2008/0211778 A1 and US 60/946,970)

Tonouchi (US 2005/0122318 A1)

Pogue (*Windows Vista: The Missing Manual, 1st Edition,* 2007)

Issues Raised by the Request

Issue 1

The Request alleges that Lane raises a substantial new question of patentability with respect to claims 10 and 16.

Issue 2

The Request alleges that Lane in view of Ledbetter raises a substantial new question of patentability with respect to claims 10 and 16.

Issue 3

The Request alleges that Kamikakai in view of Shimura raises a substantial new question of patentability with respect to claims 10 and 16.

Issue 4

The Request alleges that Kamikakai in view of Shimura, Hisano, and Ledbetter raises a substantial new question of patentability with respect to claims 10 and 16.

Issue 5

The Request alleges that CN 170 in view of Shimura raises a substantial new question of patentability with respect to claims 10 and 16.

Issue 6

The Request alleges that CN 170 in view of Shimura, Hisano, and Ledbetter raises a substantial new question of patentability with respect to claims 10 and 16.

The 844 Patent

844 Patent is generally directed to a portable computer that is configurable into different display positions or modes. Claim 10 is representative:

10. 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 permit 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 and including the single display screen which displays content;

a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode, 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 accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen wherein the plurality of modes includes 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.

Prosecution History

844 Patent issued on January 7, 2014 from application 12/170,951 filed on July 10, 2008 and claims priority to provisional application 61/041,365 filed on April 1, 2008.

July 10, 2008: Applicant filed claims 1-17.

April 4, 2011: In a non-final action, Examiner rejected claims 1-2, 6-9, 11, and 10-17 under 35 U.S.C. 103(a) as being unpatentable over Aarras (US 2006/0264243 A1) in view of Nishiyama (EP 0588210 A1); claims 3-5 and 10 under 35 U.S.C. 103(a) as being unpatentable over Aarras in view of Nishiyama and Orsley (US 2007/0247446 A1); claim 12 under 35 U.S.C. 103(a) as being unpatentable over Aarras, Nishiyama, Orsley, and Gettman (US 7,467,356 B2)

July 1, 2011: Applicant amended claims 1, 7, 8, 12, and 13; canceled claim 9; and added new claims 18-21.

October 28, 2011: In a final action, Examiner rejected claims 1-8 and 10-21 under 35 U.S.C. 103(a) as being unpatentable over Nishiyama in view of Aarras.

March 22, 2012: Applicant filed a Request for Continued Examination and amended claims 1, 7, 8, 13, 18, and 21; and added new claims 22-24.

June 7, 2012: In a non-final action, Examiner rejected claims 1-8 and 10-24 under 35 U.S.C. 103(a) as being unpatentable over Nobuchi (US 6,492,974 B1) in view of Aarras and Nishiyama (US 5,436,954 A). Examiner also provisionally rejected some claims on the ground of nonstatutory obviousness-type double patenting.

October 9, 2012: Applicant amended claim 7.

February 1, 2013: In a non-final action, Examiner rejected claims 1-8 and 10-24 under 35 U.S.C. 103(a) as being unpatentable over Schweizer (US 7,061,472 B1) in view of Nishiyama.

July 1, 2013: Applicant amended claims 1, 2, 6-8, 13-16, 18, and 20-23.

August 9, 2013: Applicant filed a terminal disclaimer.

August 22, 2013: In an Examiner's Amendment, Examiner canceled claim 22 and added the limitation "wherein the plurality of modes includes 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" to all independent claims. Examiner allowed claims 1-8, 10-21, 23, and 24, stating that

> "none of cited reference teaches 'wherein the plurality of modes includes 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.' (fig. 26) cited in claims 1, 7 & 13."

January 4, 2014: 844 Patent issued with claims 1-22.

May 4, 2021: Petitioner requested *Inter Partes* Review of 844 Patent (IPR2021-00822) , asserting that claims 1, 3-5, 7-10, and 13-16 are unpatentable over Shimura (JP 1994-242853

[H06-242853]) in view of Tsuji (US 2005/0062715 A1) and Pogue Windows XP[1] (*Windows XP Home Edition: The Missing Manual, 2nd Edition,* 2004); claim 6 is unpatentable over Shimura in view of Tsuji, Pogue Windows XP, and Escamilla (US 6,724,365 B1); claim 2 is unpatentable over Shimura in view of Tsuji, Pogue Windows XP, Escamilla, and Yeh (US 6,396,419 B1); claims 18 and 22 are unpatentable over Shimura in view of Tsuji, Pogue Windows XP, and Lin (US 2007/0013682 A1); claims 11, 12, 19, and 21 are unpatentable over Shimura in view of Tsuji, Pogue Windows XP, Escamilla, and Lin; and claim 20 is unpatentable over Shimura in view of Tsuji, Pogue Windows XP, Escamilla, Lin, and Yeh.

October 21, 2021: The Patent Trial and Appeal Board (PTAB) denied institution of *Inter Partes* Review (IPR2021-00822). PTAB determined that Petitioner did not show a reasonable likelihood of prevailing because "Shimura's Figure 4 does not disclose or suggest a frame mode…Petitioner points to nothing in Shimura that would indicate its hinge could support the display in frame mode." IPR2021-00822, decision to deny, pages 12-13.

Detailed Analysis

Claims 10 and 16 will be reexamined.

In view of the prosecution history, a substantial new question of patentability is raised by the evaluation of a prior art reference (or a combination of prior art references) that teaches 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.

[1] This "Pogue Windows XP" reference cited in IPR2021-00822 Petition is *Windows XP Home Edition: The Missing Manual, 2nd Edition*, 2004, by David Pogue. It is different from the "Pogue" reference cited in the present Request as background art, which is *Windows Vista: The Missing Manual, 1st Edition,* 2007, also by David Pogue.

Issues 1 and 2

The Request alleges that Lane alone, or in view of Ledbetter, raises a substantial new question of patentability with respect to claims 10 and 16.

Lane, published on September 8, 1995; and Ledbetter, published on March 15, 2007, are prior art with respect to 844 Patent. Lane and Ledbetter are new art because Lane and Ledbetter were not previously cited or discussed on the record during the prosecution of 344 Patent or in a concluded PTAB proceeding where a final decision was reached.

Lane teaches, among other things, a portable computer configurable between a plurality of display modes (Figures 20, 25, and 28), wherein the plurality of modes includes 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 (Lane, Figure 25; page 10, lines 28-31). Since this teaching is directly related to subject matter considered the basis for allowability of claims 10 and 16, a reasonable examiner would consider evaluation of Lane either alone or in view of Ledbetter important in determining the patentability of the claims. Therefore, Lane alone or in view of Ledbetter raises a substantial new question of patentability with respect to claims 10 and 16.

Issues 3 and 4

The Request alleges that Kamikakai in view of Shimura, or in view of Shimura, Hisano, and Ledbetter, raises a substantial new question of patentability with respect to claims 10 and 16. Kamikakai, published on November 28, 2000; Shimura, published on September 2, 1994; Hisano, published on February 16, 2006; and Ledbetter, published on March 15, 2007 are prior art with respect to 844 Patent. Kamikakai, Shimura, Hisano, and Ledbetter are new art because Kamikakai, Shimura, Hisano, and Ledbetter were not previously cited or discussed on the record

during the prosecution of 344 Patent or in a concluded PTAB proceeding where a final decision was reached.[2]

Kamikakai teaches, among other things, a portable computer configurable between a plurality of display modes (Figures 3 and 8), wherein the plurality of modes includes a frame mode in which the main display component 3 is oriented towards the operator, the base 2 contacts a substantially horizontal surface, and the keyboard 6 faces the substantially horizontal surface (Kamikakai, Figure 8; column 6, lines 27-36). Since this teaching is directly related to subject matter considered the basis for allowability of claims 10 and 16, a reasonable examiner would consider evaluation of Kamikakai in view of Shimura, or in view of Shimura, Hisano, and Ledbetter, important in determining the patentability of the claims. Therefore, Kamikakai in view of Shimura, or in view of Shimura, Hisano, and Ledbetter, raises a substantial new question of patentability with respect to claims 10 and 16.

Issues 5 and 6

The Request alleges that CN 170 in view of Shimura, or in view of Shimura, Hisano, and Ledbetter, raises a substantial new question of patentability with respect to claims 10 and 16. Shimura, Hisano, and Ledbetter are new prior art (see above). CN 170, published on July 21, 2004, is prior art with respect to 844 Patent. CN 170 is new art because CN 170 was not previously cited or discussed on the record during the prosecution of 344 Patent or in a concluded PTAB proceeding where a final decision was reached.

[2] Shimura was cited in the IPR2021-00822 petition, but as discussed above, PTAB denied institution of IPR in IPR2021-00822. In other words, the same question of patentability with respect to Shimura has not already been: (A) decided in a final holding of invalidity by a federal court in a decision on the merits involving the claim, after all appeals; (B) decided in an earlier concluded examination or review of the patent by the Office; or (C) raised to or by the Office in a pending reexamination or supplemental examination of the patent. See MPEP 2242.

CN 170 teaches, among other things, a portable computer configurable between a plurality of display modes (Figures 4, 13, and 19), wherein the plurality of modes includes a frame mode in which the main display component 91 is oriented towards the operator, the base 92 contacts a substantially horizontal surface, and the keyboard faces the substantially horizontal surface (CN 170, Figure 13)

Since this teaching is directly related to subject matter considered the basis for allowability of claims 10 and 16, a reasonable examiner would consider evaluation of CN 170 in view of Shimura, or in view of Shimura, Hisano, and Ledbetter, important in determining the patentability of the claims. Therefore, CN 170 in view of Shimura, or in view of Shimura, Hisano, and Ledbetter, raises a substantial new question of patentability with respect to claims 10 and 16.

Scope of Reexamination

Since the requester did not request reexamination of claims 1-9, 11-15, and 17-22 and did not assert the existence of a substantial new question of patentability for those claims (see 35 U.S.C. § 311(b)(2); see also 37 CFR 1.915(b) and 1.923), those claims will not be reexamined. This matter was squarely addressed in *Sony Computer Entertainment America Inc., et al. v. Jon W. Dudas*, 85 USPQ2d 1594 (E.D. Va 2006). The District Court upheld the Office's discretion to not reexamine claims in an *inter partes* reexamination proceeding other than those claims for which reexamination had been specifically requested. The Court stated:

"To be sure, a party may seek, and the PTO may grant, *inter partes* review of each and every claim of a patent. Moreover, while the PTO in its discretion may review claims for which *inter partes* review was not requested, nothing in the statute compels it to do so. To ensure that the PTO considers a claim for *inter partes* review, § 311(b)(2) requires that the party seeking

reexamination demonstrate why the PTO should reexamine each and every claim for which it seeks review. Here, it is undisputed that Sony did not seek review of every claim under the '213 and '333 patents. Accordingly, Sony cannot now claim that the PTO wrongly failed to reexamine claims for which Sony never requested review, and its argument that AIPA compels a contrary result is unpersuasive."

The Sony decision's reasoning and statutory interpretation apply analogously to *ex parte* reexamination, as the same relevant statutory language applies to both *inter partes* and *ex parte* reexamination. 35 U.S.C. § 302 provides that the *ex parte* reexamination "request must set forth the pertinency and manner of applying cited prior art *to every claim for which reexamination is requested*" (emphasis added), and 35 U.S.C. § 303 provides that "the Director will determine whether a substantial new question of patentability affecting *any claim of the patent* concerned is *raised by the request*" (emphasis added). These provisions are analogous to the language of 35 U.S.C. § 311(b)(2) and 35 U.S.C. § 312 applied and construed in Sony, and would be construed in the same manner. As the Director can decline to reexamine non-requested claims in an *inter partes* reexamination proceeding, the Director can likewise do so in *ex parte* reexamination proceeding. See *Notice of Clarification of Office Policy To Exercise Discretion in Reexamining Fewer Than All the Patent Claims* (signed Oct. 5, 2006) 1311 OG 197 (Oct. 31, 2006). See also MPEP § 2240, Rev. 5, Aug. 2006.

35 USC 325(d)

A review of the post grant history for '844 Patent indicates that this patent was the subject of a prior petition for *inter partes* review (IPR2021-00822) filed by Lenovo, which was not instituted on the merits. A review of that petition as compared to the instant request for *ex parte* reexamination of 844 patent indicates that one reference used in an asserted ground

presented in the petition for *inter partes* review is the same as that presented in the instant reexam request as raising an SNQ. In particular, in both the petition for IPR2021-00822 and this reexamination request (filed by the same third-party requester [3PR], Lenovo; see Request, page 5), the claims have been asserted as raising a substantial new question of patentability (SNQ) over the Shimura prior art reference (in combination with other references).

A review of the decision to deny institution in IPR2021-00822 indicates that PTAB denied institution because "Shimura's Figure 4 does not disclose or suggest a frame mode…Petitioner points to nothing in Shimura that would indicate its hinge could support the display in frame mode." IPR2021-00822, decision to deny, pages 12-13. Although the Request again cites Shimura as raising an SNQ in the instant request for *ex parte* reexamination of the 844 patent, 3PR combines the teachings of Shimura with different references and unlike in the IPR petition, 3PR does not rely on Shimura as the primary reference. The Request presents different arguments with respect to the teachings of Shimura, directly addressing the omissions identified by PTAB in denying the IPR petition (i.e., the Request relies on primary references Kamikakai or CN 170 for teaching the frame mode limitation). The Request also asserts identifies additional asserted obviousness grounds without Shimura that are not present in the IPR petition (i.e., Lane alone, and Lane in view of Ledbetter).

In view of the facts that 1) the Request is not based on substantially the same prior art and arguments as those previously presented, and 2) there is no evidence that 3PR has presented successive challenges of the '844 patent beyond the instant Request and IPR2021-00822, a discretionary denial pursuant to 35 USC 325(d) is not warranted and *ex parte* reexamination is Ordered for the reasons set forth above.

Conclusion

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that *ex parte* reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 8,624,844 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

All correspondence relating to this *ex parte* reexamination proceeding should be directed:

By mail to: Mail Stop *Ex Parte* Reexam
Central Reexamination Unit
Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

By fax to: (571) 273-9900
Central Reexamination Unit

By hand to: Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

/CHRISTINA Y. LEUNG/

Primary Examiner, Art Unit 3991

Conferees:

/RSD/

/Jean C. Witz/

Supervisory Patent Examiner, 3991

Reexamination	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/014,965	8624844
	Certificate Date	Certificate Number

Requester Correspondence Address: ☐ Patent Owner ☑ Third Party
KLARQUIST SPARKMAN, LLP 121 SW SALMON STREET SUITE 1600 PORTLAND, OR 97204

LITIGATION REVIEW ☑	/CL/ (examiner initials)	23 March 2022 (date)
Case Name		Director Initials
1:20cv689, Litl LLC v. Lenovo (United States), Inc. et al.		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	**NUMBER**
ex parte reexamination request for related patent US 9,880,715 B2	90/014,958

/CHRISTINA Y. LEUNG/ Primary Examiner, Art Unit 3991	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/014,965	8624844
	Examiner	Art Unit
	Christina Y Leung	3991

CPC - Searched*		
Symbol	Date	Examiner

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Reviewed patent's prosecution history and cited references.	03/23/2022	/CL/

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/CHRISTINA Y. LEUNG/ Primary Examiner, Art Unit 3991	

Bibliographic Data

Application No: 90/014,965

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☑ No ☐ Met After Allowance

Verified and Acknowledged: /CHRISTINA Y. LEUNG/ Examiner's Signature | Initials

Title: Portable Computer with Multiple Display Configurations

---

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
02/25/2022	345	3991	
RULE			

APPLICANTS

INVENTORS

8624844,

LITL LLC (Assignee), BOSTON, MA, UNITED STATES

KLARQUIST SPARKMAN, LLP (3rd Pty Req.), PORTLAND, OR, UNITED STATES

CONTINUING DATA

This application is a REX of 12170951 07/10/2008 PAT 8624844

12170951 has PRO of 61041365 04/01/2008 *

(*) Data provided by applicant is not consistent with PTO record

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

STATE OR COUNTRY

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BOSTON, MA 02210-2206
UNITED STATES

FILING FEE RECEIVED

$275

INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	~~12/170,951~~ 90/014,965
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. (optional)	Document Number Number-Kind Code (if known)	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant
/CL/	1.	U.S. Patent No. 8,624,844	01/07/2014	Behar
/CL/	2.	U.S. Patent No. 6,154,359	11/28/2000	Kamikakai
/CL/	3.	U.S. Patent No. 6,492,974	12/10/2002	Nobuchi
/CL/	4.	U.S. Patent No. 7,061,472	06/13/2006	Schweizer
/CL/	5.	U.S. Patent No. 5,644,516	07/01/1997	Podwalny

U.S. PATENT APPLICATION PUBLICATIONS

Examiner Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant
/CL/	6.	U.S. Patent Application No. 2007/0058329	03/15/2007	Ledbetter
/CL/	7.	U.S. Patent Application Publication No. 2006/0034042	02/16/2006	Hisano
/CL/	8.	U.S. Patent Application Publication No. 2005/0122318	06/09/2005	Tonouchi
/CL/	9.	U.S. Patent Application Publication No. 2005/0062715	03/24/2005	Tsuji
/CL/	10.	U.S. Patent Application Publication No. 2008/0211778	09/04/2008	Ording

EXAMINER SIGNATURE:	/CHRISTINA Y. LEUNG/	DATE CONSIDERED:	03/23/2022

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.
**Please place an "X" in this column if English translation is attached.

INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	12/470,951 [illegible]0/014,965
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

U.S. PATENT APPLICATION PUBLICATIONS

Examiner Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant
/CL/	11.	U.S. Provisional Patent Application Publication No. 60/946,970	06/28/2007	Ording

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. (optional)	Foreign Patent Document Country Code-Number-Kind Code (if known)	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant	T**
/CL/	12.	JP H6-242853	09/02/1994	Shimura	
/CL/	13.	JP 2005-71297A	03/17/2005	Kanamori	
/CL/	14.	CN 2627170Y	07/21/2003	Ruijiang	
/CL/	15.	H08-179851	07/12/1996	Shigeo	
/CL/	16.	PCT International Patent Application Publication No. WO 95/24007	09/08/1995	Lane	
/CL/	17.	European Patent No. EP 2 283 407 B1	10/10/2018	Behar	
/CL/	18.	UK Patent Application Publication No. GB 2 321 982 A	08/12/1998	Valikangas	

Examiner Initials*	Cite No. (optional)	OTHER DOCUMENTS	T**
/CL/	19.	File History of U.S. Patent No. 8,624,844	
/CL/	20.	Declaration Of Christopher Schmandt	
/CL/	21.	Certified English Translation of JP H6-242853 ("**Shimura**")	
/CL/	22.	Certified English Translation of JP2005-71297A ("**Kanamori**")	

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INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	~~12/170,951~~ 90/014,965
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

Examiner Initials*	Cite No. (optional)	OTHER DOCUMENTS	T**
/CL/	23.	Certified English Translation of CN 2627170Y ("**CN '170**") (Ruijiang)	
/CL/	24.	Certified English Translation of Japanese Patent Application Publication No. H08-179851 ("**Shigeo**")	
/CL/	25.	David Pogue, *Windows Vista: The Missing Manual*, *1st edition, 2nd printing,* published February 2007. Excerpts ("**Pogue**")	
/CL/	26.	Petition for *Inter Partes* Review of the '844 Patent, filed May 4, 2021 by Petitioner Lenovo (United Sates) Inc., *Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822 (PTAB)	
/CL/	27.	Decision Denying Institution of *Inter Partes* Review of the '844 Patent, issued October 21, 2021, *Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822 (PTAB)	
/CL/	28.	First Amended Complaint ("**Complaint**"), *LiTL LLC v. Lenovo (United States), Inc. et al,* No. DDE-1-20-cv-00689 (U.S. Dist. Ct., Dist. Delaware)	
/CL/	29.	Declaration of Dan Fauxsmith, VP of Publishing Operations at O'Reilly Media, Inc. ("Fauxsmith")	
/CL/	30.	Affidavit of Nathaniel E. Frank-White, Records Request Processor at the Internet Archive ("Frank-White")	
/CL/	31.	[No Author Listed], Litl Webbook Beats ChromeOS, Becomes First Cloud Computer. CoolThings. November 16, 2009. URL:https://www.coolthings.com/litl-webbook-beats-chromeosbecomes-first-cloud-computer/ [last accessed June 25, 2021]	
/CL/	32.	McDonald, LiTL Webbook Review. Little Tech Girl. August 31, 2010. URL:https://littletechgirl.com/2010/08/31/litl-webbook-review/ [last accessed June 25, 2021]	
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/CL/	34.	King, Litl Webbook price drops from $699 to $399. ZDNet. May 16, 2010. URL:https://www.zdnet.com/article/litl-webbook-price-drops-from-699-to-399/ [last accessed February 1, 2022]	
/CL/	35.	File History (Excerpts) of European Patent No. EP 2283407 B1	

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* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.
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INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	~~xxxxxxxx~~ 90/014,965 12/170,951
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

Examiner Initials*	Cite No. (optional)	OTHER DOCUMENTS	T**
/CL/	36.	Murph, Litl Webbook plummets from $699 to $399, still can't catch an eye. May 16, 2010. URL:https://www.engadget.com/2010-05-16-litl-webbook-plummets-from-699-to-399-still-cant-catch-an-ey.html [last accessed February 7, 2022]	

EXAMINER SIGNATURE:	/CHRISTINA Y. LEUNG/	DATE CONSIDERED:	03/23/2022

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.
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Litigation Search Report CRU 3999

Reexamination Control No. 90/014,965

To:	LEUNG, Christina	**From:**	GRAVES, Monica A.
Location:	OCRU	**Location:**	OCRU
Art Unit:	3991	**Phone:**	2-7253
Date:	16 March 2022	**E-mail:**	monica.graves@uspto.gov

Search Notes

US PATENT NO: 8,624,844 - Litigation found

1. Performed a KeyCite Search in Westlaw, which retrieves all history on the patent including any litigation.
2. Performed a search on the patent in Lexis CourtLink for any open dockets or closed cases.
3. Performed a search in Lexis in the Federal Courts and Administrative Materials databases for any cases found.
4. Performed a search in Lexis in the IP Journal and Periodicals database for any articles on the patent.
5. Performed a search in Lexis in the news databases for any articles about the patent or any articles about litigation on this patent.

Citing References (90)

Treatment	Title	Date	Type	Depth	Headnote(s)
Examined by	**1. LITL LLC v. Lenovo (United States), Inc.** 2022 WL 610739, *1+ , D.Del. , (NO. CV 20-689-RGA) Before me is Defendants' motion to dismiss for failure to state a claim. (D.I. 34). Defendants Lenovo (United States) Inc. ("Lenovo U.S.") and Lenovo (Beijing) Ltd. ("Lenovo... ... Ex. A, 40, 41) on this issue.I. BACKGROUND LITL alleges Defendants infringe one or more claims of U.S. Patent Nos. 8,289,688 ("the '688 patent") 8,624,844 ("the '844 patent ")10,289,154 ("the '154 patent")9,880,715 ("the '715 patent")8,612,888 ("the '888 patent), and 8,577,957 ("the '957 patent") (collectiveiy, "the Asserted Patents."). The ...	Jan. 21, 2022	Case		—
Examined by	**2. Patent Owner's Preliminary Response** LENOVO (UNITED STATES) INC., Petitioner, v. LITL LLC, Patent Owner. 2021 WL 3233897, *1+ , Patent Tr. & App. Bd. (Administrative Filing) , (NO. INTERFERENCE8624844) ... Fax.TABLE OF CONTENTS I. INTRODUCTION 1 A. The Petition Is Procedurally Improper 1 B. The Petition's Grounds Fail on the Merits 3 II. LITL'S ' 844 PATENT 4 A. Challenged Claims 5 B. The Challenged Claims Cover LiTL's Webbook 5 C. Claimed Aspects of LiTL's Webbook Received Contemporaneous Praise 8 III ...	July 28, 2021	Administrative Filing		—
Examined by	**3. Petition for Inter Partes Review Under 35 U.S.C. s311 et seq. and 37 C.F.R. s42.100 et seq. (Claims 1-16 and 18-22 of U.S. Patent No. 8,624,844)** LENOVO (UNITED STATES) INC., Petitioner, v. LITL LLC, Patent Owner. 2021 WL 1799996, *1+ , Patent Tr. & App. Bd. (Administrative Filing) , (NO. INTERFERENCE8624844) ... Petition for Inter Partes Review Under 35 U.S.C. s311 et seq. and 37 C.F.R. s42.100 et seq. (Claims 1-16 and 18-22 of U.S. Patent No. 8,624,844 Martin R. Bader (Reg. 54,736), Sheppard Mullin Richter & Hampton LLP, 12275 El Camino Real, Suite 200, San Diego, CA 92130, Tel.: (858 ...	May 04, 2021	Administrative Filing		—
Examined by	**4. First Amended Complaint** LITL LLC, Plaintiff, v. LENOVO (UNITED STATES), INC. and Lenovo (Beijing) Ltd. Defendants. 2020 WL 10352292, *1+ , D.Del. (Trial Pleading) , (NO. 1:20-CV-00689-RGA) ... to infringe, have induced and continue to induce the infringement of one or more claims of U.S. Patent Nos. 8,289,688 ("the #688 patent"); 8,624,844 ("the # 844 patent "); 10,289,154 ("the #154 patent"); 9,880,715 ("the #715 patent"); 8,612,888 ("the #888 patent"); and 8,577,957 ("the #957 patent") (collectively, the "Asserted Patents") at least by ...	Dec. 30, 2020	Petition		—

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Treatment	Title	Date	Type	Depth	Headnote(s)
Examined by	**5. LITL LLC's Opposition to Lenovo (Beijing) Ltd's Opening Brief in Support of its Motion to Dismiss for Failure to State a Claim** LITL LLC, Plaintiff, v. LENOVO (UNITED STATES), INC. and Lenovo (Beijing) Ltd., Defendants. 2021 WL 2878528, *1+ , D.Del. (Trial Motion, Memorandum and Affidavit) , (NO. 1:20-CV-00689-RGA) ... NATURE AND STAGE OF THE PROCEEDINGS On May 22, 2020, LITL filed its Complaint (D.I. 1) alleging infringement of U.S. Patent Nos. 8,289,688 ("'688 patent) 8,624,844 ("'844 patent ")10,289,154 ("'154 patent")9,880,715 ("'715 patent")8,612,888 ("'888 patent"); and 8,577,957 ("'957 patent") (collectively "the Asserted Patents"). On August 17, 2020, Lenovo (United ...	Mar. 03, 2021	Motion		—
Examined by	**6. Defendant Lenovo (United States) Inc.'s Opening Brief in Support of its Motion to Dismiss for Failure to State a Claim Pursuant to Fed. R. Civ. P. 12(...** LITL LLC, Plaintiff, v. LENOVO (UNITED STATES), INC. and Lenovo (Beijing) Ltd., Defendants. 2020 WL 10352289, *1+ , D.Del. (Trial Motion, Memorandum and Affidavit) , (NO. 1:20-CV-00689-RGA) ... functional language.I NATURE AND STAGE OF THE PROCEEDINGS & STATEMENT OF FACTS Plaintiff alleges infringement of "one or more claims" of U.S. Patent Nos. 8,289,688 8,624,844 10,289,154 9,880,715 8,612,888, and 8,577,957(D.I. 1. (filed May 22, 2020) ¶¶ 62, 88, 124, 143, 160, 179.) The patents all come from the same ...	Aug. 17, 2020	Motion		—
Discussed by	**7. Defendant Lenovo (Beijing) Ltd.'s Opening Brief in Support of its Motion to Dismiss for Failure to State a Claim.** LITL LLC, Plaintiff, v. LENOVO (UNITED STATES), INC. and Lenovo (Beijing) Ltd., Defendants. 2021 WL 2878525, *1+ , D.Del. (Trial Motion, Memorandum and Affidavit) , (NO. 20-689 (RGA)) ... filed its Complaint for patent infringement against Defendants on May 22, 2020. (D.I. 1.) The Complaint alleges infringement of U.S. Patent Nos. 8,289,688 ("'688 patent) 8,624,844 ("'844 patent ")10,289,154 ("'154 patent")9,880,715 ("'715 patent")8,612,888 ("'888 patent"); and 8,577,957 ("'957 patent") Lenovo U.S. was served on or about May 26, 2020 ...	Feb. 03, 2021	Motion		—
Cited by	**8. Portable computer with multiple display configurations** LitAlert P2020-22-16 ... 1:20CV00689 Filing Date: 05/22/2020 Subsequent Action: 05/22/2020 Action Taken: CAUSE - 35 USC 1 - COMPLAINT FOR PATENT INFRINGEMENT Notes: none Other Patents: US 8624844 US 10289154 US 9880715 US 8612888 US 8577957 Other Trademarks: none See LitAlert No: none ...	May 22, 2020	Lit Alert		—

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Treatment	Title	Date	Type	Depth	Headnote(s)
Cited by	**9.** Lenovo (United States) Inc. v. LITL LLC 2021 WL 5203289, *1 , Patent Tr. & App. Bd. , (NO. IPR2021-00786 , PATENT 9,880,715 B2) Lenovo (United States) Inc. ("Petitioner") filed a Petition (Paper 1, "Pet.") requesting an inter partes review of claims 1–20 of U.S. Patent No. 9,880,715 B2 (Ex. 1001, "the '715... ... of the '715 patent); IPR2021-00821 (challenging U.S. Patent No. 8,612,688, which belongs to the patent family of the '715 patent); and IPR2021-00822 (challenging U.S. Patent No. 8,624,844 , which belongs to the patent family of the '715 patent Paper 4, 2.B. The '715 Patent (Ex. 1001)The '715 patent ...	Oct. 21, 2021	Administrative Decision		—
—	**10.** CLAM-SHELL TYPE PORTABLE COMPUTER E.G. LAPTOP COMPUTER, FOR USE IN E.G. HOME, HAS SCROLL WHEEL PLACED IN BASE, WHERE WHEEL PERMITS USER TO CONTROL ONE OF OPERATING PARAMETERS OF COMPUTER AND CONTENT DISPLAYED ON DISPLAY SCREEN Out Of Plan DWPI 2009-P16803 ... 16 US 8402128 B2 2013-03-19 US 8402145 B2 2013-03-19 US 8554924 B2 2013-10-08 US 8619116 B2 2013-12-31 US 8624844 B2 2014-01-07 US 8639733 B2 2014-01-28 US 8700789 B2 2014-04-15 US 8775652 B2 2014-07-08 US 8928725 ...	Apr. 01, 2008	DWPI	—	—
—	**11.** CUSTOMIZED USER INTERFACE FOR USE WITH E.G. LAPTOP COMPUTER, FOR ORGANIZING INTERFACE ELEMENTS, HAS EXECUTION COMPONENT WITH VIEW SELECTOR COMPONENT TO SELECT VIEW FOR DISPLAY ON COMPUTER SYSTEM IN RESPONSE TO COMPUTER SYSTEM CONFIGURATION Out Of Plan DWPI 2009-S20136 ... 01 Application priority Earliest Priority Date:2008-04-01 Related:Continuation In Part of US patent US 8289688 B Continuation In Part of US patent US 8624844 B No. of Countries:1 No. of Patents:2 First Derwent Appearance:2010.01 Latest Derwent Appearance:2015.24 Classification Information International Classes (IPC ...	Apr. 01, 2008	DWPI	—	—
—	**12.** PORTABLE COMPUTER E.G. LAPTOP COMPUTER HAS DISPLAY COMPONENT WHICH IS POSITIONED TOWARDS OPERATOR WITH KEYBOARD DIRECTED AWAY FROM OPERATOR WHILE OPERATING IN EASEL MODE Out Of Plan DWPI 2013-K16925 ... 2008-04-01 Related:Continuation of US patent number US 8289688 B Continuation of US patent number US 8289688 B Continuation of US patent number US 8624844 B No. of Countries:1 No. of Patents:2 First Derwent Appearance:2013.39 Latest Derwent Appearance:2017.12 Classification Information International Classes (IPC ...	Apr. 01, 2008	DWPI	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**13. METHOD FOR ACCESSING AND MANAGING DIGITAL MEDIA LIBRARIES ON STREAMLINED COMPUTING DEVICE WITH SELECTABLE INPUT AND OUTPUT (I/O) PROFILES, INVOLVES TRANSITIONING DISPLAY ON COMPUTING DEVICE TO VIEW OF DIGITAL MEDIA CONTENT** Out Of Plan DWPI 2014-T47805+ ... 01 Related:Continuation of US patent number US 8612888 B Continuation In Part of US patent US 8289688 B Continuation In Part of US patent US 8624844 B Continuation In Part of US patent US 8289688 B Continuation of US patent number US 8612888 B Continuation In Part of US patent ...	Apr. 01, 2008	DWPI	—	—
—	**14. CUSTOMIZED USER INTERFACE FOR DISPLAYING E.G. DIGITAL PHOTO ON DISPLAY COMPONENT OF COMPUTER SYSTEM FOR PROVIDING ON-LINE SERVICES TO USER, HAS EXECUTION COMPONENT FOR TRANSITIONING DISPLAY COMPONENT TO SELECTED ONE OF VIEWS** Out Of Plan DWPI 2015-59886F+ ... 01 Related:Continuation of US patent number US 9003315 B Continuation In Part of US patent US 8289688 B Continuation In Part of US patent US 8624844 B Previously issued patent number US 2015277688 A Continuation In Part of US patent US 8289688 B Continuation In Part of US patent US ...	Apr. 01, 2008	DWPI	—	—
—	**15. METHOD FOR ACCESSING AND MANAGING ONLINE DIGITAL MEDIA LIBRARIES ON E.G. DIGITAL CAMERA WITH SELECTABLE I/O PROFILES, INVOLVES PROVIDING DISPLAY OF USER DIGITAL MEDIA CONTENT AND REFERENCED DIGITAL MEDIA CONTENT IN VIEW OF MEDIA CONTENT** Out Of Plan DWPI 2017-22135E+ ... 8612888 B Continuation of US patent number US 9495070 B Continuation In Part of US patent US 8289688 B Continuation In Part of US patent US 8624844 B Previously issued patent number US 2017090699 A Continuation In Part of US patent US 8289688 B Continuation of US patent number US 8612888 ...	Apr. 01, 2008	DWPI	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**16. PORTABLE COMPUTER E.G. LAPTOP COMPUTER USED IN HOME, HAS DISPLAY COMPONENT THAT IS ORIENTED TOWARDS OPERATOR AND KEYBOARD THAT IS IN-OPERATED TO RECEIVE INPUT FROM OPERATOR TO CONTROL PORTABLE COMPUTER** Out Of Plan DWPI 2017-49528W+ ... 170951 2008-07-10 Application priority US 041365P 2008-04-01 Application priority Earliest Priority Date:2008-04-01 Related:Continuation of US patent number US 8624844 B Continuation of US patent number US 8289688 B Continuation of US patent number US 9563229 B Previously issued patent number US 2017205849 A ...	Apr. 01, 2008	DWPI	—	—
—	**17. NON-TRANSITORY COMPUTER-READABLE STORAGE MEDIUM FOR STREAMLINING USER INTERACTION WITH CONTENT IN LAPTOP, HAS SET OF INSTRUCTIONS FOR SELECTING VIEW FOR DISPLAY ON COMPUTER SYSTEM, TRANSITIONING TO SELECTED VIEW, AND DISPLAYING VIEW** Out Of Plan DWPI 2018-50587S+ ... 04-01 Related:Continuation of US patent number US 9003315 B Continuation of US patent number US 9880715 B Continuation In Part of US patent US 8624844 B Continuation In Part of US patent US 8289688 B Previously issued patent number US 2018181271 A Continuation In Part of US patent US ...	Apr. 01, 2008	DWPI	—	—
—	**18. PORTABLE COMPUTER SUCH AS LAPTOP COMPUTER OR NOTEBOOK COMPUTER, HAS DISPLAY COMPONENT THAT IS IN SECOND POSITION RELATIVE TO BASE THAT IS DIFFERENT FROM FIRST POSITION IN SECOND MODE** Out Of Plan DWPI 2018-831978+ ... 2008-04-01 Related:Continuation of US patent number US 8289688 B Continuation of US patent number US 9563229 B Continuation of US patent number US 8624844 B Continuation of US patent number US 9927835 B Previously issued patent number US 2018307271 A Continuation of US patent number US 8289688 B ...	Apr. 01, 2008	DWPI	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**19. PORTABLE COMPUTER FOR SWITCHING BETWEEN MULTIPLE MODES, COMPRISES A HINGE ASSEMBLY ROTATABLY COUPLES THE BASE TO THE DISPLAY COMPONENT, WHERE HINGE ASSEMBLY ALLOWS THE DISABLE COMPONENT TO ROTATE RELATIVE TO THE BASE UPTO CERTAIN ANGLE** Out Of Plan DWPI 2019-99573B+ ... number US 9927835 B Continuation of US patent number US 8289688 B Continuation of US patent number US 10289154 B Continuation of US patent number US 8624844 B Continuation of US patent number US 9563229 B Previously issued patent number US 2019361491 A Continuation of US patent number US 10289154 B ...	Apr. 01, 2008	DWPI	—	—
—	**20. NON-TRANSITORY COMPUTER-READABLE MEDIUM, INVOLVES EXECUTING AN APPLICATION BY DISPLAYING A GRAPHICAL USER INTERFACE OF THE APPLICATION, WHERE THE GRAPHICAL USER INTERFACE HAS MULTIPLE SELECTABLE OPTIONS** Out Of Plan DWPI 2020-749425 ... US 9880715 B Continuation of US patent number US 10564818 B Continuation of US patent number US 9003315 B Continuation In Part of US patent US 8624844 B Continuation In Part of US patent US 8289688 B No. of Countries:1 No. of Patents:1 First Derwent Appearance:2020.064 Latest ...	Apr. 01, 2008	DWPI	—	—
—	**21. METHOD FOR MANAGING COMPUTER-BASED DIGITAL MEDIA LIBRARIES ON A COMPUTER DEVICE, INVOLVES DISPLAYING A GRAPHICAL USER INTERFACE ON A COMPUTING DEVICE WITH A SINGLE DISPLAY SCREEN AND PROVIDING THE TRANSITION BETWEEN THE VIEWS** Out Of Plan DWPI 2020-98125R ... 8612888 B Continuation of US patent number US 9495070 B Continuation In Part of US patent US 8289688 B Continuation In Part of US patent US 8624844 B No. of Countries:1 No. of Patents:1 First Derwent Appearance:2020.085 Latest Derwent Appearance:2020.085 Classification Information International Classes (IPC ...	Apr. 01, 2008	DWPI	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**22. PORTABLE COMPUTER CONFIGURED INTO DIFFERENT FUNCTIONAL AND POSITIONAL MODES, OUTPUTS DETECTION RESULT TO TRIGGER DISPLAY TRANSITION FROM FIRST DISPLAY MODE TO SECOND DISPLAY MODE TO PROCESSOR RESPONSIVE TO DETECTING ORIENTATION TRANSITION** Out Of Pate DWPI 2021-164923 ... number US 10782733 B Continuation of US patent number US 8289688 B Continuation of US patent number US 9927835 B Continuation of US patent number US 8624844 B Continuation of US patent number US 10289154 B No. of Countries:1 No. of Patents:1 First Derwent Appearance:2021.015 Latest Derwent ...	Apr. 01, 2008	DWPI	—	—
—	**23. RF 052735/0926** Out Of Pate ... Published Application Date 2009-10-01 Application Number 12/170939 Application Date 2008-07-10 Title PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS Granted Patent Number US Pat. 8624844 Granted Patent Date 2014-01-07 Published Application Number US Pat. App. 20090244012 Published Application Date 2009-10-01 Application Number 12/170951 ...	May 22, 2020	Assignments	—	—
—	**24. RF 046364/0443** Out Of Pate ... Published Application Date 2009-10-01 Application Number 12/170939 Application Date 2008-07-10 Title PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS Granted Patent Number US Pat. 8624844 Granted Patent Date 2014-01-07 Published Application Number US Pat. App. 20090244012 Published Application Date 2009-10-01 Application Number 12/170951 ...	June 14, 2018	Assignments	—	—
—	**25. RF 035497/0904** Out Of Pate ... Published Application Date 2009-10-01 Application Number 12/170939 Application Date 2008-07-10 Title PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS Granted Patent Number US Pat. 8624844 Granted Patent Date 2014-01-07 Published Application Number US Pat. App. 20090244012 Published Application Date 2009-10-01 Application Number 12/170951 ...	Apr. 24, 2015	Assignments	—	—
—	**26. RF 023966/0954** Out Of Pate ... Published Application Date 2009-10-01 Application Number 12/170939 Application Date 2008-07-10 Title PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS Granted Patent Number US Pat. 8624844 Granted Patent Date 2014-01-07 Published Application Number US Pat. App. 20090244012 Published Application Date 2009-10-01 Application Number 12/170951 ...	Feb. 22, 2010	Assignments	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**27. RF 023871/0867** Out Of Plan ... Published Application Date 2009-10-01 Application Number 12/170939 Application Date 2008-07-10 Title PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS Granted Patent Number US Pat. 8624844 Granted Patent Date 2014-01-07 Published Application Number US Pat. App. 20090244012 Published Application Date 2009-10-01 Application Number 12/170951 ...	Jan. 29, 2010	Assignments	—	—
—	**28. RF 021810/0331** Out Of Plan ... STREET CAMBRIDGE, MA 02142 Number of Pages 6 Last Modified 2014-01-07 PATENTS AFFECTED Title PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS Granted Patent Number US Pat. 8624844 Granted Patent Date 2014-01-07 Published Application Number US Pat. App. 20090244012 Published Application Date 2009-10-01 Application Number 12/170951 ...	Nov. 10, 2008	Assignments	—	—
—	**29. PatStat 8624844** ... Patent Status File Patent Number: US 8624844 Change Code: IPR Description: AIA Trial Proceedings Filed before The Patent Trial and Appeal Board Reissue Number:OG Date: 06/08/2021 ...	June 08, 2021	Patent Status Files	—	—
—	**30. PatStat 8624844** ... Patent Status File Patent Number: US 8624844 Change Code: COR Description: Certificate of Correction Reissue Number:OG Date: 04/22/2014 ...	Apr. 22, 2014	Patent Status Files	—	—
—	**31. LiTL LLC v. Lenovo (United States), Inc. ET AL**	May 22, 2020	Docket Summaries	—	—
—	**32. DISPLAY SYSTEM WITH A FLEXIBLE DISPLAY** Out Of Plan US PAT 11122155 , U.S. PTO Utility A display system includes a continuous flexible display, two book halves, two main display supports, and a movement synchronizing coupling. The two book halves is connected to each... ... 8599546 B2 2013/12 Nagasaki cited by applicant US United States US 8605421 B2 2013/12 Verschoor et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8971031 B2 2015/03 Mok et al.cited by applicant US ...	Sep. 14, 2021	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	**33.** PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS Cut Of Flow US PAT 10782733+ , U.S. PTO Utility A portable computer that is configurable between a plurality of display modes including a laptop mode (in which the portable computer has a conventional laptop appearance) and an... ... on 2008/07/10, now Patent No. 8,289,688 US US which is a Continuation of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 US US which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 Previously published as US 2019/0361491 A1 ...	Sep. 22, 2020	Patents	—	—
—	**34.** METHOD AND APPARATUS FOR MANAGING DIGITAL MEDIA CONTENT Cut Of Flow US PAT 10684743+ , U.S. PTO Utility Various aspects and embodiments are directed to a streamlined computer device and a graphical user interface that organizes interface elements into views of computer content for... ... on 2008/07/10, now Patent No. 8,289,688 which is a Continuation-in-part of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 which is a Continuation-in-part of Application No. 12/170,939, filed on 2008/07/10, now Patent No. 8,289,688 which claims priority ...	June 16, 2020	Patents	—	—
—	**35.** MULTI-FOLD COMPUTING DEVICE Cut Of Flow US PAT 10678300 , U.S. PTO Utility An apparatus can include a processor; memory accessible by the processor; a display housing that includes a display operatively coupled to the processor; a keyboard housing; a palm... ... 1618 cited by examiner US United States US 8310823 B2 2012/11 Stoltz 361/679.08 G06F 1/1616 cited by examiner US United States US 8624844 B2 2014/01 Behar 345/168 G06F 1/162 cited by examiner US United States US 8803816 B2 2014/08 Kilpatrick, II 345/173 ...	June 09, 2020	Patents	—	—
—	**36.** HINGED DEVICE Cut Of Flow US PAT 10641318 , U.S. PTO Utility The description relates to hinged devices, such as hinged computing devices. One example can include a first portion and a second portion. The example can also include a... ... States US 8578561 B2 2013/11 Chuang cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8638546 B2 2014/01 Hoshino cited by applicant US United States ...	May 05, 2020	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**37. ROTATION SENSOR DEVICE** Out Of Plan US PAT 10571972 , U.S. PTO Utility Particular embodiments described herein provide for a device that can include a hinge to couple a first housing to a second housing. The hinge can include logic to detect a... ... 00 cited by examiner US United States US 8564949 B2 2013/10 Du 361/679.55 G06F 1/1616 cited by examiner US United States US 8624844 B2 2014/01 Behar 345/169 G06F 1/162 cited by examiner US United States US 8634183 B2 2014/01 Wikander 361/679.01 ...	Feb. 25, 2020	Patents	—	—
—	**38. HINGED DEVICE** Out Of Plan US PAT 10474203 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion that includes a first display and a second portion... ... States US 8578561 B2 2013/11 Chuang cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8638546 B2 2014/01 Hoshino cited by applicant US United States ...	Nov. 12, 2019	Patents	—	—
—	**39. MULTI-AXIS HINGE** Out Of Plan US PAT 10437293 , U.S. PTO Utility Technologies are described relating to sequential multi-axis hinges that rotatably secure portions of a computing device. One example can include a set of hinges that rotate around... ... 2013/06 Griffin et al.cited by applicant US United States US 8590857 B2 2013/11 Chen et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8649166 B2 2014/02 Wu cited by applicant US United States ...	Oct. 08, 2019	Patents	—	—
—	**40. HINGED DEVICE** Out Of Plan US PAT 10364598 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion and a second portion. The first portion can define... ... States US 8578561 B2 2013/11 Chuang cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8638546 B2 2014/01 Hoshino cited by applicant US United States ...	July 30, 2019	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**41. HINGED DEVICE** Out Of Plan US PAT 10344510 , U.S. PTO Utility The description relates to hinged devices, such as hinged computing devices. One example can include a hinge assembly that rotatably secures a first portion relative to a hinge... ... States US 8578561 B2 2013/11 Chuang cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8638546 B2 2014/01 Hoshino cited by applicant US United States ...	July 09, 2019	Patents	—	—
—	**42. HINGED DEVICE** Out Of Plan US PAT 10296044 , U.S. PTO Utility The description relates to hinged devices, such as hinged computing devices. One example can include a first portion and a second portion that have hinge ends rotatably secured... ... States US 8578561 B2 2013/11 Chuang cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8638546 B2 2014/01 Hoshino cited by applicant US United States ...	May 21, 2019	Patents	—	—
—	**43. PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS** Out Of Plan US PAT 10289154+ , U.S. PTO Utility A portable computer that is configurable between a plurality of display modes including a laptop mode (in which the portable computer has a conventional laptop appearance) and an... ... on 2008/07/10, now Patent No. 8,289,688 US US which is a Continuation of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 US US which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 Previously published as US 2018/0307271 A1 ...	May 14, 2019	Patents	—	—
—	**44. HINGED DEVICE** Out Of Plan US PAT 10253804 , U.S. PTO Utility The description relates to hinged devices, such as hinged computing devices. One example can include a first portion and a second portion. The example can also include a... ... 11 Chuang cited by applicant US United States US 8615848 B2 2013/12 Mitsui 016/354 H04M 1/022 cited by examiner US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8638546 B2 2014/01 Hoshino cited by applicant US United States ...	Apr. 09, 2019	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**45. COMPUTING DEVICE EMPLOYING A SELF-SPACING HINGE ASSEMBLY** Out Of Plan US PAT 10241548 , U.S. PTO Utility The description relates to hinged devices, such as hinged computing devices. One example can include a first portion and a second portion. The example can also include a pair of... ... 11 Chuang cited by applicant US United States US 8615848 B2 2013/12 Mitsui 016/354 H04M 1/022 cited by examiner US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8638546 B2 2014/01 Hoshino cited by applicant US United States ...	Mar. 26, 2019	Patents	—	—
—	**46. HINGED DEVICE** Out Of Plan US PAT 10227808 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion and a second portion. This example can also include... ... States US 8578561 B2 2013/11 Chuang cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8638546 B2 2014/01 Hoshino cited by applicant US United States ...	Mar. 12, 2019	Patents	—	—
—	**47. MULTI-PIVOT HINGE** Out Of Plan US PAT 10174534 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion and a second portion. This example can also include... ... 2013/06 Griffin et al.cited by applicant US United States US 8590857 B2 2013/11 Chen et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8649166 B2 2014/02 Wu cited by applicant US United States ...	Jan. 08, 2019	Patents	—	—
—	**48. COVERED MULTI-AXIS HINGE** Out Of Plan US PAT 10162389 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion and a second portion. This example can also include... ... 2013/06 Griffin et al.cited by applicant US United States US 8590857 B2 2013/11 Chen et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8649166 B2 2014/02 Wu cited by applicant US United States ...	Dec. 25, 2018	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**49. DISPLAY SYSTEM WITH A FLEXIBLE DISPLAY** Out Of Plac US PAT 10154124 , U.S. PTO Utility A display system includes a continuous flexible display, two book halves, two main display supports, and a movement synchronizing coupling. The two book halves is connected to each... ... 8599546 B2 2013/12 Nagasaki cited by applicant US United States US 8605421 B2 2013/12 Verschoor et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 9563229 B2 2017/02 Behar et al.cited by applicant US ...	Dec. 11, 2018	Patents	—	—
—	**50. MULTI-PIVOT HINGE** Out Of Plac US PAT 10114424 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion and a second portion. This example can also include... ... 2013/06 Griffin et al.cited by applicant US United States US 8590857 B2 2013/11 Chen et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8649166 B2 2014/02 Wu cited by applicant US United States ...	Oct. 30, 2018	Patents	—	—
—	**51. COVER TO PROTECT KEYBOARD AND BOTTOM OF LAPTOP COMPUTER** Out Of Plac US PAT 9983632 , U.S. PTO Utility A laptop computer may include a base, a lid, and a cover. The base may include a keyboard on a first side of the base. The lid may be hingedly attached to a first end of the base.... ... 1/1628 cited by examiner US United States US 8537531 B2 2013/09 Gotham 345/175 H05K 5/02 cited by examiner US United States US 8624844 B2 2014/01 Behar 345/168 G06F 1/162 cited by examiner US United States US 8720843 B1 2014/05 Chen 206/305 G06F ...	May 29, 2018	Patents	—	—
—	**52. PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS** Out Of Plac US PAT 9927835+ , U.S. PTO Utility A portable computer that is configurable between a plurality of display modes including a laptop mode (in which the portable computer has a conventional laptop appearance) and an... ... on 2008/07/10, now Patent No. 8,289,688 US US which is a Continuation of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 US US which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 Previously published as US 2017/0205849 A1 ...	Mar. 27, 2018	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**53. COVERED RADIUS HINGE** Out Of Pkg US PAT 9910465 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion and a second portion. This example can also include... ... 2013/06 Griffin et al.cited by applicant US United States US 8590857 B2 2013/11 Chen et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8649166 B2 2014/02 Wu cited by applicant US United States ...	Mar. 06, 2018	Patents	—	—
—	**54. SENSING THE SCREEN POSITIONS IN A DUAL SCREEN PHONE** Out Of Pkg US PAT 9904501 , U.S. PTO Utility A handheld communication device includes first and second screens, a hinge to rotate the first and second screens between open and closed positions, and a position sensor to... ... 2013/10 Alameh et al.cited by applicant US United States US 8564965 B2 2013/10 Sloey et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 2001/0018799 A1 2001/09 Lauffer et al.cited by applicant ...	Feb. 27, 2018	Patents	—	—
—	**55. SYSTEM AND METHOD FOR STREAMLINING USER INTERACTION WITH ELECTRONIC CONTENT** Out Of Pkg US PAT 9880715+ , U.S. PTO Utility Various aspects and embodiments are directed to a graphical user interface that organizes interface elements into views of computer content for presentation to a user. Different... ... Patent No. 8,289,688, issued on 2012/10/16 which is a Continuation-in-part of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 , issued on 2014/01/07 which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 Previously published as US ...	Jan. 30, 2018	Patents	—	—
—	**56. MULTI-PIVOT HINGE COVER** Out Of Pkg US PAT 9851759 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion and a second portion. This example can also include... ... al.cited by applicant US United States US 8590857 B2 2013/11 Chen 024/003.1 H05K 5/0217 cited by examiner US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8649166 B2 2014/02 Wu cited by applicant US United States ...	Dec. 26, 2017	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**57. LAPTOP COMPUTER WITH COVER ROTATABLY ATTACHED TO BASE THAT ROTATES TO COVER KEYBOARD** Out Of Plan US PAT 9829927 , U.S. PTO Utility A laptop computer may include a lid, a base, and a cover. The base may be attached to the lid at a first end portion of the base. The base may include a keyboard adjacent to the... ... 1/1616 cited by examiner US United States US 8537541 B2 2013/09 Zhang 345/157 G06F 1/169 cited by examiner US United States US 8624844 B2 2014/01 Behar 345/168 G06F 1/162 cited by examiner US United States US 8811024 B2 2014/08 Wei 361/679.18 ...	Nov. 28, 2017	Patents	—	—
—	**58. HANDHELD DUAL DISPLAY DEVICE HAVING FOLDOVER GROUND TABS** Out Of Plan US PAT 9690385 , U.S. PTO Utility A handheld communication device includes a screen to receive input from and provide graphical output to a user, a processor to execute machine readable instructions and control... ... States US 8598474 B2 2013/12 Chen cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8625290 B2 2014/01 Wee et al.cited by applicant US ...	June 27, 2017	Patents	—	—
—	**59. CONVERTIBLE INFORMATION HANDLING SYSTEM INPUT DEVICE SURFACE AND SUPPORT** Out Of Plan US PAT 9658652 , U.S. PTO Utility A convertible information handling system transitions to tablet and tablet stand configurations having a keyboard with a friction enhanced surface disposed against a support... ... 1616 cited by examiner US United States US 8390255 B1 2013/03 Fathollahi 206/308.3 H02J 7/0045 cited by examiner US United States US 8624844 B2 2014/01 Behar 345/168 G06F 1/162 cited by examiner US United States US 8724302 B2 2014/05 Whitt, III 361/679 ...	May 23, 2017	Patents	—	—
—	**60. COVERED MULTI-PIVOT HINGE** Out Of Plan US PAT 9625953 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion and a second portion. This example can also include... ... 2013/05 Bohn et al.cited by applicant US United States US 8467838 B2 2013/06 Griffin et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8649166 B2 2014/02 Wu et al.cited by applicant US ...	Apr. 18, 2017	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**61. MULTI-PIVOT HINGE** Out Of Plan US PAT 9625954 , U.S. PTO Utility The description relates to devices, such as computing devices that have hinged portions. One example can include a first portion and a second portion. This example can also include... ... 2013/05 Bohn et al.cited by applicant US United States US 8467838 B2 2013/06 Griffin et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8649166 B2 2014/02 Wu et al.cited by applicant US ...	Apr. 18, 2017	Patents	—	—
—	**62. PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS** Out Of Plan US PAT 9563229+ , U.S. PTO Utility A portable computer that is configurable between a plurality of display modes including a laptop mode (in which the portable computer has a conventional laptop appearance) and an... ... on 2008/07/10, now Patent No. 8,289,688 US US which is a Continuation of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 US US which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 Previously published as US 2013/0141854 A1 ...	Feb. 07, 2017	Patents	—	—
—	**63. ELECTRONIC DEVICE INCLUDING FLEXIBLE DISPLAY** Out Of Plan US PAT 9557771 , U.S. PTO Utility An electronic device is provided including: a flexible display; a first housing member; a second housing member; a hinge module coupled to the first housing member and the second... ... 33 cited by examiner US United States US 8605421 B2 2013/12 Verschoor 361/679.21 G06F 1/1652 cited by examiner US United States US 8624844 B2 2014/01 Behar 345/168 G06F 1/162 cited by examiner US United States US 8662731 B2 2014/03 Wang 349/061 G09F ...	Jan. 31, 2017	Patents	—	—
—	**64. METHOD AND APPARATUS FOR MANAGING DIGITAL MEDIA CONTENT** Out Of Plan US PAT 9495070+ , U.S. PTO Utility Various aspects and embodiments are directed to a streamlined computer device and a graphical user interface that organizes interface elements into views of computer content for... ... on 2008/07/10, now Patent No. 8,289,688 which is a Continuation-in-part of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 which is a Continuation-in-part of Application No. 12/170,939 which is a Continuation-in-part of Application No. 12/170,951 which ...	Nov. 15, 2016	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**65. MAGNETICALLY SECURING TWO SCREENS OF A HANDHELD COMMUNICATION DEVICE** Out Of Plan US PAT 9497697 , U.S. PTO Utility A handheld communication device includes first and second screens, a hinge to rotate the first and second screens between open and closed positions, and a permanent magnet to... ... States US 8598474 B2 2013/12 Chen cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8625290 B2 2014/01 Wee et al.cited by applicant US ...	Nov. 15, 2016	Patents	—	—
—	**66. FOLDABLE COMPUTING APPARATUS AND METHOD OF ERECTING DISPLAY UNIT** Out Of Plan US PAT 9436229 , U.S. PTO Utility A foldable computing apparatus includes a display unit having a touch screen, a first body rotatably disposed in an end of the display unit, and a second body rotatably disposed in... ... 04895 cited by examiner US United States US 8467164 B2 2013/06 Chen 361/679.55 G06F 1/162 cited by examiner US United States US 8624844 B2 2014/01 Behar 345/168 G06F 1/162 cited by examiner US United States US 8649166 B2 2014/02 Wu 361/679.27 ...	Sep. 06, 2016	Patents	—	—
—	**67. DUAL LIGHT PIPE BRACKET IN MOBILE COMMUNICATION DEVICE** Out Of Plan US PAT 9317243 , U.S. PTO Utility A handheld computing device includes a screen to receive input from and provide graphical output to a user, a housing engaging a peripheral portion of the screen, a light source,... ... States US 8598474 B2 2013/12 Chen cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8625290 B2 2014/01 Wee et al.cited by applicant US ...	Apr. 19, 2016	Patents	—	—
—	**68. METAL HOUSING WITH MOULDED PLASTIC** Out Of Plan US PAT 9286024 , U.S. PTO Utility A housing for a handheld computing device can include a metallic outer shell having a substantially flat base and a sidewall connected to a periphery of the base, the metallic... ... States US 8598474 B2 2013/12 Chen cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8625290 B2 2014/01 Wee et al.cited by applicant US ...	Mar. 15, 2016	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**69. MOUNTING STRUCTURE FOR BACK-TO-BACK BRACKET** Out Of Plan US PAT 9229675 , U.S. PTO Utility A handheld computing device includes a screen to receive input from and provide graphical output to a user, a housing engaging a peripheral portion of the screen, a circuit board... ... States US 8598474 B2 2013/12 Chen cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.345/169 cited by examiner US United States US 8625290 B2 2014/01 Wee et al.361/752 ...	Jan. 05, 2016	Patents	—	—
—	**70. DOCKING STATION** Out Of Plan US PAT 9223344 , U.S. PTO Utility A docking station is used to hold an electronic apparatus and includes a docking body and a hinge module. The docking body includes an operation interface and a hinge portion. The... ... 2003/07 Watanabe cited by applicant US United States US 7663602 B2 2010/02 Jones et al.345/168 cited by examiner US United States US 8624844 B2 2014/01 Behar et al.345/169 cited by examiner US United States US 8717319 B2 2014/05 Wu 345/173 cited by ...	Dec. 29, 2015	Patents	—	—
—	**71. SEAM MINIMIZATION IN A HANDHELD DUAL DISPLAY DEVICE** Out Of Plan US PAT 9176701 , U.S. PTO Utility A handheld communication device includes first and second screen assemblies, each including a screen having an active display area and housing having a rear surface, and a side... ... States US 8598474 B2 2013/12 Chen cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8625290 B2 2014/01 Wee et al.cited by applicant US ...	Nov. 03, 2015	Patents	—	—
—	**72. L BRACKET FOR HANDHELD DEVICE ACTIVATORS** Out Of Plan US PAT 9116655 , U.S. PTO Utility A housing for a handheld computing device can include an outer shell having a base and a sidewall connected to a periphery of the base, the sidewall having a port configured to... ... States US 8598474 B2 2013/12 Chen cited by applicant US United States US 8615848 B2 2013/12 Mitsui cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8625290 B2 2014/01 Wee et al.cited by applicant US ...	Aug. 25, 2015	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**73. TABLET WITH A FLEXIBLE RETRACTABLE SCREEN FOR DISPLAYING HOLOGRAPHIC IMAGES** Out Of Plan US PAT D735709 , U.S. PTO Design ... et al.D14/341 cited by examiner US United States US 8576555 B2 2013/11 Misawa 361/679.27 cited by examiner US United States US 8624844 B2 2014/01 Behar et al.345/169 cited by examiner US United States US D703133 S 2014/04 Ireland et al.D13/108 ...	Aug. 04, 2015	Patents	—	—
—	**74. BRACKET FOR HANDHELD DEVICE INPUT/OUTPUT PORT** Out Of Plan US PAT 9086835 , U.S. PTO Utility A handheld computing device may include a housing having a base and a sidewall connected to a periphery of the base, the sidewall having an input/output port configured to... ... 2013/10 Alameh et al.cited by applicant US United States US 8564965 B2 2013/10 Sloey et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 2001/0018799 A1 2001/09 Lauffer et al.cited by applicant ...	July 21, 2015	Patents	—	—
—	**75. CORRUGATED STIFFENER FOR SIM MOUNTING** Out Of Plan US PAT 9086836 , U.S. PTO Utility A housing for a handheld computing device can include a metallic outer shell having a substantially flat base and a sidewall connected to a periphery of the base, the sidewall... ... 361/679.01 cited by examiner US United States US 8564965 B2 2013/10 Sloey et al.361/752 cited by examiner US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8764267 B2 2014/07 Kim cited by applicant US United States ...	July 21, 2015	Patents	—	—
—	**76. SUPPORT FOR A FLEXIBLE DISPLAY** Out Of Plan US PAT 9013864 , U.S. PTO Utility A device includes: a first component and a second component coupled to one another by a pivot member and being movable relative to one another between an open position in which the... ... 8369075 B2 2013/02 Huang cited by applicant US United States US 8605421 B2 2013/12 Verschoor et al.cited by applicant US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8662731 B2 2014/03 Wang et al.cited by applicant US ...	Apr. 21, 2015	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**77. HINGE FOR A HANDHELD COMPUTING DEVICE** Out Of Plan US PAT 9013867 , U.S. PTO Utility A handheld computing device may include a first screen having a first display, a second screen having a second display, and a hinge connected to the first and second screens. The... ... 12 Chen 200/001 B cited by examiner US United States US 8615848 B2 2013/12 Mitsui 016/366 cited by examiner US United States US 8624844 B2 2014/01 Behar et al.cited by applicant US United States US 8626252 B2 2014/01 Kim et al.455/575.1 cited ...	Apr. 21, 2015	Patents	—	—
—	**78. SYSTEM AND METHOD FOR STREAMLINING USER INTERACTION WITH ELECTRONIC CONTENT** Out Of Plan US PAT 9003315 , U.S. PTO Utility Various aspects and embodiments are directed to a graphical user interface that organizes interface elements into views of computer content for presentation to a user. Different... ... Claudia Claudia Dragoescu Priority Information Related Information:This application is a Continuation-in-part of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 which is a Continuation-in-part of Application No. 12/170,939, filed on 2008/07/10, now Patent No. 8,289,688 which claims priority ...	Apr. 07, 2015	Patents	—	—
—	**79. SUPPORT FOR A FLEXIBLE DISPLAY** Out Of Plan US PAT 8971032 , U.S. PTO Utility A device includes: a housing having a first component and a second component coupled to one another by a pivot member and movable relative to one another between an open position... ... 679.21 cited by examiner US United States US 8605421 B2 2013/12 Verschoor et al.361/679.3 cited by examiner US United States US 8624844 B2 2014/01 Behar et al.345/169 cited by examiner US United States US 8662731 B2 2014/03 Wang et al.362/632 ...	Mar. 03, 2015	Patents	—	—
—	**80. PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS** Out Of Plan US PAT APP 20210034104 , U.S. PTO Application A portable computer that is configurable between a plurality of display modes including a laptop mode (in which the portable computer has a conventional laptop appearance) and an... ... on 2008/07/10, now Patent No. 8,289,688 US US which is a Continuation of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 US US which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 which claims priority from Provisional Application No ...	Feb. 04, 2021	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**81. METHOD AND APPARATUS FOR MANAGING DIGITAL MEDIA CONTENT** Out Of Plan US PAT APP 20200319759+ , U.S. PTO Application Various aspects and embodiments are directed to a streamlined computer device and a graphical user interface that organizes interface elements into views of computer content for... ... on 2008/07/10, now Patent No. 8,289,688 which is a Continuation-in-part of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 which is a Continuation-in-part of Application No. 12/170,939, filed on 2008/07/10, now Patent No. 8,289,688 which is a ...	Oct. 08, 2020	Patents	—	—
—	**82. SYSTEM AND METHOD FOR STREAMLINING USER INTERACTION WITH ELECTRONIC CONTENT** Out Of Plan US PAT APP 20200249807 , U.S. PTO Application Various aspects and embodiments are directed to a graphical user interface that organizes interface elements into views of computer content for presentation to a user. Different... ... on 2008/07/10, now Patent No. 8,289,688 which is a Continuation-in-part of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 which claims priority from Provisional Application No. 61/041,365 ...	Aug. 06, 2020	Patents	—	—
—	**83. PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS** Out Of Plan US PAT APP 20190361491 , U.S. PTO Application A portable computer that is configurable between a plurality of display modes including a laptop mode (in which the portable computer has a conventional laptop appearance) and an... ... on 2008/07/10, now Patent No. 8,289,688 US US which is a Continuation of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 US US which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 which claims priority from Provisional Application No ...	Nov. 28, 2019	Patents	—	—
—	**84. PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS** Out Of Plan US PAT APP 20180307271 , U.S. PTO Application A portable computer that is configurable between a plurality of display modes including a laptop mode (in which the portable computer has a conventional laptop appearance) and an... ... on 2008/07/10, now Patent No. 8,289,688 US US which is a Continuation of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 US US which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 which claims priority from Provisional Application No ...	Oct. 25, 2018	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**85. SYSTEM AND METHOD FOR STREAMLINING USER INTERACTION WITH ELECTRONIC CONTENT** Out Of Plan US PAT APP 20180181271 , U.S. PTO Application Various aspects and embodiments are directed to a graphical user interface that organizes interface elements into views of computer content for presentation to a user. Different... ... on 2008/07/10, now Patent No. 8,289,688 which is a Continuation-in-part of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 which claims priority from Provisional Application No. 61/041,365 ...	June 28, 2018	Patents	—	—
—	**86. PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS** Out Of Plan US PAT APP 20170205849 , U.S. PTO Application A portable computer that is configurable between a plurality of display modes including a laptop mode (in which the portable computer has a conventional laptop appearance) and an... ... on 2008/07/10, now Patent No. 8,289,688 US US which is a Continuation of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 US US which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 which claims priority from Provisional Application No ...	July 20, 2017	Patents	—	—
—	**87. METHOD AND APPARATUS FOR MANAGING DIGITAL MEDIA CONTENT** Out Of Plan US PAT APP 20170090699+ , U.S. PTO Application Various aspects and embodiments are directed to a streamlined computer device and a graphical user interface that organizes interface elements into views of computer content for... ... on 2008/07/10, now Patent No. 8,289,688 which is a Continuation-in-part of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 which is a Continuation-in-part of Application No. 12/170,939, filed on 2008/07/10, now Patent No. 8,289,688 which is a ...	Mar. 30, 2017	Patents	—	—

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Treatment	Title	Date	Type	Depth	Headnote(s)
—	**88. SYSTEM AND METHOD FOR STREAMLINING USER INTERACTION WITH ELECTRONIC CONTENT** Out Of Plac US PAT APP 20150277688 , U.S. PTO Application Various aspects and embodiments are directed to a graphical user interface that organizes interface elements into views of computer content for presentation to a user. Different... ... on 2008/07/10, now Patent No. 8,289,688 which is a Continuation-in-part of Application No. 12/170,951, filed on 2008/07/10, now Patent No. 8,624,844 which claims priority from Provisional Application No. 61/041,365, filed on 2008/04/01 which claims priority from Provisional Application No. 61/041,365 ...	Oct. 01, 2015	Patents	—	—
—	**89. METHOD AND APPARATUS FOR MANAGING DIGITAL MEDIA CONTENT** Out Of Plac US PAT APP 20140282263+ , U.S. PTO Application Various aspects and embodiments are directed to a streamlined computer device and a graphical user interface that organizes interface elements into views of computer content for... ... now Pat. No. 8,289,688 Said application No. 12/416,479 is a continuation-in-part of application No. 12/170,951, filed on 2008/07/10, now Pat. No. 8,624,844 Said application No. 12/611,282 is a continuation-in-part of application No. 12/170,939, filed on 2008/07/10, now Pat. No ...	Sep. 18, 2014	Patents	—	—
—	**90. PATENT-D. DEL. MOBILE DEVICE PATENTS WERE NOT DIRECTED AT AN ABSTRACT IDEA** The patents were directed at solving technical computer problems and not at carrying out an abstract idea on generic computer components. A patent holder successfully stated a... ... LLC v. Lenovo (United States), Inc., January 21, 2022, Andrews, R.).LITL, LLC (LITL) was the owner of U.S. Patents Nos. 8,289,688 (the '688 patent) 8,624,844 (the '844 patent) 10,289,154 (the '154 patent)9,880,715 (the '715 patent)8,612,888 (the '888 patent) (collectively, the "Display Alteration Patents") and 8,577,957 (the '957 patent ...	2022	Other Secondary Source	—	—

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2021 Pat. App. LEXIS 6293

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Patent Trial and Appeal Board Representative Orders, Decisions and Notices

October 21, 2021, Decided

IPR2021-00822, Paper: 6 ; Patent 8,624,844 B2

Info Notes

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No subsequent appellate history.

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Heading

USPTO Bd of Patent Appeals & Interferences; Patent Trial & Appeal Bd Decs.

Reporter

2021 Pat. App. LEXIS 6293 *

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2021 Pat. App. LEXIS 6256

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Patent Trial and Appeal Board Representative Orders, Decisions and Notices

October 21, 2021, Decided

IPR2021-00786, Paper: 6 ; Patent 9,880,715 B2

Info Notes

Shepard's®

No subsequent appellate history.

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Heading

USPTO Bd of Patent Appeals & Interferences; Patent Trial & Appeal Bd Decs.

Reporter

2021 Pat. App. LEXIS 6256 *

LENOVO (UNITED STATES) INC., Petitioner,















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Results for: US PAT 8624844

Briefs, Pleadings and Motions (5) Sort by: Relevance

1.

PETITION FOR INTER PARTES REVIEW UNDER 35 U.S.C. § 311 ET SEQ. AND 37 C.F.R. § 42.100 ET SEQ. (CLAIMS 1-16 and 18-22 OF U.S. PATENT NO. 8,624,844)

May 04, 2021 | 2021 PAT. APP. FILINGS LEXIS 1001 | LENOVO (UNITED STATES) INC., Petitioner v. LITL LLC, Patent Owner | Petitions

... Error by Overlooking Its Impact 7 VI. RELEVANT INFORMATION CONCERNING THE **'844 PATENT** 8 A. Overview of the '844 Patent 8 B. Prosecution History ...

... believed the art not to disclose. VI. RELEVANT INFORMATION CONCERNING THE **'844 PATENT** A. Overview of the '844 Patent...

2.

PATENT OWNER'S PRELIMINARY RESPONSE

Jul 28, 2021 | 2021 PAT. APP. FILINGS LEXIS 5757 | LENOVO (UNITED STATES) INC., Petitioner, v. LITL LLC, Patent Owner. | Preliminary Responses

... The Petition's Grounds Fail on the Merits 3 II. LITL 'S **'844 PATENT** 4 A. Challenged Claims 5 B. The Challenged Claims Cover LITL ...

... Pogue with Shimura-Tsuji in the manner the Petition alleges. II. LITL'S **'844 PATENT** Before the LITL Webbook, "home computers were essentially the same as ...

3.

DEFENDANT LENOVO (UNITED STATES) INC.'S OPENING BRIEF IN SUPPORT OF ITS MOTION TO DISMISS FOR FAILURE TO STATE A CLAIM PURSUANT TO FED. R. CIV. P. 12(b)(6), BASED ON PATENT INELIGIBILITY UNDER 35 U.S.C. § 101

Delaware District Court | Aug 17, 2020 | 2020 U.S. DIST. CT. MOTIONS LEXIS 83552 | LITL LLC, Plaintiff, v. LENOVO (UNITED STATES), INC. and LENOVO (BEIJING) LTD., Defendants. | Motion

... of "one or more claims" of U.S. Patent Nos. 8,289,688 , **8,624,844** , 10,289,154 , 9,880,715 , 8,612,888 , and 8,577,957...

4.

PETITION FOR INTER PARTES REVIEW UNDER 35 U.S.C. § 311 ET SEQ. AND 37 C.F.R. § 42.100 ET SEQ. (CLAIMS 1-20 OF U.S. PATENT NO. 9,880,715)

May 04, 2021 | 2021 PAT. APP. FILINGS LEXIS 1412 | LENOVO (UNITED STATES) INC., Petitioner v. LITL LLC,

Patent Owner | Petitions

... U.S. Patent No. 8,289,688) and Application No. 12/170,951 (**U.S. Patent No. 8,624,844**), and claims priority to U.S. Provisional Application No. 61/041,365, filed ...

5.

PETITION FOR INTER PARTES REVIEW UNDER 35 U.S.C. § 311 ET SEQ. AND 37 C.F.R. § 42.100 ET SEQ. (CLAIMS 1-20 OF U.S. PATENT NO. 10,289,154)

May 04, 2021 | 2021 PAT. APP. FILINGS LEXIS 1022 | LENOVO (UNITED STATES) INC., Petitioner v. LITL LLC, Patent Owner | Petitions

... No. 8,289,688), which is a continuation of Application No. 12/170,951 (**U.S. Patent No. 8,624,844**), and claims priority to U.S. Provisional Application No. 61/041,365, filed ...

Content type: Briefs, Pleadings and Motions

Terms: US PAT 8624844

Search Type: Boolean - Fewer Results

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Legal News (4) Sort by: Relevance

1.

Lenovo Petitions Board For Review Of Computer Patent

Patents: Mealey's Litigation Report | May 17, 2021 | 601 words

2.

Lenovo Petitions Board For Review Of Computer Patent

Cyber Tech & E-Commerce: Mealey's Litigation Report | May 01, 2021 | 601 words

3.

Lenovo Petitions Board For Review Of Computer Patent

Intellectual Property: Mealey's Litigation Report | May 17, 2021 | 601 words

4.

Mealey's IP/Tech - Lenovo Petitions Board For Review Of Computer Patent

Mealey's Daily News Update - IP/Tech | May 06, 2021 | 601 words

Content type: Legal News

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Narrow By: None

Date and Time: Mar 16, 2022 05:56:20 p.m. EDT

1:20cv689, Litl Llc V. Lenovo(United States), Inc. Et Al

US District Court Docket

United States District Court, Delaware

(Wilmington)

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Header

Case Number: 1:20cv689
Date Filed: 05/22/2020
Assigned To: Judge Richard G. Andrews
Nature of Suit: Patent (830)
Cause: Patent Infringement
Lead Docket: None
Other Docket: None
Jurisdiction: Federal Question

Class Code: Open
Statute: 35:1
Jury Demand: Plaintiff
Demand Amount: $0
NOS Description: Patent

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Lenovo (Beijing) Ltd. **Defendant**	Rodger Dallery Smith , II LEAD ATTORNEY;ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington, DE 19899 USA (302) 351-9205 Email:Rdsefiling@mnat.Com

Proceedings

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	Availability	#	Date	Proceeding Text	Source

				ADEDC-2947433.) - filed by LITL LLC. (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Civil Cover Sheet)(myr) (Entered: 05/22/2020)
☐	Free	2	05/22/2020	Notice, Consent and Referral forms re: U.S. Magistrate Judge jurisdiction. (myr) (Entered: 05/22/2020)
☐	Free	3	05/22/2020	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) See Attached. (myr) (Entered: 05/22/2020)
☐	Free	4	05/22/2020	Disclosure Statement pursuant to Rule 7.1: identifying Corporate Parent TRI Ventures, Inc. for LITL LLC filed by LITL LLC. (myr) (Entered: 05/22/2020)
☐	Free	5	05/22/2020	Summonses Issued (please complete the top portion of the form and print out for use/service). (myr) (Entered: 05/22/2020)
☐	Free	6	05/26/2020	SUMMONS Returned Executed by LITL LLC. Lenovo(United States), Inc. served on 5/26/2020, answer due 6/16/2020. (Vrana, Robert) (Entered: 05/26/2020)
☐	Runner		05/27/2020	Case Assigned to Judge Richard G. Andrews. Please include the initials of the Judge (RGA) after the case number on all documents filed. (rjb) (Entered: 05/27/2020)
☐	Runner		05/27/2020	CORRECTING ENTRY. The order filed at D.I. 7 has been removed as it was filed in error. (nms) (Entered: 05/27/2020)
☐	Free	7	05/28/2020	MOTION for Pro Hac Vice Appearance of Attorney Michael A. Albert, Eric J. Rutt, Gerald B. Hrycyszyn, and Marie A. McKiernan - filed by LITL LLC. (Vrana, Robert) (Entered: 05/28/2020)
☐	Runner		05/28/2020	SO ORDERED, re 7 MOTION for Pro Hac Vice Appearance of Attorney Michael A. Albert, Eric J. Rutt, Gerald B. Hrycyszyn, and Marie A. McKiernan, filed by LITL LLC. Signed by Judge Richard G. Andrews on 5/28/2020. (nms) (Entered: 05/28/2020)
☐	Runner		05/29/2020	Pro Hac Vice Attorneys Michael A. Albert, Eric J. Rutt, Gerald B. Hrycyszyn, Marie A. McKiernan for LITL LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (kmd) (Entered: 05/29/2020)
☐	Free	8	06/15/2020	STIPULATION and Order - filed by Lenovo(United States), Inc.. (Smith, Rodger) Modified on 6/16/2020 (nms). (Entered: 06/15/2020)
☐	Runner		06/16/2020	SO ORDERED, re 8 STIPULATION and Order (*Reset Answer Deadlines: Lenovo(United States), Inc. answer due 7/16/2020). Signed by Judge Richard G. Andrews on 6/16/2020. (nms) (Entered: 06/16/2020)
☐	Free	9	07/01/2020	STIPULATION and Order - filed by Lenovo(United States), Inc . (Smith, Rodger) Modified on 7/2/2020 (nms). (Entered: 07/01/2020)
☐	Runner		07/02/2020	SO ORDERED, re 9 STIPULATION and Order (*Reset Answer Deadlines: Lenovo(United States), Inc. answer due 8/17/2020). Signed by Judge Richard G. Andrews on 7/2/2020. (nms) (Entered: 07/02/2020)
☐	Free	10	08/17/2020	MOTION to Dismiss for Failure to State a Claim - filed by Lenovo(United States), Inc.. (Smith, Rodger) (Entered: 08/17/2020)
☐	Free	11	08/17/2020	OPENING BRIEF in Support re 10 MOTION to Dismiss for Failure to State a Claim filed by Lenovo(United States), Inc..Answering Brief/Response due date per Local Rules is 8/31/2020. (Smith, Rodger) (Entered: 08/17/2020)
☐	Free	12	08/17/2020	DECLARATION of Lai L. Yip re 10 MOTION to Dismiss for Failure to State a Claim, by Lenovo(United States), Inc.. (Attachments: # 1 Exhibits 1-2)(Smith, Rodger) Modified on 8/17/2020 (nms). (Entered: 08/17/2020)

				Inc. filed by Lenovo(United States), Inc.. (Smith, Rodger) (Entered: 08/17/2020)
☐	Free	14	08/17/2020	MOTION for Pro Hac Vice Appearance of Attorney Martin R. Bader, Lai L. Yip, and Michael J. Hopkins - filed by Lenovo(United States), Inc.. (Smith, Rodger) (Entered: 08/17/2020)
☐	Runner		08/17/2020	SO ORDERED, re 14 MOTION for Pro Hac Vice Appearance of Attorney Martin R. Bader, Lai L. Yip, and Michael J. Hopkins, filed by Lenovo(United States), Inc.. Signed by Judge Richard G. Andrews on 8/17/2020. (nms) (Entered: 08/17/2020)
☐	Free	15	08/25/2020	STIPULATION and Proposed Order to Extend Time - filed by LiTL LLC. (Poff, Adam) Modified on 8/25/2020 (nms). (Entered: 08/25/2020)
☐	Runner		08/25/2020	SO ORDERED, re 15 STIPULATION and Proposed Order to Extend Time (*Reset Briefing Schedule: re 10 MOTION to Dismiss. Answering Brief due 9/14/2020, Reply Brief due 10/5/2020). Signed by Judge Richard G. Andrews on 8/25/2020. (nms) (Entered: 08/25/2020)
☐	Runner		08/26/2020	Pro Hac Vice Attorney Martin R. Bader for Lenovo(United States), Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (myr) (Entered: 08/26/2020)
☐	Runner		08/26/2020	Pro Hac Vice Attorney Lai L. Yip for Lenovo(United States), Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (myr) (Entered: 08/26/2020)
☐	Runner		08/26/2020	Pro Hac Vice Attorney Michael J. Hopkins for Lenovo(United States), Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (myr) (Entered: 08/26/2020)
☐	Online	16	09/14/2020	ANSWERING BRIEF in Opposition re 10 MOTION to Dismiss for Failure to State a Claim, filed by LiTL LLC.Reply Brief due date per Local Rules is 9/21/2020. (Attachments: # 1 Exhibits A-F)(Poff, Adam) Modified on 9/15/2020 (nms). (Main Document 16 replaced on 9/15/2020) (nms). (Entered: 09/14/2020)
☐	Free	17	09/14/2020	DECLARATION of Eric J. Gould Bear re 16 Answering Brief in Opposition, by LiTL LLC. (Attachments: # 1 Exhibit 1)(Poff, Adam) Modified on 9/15/2020 (nms). (Entered: 09/14/2020)
☐	Runner		09/15/2020	CORRECTING ENTRY: The main pdf for D.I. 16 has been replaced per counsel's request. Formatting issues have been corrected. (nms) (Entered: 09/15/2020)
☐	Free	18	09/29/2020	STIPULATION TO EXTEND TIME for defendant Lenovo (Beijing), Ltd. to move, answer, or otherwise respond to the Complaint to November 9, 2020 - filed by Lenovo (Beijing) Ltd., Lenovo(United States), Inc.. (Smith, Rodger) (Entered: 09/29/2020)
☐	Runner		09/29/2020	SO ORDERED, re 18 STIPULATION TO EXTEND TIME for defendant Lenovo (Beijing), Ltd. to move, answer, or otherwise respond to the Complaint to November 9, 2020 (*Reset Answer Deadlines: Lenovo (Beijing) Ltd. answer due 11/9/2020). Signed by Judge Richard G. Andrews on 9/29/2020. (nms) (Entered: 09/29/2020)
☐	Free	19	10/05/2020	REPLY BRIEF re 10 MOTION to Dismiss for Failure to State a Claim - filed by Lenovo(United States), Inc .. (Smith, Rodger) (Entered: 10/05/2020)
☐	Free	20	10/05/2020	DECLARATION of Lai L. Yip re 19 Reply Brief, by Lenovo(United States), Inc.. (Attachments: # 1 Exhibits 3-14)(Smith, Rodger) Modified on 10/6/2020 (nms). (Entered: 10/05/2020)

				(Beijing) Ltd.. (Smith, Rodger) (Entered: 10/30/2020)
☐	Runner		10/30/2020	SO ORDERED, re 21 STIPULATION TO EXTEND TIME to move, answer, or otherwise respond to the Complaint to December 9, 2020 (*Reset Answer Deadlines: Lenovo (Beijing) Ltd. answer due 12/9/2020). Signed by Judge Richard G. Andrews on 10/30/2020. (nms) (Entered: 10/30/2020)
☐	Free	22	11/25/2020	Joint STIPULATION and [Proposed] Order to Extend Time and Modify Page Limitations - by Lenovo (Beijing) Ltd., Lenovo(United States), Inc (Smith, Rodger) (Entered: 11/25/2020)
☐	Free	23	11/30/2020	SO ORDERED, re 22 Joint Stipulation and Proposed Order to Extend Time and Modify Page Limitations. Signed by Judge Richard G. Andrews on 11/25/2020. (nms) (Entered: 11/30/2020)
☐	Free	24	12/09/2020	MOTION to Dismiss - filed by Lenovo (Beijing) Ltd.. (Smith, Rodger) Modified on 12/9/2020 (nms). (Entered: 12/09/2020)
☐	Free	25	12/09/2020	OPENING BRIEF in Support re 24 MOTION to Dismiss, filed by Lenovo (Beijing) Ltd..Answering Brief/Response due date per Local Rules is 12/23/2020. (Smith, Rodger) Modified on 12/9/2020 (nms). (Entered: 12/09/2020)
☐	Free	26	12/09/2020	DECLARATION of Shannon Murray re 24 MOTION to Dismiss, by Lenovo (Beijing) Ltd.. (Smith, Rodger) Modified on 12/9/2020 (nms). (Entered: 12/09/2020)
☐	Free	27	12/09/2020	DECLARATION of Sean Noble re 24 MOTION to Dismiss, by Lenovo (Beijing) Ltd.. (Smith, Rodger) Modified on 12/9/2020 (nms). (Entered: 12/09/2020)
☐	Free	28	12/09/2020	DECLARATION of Annie Sun re 24 MOTION to Dismiss, by Lenovo (Beijing) Ltd.. (Smith, Rodger) Modified on 12/9/2020 (nms). (Entered: 12/09/2020)
☐	Free	29	12/09/2020	DECLARATION of Lai L. Yip re 24 MOTION to Dismiss, by Lenovo (Beijing) Ltd.. (Attachments: # 1 Exhibits 1-9) (Smith, Rodger) Modified on 12/9/2020 (nms). (Entered: 12/09/2020)
☐	Free	30	12/09/2020	Disclosure Statement pursuant to Rule 7.1: identifying Corporate Parent Lenovo Group Limited for Lenovo (Beijing) Ltd. filed by Lenovo (Beijing) Ltd.. (Smith, Rodger) (Entered: 12/09/2020)
☐	Online	31	12/30/2020	First Amended Complaint against All Defendants - filed by LITL LLC. (Attachments: # 1 Exhibits A-F)(Poff, Adam) Modified on 12/30/2020 (nms). (Entered: 12/30/2020)
☐	Free	32	01/05/2021	Joint STIPULATION and [Proposed] Order Regarding Briefing on Defendants' Motion to Dismiss by Lenovo (Beijing) Ltd., Lenovo(United States), Inc.. (Smith, Rodger) (Entered: 01/05/2021)
☐	Free	33	01/05/2021	SO ORDERED, re 32 Joint Stipulation and Proposed Order Regarding Briefing on Motion to Dismiss (*Reactivated and Reset Briefing Schedule' re 10 MOTION to Dismiss for Failure to State a Claim. Opening Brief due 2/3/2021, Answering Brief due 3/3/2021, Reply Brief due 3/24/2021). Signed by Judge Richard G. Andrews on 1/5/2021. (nms) (Entered: 01/05/2021)
☐	Free	34	02/03/2021	MOTION to Dismiss for Failure to State a Claim - filed by Lenovo (Beijing) Ltd., Lenovo(United States), Inc.. (Smith, Rodger) (Entered: 02/03/2021)
☐	Free	35	02/03/2021	OPENING BRIEF in Support re 34 MOTION to Dismiss for Failure to State a Claim - filed by Lenovo (Beijing) Ltd..Answering Brief/Response due date per Local Rules is 2/17/2021. (Smith, Rodger) (Entered: 02/03/2021)
☐	Free	36	03/03/2021	ANSWERING BRIEF in Opposition re 34 MOTION to Dismiss for Failure to State a Claim filed by LITL LLC Reply Brief due date per Local Rules is 3/10/2021. (Poff, Adam) (Entered: 03/03/2021)

	Free	38	03/25/2021	NOTICE of Filing of Petition for Inter Parties Review by Lenovo (Beijing) Ltd., Lenovo(United States), Inc. (Attachments: # 1 Exhibit A)(Clark, Cameron) (Entered: 03/25/2021)
	Free	39	04/05/2021	MOTION for Leave to File Sur-Reply Brief in Opposition to Lenovo (Beijing) Ltd.'s Motion to Dismiss for Failure to State a Claim - filed by LiTL LLC. (Attachments: # 1 Exhibit A, # 2 Proposed Order)(Poff, Adam) Modified on 4/5/2021 (nms). (Entered: 04/05/2021)
	Runner		04/05/2021	Set Answering Brief Deadline re 39 MOTION for Leave to File Sur-Reply Brief in Opposition to Lenovo (Beijing) Ltd.'s Motion to Dismiss for Failure to State a Claim. Answering Brief/Response due date per Local Rules is 4/19/2021. (nms) (Entered: 04/06/2021)
	Online	40	04/19/2021	ANSWERING BRIEF in Opposition re 39 MOTION for Leave to File Sur-Reply Brief, filed by Lenovo (Beijing) Ltd..Reply Brief due date per Local Rules is 4/26/2021. (Smith, Rodger) Modified on 4/20/2021 (nms). (Entered: 04/19/2021)
	Online	41	04/26/2021	REPLY BRIEF re 39 MOTION for Leave to File Sur-Reply Brief in Opposition to Lenovo (Beijing) Ltd.'s Motion to Dismiss for Failure to State a Claim filed by LiTL LLC. (Vrana, Robert) (Entered: 04/26/2021)
	Online	42	04/29/2021	NOTICE of Filing of Petition for Inter Partes Review by Lenovo(United States), Inc. (Attachments: # 1 Exhibit A)(Clark, Cameron) (Entered: 04/29/2021)
	Online	43	05/14/2021	NOTICE of Filing of Petitions for Inter Partes Review by Lenovo(United States), Inc. (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C)(Clark, Cameron) (Entered: 05/14/2021)
	Online	44	05/27/2021	NOTICE of Filing of Petition for Inter Partes Review by Lenovo (Beijing) Ltd., Lenovo(United States), Inc. (Attachments: # 1 Exhibit A)(Clark, Cameron) (Entered: 05/27/2021)
	Free	45	11/30/2021	NOTICE of IPR Resolutions and Request for Scheduling Conference by LiTL LLC (Poff, Adam) (Entered: 11/30/2021)
	Free	46	01/21/2022	MEMORANDUM OPINION. Signed by Judge Richard G. Andrews on 1/21/2022. (nms) (Entered: 01/21/2022)
	Free	47	01/21/2022	ORDER: The motion to dismiss (D.I. 10) based on patent ineligibility under 35 U.S.C. 101 is DENIED. The motion to dismiss (D.I. 34) for failure to state a claim is GRANTED IN PART and DENIED IN PART; and the motion for leave to file a sur-reply (D.I. 39) is GRANTED (see Order for further details). Signed by Judge Richard G. Andrews on 1/21/2022. (nms) (Entered: 01/21/2022)
	Free	48	01/25/2022	STIPULATION TO EXTEND TIME for defendants to respond to the Amended Complaint to February 18, 2022 - filed by Lenovo (Beijing) Ltd., Lenovo(United States), Inc.. (Smith, Rodger) (Entered: 01/25/2022)
	Runner		01/25/2022	SO ORDERED, re 46 STIPULATION and Proposed Order to Extend Time (*Reset Answer Deadlines: Lenovo (Beijing) Ltd. answer due 2/18/2022; Lenovo(United States), Inc. answer due 2/18/2022). Signed by Judge Richard G. Andrews on 1/25/2022. (nms) (Entered: 01/25/2022)
	Free	49	02/17/2022	NOTICE of Filing of Request for Ex Parte Reexamination by Lenovo (Beijing) Ltd., Lenovo(United States), Inc. (Attachments: # 1 Exhibit A)(Clark, Cameron) (Entered: 02/17/2022)
	Free	50	02/18/2022	ANSWER to 31 Amended Complaint with Jury Demand, by Lenovo (Beijing) Ltd., Lenovo(United States), Inc.. (Smith, Rodger) Modified on 2/21/2022 (nms). (Entered: 02/18/2022)

				details). Signed by Judge Richard G. Andrews on 2/24/2022. (nms) (Entered: 02/24/2022)	

Retrieve Document(s)

Patents

Number	Title	Issued	Class	Subclass
8,289,688	Portable computer with multiple display configurations	10/16/2012	361	679.3
8,624,844	Portable computer with multiple display configurations	01/07/2014	345	169
9,850,715	System and method for streamlining user interaction with electronic content	01/30/2018	1	1
8,612,888	Method and apparatus for managing digital media content	12/17/2013	715	810
8,577,957	System and method for streamlining user interaction with electronic content	11/05/2013	709	203
9,727,091	Electronic device	08/08/2017	1	1
9,003,315	System and method for streamlining user interaction with electronic content	04/07/2015	715	764
10,289,154	Portable computer with multiple display configurations	05/14/2019	1	1

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REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/014,965	02/25/2022	8624844

CONFIRMATION NO. 3442

REEXAM ASSIGNMENT NOTICE

23628
WOLF GREENFIELD & SACKS, P.C.
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206

OC000000132260350

Date Mailed: 03/07/2022

NOTICE OF ASSIGNMENT OF REEXAMINATION REQUEST

The above-identified request for reexamination has been assigned to Art Unit 3992. All future correspondence to the proceeding should be identified by the control number listed above and directed to the assigned Art Unit.

A copy of this Notice is being sent to the latest attorney or agent of record in the patent file or to all owners of record. (See 37 CFR 1.33(c)). If the addressee is not, or does not represent, the current owner, he or she is required to forward all communications regarding this proceeding to the current owner(s). An attorney or agent receiving this communication who does not represent the current owner(s) may wish to seek to withdraw pursuant to 37 CFR 1.36 in order to avoid receiving future communications. If the address of the current owner(s) is unknown, this communication should be returned within the request to withdraw pursuant to Section 1.36.

NOTICE OF USPTO EX PARTE REEXAMINATION PATENT OWNER STATEMENT WAIVER PROGRAM

The USPTO has implemented a pilot program where, after a reexamination proceeding has been granted a filing date and before the examiner begins his or her review, the patent owner may orally waive the right to file a patent owner's statement. See *"Pilot Program for Waiver of Patent Owner's Statement in Ex Parte Reexamination Proceedings,"* 75 FR 47269 (August 5, 2010). One goal of the pilot program is to reduce the pendency of reexamination proceedings and improve the efficiency of the reexamination process.

Ordinarily when ex parte reexamination is ordered, the USPTO must wait until after the receipt of the patent owner's statement and the third party requester's reply, or after the expiration of the time period for filing the statement and reply (a period that can be as long as 5 to 6 months), before mailing a first determination of patentability. The USPTO's first determination of patentability is usually a first Office action on the merits or a Notice of Intent to Issue Reexamination Certificate (NIRC).

Under the pilot program, the patent owner's oral waiver allows the USPTO to act on the first determination of patentability immediately after determining that reexamination will be ordered, and in a suitable case issue the reexamination order and the first determination of patentability (which could be a NIRC if the claims under reexamination are confirmed) at the same time.

Benefits to the Patent Owner for participating in this pilot program include reduction in pendency.

To participate in this pilot program, Patent Owners may contact the USPTO's Central Reexamination Unit (CRU) at 571-272-7705. The USPTO will make the oral waiver of record in the reexamination file in an interview summary and a copy will be mailed to the patent owner and any third party requester.

cc: Third Party Requester(if any)
KLARQUIST SPARKMAN, LLP
121 SW SALMON STREET
SUITE 1600
PORTLAND, OR 97204

/tplovelace/

Legal Instruments Examiner
Central Reexamination Unit 571-272-7705; FAX No. 571-273-9900

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United States Patent and Trademark Office
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REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/014,965	02/25/2022	8624844

CONFIRMATION NO. 3442

KLARQUIST SPARKMAN, LLP
121 SW SALMON STREET
SUITE 1600
PORTLAND, OR 97204

REEXAMINATION REQUEST NOTICE

OC000000132260348

Date Mailed: 03/07/2022

NOTICE OF REEXAMINATION REQUEST FILING DATE

(Third Party Requester)

Requester is hereby notified that the filing date of the request for reexamination is 02/25/2022, the date that the filing requirements of 37 CFR § 1.510 were received.

A decision on the request for reexamination will be mailed within three months from the filing date of the request for reexamination. (See 37 CFR 1.515(a)).

A copy of the Notice is being sent to the person identified by the requester as the patent owner. Further patent owner correspondence will be the latest attorney or agent of record in the patent file. (See 37 CFR 1.33). Any paper filed should include a reference to the present request for reexamination (by Reexamination Control Number).

cc: Patent Owner
23628
WOLF GREENFIELD & SACKS, P.C.
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206

/tplovelace/

Legal Instruments Examiner
Central Reexamination Unit 571-272-7705; FAX No. 571-273-9900

Patent Assignment Abstract of Title

Total Assignments: 6

Application #: 12170951 **Filing Dt:** 07/10/2008 **Patent #:** 8624844 **Issue Dt:** 01/07/2014
PCT #: NONE **Intl Reg #:** **Publication #:** US20090244012 **Pub Dt:** 10/01/2009
Inventors: Yves Behar, Joshua Morenstein, Christopher Hibmacronan, Naoya Edahiro, Matthew David Day
Title: PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS

Assignment: 1

Reel/Frame: 021810 / 0331 **Received:** 11/10/2008 **Recorded:** 11/10/2008 **Mailed:** 11/10/2008 **Pages:** 6
Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).
Assignors: BEHAR, YVES **Exec Dt:** 10/28/2008
MORENSTEIN, JOSHUA **Exec Dt:** 10/22/2008
HIBMACRONAN, CHRISTOPHER **Exec Dt:** 10/22/2008
EDAHIRO, NAOYA **Exec Dt:** 10/22/2008
DAY, MATTHEW DAVID **Exec Dt:** 10/22/2008
Assignee: AQUENT, LLC
711 BOYLSTON STREET
BOSTON, MASSACHUSETTS 02116
Correspondent: SARAH M. GATES
ONE MAIN STREET
CAMBRIDGE, MA 02142

Assignment: 2

Reel/Frame: 023871 / 0867 **Received:** 01/29/2010 **Recorded:** 01/29/2010 **Mailed:** 01/29/2010 **Pages:** 7
Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).
Assignor: AQUENT LLC **Exec Dt:** 12/18/2009
Assignee: LITL LLC
33 EXETER STREET
BOSTON, MASSACHUSETTS 02116
Correspondent: JOHN L. WELCH
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LANDO & ANASTASI, LLP
CAMBRIDGE, MA 02142

Assignment: 3

Reel/Frame: 023966 / 0954 **Received:** 02/22/2010 **Recorded:** 02/22/2010 **Mailed:** 02/22/2010 **Pages:** 9
Conveyance: SECURITY AGREEMENT
Assignor: LITL LLC **Exec Dt:** 02/16/2010
Assignee: WELLS FARGO CAPITAL FINANCE, LLC, AS AGENT (F/K/A WELLS FARGO FOOTHILL, LLC)
ONE BOSTON PLACE
18TH FLOOR
BOSTON, MASSACHUSETTS 02108
Correspondent: CHRISTINE SLATTERY
PROSKAUER ROSE LLP
ONE INTERNATIONAL PLACE
BOSTON, MA 02110

Assignment: 4

Reel/Frame: 035497 / 0904 **Received:** 04/24/2015 **Recorded:** 04/24/2015 **Mailed:** 04/28/2015 **Pages:** 23
Conveyance: SECURITY INTEREST (SEE DOCUMENT FOR DETAILS).
Assignors: AQUENT LLC **Exec Dt:** 04/24/2015
LITL LLC **Exec Dt:** 04/24/2015
SCOUT EXCHANGE LLC **Exec Dt:** 04/24/2015
Assignee: CRYSTAL FINANCIAL LLC
2 INTERNATIONAL PLACE

17TH FLOOR
BOSTON, MASSACHUSETTS 02110

Correspondent: ELIZABETH A. WALKER, ESQ.
TWO INTERNATIONAL PLACE
BOSTON, MA 02110

Assignment: 5

Reel/Frame: 046364 / 0443 **Received:** 06/14/2018 **Recorded:** 06/14/2018 **Mailed:** 07/18/2018 **Pages:** 10

Conveyance: TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENT RIGHTS AT REEL/FRAME: 035497/0904

Assignor: CRYSTAL FINANCIAL LLC **Exec Dt:** 06/12/2018

Assignees: AQUENT LLC
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BOSTON, MASSACHUSETTS 02116

LITL LLC
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Correspondent: MICHAEL J. BEVILACQUA, ESQ.
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Assignment: 6

Reel/Frame: 052735 / 0926 **Received:** 05/22/2020 **Recorded:** 05/22/2020 **Mailed:** 05/25/2020 **Pages:** 16

Conveyance: NUNC PRO TUNC ASSIGNMENT (SEE DOCUMENT FOR DETAILS).

Assignor: AQUENT LLC **Exec Dt:** 05/21/2020

Assignee: LITL LLC
501 BOYLSTON STREET
BOSTON, MASSACHUSETTS 02116

Correspondent: EDWARD J. RUSSAVAGE
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BOSTON, MA 02210

Search Results as of: 03/07/2022 01:38 PM

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Web interface last modified: Jun 26, 2017 v.2.6

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BIB DATA SHEET

CONFIRMATION NO. 3442

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
90/014,965	02/25/2022 RULE	345	3991	

APPLICANTS

INVENTORS

8624844, Residence Not Provided;
LITL LLC (Assignee), BOSTON, MA;
KLARQUIST SPARKMAN, LLP (3rd Pty Req.), PORTLAND, OR;
KLARQUIST SPARKMAN, LLP, PORTLAND, OR

**** CONTINUING DATA ***************************

This application is a REX of 12/170,951 07/10/2008 PAT 8624844 *
which claims benefit of 61/041,365 04/01/2008
(*)Data provided by applicant is not consistent with PTO records.

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****

Foreign Priority claimed ❑ Yes ❑ No 35 USC 119(a-d) conditions met ❑ Yes ❑ No Verified and Acknowledged _____ Examiner's Signature	❑ Met after Allowance _____ Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
				22	3

ADDRESS

WOLF GREENFIELD & SACKS, P.C.
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206
UNITED STATES

TITLE

Portable Computer with Multiple Display Configurations

FILING FEE RECEIVED		
12600	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	❑ All Fees ❑ 1.16 Fees (Filing) ❑ 1.17 Fees (Processing Ext. of time) ❑ 1.18 Fees (Issue) ❑ Other _____ ❑ Credit

INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	12/170,951
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. (optional)	Document Number Number-Kind Code (if known)	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant
	1.	U.S. Patent No. 8,624,844	01/07/2014	Behar
	2.	U.S. Patent No. 6,154,359	11/28/2000	Kamikakai
	3.	U.S. Patent No. 6,492,974	12/10/2002	Nobuchi
	4.	U.S. Patent No. 7,061,472	06/13/2006	Schweizer
	5.	U.S. Patent No. 5,644,516	07/01/1997	Podwalny

U.S. PATENT APPLICATION PUBLICATIONS

Examiner Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant
	6.	U.S. Patent Application No. 2007/0058329	03/15/2007	Ledbetter
	7.	U.S. Patent Application Publication No. 2006/0034042	02/16/2006	Hisano
	8.	U.S. Patent Application Publication No. 2005/0122318	06/09/2005	Tonouchi
	9.	U.S. Patent Application Publication No. 2005/0062715	03/24/2005	Tsuji
	10.	U.S. Patent Application Publication No. 2008/0211778	09/04/2008	Ording

EXAMINER SIGNATURE:	DATE CONSIDERED:

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.
**Please place an "X" in this column if English translation is attached.

INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	12/170,951
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

U.S. PATENT APPLICATION PUBLICATIONS

Examiner Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant
	11.	U.S. Provisional Patent Application Publication No. 60/946,970	06/28/2007	Ording

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. (optional)	Foreign Patent Document Country Code-Number-Kind Code (if known)	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant	T**
	12.	JP H6-242853	09/02/1994	Shimura	
	13.	JP 2005-71297A	03/17/2005	Kanamori	
	14.	CN 2627170Y	07/21/2003	Ruijiang	
	15.	H08-179851	07/12/1996	Shigeo	
	16.	PCT International Patent Application Publication No. WO 95/24007	09/08/1995	Lane	
	17.	European Patent No. EP 2 283 407 B1	10/10/2018	Behar	
	18.	UK Patent Application Publication No. GB 2 321 982 A	08/12/1998	Valikangas	

Examiner Initials*	Cite No. (optional)	OTHER DOCUMENTS	T**
	19.	File History of U.S. Patent No. 8,624,844	
	20.	Declaration Of Christopher Schmandt	
	21.	Certified English Translation of JP H6-242853 ("**Shimura**")	
	22.	Certified English Translation of JP2005-71297A ("**Kanamori**")	

EXAMINER SIGNATURE:	DATE CONSIDERED:

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	12/170,951
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

Examiner Initials*	Cite No. (optional)	OTHER DOCUMENTS	T**
	23.	Certified English Translation of CN 2627170Y ("**CN '170**") (Ruijiang)	
	24.	Certified English Translation of Japanese Patent Application Publication No. H08-179851 ("**Shigeo**")	
	25.	David Pogue, *Windows Vista: The Missing Manual*, *1st edition, 2nd printing,* published February 2007. Excerpts ("**Pogue**")	
	26.	Petition for *Inter Partes* Review of the '844 Patent, filed May 4, 2021 by Petitioner Lenovo (United Sates) Inc., *Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822 (PTAB)	
	27.	Decision Denying Institution of *Inter Partes* Review of the '844 Patent, issued October 21, 2021, *Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822 (PTAB)	
	28.	First Amended Complaint ("**Complaint**"), *LiTL LLC v. Lenovo (United States), Inc. et al,* No. DDE-1-20-cv-00689 (U.S. Dist. Ct., Dist. Delaware)	
	29.	Declaration of Dan Fauxsmith, VP of Publishing Operations at O'Reilly Media, Inc. ("Fauxsmith")	
	30.	Affidavit of Nathaniel E. Frank-White, Records Request Processor at the Internet Archive ("Frank-White")	
	31.	[No Author Listed], Litl Webbook Beats ChromeOS, Becomes First Cloud Computer. CoolThings. November 16, 2009. URL:https://www.coolthings.com/litl-webbook-beats-chromeosbecomes-first-cloud-computer/ [last accessed June 25, 2021]	
	32.	McDonald, LiTL Webbook Review. Little Tech Girl. August 31, 2010. URL:https://littletechgirl.com/2010/08/31/litl-webbook-review/ [last accessed June 25, 2021]	
	33.	Strauss, Litl Webbook Re-Defines Computing. ABC News. December 14, 2009. URL:https://abcnews.go.com/Technology/GadgetGuide/litlwebbook-defines-computing/story?id=9311095 [last accessed June 25, 2021]	
	34.	King, Litl Webbook price drops from $699 to $399. ZDNet. May 16, 2010. URL:https://www.zdnet.com/article/litl-webbook-price-drops-from-699-to-399/ [last accessed February 1, 2022]	
	35.	File History (Excerpts) of European Patent No. EP 2283407 B1	

EXAMINER SIGNATURE:	DATE CONSIDERED:

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

**Please place an "X" in this column if English translation is attached.

INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	12/170,951
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

Examiner Initials*	Cite No. (optional)	OTHER DOCUMENTS	T**
	36.	Murph, Litl Webbook plummets from $699 to $399, still can't catch an eye. May 16, 2010. URL:https://www.engadget.com/2010-05-16-litl-webbook-plummets-from-699-to-399-still-cant-catch-an-ey.html [last accessed February 7, 2022]	

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Exhibit 1003

INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	12/170,951
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. (optional)	Document Number Number-Kind Code (if known)	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant
	1.	U.S. Patent No. 8,624,844	01/07/2014	Behar
	2.	U.S. Patent No. 6,154,359	11/28/2000	Kamikakai
	3.	U.S. Patent No. 6,492,974	12/10/2002	Nobuchi
	4.	U.S. Patent No. 7,061,472	06/13/2006	Schweizer
	5.	U.S. Patent No. 5,644,516	07/01/1997	Podwalny

U.S. PATENT APPLICATION PUBLICATIONS

Examiner Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant
	6.	U.S. Patent Application No. 2007/0058329	03/15/2007	Ledbetter
	7.	U.S. Patent Application Publication No. 2006/0034042	02/16/2006	Hisano
	8.	U.S. Patent Application Publication No. 2005/0122318	06/09/2005	Tonouchi
	9.	U.S. Patent Application Publication No. 2005/0062715	03/24/2005	Tsuji
	10.	U.S. Patent Application Publication No. 2008/0211778	09/04/2008	Ording

EXAMINER SIGNATURE:	DATE CONSIDERED:

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INFORMATION DISCLOSURE STATEMENT BY THIRD PARTY REQUESTOR		
	Attorney Docket Number	10306-107453-04
	Application Number	12/170,951
	Filing Date	July 10, 2008
	First Named Inventor	Yves Behar
	Art Unit	
	Examiner Name	Sosina Abebe

U.S. PATENT APPLICATION PUBLICATIONS

Examiner Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant
	11.	U.S. Provisional Patent Application Publication No. 60/946,970	06/28/2007	Ording

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. (optional)	Foreign Patent Document Country Code-Number-Kind Code (if known)	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant	T**
	12.	JP H6-242853	09/02/1994	Shimura	
	13.	JP 2005-71297A	03/17/2005	Kanamori	
	14.	CN 2627170Y	07/21/2003	Ruijiang	
	15.	H08-179851	07/12/1996	Shigeo	
	16.	PCT International Patent Application Publication No. WO 95/24007	09/08/1995	Lane	
	17.	European Patent No. EP 2 283 407 B1	10/10/2018	Behar	
	18.	UK Patent Application Publication No. GB 2 321 982 A	08/12/1998	Valikangas	

Examiner Initials*	Cite No. (optional)	OTHER DOCUMENTS	T**
	19.	File History of U.S. Patent No. 8,624,844	
	20.	Declaration Of Christopher Schmandt	
	21.	Certified English Translation of JP H6-242853 ("**Shimura**")	
	22.	Certified English Translation of JP2005-71297A ("**Kanamori**")	

EXAMINER SIGNATURE:	DATE CONSIDERED:

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	Attorney Docket Number	10306-107453-04
	Application Number	12/170,951
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	First Named Inventor	Yves Behar
	Art Unit	
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	29.	Declaration of Dan Fauxsmith, VP of Publishing Operations at O'Reilly Media, Inc. ("Fauxsmith")	
	30.	Affidavit of Nathaniel E. Frank-White, Records Request Processor at the Internet Archive ("Frank-White")	
	31.	[No Author Listed], Litl Webbook Beats ChromeOS, Becomes First Cloud Computer. CoolThings. November 16, 2009. URL:https://www.coolthings.com/litl-webbook-beats-chromeosbecomes-first-cloud-computer/ [last accessed June 25, 2021]	
	32.	McDonald, LiTL Webbook Review. Little Tech Girl. August 31, 2010. URL:https://littletechgirl.com/2010/08/31/litl-webbook-review/ [last accessed June 25, 2021]	
	33.	Strauss, Litl Webbook Re-Defines Computing. ABC News. December 14, 2009. URL:https://abcnews.go.com/Technology/GadgetGuide/litlwebbook-defines-computing/story?id=9311095 [last accessed June 25, 2021]	
	34.	King, Litl Webbook price drops from $699 to $399. ZDNet. May 16, 2010. URL:https://www.zdnet.com/article/litl-webbook-price-drops-from-699-to-399/ [last accessed February 1, 2022]	
	35.	File History (Excerpts) of European Patent No. EP 2283407 B1	

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Examiner Initials*	Cite No. (optional)	OTHER DOCUMENTS	T**
	36.	Murph, Litl Webbook plummets from $699 to $399, still can't catch an eye. May 16, 2010. URL:https://www.engadget.com/2010-05-16-litl-webbook-plummets-from-699-to-399-still-cant-catch-an-ey.html [last accessed February 7, 2022]	

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* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.
**Please place an "X" in this column if English translation is attached.

CERTIFICATE OF SERVICE

The undersigned certifies that on February 25, 2022, a copy of the **REQUEST FOR *EX PARTE* REEXAMINATION UNDER 35.U.S.C. §§ 302–307 AND 37 C.F.R. § 1.510 (AND EXHIBITS THERETO); REQUEST FOR EX PARTE REEXAMINATION TRANSMITTAL FORM; AND INFORMATION DISCLOSURE STATEMENT** were served via Federal Express on Patent Owner at the following address of record listed on PAIR:

Wolf Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, MA 02210

By: /Andrew M. Mason/
Andrew M. Mason (Reg. No. 64,034)
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Counsel for Requester,
Lenovo (United States) Inc.

PTO/SB/57 (09-16)
Approved for use through 09/30/2018. OMB 0651-0064
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

(Also referred to as FORM PTO-1465)

REQUEST FOR *EX PARTE* REEXAMINATION TRANSMITTAL FORM

Address to:
Mail Stop *Ex Parte* Reexam
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attorney Docket No.: 10306-107453-04

Date: February 25, 2022

1. ☑ This is a request for *ex parte* reexamination pursuant to 37 CFR 1.510 of patent number 8,624,844 issued January 7, 2014. The request is made by:
   ☐ patent owner. ☑ third party requester.
2. ☑ The name and address of the person requesting reexamination is:
   Andrew M. Mason
   Klarkquist Sparkman LLP
   121 SW Salmon Street, Suite 1600, Portland, OR 97204
3. Requester asserts ☐ small entity status (37 CFR 1.27) or ☐ certifies micro entity status (37 CFR 1.29). Only a patent owner requester can certify micro entity status. Form PTO/SB/15A or B must be attached to certify micro entity status.
4. ☐ a. A check in the amount of $_____ is enclosed to cover the reexamination fee, 37 CFR 1.20(c)(1);
   ☑ b. The Director is hereby authorized to charge the fee as set forth in 37 CFR 1.20(c)(1) to Deposit Account No. 02-4550;
   ☐ c. Payment by credit card. Form PTO-2038 is attached; **or**
   ☑ d. Payment made via EFS-Web.
5. ☑ Any refund should be made by ☐ check or ☑ credit to Deposit Account No. 02-4550. 37 CFR 1.26(c). If payment is made by credit card, refund must be to credit card account.
6. ☑ A copy of the patent to be reexamined having a double column format on one side of a separate paper is enclosed. 37 CFR 1.510(b)(4).
7. ☐ CD-ROM or CD-R in duplicate, Computer Program (Appendix) or large table
   ☐ Landscape Table on CD
8. ☐ Nucleotide and/or Amino Acid Sequence Submission
   If applicable, items a. – c. are required.
   a. ☐ Computer Readable Form (CRF)
   b. Specification Sequence Listing on:
      i. ☐ CD-ROM (2 copies) or CD-R (2 copies); **or**
      ii. ☐ paper
   c. ☐ Statements verifying identity of above copies
9. ☐ A copy of any disclaimer, certificate of correction or reexamination certificate issued in the patent is included.
10. ☑ Reexamination of claim(s) _____ is requested.
11. ☑ A copy of every patent or printed publication relied upon is submitted herewith including a listing thereof on Form PTO/SB/08, PTO-1449, or equivalent.
12. ☑ An English language translation of all necessary and pertinent non-English language patents and/or printed publications is included.

This collection of information is required by 37 CFR 1.510. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) a request for reexamination. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 18 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop *Ex Parte* Reexam, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

13. ☑ The attached detailed request includes at least the following items:

a. A statement identifying each substantial new question of patentability based on prior patents and printed publications. 37 CFR 1.510(b)(1).

b. An identification of every claim for which reexamination is requested, and a detailed explanation of the pertinency and manner of applying the cited art to every claim for which reexamination is requested. 37 CFR 1.510(b)(2).

14. ☐ A proposed amendment is included (only where the patent owner is the requester). 37 CFR 1.510(e).

15. ☑ It is certified that the statutory estoppel provisions of 35 U.S.C. 315(e)(1) or 35 U.S.C. 325(e)(1) do not prohibit requester from filing this *ex parte* reexamination request. 37 CFR 1.510(b)(6).

16. ☑ a. It is certified that a copy of this request (if filed by other than the patent owner) has been served in its entirety on the patent owner as provided in 37 CFR 1.33(c).

The name and address of the party served and the date of service are:

Wolf Greenfield & Sacks, P.C.

600 Atlantic Avenue, Boston, MA 02210-2206

Date of Service: February 25, 2022; **or**

☐ b. A duplicate copy is enclosed since service on patent owner was not possible. An explanation of the efforts made to serve patent owner **is attached**. See MPEP 2220.

17. Correspondence Address: Direct all communication about the reexamination to:

☑ The address associated with Customer Number: 24197

OR

☐ Firm or Individual Name Klarquist Sparkman LLP

Address
121 SW Salmon Street, Suite 1600

City	State	Zip
Portland	OR	97204

Country
USA

Telephone	Email
503-595-5300	andrew.mason@klarquist.com

18. ☑ The patent is currently the subject of the following concurrent proceeding(s):

☐ a. Copending reissue Application No. _____

☐ b. Copending reexamination Control No. _____

☐ c. Copending Interference No. _____

☑ d. Copending litigation styled:

LiTL LLC v. Lenovo (United States) Inc., et al., 1:20-cv-00689, (D. Del.), filed May 22, 2020

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

/Andrew M. Mason/ — Authorized Signature

February 25, 2022 — Date

Andrew M. Mason — Typed/Printed Name

64,034 — Registration No.

☐ For Patent Owner Requester

☑ For Third Party Requester

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Exhibit 1004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:	Behar et al.
U.S. Patent No.:	8,624,844 B2
Issue Date:	January 7, 2014
Filed:	July 10, 2008
Entitled:	PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS

DECLARATION OF CHRISTOPHER SCHMANDT

EFS Web Filed
Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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6. Välikangas (Exhibit 1042) 44

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I. INTRODUCTION AND ENGAGEMENT

A. Engagement

1. I have been retained by counsel for Lenovo as an expert witness in the above-captioned Request for *Ex Parte* Reexamination ("Request"). I have been asked to provide my opinion about the state of the art of the technology described in U.S. Patent No. 8,624,844 ("the '844 Patent") (Exhibit 1001) and on the patentability of the claims of this patent. The following is my written report on these topics.

B. Background and Qualifications

2. In 2019, I retired as a Principal Research Scientist at the Media Laboratory at M.I.T. In that role I also served as faculty for the M.I.T. Media Arts and Sciences academic program. I have more than 35 years of experience in the field of Media Technology, and was a founder of the M.I.T. Media Laboratory.

3. I received my BS degree in Electrical Engineering and Computer Science from M.I.T in 1978, and my MS in Visual Studies (Computer Graphics) also from M.I.T. I was employed at M.I.T. from 1980–2018, initially at the Architecture Machine Group which was an early computer graphics research Lab. In 1985, I helped found the Media Laboratory and continue to work there to date. I currently run a research group titled "Living Mobile." My research spans distributed communication and collaborative systems, with an emphasis on multi-media and user interfaces; I have over 70 published conference and journal papers and one book in these fields.

4. In my faculty position, I taught courses and directly supervised student research and theses at the Bachelor's, Master's, and Ph.D. levels. I oversaw the Master's and Ph.D. thesis programs for the entire Media Arts and Sciences academic program. I also served on the Media Laboratory intellectual property committee.

5. In the course of my research on human computer interaction, my students and I built a number of computer input configurations and user interfaces that resembled the various physical device modes and associated software configurations described in the specification of the '844 Patent. In terms of flat screen displays with touch style interfaces, as early as 1978 I used such for my Bachelor's thesis, which was a pioneering ebook reader. I used similar hardware to access voice and text messages shortly thereafter (The Intelligent Ear in 1983, and Phone Slave in 1985, for example). I used easel-like configurations in Clique Here (2003, for images), TalkBack (also 2003, for voice messages) and GlobeToddler (2008, laptop style interface to images and games for adult, tablet style interface for child). I used tablet like two dimensional as well as fully three dimensional modes in a Stereoscopic Workspace (1982), and again with handheld tablet classroom aids in 2011. I also built user interactions using a watch (WatchMe, 2004) and a coffee mug (Mug Shots, 2014). Although none of these projects precisely mimics the claimed material, in toto they demonstrate familiarity with a range of non-traditional computer interaction configurations and interfaces.

6. Based on the above experience and qualifications, I have a solid understanding of the knowledge and perspective of a person of ordinary skill in this technical field since at least 1990.

7. My Curriculum Vitae is submitted herewith as Appendix A.

8. I am being compensated at a rate of $500 per hour for my study and other work in this matter. I am also being reimbursed for reasonable and customary expenses associated with my work in this investigation. My compensation is not contingent on the outcome of this matter or the specifics of my testimony. In the last five years, I have provided deposition or trial testimony in the following matters:

- *Facebook* v. Windy City, IPR expert, 2017
- *Facebook* v. EVERMD.COM LLC, IPR expert, 2017
- Express Mobile v. *Big Commerce*, litigation expert, 2017
- *Comcast* v. Promptu, IPR expert, 2017
- *Facebook* v. Hypermedia, IPR expert, 2018
- *Microsoft* v. Speakware, IPR expert, 2019
- *Bumble Trading LCC* v Match Group LLC, IPR expert, 2019
- *Tile Inc.* v. Cellwitch Inc., IPR expert 2019
- Blackberry Ltd v. *Facebook, Inc.*, IPR expert 2020
- *Snap, Inc.* v. SRK Technology LLC, IPR expert 2020
- *Shopify Inc.* v. Express Mobile Inc., litigation expert 2020
- Express Mobile Inc., v. *GoDaddy Inc.*, litigation expert 2021

II. STANDARDS

9. As part of my work in connection with this matter, I have studied the '844 Patent and the U.S. Patent and Trademark Office ("USPTO") file history of the '844 Patent. I have also reviewed the prior art reference cited herein, as well as additional background references.

10. My opinions are based on my years of education, research and experience, as well as my investigation and study of relevant materials. In forming my opinions, I have considered the materials referred to herein.

11. I understand that an inventor is not entitled to a patent if his or her invention would have been obvious to a POSITA at the time the invention was made. The following standards govern the determination of whether a claim in a patent is obvious. I have applied these standards in my evaluation of whether the claims in the '844 Patent would have been obvious.

12. A claim in a patent is obvious when the differences between the subject matter sought to be patented 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 the subject matter pertains.

13. I understand that an obviousness analysis requires an understanding of the scope and content of the prior art, any differences between the alleged invention and the prior art, and the level of ordinary skill in evaluating the pertinent art.

14. I further understand that a claim would have been obvious if it unites old elements with no change to their respective functions, or alters prior art by mere substitution of one element for another known in the field and that combination yields predictable results. While it may be helpful to identify a reason for this combination, I understand that there is no rigid requirement of finding an express teaching, suggestion, or motivation to combine within the references. When a product is available, design incentives and other market forces can prompt variations of it, either in the same field or different one. If a POSITA can implement a predictable variation, obviousness likely bars its patentability. For the same reason, if a technique has been used to improve one device and a POSITA would recognize that it would improve similar devices in the same way, using the technique would have been obvious. I understand that a claim would have been obvious if common sense directs one to combine multiple prior art references or add missing features to reproduce the alleged invention recited in the claims.

15. In determining the differences between the invention covered by the patent claims and the prior art, I understand that the prior art references are not looked at in isolation. Rather, the claimed invention as a whole must be considered, and it must be determined whether or not it would have been obvious in light of all of the prior art.

16. I further understand that certain factors may support or rebut the obviousness of a claim. I understand that such secondary considerations include, among other things, commercial success of the patented invention, skepticism of those having ordinary skill in the art at the time of invention, unexpected results of the invention, any long-felt but unsolved need in the art that was satisfied by the alleged invention, the failure of others to make the alleged invention, praise of the alleged invention by those having ordinary skill in the art, and copying of the alleged invention by others in the field. I understand that there must be a nexus-a connection-between any such secondary considerations and the alleged invention.

17. I am not aware of any secondary considerations that would tend to rebut the obviousness of any claim of the '844 Patent.

18. I understand that in considering obviousness, it is important not to determine obviousness using the benefit of hindsight derived from the patent being considered.

III. MATERIALS CONSIDERED

19. My opinions are based on my years of education, research, and experience, as well as my investigation and study of relevant materials.

20. In preparing this declaration, I have reviewed the following materials bearing Exhibit Nos. that I understand are being referenced in the Request to which my declaration accompanies:

LIST OF EXHIBITS

No.	Description
1001	U.S. Patent No. 8,624,844 ("**'844 Patent**") to Behar et al. assigned to LITL LLC
1002	File History of U.S. Patent No. 8,624,844
1003	N/A
1004	Declaration of Chris Schmandt ("**Schmandt**")
1005	U.S. Patent No. 6,154,359 to Kamikakai et al. ("**Kamikakai**") issued November 28, 2000
1006	JP H6-242853 to Shimura et al. published September 2, 1994
1007	Certified English Translation of JP H6-242853 ("**Shimura**")
1008	U.S. Patent Application Publication No. 2007/0058329 to Ledbetter et al. ("**Ledbetter**") published March 15, 2007
1009	INTENTIONALLY LEFT BLANK
1010	JP 2005-71297A to Kanamori published March 17, 2005
1011	Certified English Translation of JP 2005-71297A ("**Kanamori**")
1012	CN 2627170Y to Ruijiang issued July 21, 2004
1013	Certified English Translation of CN 2627170Y ("**CN '170**")
1014	U.S. Patent No. 6,492,974 to Nobuchi et al. ("**Nobuchi**") issued December 10, 2002
1015	U.S. Patent No. 7,061,472 to Schweizer et al. ("**Schweizer**") issued June 13, 2006
1016	U.S. Patent Application Publication No. 2006/0034042 to Hisano et al. ("**Hisano**") published February 16, 2006
1017	U.S. Patent Application Publication No. 2005/0122318 to Tonouchi et al. ("**Tonouchi**") published June 9, 2005
1018	U.S. Patent Application Publication No. 2005/0062715 to Tsuji et al. ("**Tsuji**") published March 24, 2005
1019	INTENTIONALLY LEFT BLANK
1020	INTENTIONALLY LEFT BLANK
1021	INTENTIONALLY LEFT BLANK

No.	Description
1022	Japanese Patent Application Publication No. H08-179851 to Shigeo published July 12, 1996
1023	Certified English Translation of Japanese Patent Application Publication No. H08-179851 ("**Shigeo**")
1024	U.S. Patent No. 5,644,516 to Podwalny et al. ("**Podwalny**") issued July 1, 1997
1025	INTENTIONALLY LEFT BLANK
1026	INTENTIONALLY LEFT BLANK
1027	U.S. Patent Application Publication No. 2008/0211778 to Ording et al. (the '778 Publication) published September 4, 2008
1028	U.S. Provisional Patent Application No. 60/946,970 to Ording et al. ("**Ording**") filed June 28, 2007
1029	David Pogue, *Windows Vista: The Missing Manual*, 1st edition, 2nd printing, published February 2007 ("**Pogue**")
1030	*Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822, Paper 1 ("**Petition**") (PTAB May 4, 2021)
1031	*Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822, Paper 6 ("**Decision**") (PTAB October 21, 2021)
1032	First Amended Complaint ("**Complaint**"), *LiTL LLC v. Lenovo (United States), Inc. et al*, No. DDE-1-20-cv-00689 (U.S. Dist. Ct., Dist. Delaware)
1033	Declaration of Dan Fauxsmith, VP of Publishing Operations at O'Reilly Media, Inc. ("**Fauxsmith**")
1034	Affidavit of Nathaniel E. Frank-White, Records Request Processor at the Internet Archive ("Frank-White")
1035	[No Author Listed], Litl Webbook Beats ChromeOS, Becomes First Cloud Computer. CoolThings. November 16, 2009. URL:https://www.coolthings.com/litl-webbook-beats-chromeosbecomes-first-cloud-computer/ [last accessed June 25, 2021]
1036	McDonald, LiTL Webbook Review. Little Tech Girl. August 31, 2010. URL:https://littletechgirl.com/2010/08/31/litl-webbook-review/ [last accessed June 25, 2021]
1037	Strauss, Litl Webbook Re-Defines Computing. ABC News. December 11, 2009. URL:https://abcnews.go.com/Technology/GadgetGuide/litlwebbook-defines-computing/story?id=9311095 [last accessed June 25, 2021]

No.	Description
1038	PCT International Patent Application Publication No. WO 95/24007 to Lane ("**Lane**") published September 8, 1995
1039	King, Litl Webbook price drops from $699 to $399. ZDNet. May 16, 2010. URL:https://www.zdnet.com/article/litl-webbook-price-drops-from-699-to-399/ [last accessed February 1, 2022]
1040	European Patent No. EP 2 283 407 B1 ("**EP '407**") to Behar et al. assigned to LITL LLC
1041	File History (Excerpts) of European Patent No. EP 2 283 407 B1
1042	UK Patent Application Publication No. GB 2 321 982 A to Välikangas ("**Välikangas**") published August 12, 1998
1043	Murph, Litl Webbook plummets from $699 to $399, still can't catch an eye. Engadget. May 16, 2010. URL: https://www.engadget.com/2010-05-16-litl-webbook-plummets-from-699-to-399-still-cant-catch-an-ey.html [last accessed February 7, 2022]

IV. THE '844 PATENT

21. I have read and reviewed the '844 Patent. I understand the '844 Patent, titled "PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS," issued on January 7, 2014, from an application filed July 10, 2008, and which alleges priority to a provisional patent application filed April 1, 2008.

22. From my review, the '844 Patent purports to address a need for a general-purpose laptop having conventional laptop functionality that also is well-suited for passive viewing (e.g., watching videos, viewing photographs, and listening to music). Ex. 1001, 5:53-62. The '844 Patent purports to address this need by providing a portable computer with a 320°–rotatable hinge assembly that can be opened from a closed position beyond a conventional laptop display mode, to display mode(s) where the base and its keyboard are out of the way and only the display faces the user. *Id.*, 5:43-62, 7:48-61, 9:23-26, 16:1-13, FIGS. 4, 26. The '844 Patent mentions two such

display modes—an easel mode and a frame mode—both of which are recited in all of the independent claims.

23. The '844 Patent claims that its purported invention is directed specifically to the easel mode, stating that "[a]spects and embodiments of the present invention are directed to a portable computer that is configurable between a laptop mode (in which the portable computer has a conventional laptop appearance) and an easel mode in which the base of the computer and its display component stand upright forming an inverted 'V'." *Id.*, at 1:59-64. In this upside-down inverted "V" configuration, the keyboard faces away from the user and only the display is presented to the user. *Id.*, 7:48-61, FIG. 4.

'844 Patent's Easel Mode

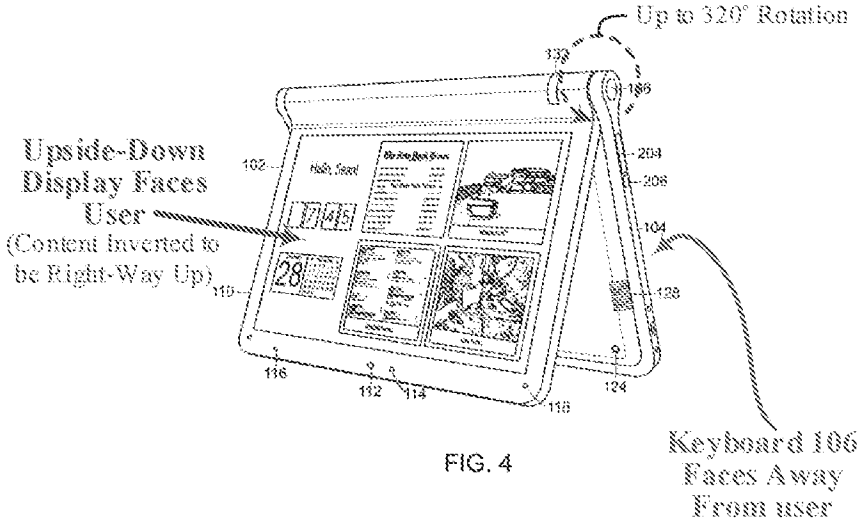


FIG. 4

'844 Patent, FIG. 4 (with annotations).

24. Similarly in frame mode, where the entire computer is turned by approximately °90 from easel mode, the display is positioned at the front of the device and faces the user while the base is positioned upside down on the table or other surface such that the keyboard faces down. *Id.*, 16:1-13, FIG. 26.

'844 Patent's Frame Mode

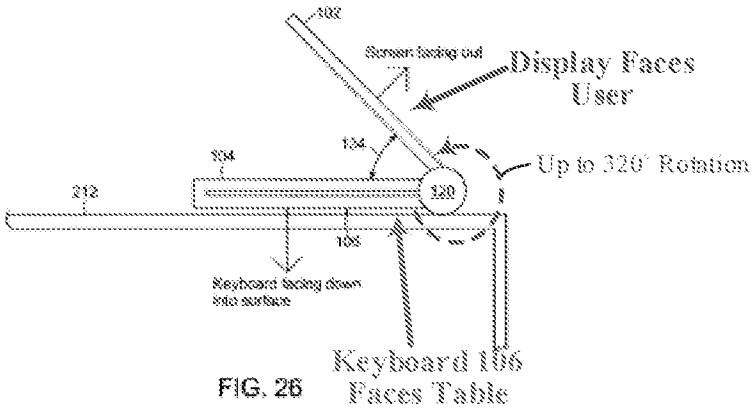


FIG. 26

Id., FIG. 26 (with annotations). These frame and easel modes are recited in all of the independent claims (claims 1, 10, and 18). *Id.*, 17:32-51, 18:51-19:2, 20:14-29.

25. All of the independent claims also recite that the easel mode is configured to display content in an inverted orientation relative to that of the conventional laptop mode ("the [laptop mode] and [easel mode] content display orientations are 180 degrees relative to each other"). *Id.*, 17:32-41, 18:51-60, 20:14-23. This ensures "information appears 'right-way-up'" *Id.*, 8:10. in easel mode, as the display is upside down in easel mode relative to its laptop and frame modes. *Id.*, 8:7-12, 7:48-61, FIG. 4.

26. I understand that the '844 Patent admits that the following were known or conventional: computers with processors, memory, display screens (e.g., LCD screens), and one or more input devices/navigation controls including, a keyboard, a mouse, a touch screen, and/or touch pads or trackballs (*id.*, 1:32-41, 6:38-45, 10:3-6, 11:2-26); accelerometers to automatically rotate displayed content when the display's orientation changes; clamshell type portable computers that are configurable into a conventional laptop display mode (*id.*, 1:21-31, 5:45-46, 8:66-9:5); and tablet-type portable computers that are configurable into not only the conventional laptop display

mode, but also into a tablet display mode whereby the laptop is opened by 360° (*id.*, 1:19-46, 9:7-11).

27. Although these tablet-type computers were capable of opening farther than the '844 Patent's computer (360° vs. 320°), the '844 Patent alleges that such tablet-type computers could not be configured into easel mode. *Id.*, 9:7-11. The '844 Patent appears to imply that this was because then-existing tablet-type computer allegedly could not maintain an intermediate position like easel mode and would instead collapse to tablet mode whenever they were opened by more than 270°. *Id.*, 9:7-18, 10:31-33.

28. I understand that the '844 Patent also is directed to, and claims, a navigation control that can be included in its portable computer to allow a user to control computer settings and manipulate displayed content. I understand this "navigation control" to be a type of input device, like a mouse, touchpad, or trackball, that permits a user to interact with the portable computer. *E.g.*, *Id.*, 10:54–11:26. While the only navigation controls expressly shown in the drawings of the '844 Patent are the scroll wheel 132 and navigation button 166, 168, I also understand that the '844 Patent acknowledges that touchscreens were one, then-existing type of input device. *E.g.*, *Id.*, 1:32–34, 10:54–11:26, FIGS. 14–17. I also attest that touch screens were widely used as input devices/navigation controls in portable computers like laptops by the alleged priority date in 2008.

A. The Prosecution History

29. I have read and reviewed relevant excerpts from the prosecution history of the '844 Patent. Ex. 1002.

30. I understand that the Examiner found that the Schweizer reference teaches the claimed easel mode, including its second content display orientation that is 180 degrees relative to the first content display orientation of the laptop mode. Ex. 1002, 439-448.

31. Moreover, I understand that the Examiner allowed the claims based solely on the frame mode limitation, recited in all of the independent claims.

> The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schweizer (US 7,061,472) and Nishiyama (US 5,436,954) as a whole teach most of the limitations which is similar to the applicant's claimed invention but fail to teach of said claimed features.
>
> The following is an examiner's statement of reasons for allowance: none of cited reference teaches "wherein the plurality of modes includes 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." (fig. 26) cited in claims 1, 7 & 13. Claims 1 – 8, 10 – 21 and 23 - 24 are therefore allowed over the prior art of record.

Ex. 1002, 989.

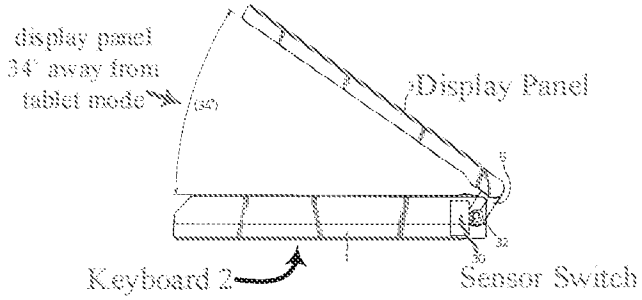
32. I also understand that the Examiner had initially rejected claims directed to this frame mode based on the Nobuchi reference. *Id.*, 375. However, after reviewing the Nobuchi reference, I can understand why the Examiner may have allowed the claims even after having cited Nobuchi in the earlier (penultimate) Office action. What looks like the frame mode in Nobuchi is not actually a "display mode" as I understand a "display mode" to mean in the context of the '844 Patent. Specifically, I understand "display mode," as used in the '844 Patent, to mean a stable position at which base and the display can maintained at a fixed angle relative to one another such that the user can view and/or interact with the computer without the computer collapsing. *See e.g.*, Ex. 1001, 9:7-11 (discussing how then-existing tablet-type computers did not have a true easel

"display mode" because the display would collapse to tablet mode, i.e., the base and display could not be maintained in the "V" configuration of easel mode).

33. Nobuchi on the other hand, discloses an example switching position at which a switch is activated to trigger rotation of the displayed content. Specifically, what looks like the frame mode in Nobuchi's FIG. 14 (cited by the Examiner) is actually just a transient position at which the switch is activated as the computer is being opened to the tablet mode. *E.g.*, Nobuchi, 7:60-65.

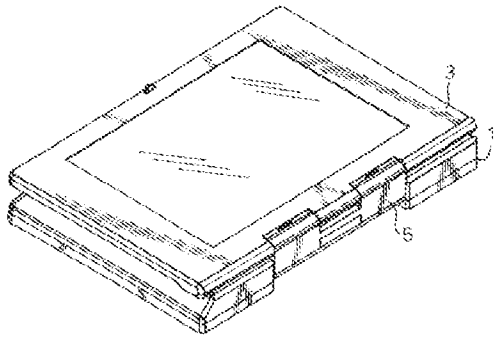
Example Position at Which Sensor Switch 30 is turned ON to Trigger Content Rotation

Fig.14



Nobuchi's Tablet Mode

Fig.8



Nobuchi, FIGS. 8, 14 (with annotations).

> The angle of the liquid crystal display panel **3**, with respect to the apparatus body **1**, at which the sensor switch **30** performs the ON-OFF changing action, can be suitably selected by changing the position of the projection **32**. For example, FIG. **13** shows a case in which the ON-OFF changing action is performed at a position of the liquid crystal display **3** which is turned by 355° with respect to the apparatus body **1** from the state shown in FIGS. **11**(*a*), **11**(*b*) and **12**. Also, FIG. **14** shows another case in which the projection **32** comes into touch with the contact **31** of the sensor switch **30** to perform the switch ON-OFF changing action at a position of the liquid crystal display panel **3** which is turned by 35° with respect to the apparatus body **1** from the state shown in FIGS. **11**(*a*), **11**(*b*) and **12**.

Nobuchi, 7:52-65.

34. Thus, the frame mode-like positions shown in Nobuchi's drawings (FIGS. 11(a), 12-14) are just example positions at which the sensor switch 30 can be turned ON when the laptop transitions to the tablet mode (FIG. 8). *E.g.,* Nobuchi, 7:16-65. They are not stable positions where the base and display are held securely enough to allow the user to touch and interact with the display without the display moving or collapsing.

35. Specifically, Nobuchi does not explicitly disclose or suggest that these positions are anything more than sensor switching positions. For example, Nobuchi does not disclose or suggest that these are stable, fixed positions at which the user can interact with (i.e., touch) the display panel 3. Nor does Nobuchi provide any indication that its hinge member 5 is capable of holding the display panel 3 in these frame mode-like positions.

36. My understanding of Nobuchi is that its sensor switch is activated before reaching tablet mode to ensure that content is rotated by the time the computer reaches the tablet mode so that a user can immediately start using the device when it reaches tablet mode (i.e., so that there is no delay). A POSITA would have understood that it could take some time for the laptop to rotate the displayed content once the switch is triggered. Thus, my understanding of Nobuchi is that it pre-emptively activates the switch and triggers content rotation before reaching tablet mode to account for this delay.

V. CLAIM CONSTRUCTION

37. I have been informed that, for purposes of my analysis in this Request, the terms appearing in the patent claims should be interpreted in accordance with 37 C.F.R. § 1.555(b) and MPEP § 2111. Specifically, each term of the claims is to be given its "broadest reasonable construction" consistent with the specification.

38. I have been informed that the USPTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage, as one of ordinary skill in the art would have understood them. I have been further informed that the rationale underlying the "broadest reasonable construction" standard is that it reduces the possibility that a claim, after issue or certificate of reexamination, will be interpreted more broadly than is justified.

A. "Frame Mode"

39. I understand that in IPR2021-00822, the Board construed "frame mode" to not only require that the keyboard be facing down and the display be facing up, but also that the display and base be at a nonzero angle relative to one another.

> 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.

Decision (Ex. 1031), 12.

40. I understand that the Requester is not challenging the Board's previous claim construction of "frame mode" because all of the challenged claims (10 and 16) are obvious over the prior art even under the Board's construction in IPR2021-00822.

41. I agree that that all of the challenged claims (10 and 16) are obvious over the prior art either under the Board's construction in IPR2021-00822, or under a broader construction, and thus have used the Board's claim construction from IPR2021-00822.

VI. PERSON OF ORDINARY SKILL IN THE ART ("POSITA")

42. I understand that patentability must be analyzed from the perspective of one of ordinary skill in the art ("POSITA") in the same field as the patents-in-suit at the time of the invention. I am also informed that several factors are considered in assessing the level of ordinary

skill in the art, including (1) the types of problems encountered in the art; (2) the prior art solutions to those problems; (3) the rapidity with which innovations are made; (4) the sophistication of the technology; and (5) the educational level of active workers in the field.

43. During my time at the Media Lab, I worked with many graduate students who would have been considered POSITAs, and thus I have good knowledge of what a POSITA would have known and been capable of during the relevant time period.

44. In my opinion, a POSITA in April 2008 would have possessed at least a bachelor's degree in computer science, computer engineering, or electrical engineering and would have had at least two years of experience in the design and architecture of personal computers (e.g., laptops) and other portable electronic devices (or equivalent degree or experience). The POSITA may have had less design experience with a higher level of education, such as a Master's or Ph.D. degree, and vice versa.

VII. SUMMARY OF THE PRIOR ART

A. Lane (Exhibit 1038)

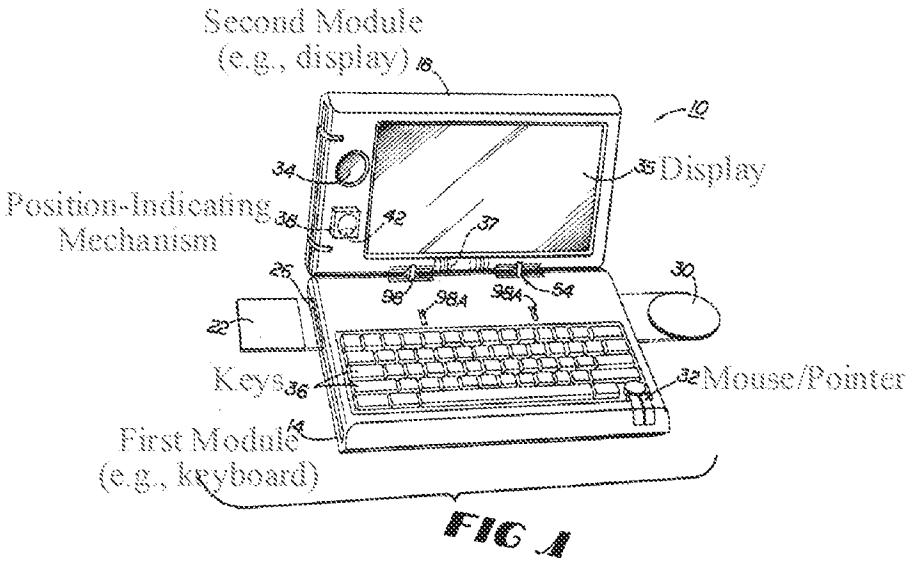
45. I understand that Lane (WO 95/24007) is a publication of a PCT international patent application that published on September 8, 1995—more than 12 years before the alleged priority date of the '844 Patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand that Lane was not relied on by the Examiner during prosecution of the '844 patent (Ex. 1001, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

46. I also understand that while Lane has not previously been considered by the U.S. Patent and Trademark Office, during prosecution of one of Patent Owner's counterpart European Patents, EP 2283407 B1 (Ex. 1040), the European Patent Office (EPO) Examiner relied on Lane

to reject claims that were very similar to the issued claims of the '844 Patent. Ex. 1041, 11-15. Specifically, the rejected European claims similarly recited all three of the claimed display modes—laptop, easel, and frame—and went even further than the claims of the '844 Patent by explicitly reciting an accelerometer for detecting a current display mode (to automatically reorient content when transitioning to and from easel mode). Ex. 1041, 4-5.

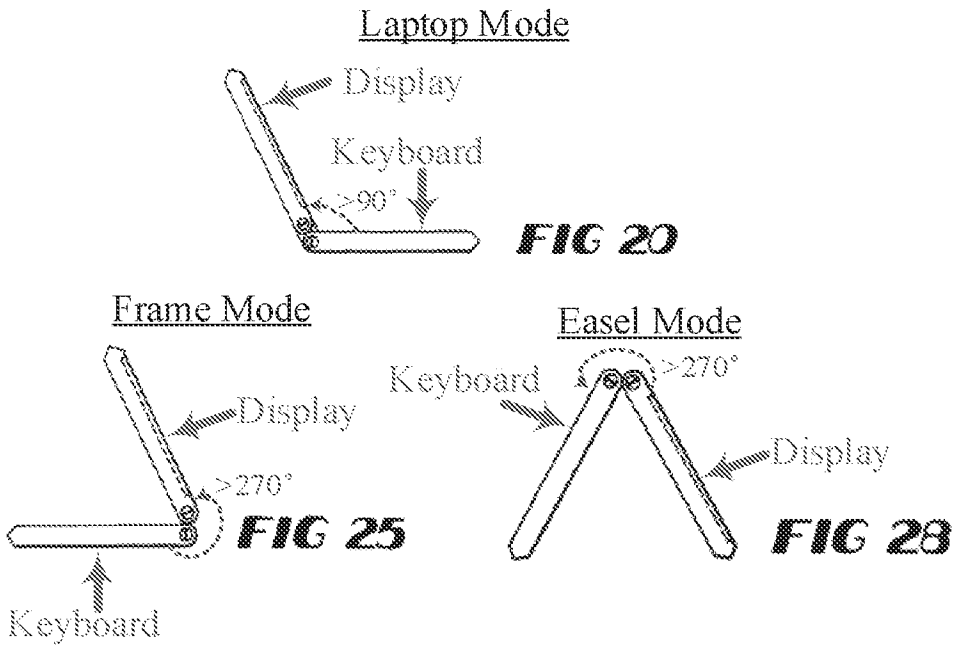
47. As noted by the EPO Examiner (Ex. 1041, 11-15), Lane discloses a portable computer having a first module 14 (base) and a second module 18 (display component) that are rotatable relative to one another by up to 360° to transition the computer into various modes, including all three of the '844 Patent's claimed display modes—the laptop, easel, and frame modes. *E.g.*, Lane, 3:5-14, 10:24-31, FIGS. 20, 25, 28.

Lane's Primary Components



Lane, FIG. 1 (with annotations).

Lane's Display Modes



Lane, FIGS. 20, 25, 28 (with annotations).

48. As also noted by the European examiner, Lane teaches that the computer includes software for automatically reorienting displayed content based on an indication of the spatial orientation of the first and/or second modules 14, 18 provided by a position-indicating mechanism 38. *E.g.*, Lane, 5:23-6:6.

B. Kamikakai (Exhibit 1005)

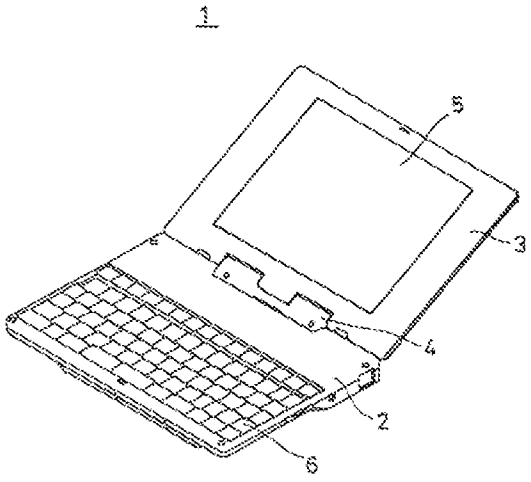
49. I have read and reviewed Kamikakai (U.S. 6,154,359). I understand that Kamikakai is a U.S. patent that issued on November 28, 2000—more than seven years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under 35 U.S.C. § 102(b) (pre-AIA).

50. I understand that Kamikakai was not cited or relied on by the Examiner during original prosecution of the '844 patent (Ex. 1001, Cover); nor was it presented in the non-instituted IPR proceeding[1].

51. Kamikakai discloses a portable electronic device having a display part 3 and a main part 2. The portable electronic device is configurable into different display modes, including at least a conventional laptop mode and a frame mode. *E.g.*, Kamikakai, FIGS. 3, 8, 9.

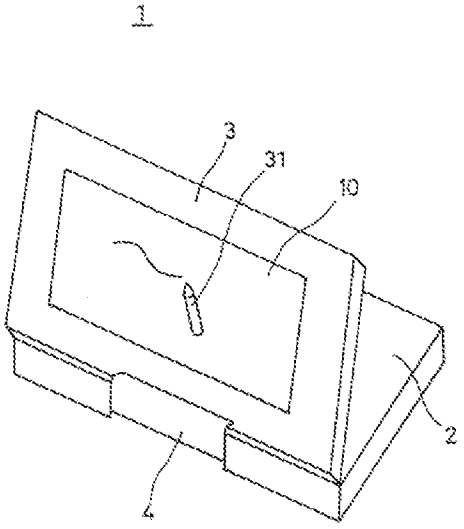
Kamikakai's Laptop Mode

FIG. 3



Kamikakai's Frame Mode

FIG. 9

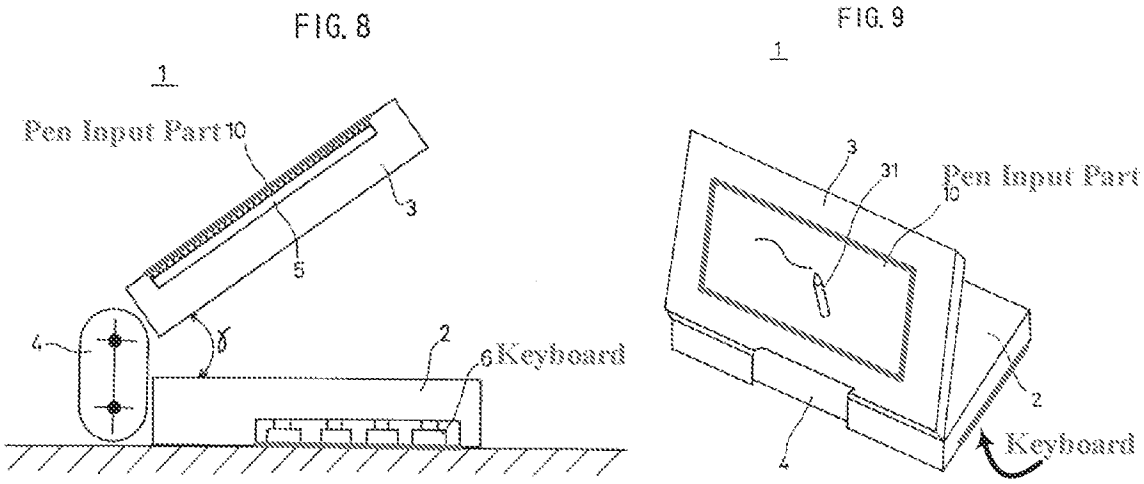


Kamikakai, FIGS. 3, 9 (with annotations).

52. In the frame mode, the keyboard is placed face down on a surface and the display's pen input part 10 faces up at a nonzero angle with respect to the base, as shown in the perspective view of FIG. 9 and the cross-sectional view of FIG. 8:

[1] "The non-instituted IPR proceeding" is used throughout this Declaration to refer to *Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822 (PTAB).

Kamikakai's Frame Mode



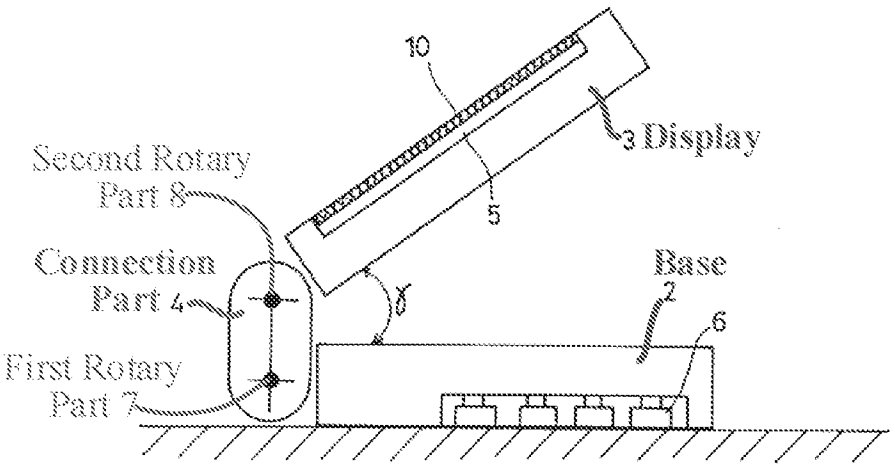
Kamikakai, FIGS. 8, 9 (with annotations).

53. As described by Kamikakai, this frame mode allows a user to "easily input data from the pen input part 10 by manipulating a pen." *Id.*, 6:49-50.

54. Kamikakai's portable electronic device also comprises a hinge assembly, referred to as a "connection part 4," (*Id.*, 3:39-42) that is capable of holding the display part 3 in this frame mode (against the force of gravity), as well any other rotary position relative to the base between 0° and 360°, due to friction that exists between components of the connection part's first and second rotary parts 7 and 8, respectively. *See, e.g.*, Kamikakai, 4:10-42 (discussing how friction between the bearing part 26 and the rotary shaft 24 of the second rotary part 8 resists rotation of the display part 3 relative to the connection part 4 and how friction between the bearing part 23 and the rotary shaft 21 of the first rotary part 7 resists rotation of the main body 2 relative to the connection part 4). As such, at least a predetermined rotary manipulation force is required to rotate the main body 2 and/or display part 3 relative to the connection part 4; otherwise the main body 2 and/or display part 3 remain fixed relative to the connection part 4. *E.g.*, *id.*, 3:52-64, 5:1-27.

Thus, Kamikakai's hinge assembly not only allows the portable electronic device to be opened to any angle between 0° and 360°, but also is capable of holding the portable electronic device in any of these arbitrary rotary positions. *E.g., id.,* 3:52-64, 4:59-5:47, 6:28-36, FIGS. 3, 8-9.

Kamikakai's Hinge Assembly



Kamikakai, FIG. 8 (with annotations).

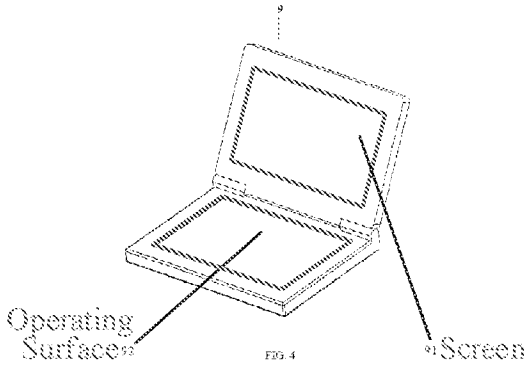
C. CN '170 (Exhibit 1013)

55. I understand that CN '170 (CN 2627170Y) is a certified English translation of a Chinese Patent issued on July 21, 2004—more than 4 years before the alleged priority date of the '844 Patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand that CN '170 was not relied on by the Examiner during prosecution of the '844 patent (Ex. 1001, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

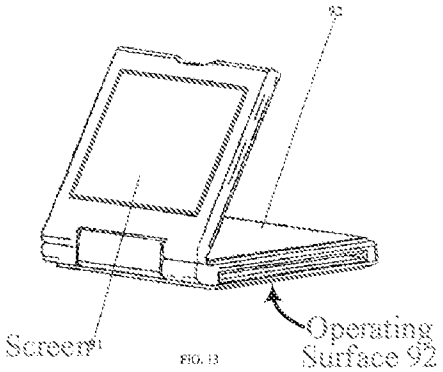
56. CN '170 is directed to an electronic product, such as a laptop, that can be configured into a plurality of display modes including, laptop, easel, and frame modes. *E.g.,* CN '170, FIGS. 4, 13, 15, 17-19. Specifically, in the frame mode, the operating surface 92 is horizontal and facing

down and the display screen 91 is facing upward at a nonzero angle relative to the operating surface 92. *E.g.*, CN '170, 4:7-10, 7:11-14, FIGS. 13, 15, 17, 18. In the easel mode, the screen 91 and operating surface 92 are at an angle similar to that in the frame mode, but the laptop is vertically oriented in an inverted "V" configuration. *E.g.*, CN '170, FIG. 19, 5:43-44, 7:11-14.

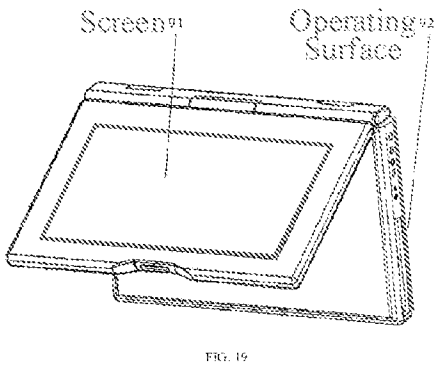
CN '170's Laptop Mode



CN '170's Frame Mode



CN '170's Easel Mode



CN '170, FIGS. 4, 13, 19 (with annotations).

D. Shimura (Exhibit 1007)

57. I understand that Shimura (JP H6-242853) is a certified English translation of a Laid-Open Japanese Patent that published on September 2, 1994—more than 13 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA).

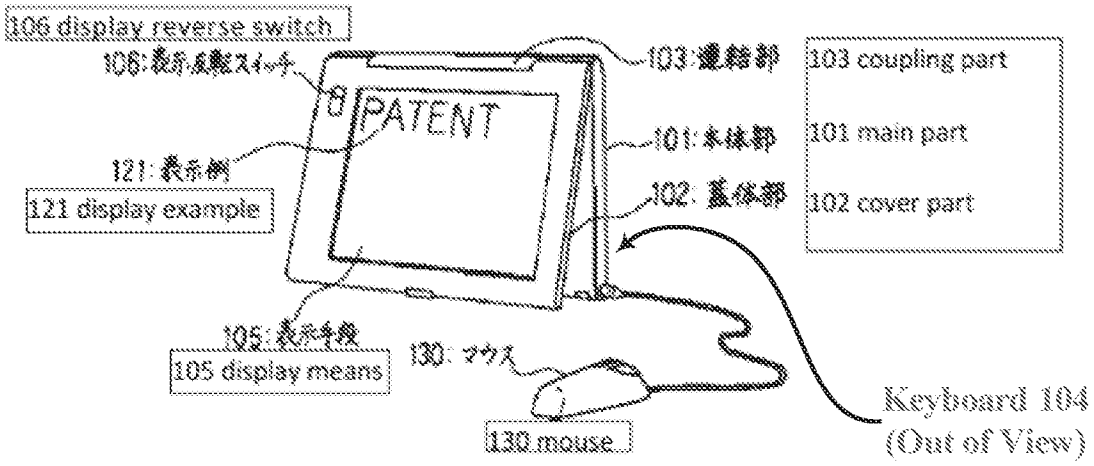
58. I also understand that Shimura was not cited or relied on by the Examiner during prosecution of the '844 patent[2]. Ex. 1001, Cover. Petitioner presented Shimura in the non-instituted IPR proceeding.

59. Like Kamikakai, Shimura is directed to a personal computer comprising a touch-sensitive screen ("display means") connected to a base ("main part") having a keyboard that can be disabled when placed face down on a table. *E.g.*, Shimura, ¶¶ [0008], [0011], [0018]. Shimura's computer also has a similar hinge assembly ("coupling part") that permits the screen to be rotated to "any angle relative to the main part within a range of 0° to 360°." *Id.* ¶¶ [0013]-[0017].

60. Extending on Kamikakai's frame mode (FIG. 8 Kamikakai shown above at VII.B.), Shimura shows how, with the screen ("display means 105") and base ("main part 101") in a similar relative orientation (approximately 340°), the computer can be placed on a table in an inverted "V" configuration. *E.g.*, *id.*, ¶ [0017], Figure 5 (reproduced below with annotations).

[2] I understand that Shimura is included on the list of "references cited" on the face of the '844 Patent, but it was not relied on or discussed by the Examiner in any rejection during original prosecution.

Annotated Figure 5 of Shimura



Shimura, Figure 5 (with annotations).

61. Shimura explains that this easel mode configuration is advantageous because "the area taken up by by the computer on the table can be greatly reduced." *Id.*, ¶ [0017].

62. Since the display screen is upside down in this easel mode, Shimura includes a switching means, such as a physical display reverse switch 106, for re-orienting/flipping the displayed content to ensure it is right-side up. *E.g.*, *id.*, ¶¶ [0008], [0012], [0016-18].

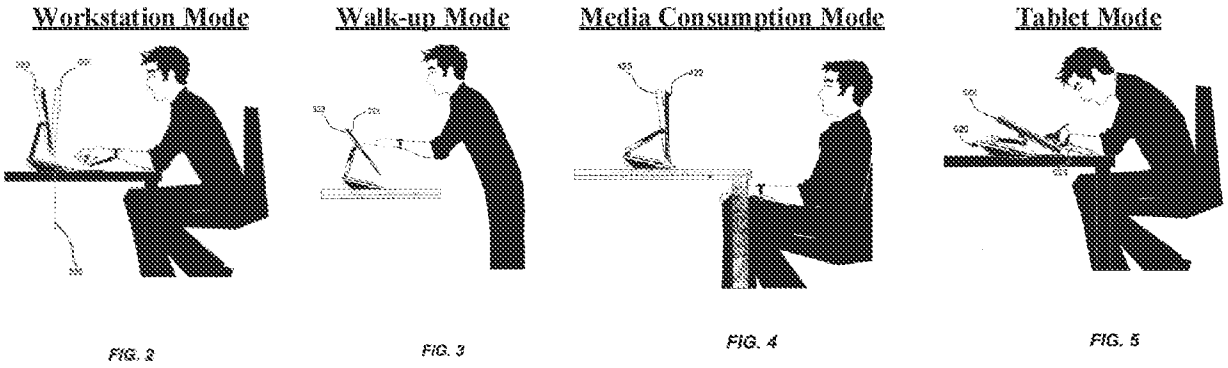
E. Ledbetter (Exhibit 1008)

63. I understand that Ledbetter (U.S. 2007/0058329) is a publication of a U.S. Patent Application that published on March 15, 2007—more than one year before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA).

64. I also understand that Ledbetter was not cited or relied on by the Examiner during prosecution of the '844 patent (Ex. 1001, Cover); nor was it presented in the non-instituted IPR proceeding.

65. Ledbetter is also directed to a computer system with multiple configurations, comprising a touch-sensitive screen ("monitor screen") and a base having a keyboard. *E.g.*,

Ledbetter, ¶¶ [0023-25]. Ledbetter's screen is connected to the base via a display arm that is configured to move the screen to various different modes/positions, such as the ones shown below in Ledbetter's annotated FIGS. 2-5. *Id.*, ¶¶ [0027-32], FIGS. 2-5.



Ledbetter, FIGS. 2-5 (with annotations).

66. Like then-existing computers, Ledbetter's computer displays several different modes of content, such as: the internet, messages, and media player software. *Id.*, ¶ [0057].

67. Ledbetter also recognizes that a given physical configuration (i.e., display mode) of a computer may be optimized for a particular content usage. For example, media consumption mode may be better suited for watching videos, tablet mode may be better suited for handwriting, and workstation mode may be better suited for working and gaming. *Id.*, ¶ [0057]. Thus, Ledbetter teaches automatically changing the displayed content when the screen position/mode changes to ensure it matches the current monitor position/mode. *E.g.*, Ledbetter, Abstract, ¶¶ [0004], [0055-57].

F. Hisano (Exhibit 1016)

68. I understand that Hisano (U.S. 2006/0034042) is a publication of a U.S. Patent Application that published on February 16, 2006—more than 2 years before the alleged priority date of the '844 Patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand that Hisano was not relied on by the Examiner

during prosecution of the '844 patent (Ex. 1001, Cover) but it was cited by the Petitioner in the non-instituted IPR proceeding.

69. Hisano is directed to an electronic apparatus, such as a notebook personal computer, that includes a virtual keyboard 20, rather than a conventional mechanical keyboard, that is displayed on one of two display panels. *E.g.*, Hisano, ¶¶ [0054], [0058]. The two display panels are included in two housings 2, 4 that are rotatably coupled to one another and that can be configured into an easel mode whereby the display panels face outward and away from one another in an upright, inverted "V" configuration. *E.g.*, Hisano, ¶¶ [0054], [0098], FIG. 9.

Hisano's Easel Mode

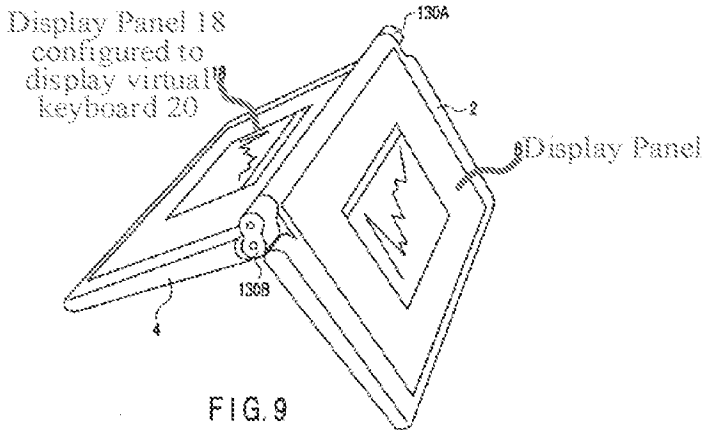


FIG. 9

Hisano, FIG. 9 (with annotations).

70. Importantly, Hisano discloses automatically rotating the content displayed on the display panel 8 of the housing 2 by 180° (i.e., inverting it) when transitioning from the laptop mode to the easel mode, thus ensuring that it is presented right-side up to a user in the easel mode, as is shown in Hisano's FIG. 9. *E.g.*, Hisano, ¶¶ [0098-99], FIG. 9.

Hisano's Laptop Mode **Hisano's Easel Mode**

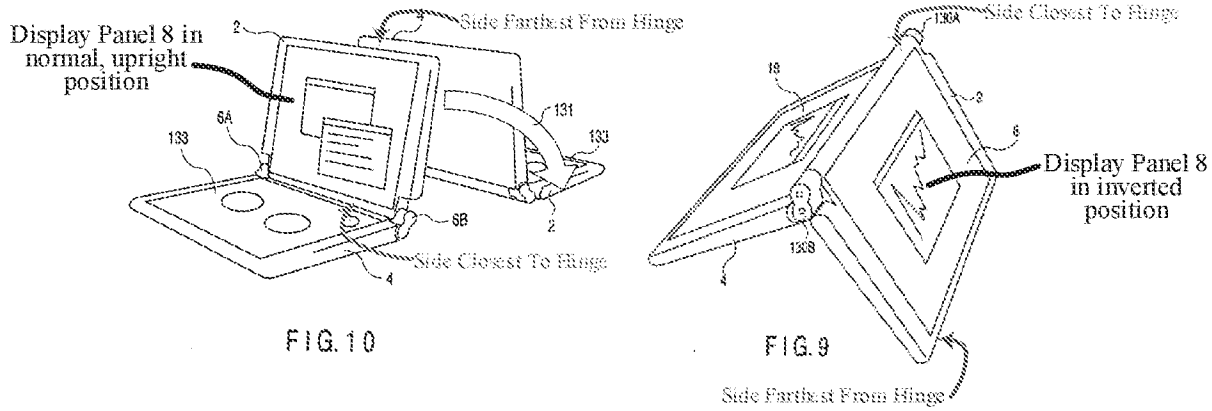


FIG. 10 FIG. 9

Hisano, FIGS. 9, 10 (with annotations).

71. Hisano recognizes that the content can be inverted automatically based on the angle of the device's hinges and/or based on a gravity sensor, stating that "the rotating angle of the hinges 130A and 130B may be used to switch between the display of a side of the screen closer to the hinges as the top and the display of a side of the screen farther from the hinges 130A and 130B as the top. Further, the personal computer may comprise a sensor that senses the direction of gravity so as to automatically switch the top and bottom of the display screen regardless of the angle of the hinges 130A and 130B or the placement of the personal computer." Hisano, ¶ [0099].

VIII. ADDITIONAL BACKGROUND PRIOR ART REFERENCES

72. This section describes numerous other background prior art references that teach and disclose pertinent aspects of the challenged claims.

A. Additional Reference Disclosing The Frame Mode

73. ***In addition to Kamikakai, Lane, and CN '170***, at least two other prior art references also disclose the claimed frame mode, providing further evidence that this claimed frame mode was well known in the art before the alleged priority date of the '844 Patent.

1. Välikangas (Exhibit 1042)

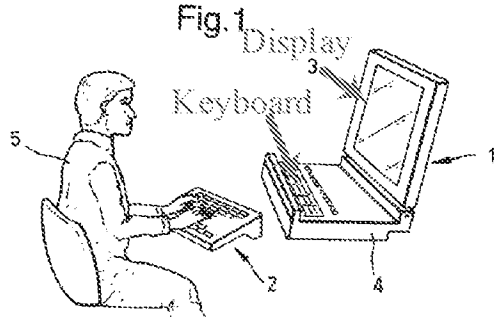
74. I understand that Välikangas (GB 2321982 A) is a publication of a UK patent application that published on August 12, 1998—nearly 10 years before the alleged priority date of the '844 Patent (April 1, 2008)— and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand that Välikangas was not relied on by the Examiner during prosecution of the '844 patent (Ex. 1001, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

75. That said, I also understand that during prosecution of one of Patent Owner's counterpart European Patent, EP 2283407 B1 (Exhibit 1040), the European Patent Office (EPO) Examiner cited to Välikangas, alleging it discloses all three of the '844 Patent's claimed display modes—the laptop, easel, and frame modes. Ex. 1041, 11, 14. To be sure, Välikangas does in fact disclose a notebook computer that is configurable to the laptop, easel, and frame modes. *See, e.g.,* Välikangas, FIGS. 1, 2, 4, 4A. Specifically, Välikangas's notebook computer comprises a body 4 (base) having an integral keyboard 4B and a screen 3 (display component) that are rotatable relative to one another by more than 270° to configure the computer into the laptop, easel, and frame modes. *E.g.,* Välikangas, pp. 3-5, FIGS. 1, 2, 4A.

Valikangas's Display Modes

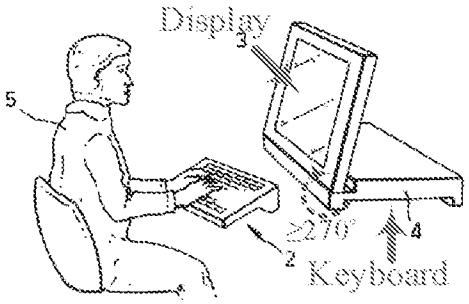
Laptop Mode

Fig.1.



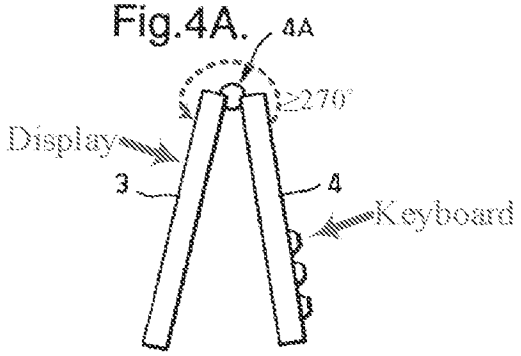
Frame Mode

Fig.2.



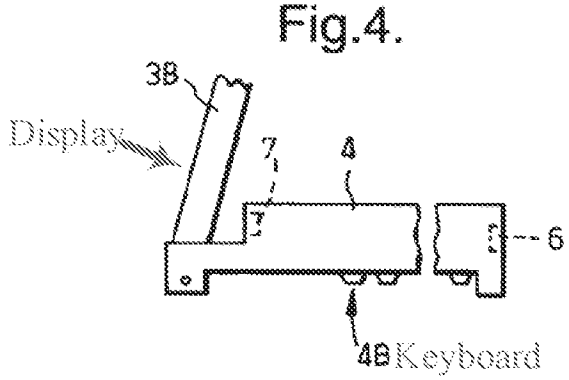
Easel Mode

Fig.4A.



Välikangas, FIGS. 1, 2, 4A (with annotations).

76. Välikangas confirms that the keyboard is face down in FIG. 2, like in the '844 Patent's frame mode, stating that "in Figure 2 . . . the notebook computer has been opened up to the order of 270° and the body has been positioned on a work top ***with the integral keyboard facing downwards***." Välikangas, p. 4. (emphasis added.) FIG. 4 of Välikangas also shows a side view of the frame mode, with the integral keyboard 4B being visible on the bottom.



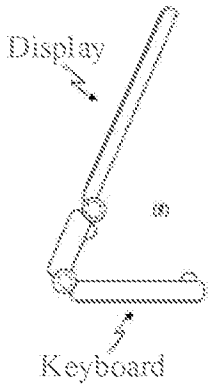
Välikangas, FIG. 4 (with annotations).

2. Kanamori (Exhibit 1011)

77. I understand that Kanamori (JP2005-71297A) is a certified English translation of a Japanese patent application published on March 17, 2005—more than 3 years before the alleged priority date of the '844 Patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand that Kanamori was not relied on by the Examiner during prosecution of the '844 patent (Ex. 1001, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

78. Like Kamikakai, Kanamori discloses a laptop-type personal computer (*e.g.*, Kanamori, ¶ [0001]) that can be configured into a frame mode where the keyboard is placed "on and in contact with the surface of the floor or a table . . . and the display held high." Kanamori, ¶ [0042]. *See also, e.g.*, Kanamori, ¶¶ [0053], [0069], FIGS. 6(4), 8(g), 11(f).

Kanamori's Frame Mode



Kanamori, FIG. 11(f) (with annotations).

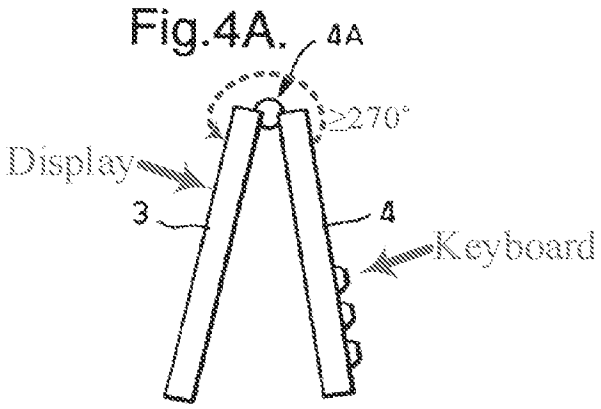
B. Additional References Disclosing Easel Mode

79. ***In addition to Shimura, Lane, Hisano, and CN '170***, other prior art references also disclose a display/base configuration just like the claimed easel mode. These supplementary prior art references are introduced briefly below just to show how well known it was prior to the alleged priority date of the '844 patent to configure a laptop computer into an upright "V" configuration like the claimed easel mode.

1. Välikangas (Exhibit 1042)

80. As introduced above (VIII.A.1.), Välikangas shows the claimed easel mode in FIG. 4A.

Valikangas's Easel Mode



Välikangas, FIG. 4A. Välikangas confirms that "the notebook can be stood on its ends in an 'A' shaped configuration." Välikangas, p. 1, Abstract.

81. Further, Välikangas recognizes the need to "invert" or "revers[e], top to bottom" the displayed content when in easel mode since the display is upside down in this mode but does not explicitly provide details on how to do this. *E.g.*, Välikangas, pp. 1 (Abstract), 5, 7 (claim 5).

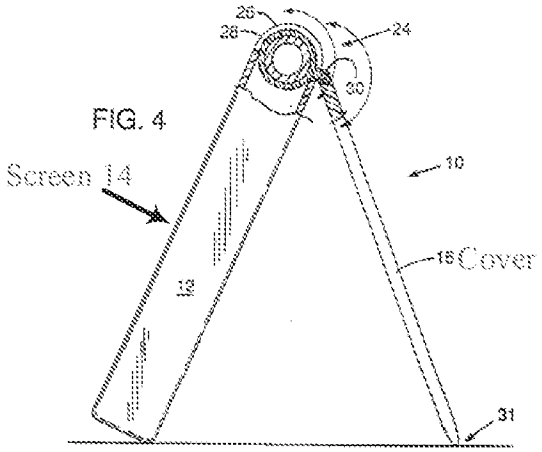
2. Podwalny (Exhibit 1024)

82. I understand that Podwalny (U.S. 5,644,516) is a U.S. Patent that issued on July 1, 1997—more than 10 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand Podwalny was not relied on by the Examiner during prosecution of the '844 patent (Ex. 1001, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

83. Podwalny is directed to a portable computer that includes a housing 12 having a screen 14 and a cover 16 rotatably coupled to the housing 12. *E.g.*, Podwlany, 1:9-12, 2:32-39. Podwalny's computer can be configured into an easel mode-like position whereby the cover 16 and housing 12 (which includes the screen 14) are placed in an upright, inverted "V" configuration. *E.g.*, Podwalny, 4:16-26, FIG. 4. Specifically, Podwalny's computer includes a hinge 24 that

includes a detent mechanism that effectively locks the hinge in a particular position, "permit[ting] the computer to be stably arranged in the easel-like fashion depicted in FIG. 4." Podwalny, 4:21-23, FIG. 4.

Podwalny's Easel Mode-like Position



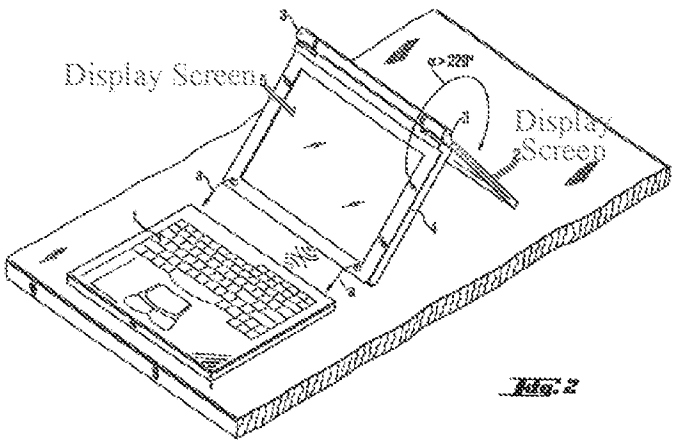
Podwalny, FIG. 4 (with annotations).

3. Schweizer (Exhibit 1015)

84. I understand that Schweizer (U.S. 7,061,472) is a U.S. Patent that issued on June 13, 2006—more than one year before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand that Schweizer was relied on by the Examiner during prosecution of the '844 patent.

85. Schweizer is directed to a laptop computer that has a detachable keyboard and two display screens that can be configured into an easel-mode like position. *E.g.*, Schweizer, 1:49-2:4, FIGS. 2, 4, 6.

Schweizer's Easel Mode-like Position



Schweizer, FIG. 2 (with annotations).

C. Additional References Disclosing Different Display Orientations

86. In addition to Shimura, Lane, and Hisano, several other prior art references also disclose reorienting displayed content to ensure it is presented right-side up. These references show how well known this claimed feature was prior to the alleged priority date of the '844 patent.

1. Tsuji (Exhibit 1018)

87. I understand that Tsuji (U.S. 2005/0062715) is a publication of a U.S. Patent Application that published on March 24, 2005—more than 3 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand Tsuji was not relied on by the Examiner during prosecution of the '844 patent (Ex. 1001, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

88. Tsuji relates to an information processing apparatus, such as a portable computer (Tsuji, ¶ [0003]), that includes a display unit 12 that can rotate relative to the main body 11 (which contains the keyboard 111) by more than 180°, and that can swivel about a single axis 15b between

a tablet mode in which the backside of the display rests against the keyboard 111, and an open position similar to a conventional laptop mode. *E.g.*, Tsuji, ¶¶ [0033-34], [0049-50], [0057], FIGS. 1-2, 5-9.

Tsuji's Laptop Mode

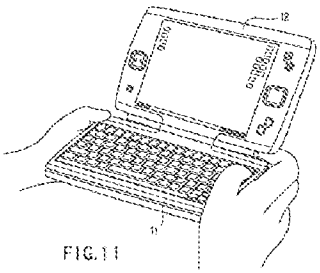


FIG. 11

≥ 180° Rotation

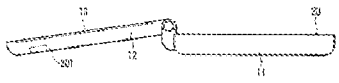


FIG. 9

Swivel to Tablet Mode

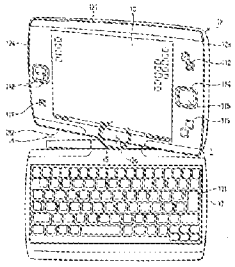


FIG. 2

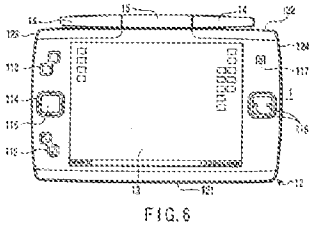


FIG. 6

Tsuji, FIGS. 2, 6, 9, 11 (with annotations).

89. As explained by Tsuji, the display can be opened by more than 180° to, for example, "present the screen image to [a] partner who faces the user." *E.g.*, Tsuji, ¶ [0049]. Tsuji teaches automatically rotating the screen image 180 degrees relative to the default orientation (i.e., the orientation presented in laptop mode), so that "a user can present the screen image . . . in a correct orientation." Tsuji, ¶ [0049]. Tsuji goes on to state that a rotation angle sensor 202 can be used to "sense an angle formed between the front surface of the display unit 12 and the top surface of the computer main body 11." Tsuji, ¶ [0061]. A POSITA would have understood that this rotation angle sensor 202 could have been used to sense when the display unit 12 has been rotated by more than 180° relative to the main body 11 in order to perform the automatic content reorienting

prescribed by Tsuji in paragraph 49. Further, when in the tablet mode, Tsuji teaches using a gravity sensor to automatically reorient the displayed content to ensure it is right-side up, regardless of the device's orientation. *E.g.*, Tsuji, ¶¶ [0055], [0059-60].

90. FIG. 14 of Tsuji and its corresponding description also disclose that the content is inverted when the display is rotated more than 180° to a position where it is upside down (position (b) in FIG. 14) to ensure the content is displayed right-side-up. *E.g.*, Tsuji, FIG. 14, ¶ [0074].

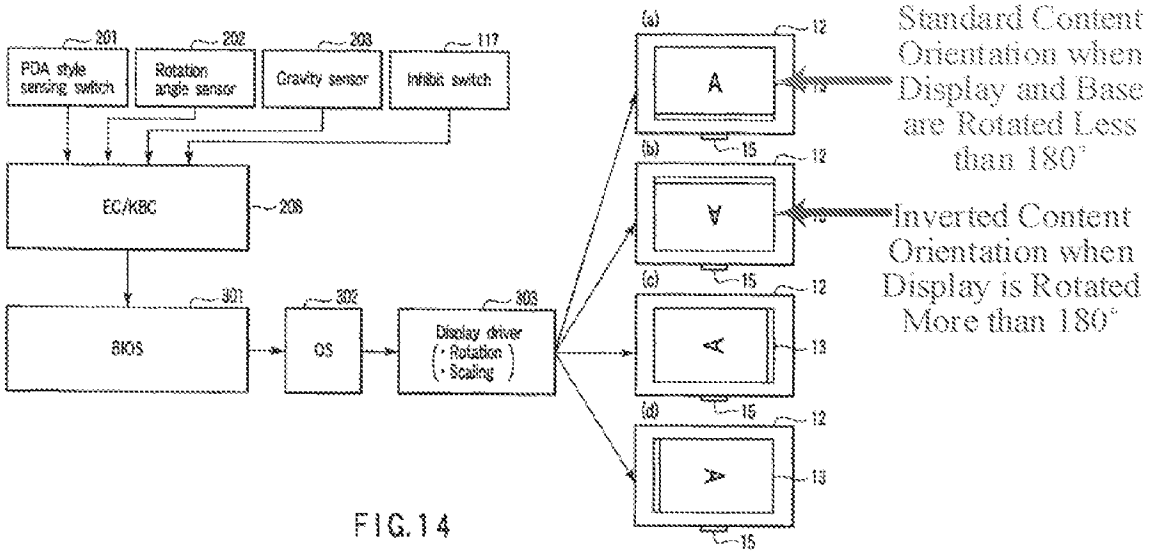


FIG. 14

Tsuji, FIG. 14 (with annotations).

91. Tsuji's description of FIG. 14 confirms that this content inversion occurs when the display is rotated more than 180°.

> (step **S113**). If the angle is smaller than 180 degrees (NO in step **S113**), the **BIOS 301** controls the display driver **303** such that the orientation of the screen image is set in that of a default (corresponding to (a) in **FIG. 14**) in the PC style (step **S114**). If the angle is 180 degrees or greater (YES in step **S113**), the **BIOS 301** controls the display driver **303** to display the screen image in the orientation (corresponding to (b) in **FIG. 14**) in which the screen image rotates 180 degrees relative to the orientation of a default in the PC style (step **S115**).

Tsuji, ¶ [0074].

2. Schweizer (Exhibit 1015)

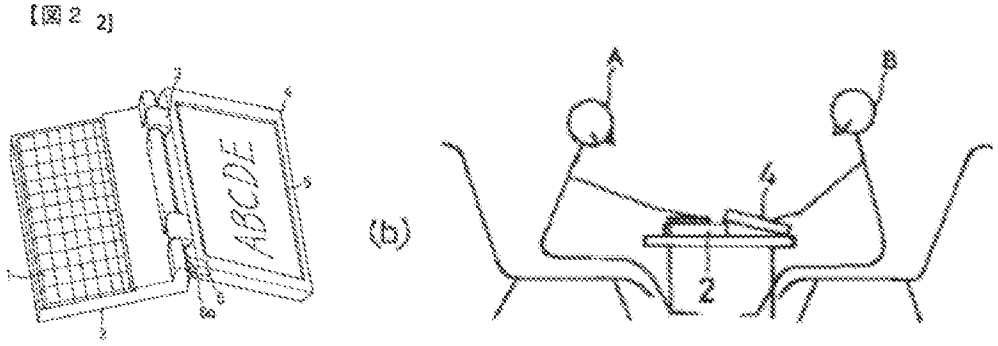
92. Schweizer (introduced above at VII.B.3.) teaches rotating an image on the main display screen by 180 degrees when the main display screen is rotated by an angle of at least 220 degrees relative to the display screen 5, such as to the position shown in FIG. 2. *E.g.*, Schweizer, 5:28-33, claim 1 (6:4-20). Schweizer also confirms that such content inversion was well known in the art, stating that "the creation of the control electronics for rotating the image of the main display screen by 180 degrees" involves "no inventive activity." Schweizer, 5:23-35.

3. Shigeo (Exhibit 1023)

93. I understand that Shigeo is a certified English translation of a Laid-Open Japanese Disclosure that published on July 12, 1996—more than 11 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand that Shigeo was not relied on by the Examiner during prosecution of the '844 patent[3] but was relied on by Petitioner in the non-instituted IPR proceeding.

94. Shigeo relates to a portable computer whereby the content presented on the display is rotated by 180 degrees when the user opens the display wider than 180 degrees relative to the main body 2. *E.g.*, Shigeo, Abstract, ¶¶ [0004], [0014-16]. As shown in FIGS. 2 and 4(b) of Shigeo and explained throughout Shigeo, reorienting the content in this way (i.e., inverting it) allows another user sitting across from the primary user to view the displayed content right-side up. *E.g.*, Shigeo, Abstract, ¶¶ [0004], [0014-16], FIGS. 2, 4(b).

[3] I understand that Shigeo is included on the list of "references cited" on the face of the '844 Patent, but it was not relied on or discussed by the Examiner in any rejection during original prosecution.



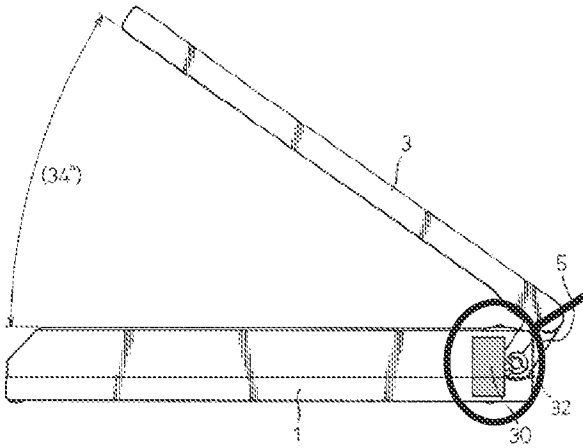
Shigeo, FIGS. 2, 4(b).

4. Nobuchi (Exhibit 1014)

95. I understand that Nobuchi (U.S. 6,492,974) is a U.S. Patent that issued on December 10, 2002—more than 5 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also understand, as introduced above in the discussion of the '844 Patent's prosecution history (Section IV.A.), that Nobuchi was cited by the Examiner. Nobuchi is primarily directed to a means for automatically reorienting a laptop's displayed content by 90° when the display panel 3 is rotated relative to the body 1 by more than a threshold angle as it transitions to a tablet mode. *E.g.*, Nobuchi, Abstract, 7:5-15, 7:40-8:1.

96. Specifically, Nobuchi discusses using a sensor switch 30 that, when turned ON, automatically triggers rotation of display content by 90°. *E.g.*, Nobuchi, 7:5-15. The sensor switch 30 is turned on by a projection 32 coming into contact with the switch 30, which occurs when the display is rotated by more than a threshold angle. *E.g.*, Nobuchi, 7:32-51. This threshold angle can be adjusted by changing the position of the projection 32. *E.g.*, Nobuchi, 7:40-65, FIGS. 11-14 (showing various positions at which the projection 32 first makes contact with the sensor switch 30 to turn it ON). For example, FIG. 14 of Nobuchi shows one example where the projection 32 turns the sensor switch 30 ON when the laptop is 34° away from tablet mode.

Fig.14



Nobuchi, FIG. 14 (with annotations).

97. Also, when describing the related prior art that existed in 2002, Nobuchi discloses that it was well known to display an icon ("display changing actuation position 7/17") on a display screen that a user could touch or otherwise select to rotate displayed content.

> Therefore, as shown in FIGS. **17**(*a*) and **17**(*b*), a display changing actuation position **17** is conventionally provided in the liquid crystal display **3** so that, when the operator touches this position with a tip of the pen **4**, the orientation of the liquid crystal display **3** is turned by 90°. If the position is touched again, the orientation of the liquid crystal display **3** is turned back to the initial state.

Nobuchi, 2:1-7.

Fig.17(a)
PRIOR ART

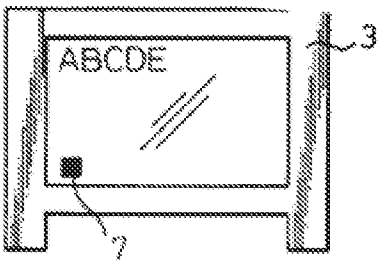
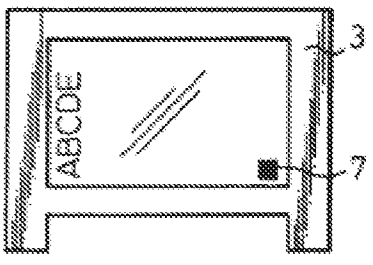


Fig.17(b)
PRIOR ART



Nobuchi, FIGS. 17(a), 17(b).

5. U.S. 2008/0211778 And U.S. 60/946,970 (Exhibits 1027 And 1028)

98. I understand that U.S. 2008/0211778 is a publication of a U.S. Patent Application filed December 19, 2007, and thus qualifies as prior art at least under Section 102(e) (pre-AIA). I understand that the '778 publication also claims priority to U.S. Provisional Patent Application No. 60/946,970 ("Ording"), which was filed on June 28, 2007, and which would have become publicly available on Patent Application Information Retrieval (PAIR) when the non-provisional application published on September 4, 2008.

99. The '970 Provisional Patent Application confirms that as of its filing date on June 28, 2007 (more than nine months before the '844 patent's alleged priority date), it was known for portable devices to "use one or more accelerometers to automatically adjust the orientation of the information on the screen." Ording, ¶ [0007].

6. Välikangas (Exhibit 1042)

100. As introduced above, Välikangas discloses an easel mode and teaches that the displayed content needs to be inverted/reversed in easel mode relative to the laptop and frame modes. *E.g.,* Välikangas, pp. 1 (Abstract), 5, 7 (claim 5). Although Välikangas does not disclose how to perform this content inversion, it is nonetheless recited in one of Välikangas's claims (claim 5), strongly suggesting that a POSITA could have implemented this content inversion without any undue experimentation circa 1998 when Välikangas published. In sum, Välikangas's lack of teaching on how to implement this content inversion evidences that even as early as 1998 (roughly 10 years before the alleged priority of the '884 Patent), inverting displayed content when a display is upside down was something that was well within the ordinary skill of a POSITA.

D. Additional References Disclosing Different Modes Of Content

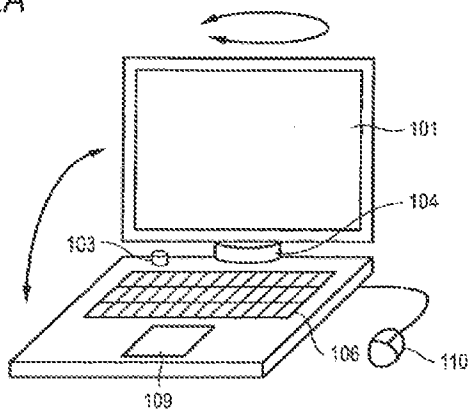
101. Besides Ledbetter, several other prior art references also disclose displaying different modes of content, including changing the mode of content based on a change in the display mode. For example, Tonouchi (Ex. 1017) teaches loading different user interfaces and/or software based on whether the computer is in a laptop mode or a tablet mode. *E.g.*, Tonouchi, ¶¶ [0009-10], [0014]. Moreover a guidebook to an operating system (OS) that existed before the '844 patent's alleged priority date (Windows Vista) confirms that these different kinds of content modes were typical of then-existing computer systems.

1. Tonouchi (Exhibit 1017)

102. Tonouchi (U.S. 2005/0122318) is a publication of a U.S. Patent Application that published June 9, 2005—more than two years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). Tonouchi was not relied on by the Examiner during prosecution of the '844 patent ('844 Patent, Cover) but was relied on by Petitioner in the non-instituted IPR proceeding.

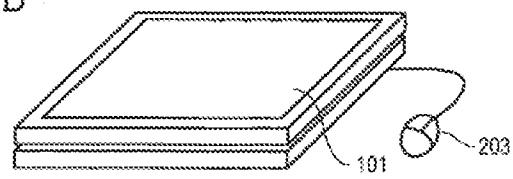
103. Tonouchi discloses a computer comprising a swiveling display that can be configured into a normal laptop or notebook mode and a tablet mode. *E.g.*, Tonouchi, FIGS. 2A-2B, 4A-4D, ¶ [0030].

FIG. 2A



NOTEBOOK MODE
ROTATION SWITCH: 0°
RECLOSABLE SWITCH: OPEN

FIG. 2B



TABLET MODE
ROTATION SWITCH: 180°
RECLOSABLE SWITCH: CLOSED

Tonouchi, FIGS. 2A, 2B.

104. Tonouchi teaches switching the user interface and/or the software to be operated when transitioning between these two modes. *E.g.*, ¶¶ [0009–10], [0014]. Specifically, Tonouchi teaches determining whether or not the computer is in the tablet mode or the laptop (notebook) mode based on the state of two switches, and teaches switching a user interface and/or software based on that determination. *Id.*

2. Pogue (Exhibit 1029)

105. Pogue is a manual for the Windows Vista Operating System (OS). In discussing the various features of this well-known and commonly-used prior art operating system, Pogue confirms that it displayed the same kinds of modes of content described in the '844 patent. These include, web browsers (*e.g.*, Pogue, 367-390), word processors (*e.g.*, Pogue, 263), media players (*e.g.*, Pogue, 463-482), and email and messaging services (*e.g.*, Pogue, 391-420).

106. As explained in the following paragraphs, I understand that Pogue is a printed publication that was published, known, and readily available at least by March 2007. I understand that it thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). I also

understand that Pogue was not relied on by the Examiner during prosecution of the '844 patent ('844 Patent, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

107. I understand that Pogue was published by a well-known commercial publisher (O'Reilly Media, Inc.) and bears conventional markers of publication that predate the alleged priority date. I understand that this more than makes out more than a prima facie case that Pogue was a "printed publication" available to skilled artisans no later than March 2007, and likely before.

108. I also understand that Pogue was for sale on the publisher's (O'Reilly's) website more than one year before the alleged priority date. I understand that authenticated internal records from Pogue's publisher (O'Reilly Media, Inc.) show that Pogue was available for sale, and sold, to the public before April 1, 2007, thus confirming that Pogue was publicly accessible more than one year before the alleged priority date of the '844 Patent. *See,* Fauxsmith (Ex. 1033).

109. Moreover, I understand that the Internet Archive's Wayback Machine® corroborates the publisher's records. Specifically, the Wayback Machine® confirms that Pogue was available for sale on both O'Reilly's and Amazon's websites before April 1, 2008, including more than one year before April 1, 2008. Ex. 1034, Exhibit A.

110. Thus, I understand that Pogue was publicly available before the alleged priority date of the '844 Patent for at the least the reasons that: 1) it bears conventional markers of publication that predate the alleged priority date; 2) it was published by an established publisher in O'Reilly Media, Inc.; and 3) as confirmed by the publisher's internal records and the Wayback Machine®, was available for sale—and was actually sold—more than one year before the alleged priority date.

IX. GROUND 1: LANE RENDERS OBVIOUS CLAIMS 10 AND 16 OF THE '844 PATENT

111. Lane teaches all of the elements of claims 10 and 16, and thus renders them obvious, as explained in greater detail below. Although Lane does not expressly disclose inverting content in the easel mode, it does disclose automatically reorienting content depending on the orientation of the display component. Lane, 5:23–6:3. Thus, based on this general teaching to reorient content based on the orientation of the display component, it would have been obvious to a POSITA when implementing Lane's computer to have inverted the content orientation in easel mode so that the displayed content would appear right-side-up to a user. The ease and obviousness of this implementation is confirmed by the numerous prior art references that recognize the common-sense need to change content orientation to correspond to the physical orientation of the display. *See, e.g.*, Hisano, ¶¶ [0098–99], FIG. 9; Tsuji, ¶¶ [0049], [0055], [0059–61], [0074], FIG. 14; Schweizer, 5:23–35; Shigeo, Abstract, ¶¶ [0004], [0014–16], FIGS. 2, 4(b). To the extent Patent Owner argues that the claims require different types of content be displayed in the two content modes, these claims are obvious in further view of Ledbetter, as explained below in Section X.A.

A. Claim 10

[10.1] 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 permit an operator to interact with a single display screen in each of the plurality of display modes, the portable computer comprising:

112. To the extent the preamble is limiting, Lane discloses it for the following reasons.

Lane's portable computer is configurable between a plurality of display modes including a laptop mode and an easel mode.

113. Lane discloses a "portable computer" (*e.g.*, Lane, 1:3–6) that is openable from a closed configuration (FIG. 19) to a plurality of display modes including a laptop mode and an easel mode, as well as a frame mode. *E.g.*, Lane, 3:5–14, 10:24–31, FIGS. 19, 20, 25, 28.

Lane's Closed Configuration

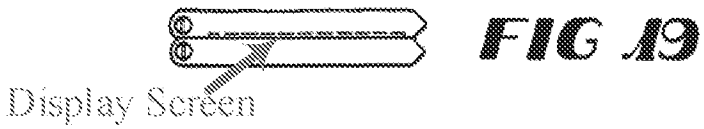
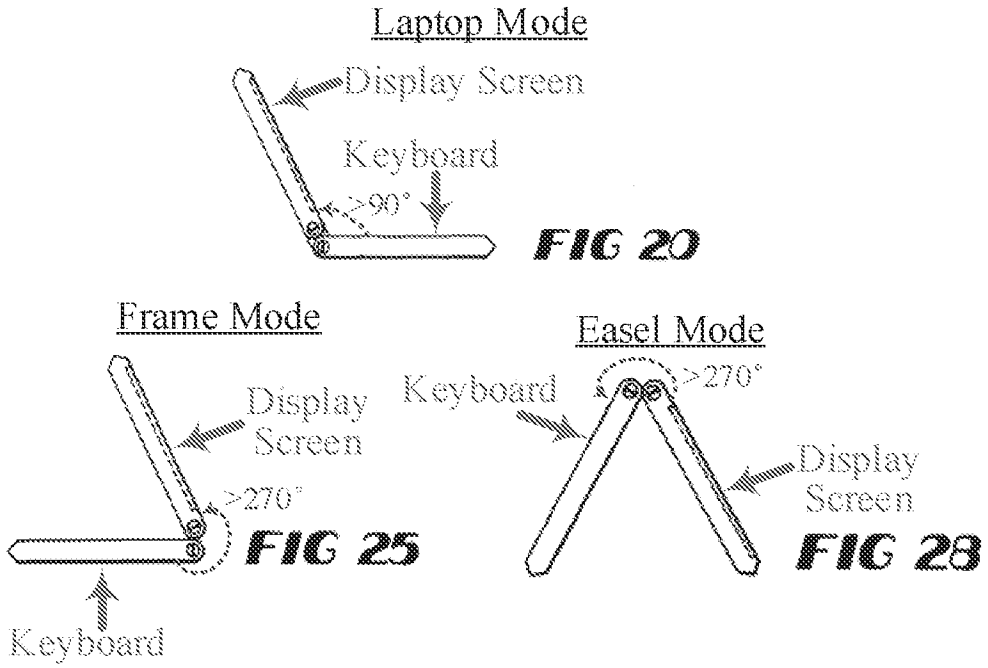


FIG 19

Lane, FIG. 19 (with annotations).

Lane's Display Modes



Lane, FIGS. 20, 25, 28 (with annotations).

114. Lane confirms that in FIGS. 25 and 28, the main display component ("second module 18") "is rotated more than 270" from the closed configuration shown in FIG. 19 so that "only the visual display 35 [is] accessible." Lane, 10:28–31. Thus, the dashed box in FIGS. 19–28 is the single display screen ("visual display 35") since it is the only part of the computer

accessible to a user in the easel and frame modes shown in FIGS. 28 and 25, respectively. *See, e.g.*, Lane, 10:10–31, FIGS. 19–28.

An operator can interact with Lane's single display screen in each of the plurality of display modes.

115. As can be seen in FIGS. 20, 25, and 28 of Lane, an operator can interact with Lane's single display screen ("visual display 35") in each of the plurality of display modes because Lane's single display screen ("visual display 35") is accessible in all of the display modes. Specifically, in FIG. 20, the main display component ("module 18") "is rotated more than 90° [from the nominally closed position shown in FIG. 19] to provide a standard 'desktop' orientation" where both the display screen and the keyboard ("keys 36") are accessible to the user. Lane, 10:26–28. In FIGS. 25 and 28, the main display component ("second module 18") "is rotated more than 270°" from the closed configuration shown in FIG. 19 so that "only the visual display 35 [is] accessible." Lane, 10:28–31.

116. Thus, in laptop mode, an operator can interact with Lane's single display screen through either the display screen itself (since it is touch-sensitive; *see, e.g.*, Lane, 3:13–14, 8:18–19, 10:19–20), through the keyboard ("keys 36"), and/or through the mouse 32. In the easel and frame modes, the operator can interact only with Lane's single display screen (*e.g.*, by touching it with a pen or other instrument) since the keyboard and mouse 32 are inaccessible. *See, e.g.*, Lane, 3:13–14, 8:18–19, 10:19–20, 10:28–31, FIGS. 25, 28. Moreover, a POSITA would have understood that a user could interact directly with Lane's touch sensitive screen in each of Lane's display modes since the '844 Patent itself acknowledges that then-existing "portable computers [were] able to accept user inputs via a touch screen." '844 Patent, 1:32–33; *also see, e.g.*, Pogue, 583–586 (explaining how a user can navigate documents, manipulate data and adjust settings via the touch screen).

[10.2] a base including a keyboard;

117. Lane discloses this limitation. Specifically, Lane's "first module 14" is the base of the Lane's computer and includes a plurality of "keys 36" that make up a keyboard. *See, e.g.*, Lane, FIG. 1, 5:15–17, 6:5–6, 8:22–23. Claim 12 of Lane confirms that the portable computer "comprises a keyboard having a plurality of keys." Lane, p. 14, claim 12.

Lane's Base with Keyboard

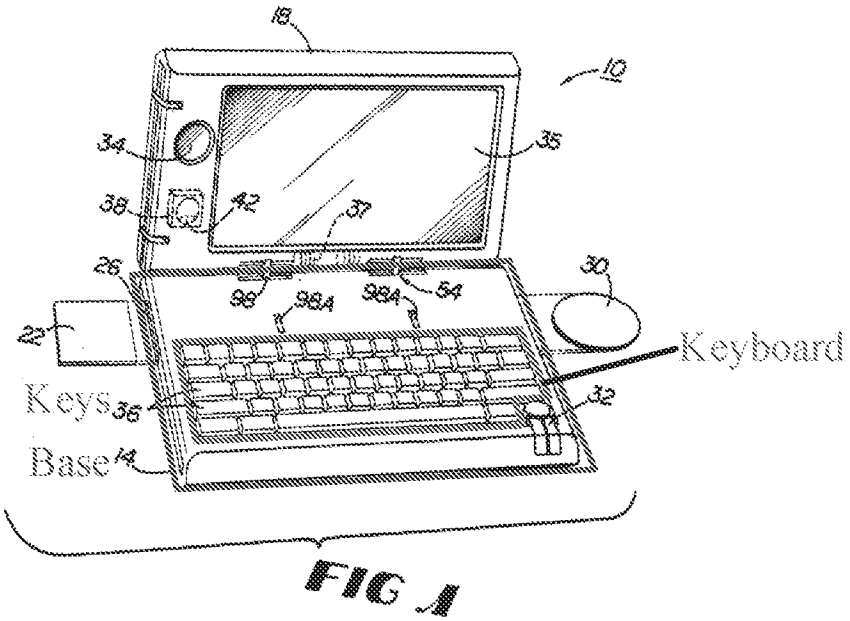


FIG. 1

Lane, FIG. 1 (with annotations).

[10.3] a main display component rotatably coupled to the base and including the single display screen which displays content;

118. Lane discloses this claim limitation for the following reasons.

Lane's main display component is rotatably coupled to the base.

119. As discussed above for element 10.1 in this Section, Lane's "second module 18" is the main display component of Lane's computer since it includes the display screen ("visual

display 35"). Lane even refers to the "second module 18" as a "display" at one point. *E.g.*, Lane, 5:6.

Lane's Main Display Component

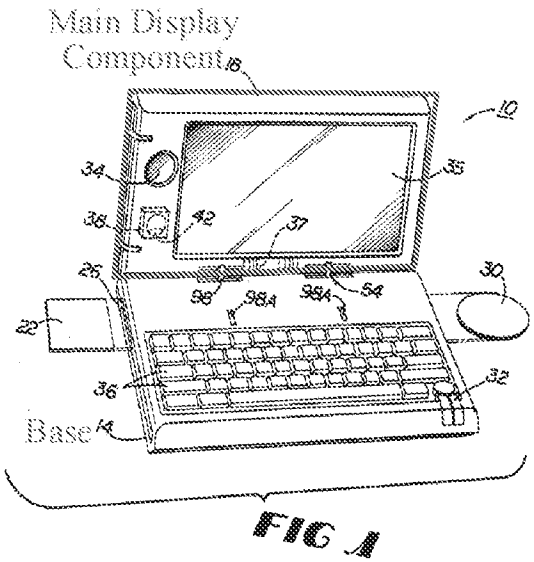


FIG. 1

Lane, FIG. 1 (with annotations).

120. Further, Lane discloses that the main display component ("second module 18") is rotatably coupled to the base ("first module 14") such that computer can be opened to various different angles between 0 and 360° to configure the computer into a plurality of display modes, including the laptop, easel, and frame modes. *E.g.*, Lane, Abstract, 3:5–14, 10:24–11:16, FIGS. 19–28.

Lane's main display includes the single display screen which displays content.

121. Lane discloses this claim limitation. Specifically, the main display component ("second module 18") includes the single display screen ("visual display 35). *E.g.*, Lane, FIG. 1, 10:10–31.

Lane's Display Screen

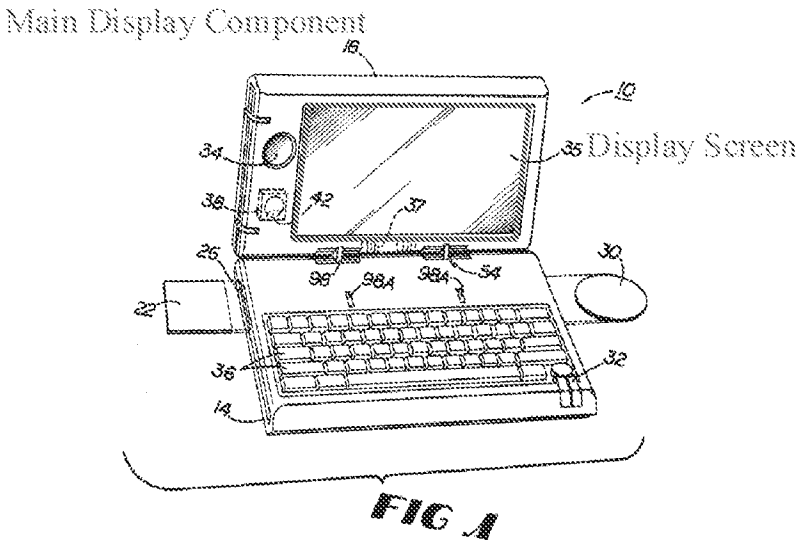


FIG. 1

Lane, FIG. 1 (with annotations).

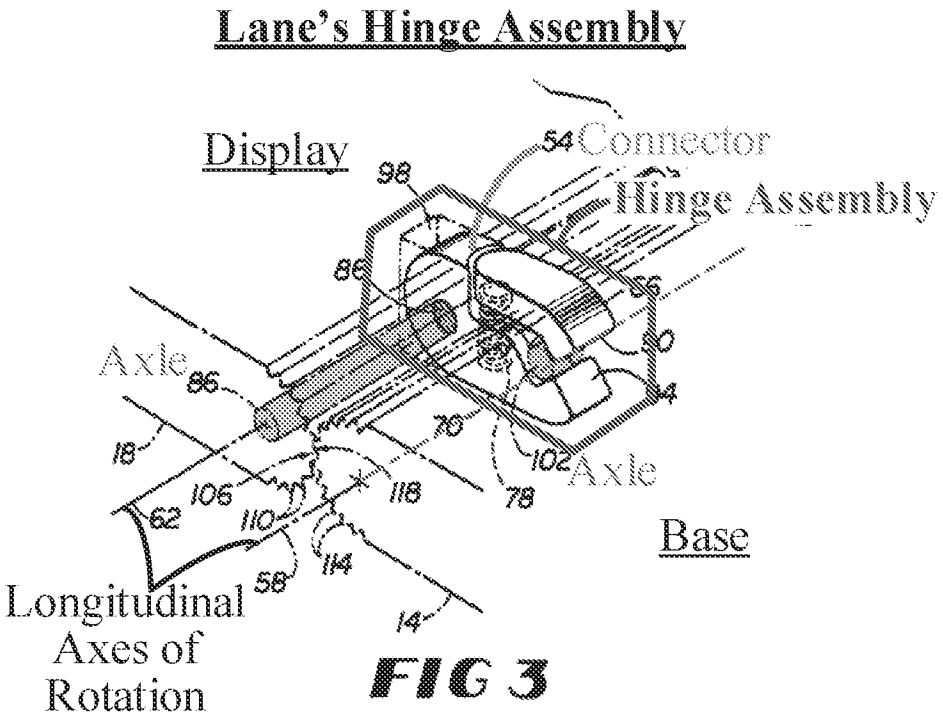
122. Lane's display screen also displays content. Lane discloses "information to appear on visual display 35" (Lane, 5:37–6:1), and discloses the invented system can be used as "a television or telecommunications monitor or a pen-based computing tablet" (Lane, 3:12–14), all uses requiring content be displayed on the display screen. Moreover, a POSITA would have understood that Lane's display screen necessarily displays content since this is the entire purpose of a display screen. *Id.* The display screen would be effectively useless if it did not display content. *Id.*

[10.4] a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode, 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

123. Lane satisfies this limitation for the following reasons.

Lane's computer comprises a hinge assembly disposed at least partially within the base and the main display component.

124. Lane's computer comprises a hinge assembly, depicted in FIG. 3. The hinge assembly comprises an axle 102 in the base ("first module 14"), an axle 86 in the main display component ("second module 18"), and a connector 54 that is rotatably coupled to these two axles 86, 102 so that the base ("first module 14") can rotate about the longitudinal axis 58 defined by the axle 102 and the main display component ("second module 18") can rotate about the longitudinal axis 62 defines by the axle 86. *E.g.*, Lane, FIG. 3, 6:25–7:29.



Lane, FIG. 3 (with annotations).

125. As shown in FIG. 3, Lane's hinge assembly is disposed at least partially within the base and the main display component, as the axle 102 and a portion of the connector 54 are disposed within the base, and the axle 86 and another portion of the connector 54 are disposed within the main display component.

The hinge assembly defines an axis of rotation about which both the base and the main display component are rotatable to transition Lane's portable computer between at least the laptop mode and the easel mode.

126. As shown in Lane's annotated FIG. 3 above, the axles 86 and 102 define the longitudinal axes 62 and 58, respectively about which the base and main display component rotate.

Lane's Parallel Axes of Rotation

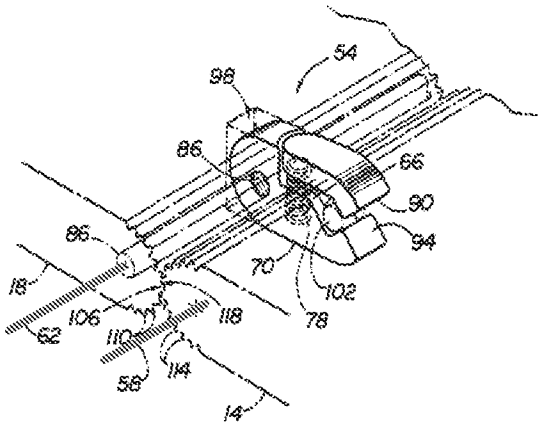


FIG 3

Lane, FIG. 3 (with annotations).

first and second modules 14 and 18. As shown in FIG. 3, for example, first module 14 defines a primary axis of rotation 58, while second module 18 defines a corresponding primary axis of rotation 62 parallel to axis 58. In some embodiments of device

Lane, 6:8–12.

127. Thus, Lane's base ("first module 14") is rotatable about its longitudinal axis ("primary axis of rotation 58") and Lane's main display component ("second module 18") is rotatable about its longitudinal axis ("primary axis of rotation 62"). *E.g.*, Lane, 6:8–12, FIGS. 25, 28.

128. As shown in FIGS. 20, 25, and 28, and described in Lane, the main display component and the base are rotatable about these two axes of rotation (58, 62) to transition between

the various display modes, including the laptop and easel modes. *E.g.*, Lane, FIGS. 3, 19–28, 3:5–14, 6:7–22, 12 (claim 2), 10:24–11:16.

> The innovative system also is adapted to rotate about at least two adjacent, parallel axes. Consequently, the present invention permits components to be repositioned about each other throughout approximately 0-360°, allowing use of a visual display not only in a standard laptop computer format but also in formats facilitating use of the display as, for example, a television or telecommunications monitor or a pen-based computing tablet.

Lane, 3:5–14.

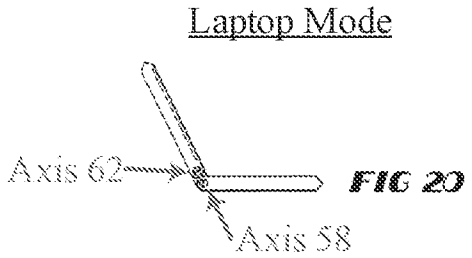


FIG 20

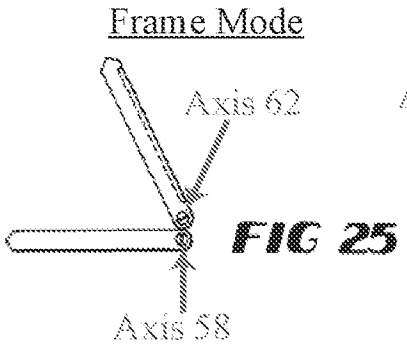


FIG 25

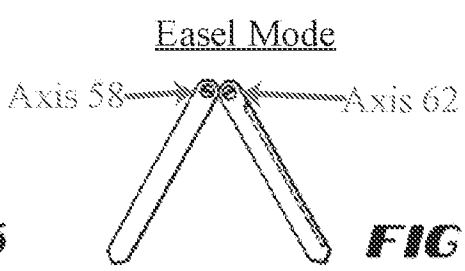


FIG 28

Lane, FIGS. 20, 25, 28 (with annotations).

129. Although the claim limitation recites "***an*** axis of rotation" ('844 Patent, 18:38–39), in district court litigation, Patent Owner appears to contend in the District Court litigation that the

scope of this claim element covers computers having more than one rotational axis, as Patent Owner's Complaint alleges that Requester's dual-axis product(s) infringe claim 10 of the '844 Patent. First Amended Complaint (Ex. 1032), ¶ 155 (p. 75). Assuming the broadest reasonable interpretation (BRI) of this claim limitation encompasses Patent Owner's advanced construction in district court litigation, then Lane's similar dual-hinge assembly satisfies this claim limitation. That is, if Patent Owner attempts to read this claim limitation so broadly as to cover the dual-axis hinge assembly of Requester's accused product(s), then Lane's similar dual-axis hinge assembly satisfies the claim limitation.

The transition between Lane's laptop mode and Lane's easel mode allows the operator to operate the portable computer while viewing the single display screen in each of the plurality of display modes.

130. As discussed above for element 10.1 in this Section, an operator is able to view the single display screen ("visual display 35") in each of the plurality of display modes since the display screen faces the operator in each of the display modes. *See, e.g.*, Lane, FIGS. 20, 25, 28. Moreover, an operator is able to operate (i.e., interact with) the computer in each of the plurality of display modes, such as by using the keyboard ("keys 36"), mouse 32, and/or touch-sensitive display screen ("visual display 35") in the laptop mode (FIG. 20), and by using the touch-sensitive display screen ("visual display 35") in the frame and easel modes (FIGS. 25 and 28, respectively).

User Interaction in Lane's Display Modes

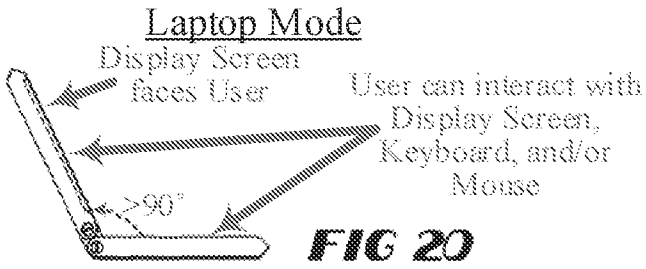


FIG 20

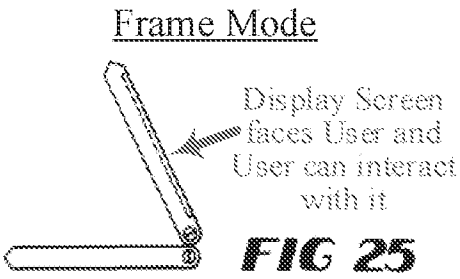


FIG 25

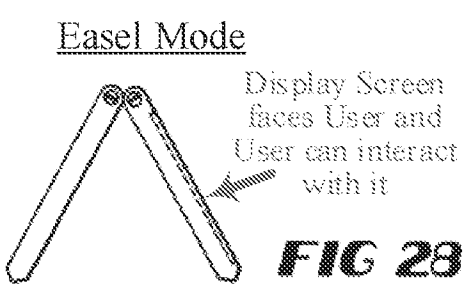


FIG 28

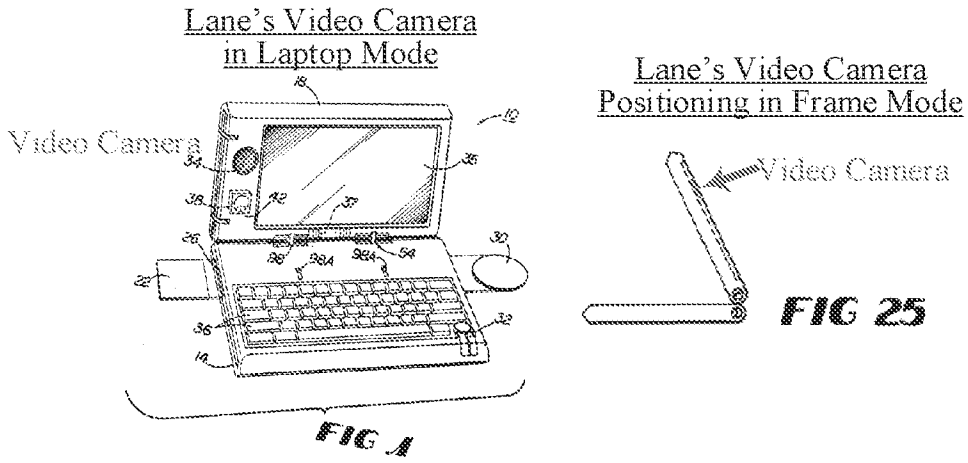
Lane, FIGS. 20, 25, 28 (with annotations).

131. Specifically, as discussed above for element 10.1, the keyboard ("keys 36") and mouse 32 are accessible to an operator in the laptop mode. *E.g.*, Lane, 10:26–28, FIGS. 1, 20. A POSITA would have understood that an operator could operate the portable computer with the keyboard and mouse since this is their very purpose as input devices.

132. Further, a POSITA would have understood that an operator could utilize the display screen to operate the computer in the frame and easel modes since the display is touch sensitive. *See, e.g.*, Lane, 3:13–14, 8:18–19, 10:19–20 (discussing how the display screen can be used for pen-based computing). Even if this touch screen operability in easel and frame modes is not inherent in Lane's disclosure, it would nonetheless have been obvious to a POSITA when implementing Lane's computer. First, without such functionality, a user would not be able to interact with the computer in the easel and frame modes because the only other input devices (the

keyboard and mouse) are inaccessible in these modes. Lane does not disclose any other input devices in the main display component that would be accessible to a user in these modes. Thus, a POSITA naturally would have ensured that Lane's existing pen input functionality is operational in the frame and easel modes so that a user could still interact with the computer in the frame and easel modes.

133. Second, a POSITA would have been motivated to ensure Lane's touch-sensitive functionality is operational in these modes so that the camera 34 can be used. As discussed by Lane, one desirable use for its computer—and one reason its computer includes the easel and frame modes—is for video conferencing. *See, e.g.*, Lane, 3:5–14 (discussing how the ability of its computer to open up to 360° (such as to frame mode) allows it to be used as a telecommunications monitor). Moreover, even absent such disclosure, a POSITA would have recognized that Lane's frame mode is well-suited for using the camera 34, since the keyboard is out of the way and the camera is at both a desirable position and angle (slightly reclined and elevated position near the top of the main display component). *See e.g.*, Lane, FIG. 25.



Lane, FIGS. 1, 25 (with annotations).

134. To operate the camera 34 in frame mode, a POSITA would have understood that a user would need to be able to interact with the touch-sensitive display screen since the other input devices (the keyboard and mouse 32), are inaccessible in frame mode. *E.g.*, Lane, FIG. 25, 10:29–31. Thus, when implementing Lane's computer, a POSITA would have ensured that its existing touch-sensitive screen is operational in at least the frame mode so that a user can use the camera in this camera-friendly display mode.

[10.5] 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;

135. Although Lane does not explicitly disclose a first content mode having a first content display orientation, this claim limitation is nonetheless obvious in view of Lane's teachings for the following reasons.

It would have been obvious to a POSITA that Lane's laptop mode is configured to display a first content mode having a first content display orientation

136. Lane teaches and/or strongly suggests this part of the claim limitation since it teaches automatically reorienting displayed content depending on an indication of the spatial orientation of the main display component ("second module 18") provided by a position-indicating mechanism 38. *E.g.*, Lane, 5:23–6:3.

> Also shown in FIG. 1 (and FIG. 29) as part of second module 18 is position-indicating mechanism 38. Mechanism 38 includes a moveable conductor 42 (such as liquid mercury) in a spherical cavity 46 having contacts 50 spaced about its periphery. Conductor 42 responds via gravitational forces to spatial reorientation of mechanism 38 by moving relative to contacts 50 (to contact at least one contact 50 to close its respective circuit). Including mechanism 38 as a component of either first or second modules 14 or 18 would thus permit it to indicate the spatial orientation of that module. Doing so would also allow mechanism 38 to assist device 10 (and its associated software) in determining, for example, whether the information to appear on visual display 35 should be in "landscape" or "portrait" position as the visual display 35 is spatially configured, the direction

Lane, 5:23–6:3.

137. As recited above, Lane clearly teaches displaying content on the main display component, since it discusses "information to appear on visual display 35." Lane, 5:37–6:1. Further, Lane clearly teaches displaying this content in a particular orientation (i.e., one in which content is presented right-side-up to a user) since Lane includes a sensor and associated software to automatically do exactly this. *E.g.*, Lane, 5:23–6:3.

138. For example, Lane teaches using the sensor mechanism 38 to "indicate the spatial orientation" of both the base and display (its first module 14 and second module 18). Lane, 5:32–35. Thus, a POSITA would have understood this to teach using the sensor 38 to determine whether, *e.g.*, Lane's display component ("first module 14") is orientated in Lane's laptop mode (FIGS. 1, 20) or in Lane's easel mode (FIG. 28). Lane further explains that this physical

orientation information is correspondingly used to determine how the displayed *content* should be "position[ed]." Lane, 5:35–6:6. While Lane provides the specific examples of "'landscape' or 'portrait'" orientations, a POSITA would have understood that Lane more generally teaches orienting the content so that it is presented right-side-up in each display mode. Orienting content in any other way (e.g., sideways, upside down) would be nonsensical, as it would make it difficult, if not impossible, for a user to view the displayed content. Thus, a POSITA would have understood that the only logical and common-sense reason Lane includes its position-indicating mechanism 38 and associated software is to present content right-side-up to a user.

139. As such, Lane's display of content in a right-side-up orientation in laptop mode is a first content mode having a first display orientation. A POSITA would have understood from Lane's disclosure that Lane's computer automatically displays information/content in this first display orientation in laptop mode, and that, like all of Lane's content display orientations for its other display modes, this first content display orientation is one in which the content is presented right-side-up to the user. For example, a POSITA would have understood that Lane's laptop mode would display content right-side-up in the first content display orientation and that when in easel mode, where the main display component ("second module 18") is upside down, content would be displayed in a second, inverted orientation to ensure content also is displayed right-side-up in easel mode. *Infra*, Element 10.7.

In Lane's laptop mode, the main display component is oriented towards the user and the keyboard is oriented to receive input from the user laptop mode.

140. As discussed above for element 10.1 in this Section, Lane's keyboard ("keys 36") faces up towards a user in laptop mode and is therefore oriented to receive input from the user. *See, e.g.*, Lane, FIGS. 1, 20, 10:24–28. Further, Lane's main display component is opened by at

least 90° in the laptop mode so that the display screen ("visual display 35") is oriented towards the user. *Id.*

Lane's Laptop Mode

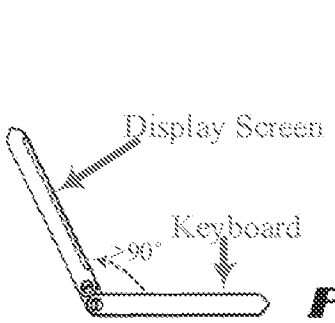


FIG 20

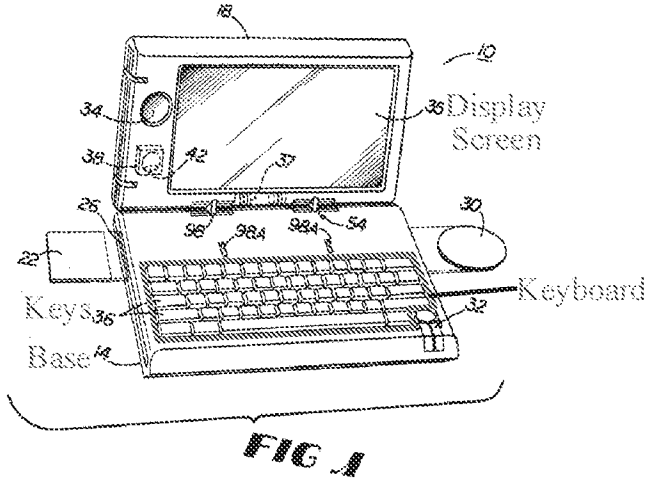


FIG 1

Lane, FIGS. 20, 1 (with annotations).

141. Thus, Lane teaches that its 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.

> [10.6] 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

142. Although Lane does not explicitly disclose a second mode having a second content display orientation, this claim limitation is nonetheless obvious in view of Lane's teachings for the following reasons.

It would have been obvious to a POSITA that Lane's easel mode is configured to display to the user on the main display component a second content mode having a second

content display orientation that is 180 degrees relative to the first content display orientation.

143. As discussed above for element 10.5 in this Section, Lane teaches that its computer includes software for automatically determining a spatial orientation of the main display component ("second module 18") based on feedback from a position-indicating mechanism 38, and for reorienting displayed content based on this determined spatial orientation of the main display component. *E.g.*, Lane, 5:23–6:6.

> Including mechanism 38 as a component of either first or second modules 14 or 18 would thus permit it to indicate the spatial orientation of that module. Doing so would also allow mechanism 38 to assist device 10 (and its associated software) in determining, for example, whether the information to appear on visual display 35 should be in "landscape" or "portrait" position as the visual display 35 is spatially configured, the direction

Lane, 5:32–6:3.

144. Although Lane only explicitly describes "portrait" and "landscape" content orientations, a POSITA would have understood that the entire purpose of Lane's automatic content reorienting is to ensure that content is displayed right-side-up to a user. Lane provides no other reason why its computer would reorient content. Moreover, ***more than a decade before the '844 Patent's alleged priority date***, others had already publicly recognized that displayed content "needs inverting" in easel mode. *See, e.g.*, Välikangas (Ex. 1042), Abstract (describing how displayed content needs to be inverted in its computer's easel mode ("A shaped configuration") shown in FIG. 4A), *also see* Välikangas, FIG. 4A, p. 5. Moreover, such content inverting would have been obvious given the state of the art at or before the alleged priority date, as evidenced by the multitude of prior art references that had disclosed such inverting when a screen is rotated more

than 180° relative to its base from a closed position. *See, e.g.*, Hisano, ¶¶ [0098–99], FIG. 9; Tsuji, ¶¶ [0049], [0055], [0059–61], [0074], FIG. 14; Schweizer, 5:23–35; Shigeo, Abstract, ¶¶ [0004], [0014–16], FIGS. 2, 4(b); VII.F., and VIII.C.

Hisano's Inverted Content

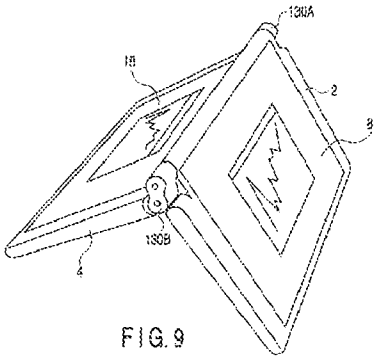


FIG. 9

Tsuji's Inverted Content

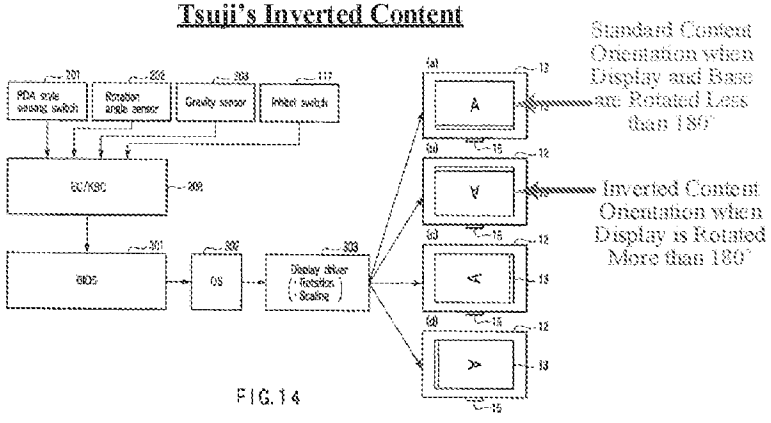


FIG. 14

Hisano, FIG. 9; Tsuji, FIG. 14 (with annotations).

145. Thus, a POSITA implementing Lane's computer would have understood that, when in easel mode, the content orientation would need to be inverted (i.e., rotated 180°) relative to laptop mode in order to present displayed content right-side-up to the user. As shown in Lane's FIGS. 20 and 28, this is due to the fact that Lane's main display component is upside down in easel mode relative to laptop mode. *E.g.*, Lane, FIGS. 20, 28. Specifically, the display is oriented hinge-side-up in easel mode and hinge-side-down in laptop mode). *E.g.*, Lane, FIGS. 20, 28.

Lane's Display Orientation in Laptop Mode

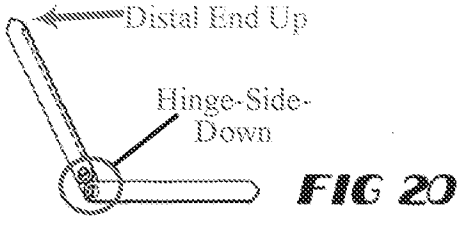


FIG 20

Lane's Display Orientation in Easel Mode

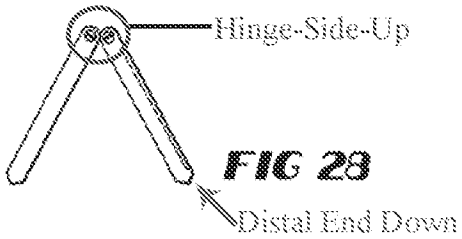


FIG 28

Lane, FIGS. 20, 28 (with annotations).

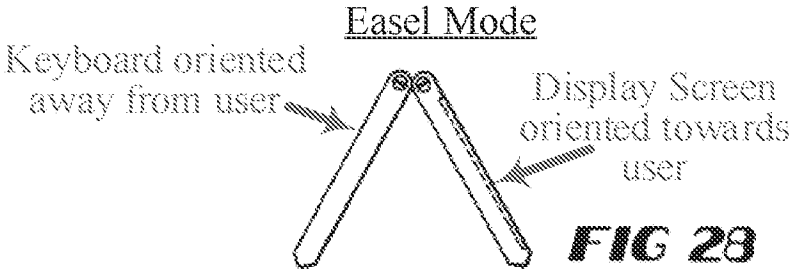
146. Thus, if the content orientation is not inverted in easel mode relative to laptop mode, content would not be presented right-side-up to a user, and the user would have a very difficult time viewing the content. As explained above, however, it would be senseless for Lane's computer to not reorient content so that it is right-side-up in easel mode, given that Lane explicitly provides a means for doing so (an orientation sensor and associated software). That is, to include such automatic content reorienting functionality and not present content right-side-up to a user would be nonsensical.

147. Thus, this portion of the claim limitation is obvious in view of Lane's explicit teaching to automatically reorient content based on the orientation of the main display component. Specifically, a POSITA implementing Lane's computer would understand that Lane's easel mode is configured to display to the user on the main display component a second content mode having a second content display orientation that is 180 degrees relative to the first content display orientation of the laptop mode.

148. To the extent Patent Owner argues that the claim requires the first and second content modes include different types of content, this claim is obvious in further view of Ledbetter, as discussed in more detail below in Section X.A.

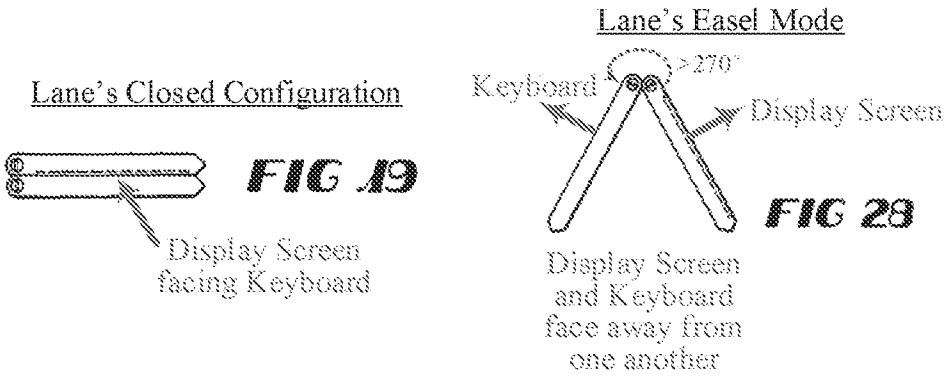
In Lane's easel mode, the main display component is oriented towards the user and the keyboard is oriented away from the user.

149. As shown in FIG. 28 of Lane, the main display component ("second module 18") is oriented towards the user and the keyboard is oriented away from the user.



Lane, FIG. 28 (with annotations).

150. Lane confirms that the display is oriented towards the user in easel mode, stating that in FIG. 28, "only the visual display 35 need be accessible." Lane, 10:30–31. Thus, the display 35 must be oriented towards the user to be accessible as prescribed by Lane. Further, since only the "visual display 35" is accessible to the user in easel mode, the keyboard must be oriented away from the user. *E.g.*, Lane, 10:30–31. Moreover, because the display screen faces the keyboard in the closed position, and because the display component is rotated more than 270° relative to the base to transition from the closed position to the easel mode, the display screen and keyboard must face away from one another in easel mode. *E.g.*, Lane, 10:12–17, 10:29–31.



Lane, FIGS. 19, 28 (with annotations).

151. Thus, if the visual display 35 is oriented towards the user in easel mode, the oppositely facing keyboard must be oriented away from the user.

Lane's portable computer is operable in the easel mode to enable the user to interact with displayed content without interacting with the keyboard.

152. As discussed above for element 10.5 in this Section, when implementing Lane's computer, a POSITA would have understood and/or would have ensured that a user could interact with displayed content via Lane's touch-sensitive screen ("visual display 35").

153. Specifically, because Lane's keyboard and mouse are inaccessible in easel mode (since they are oriented away from the user) a POSITA would have ensured that Lane's only other input device (its touch-sensitive screen) would be operational in easel mode so that a user could still interact with the computer in easel mode. *See, e.g.*, Lane, 3:13–14, 8:18–19, 10:19–20 (discussing how the display screen can be used for pen-based computing). Thus, it would have been obvious to a POSITA based on Lane's teachings that Lane's computer is operable in the easel mode to enable the user to interact with displayed content via its touch-sensitive screen, without interacting with the keyboard.

[10.7] a navigation control accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen

154. In the related District Court litigation, Patent Owner appears to contend that the recited "navigation control" encompasses touch-sensitive display screens, as Patent Owner's Complaint alleges that Requester's touchscreen products infringe claim 10 of the '844 Patent. First Amended Complaint (Ex. 1032), ¶ 155 (p. 75). Assuming the broadest reasonable interpretation (BRI) of this claim limitation is as broad as the construction advanced by Patent Owner in district court litigation, then Lane's similar touch-sensitive display screen satisfies this claim limitation. That is, if Patent Owner attempts to read this claim limitation so broadly as to cover the touchscreen of Requester's accused product(s), then Lane's similar touch-sensitive display screen satisfies the claim limitation.

155. Specifically, as argued above for element 10.4 in this Section, Lane's touch sensitive display screen ("visual display 35") permits a user to interact with Lane's computer. Though Lane does not explicitly disclose that the touch screen permits *manipulation of operating parameters and displayed content*, this would nonetheless have been obvious to a POSITA based on the fact that it would be very difficult, if not impossible, for a user to interact with the computer (as taught by Lane) without manipulating operating parameters and/or displayed content. Every time a user touches a touch sensitive screen (or manipulates an input device/navigation control for that matter) the computer (i.e., its processor) responds by changing an operating parameter and/or changing what is displayed on the screen. Without such associated software functionality, the touch screen would provide limited to no means for a user to actually interact with Lane's computer.

156. Moreover, because the mouse 32 and keyboard ("keys 36") are inaccessible in the easel and frame modes, a POSITA would have understood that Lane's touch sensitive screen incorporated the same functionality in the easel and frame modes, thus allowing a user to manipulate operating parameters and content just as they would be able to with a mouse and/or keyboard in laptop mode. Since mice and keyboards conventionally functioned to allow users to manipulate operating parameters and displayed content, a POSITA would have understood that incorporating functionality from the mouse 32 and/or keyboard into the display screen in the easel and frame modes would necessarily have entailed including their ability to permit users to manipulate operating parameters and displayed content.

157. Thus, under Patent Owner's apparent construction of the recited "navigation control" this element is met by Lane's touch-sensitive visual display 35. That is, if Patent Owner

attempts to read this claim limitation so broadly as to cover the touch-sensitive screen of Lenovo's accused product(s), then Lane's similar touch-sensitive screen satisfies the claim limitation.

[10.8] wherein the plurality of modes includes 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.

158. As discussed above in element 10.1 of this Section, Lane discloses that its plurality of display modes includes a frame mode. Specifically, as shown in FIG. 25 of Lane, the keyboard ("keys 36") side of the base ("first module 14") faces down and the main display component ("first module 14") is oriented towards the operator with the single display screen ("visual display 35") facing up. *E.g.*, Lane, FIG. 25, 10:29–31. In addition, and as required by the Board in the non-instituted IPR proceeding, Lane's main display component ("second module 18") is at a nonzero angle relative to the base ("first module 14") in the frame mode.

Lane's Closed Configuration



FIG 19

Lane's Frame Mode

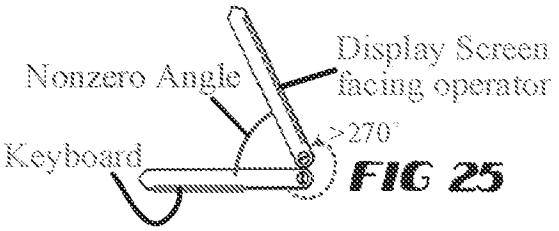


FIG 25

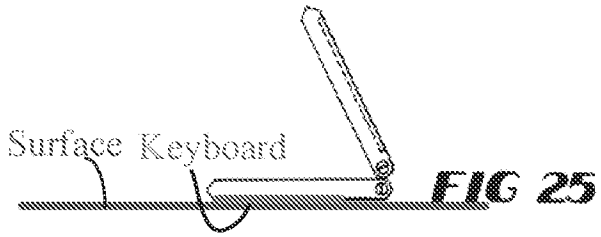
Lane, FIGS. 19, 25 (with annotations).

159. Moreover, the display screen and keyboard must be facing in the directions shown in annotated FIG. 25 above, since the main display component has been rotated relative to the base by more than 270° from the closed position shown in FIG. 19 in which the display screen and keyboard face one another. *E.g.*, Lane, 10:29–31.

160. Although Lane does not explicitly show the computer placed on a surface in FIGS. 20–28, a POSITA would have understood that they are shown in the drawings in the same

orientation as they would be placed on a surface. For example, in the laptop mode of FIG. 20, a POSITA would have understood that the bottom of the base would have to be positioned on a surface in the same orientation shown in FIG. 20, in order for the keyboard and display to be accessible to the user, as required by Lane. *E.g.*, Lane, 5:15–17, FIGS. 1, 20. Similarly a POSITA would have understood that the top of the base (where the keys 36 are positioned) would have to be positioned on the surface in the frame mode so that only the display screen ("visual display 35") is accessible to a user, as required by Lane. *E.g.*, Lane, 10:29–31; Thus, a POSITA would have understood that Lane's keyboard ("keys 36") is face down on a surface when Lane's computer is placed on a surface in the frame mode shown in FIG. 25. *E.g.*, Lane, FIG. 25.

Lane's Frame Mode



Lane, FIG. 25 (with annotations).

161. Thus, Lane satisfies this limitation, even under the Board's interpretation of "frame mode" in the non-instituted IPR proceeding..

B. Claim 16

[16.1] The portable computer of claim 10, wherein an operating display mode is selected from the plurality of display modes based on a physical orientation of the portable computer.

162. To the extent Patent Owner argues that the "operating display mode" is a "content display orientation," Lane renders this claim obvious. Specifically, Lane teaches automatically determining the current display mode of Lane's computer based on an indication of a physical orientation of the main display component ("second module 18") and/or the base ("first module

14") provided by a position-indicating mechanism 38. *E.g.*, Lane, 5:23–6:6. As argued above for elements 10.5 and 10.6 in Section IX.A., a POSITA would have understood that Lane performs this content reorienting to ensure that displayed content is presented right-side-up to a user in every one of the display modes. *E.g., supra,* Section IX.A. Thus, Lane's computer determines the computer's current display mode based on an indication of the physical orientation of the portable computer provided by the position-indicating mechanism 38, and then automatically orients the displayed content so that it is presented right-side-up to the user. *Id.*

X. GROUND 2: LANE AND LEDBETTER RENDER OBVIOUS CLAIMS 1 AND 16 OF THE '844 PATENT

163. ***A POSITA would have found it obvious to implement Lane's computer such that it would display different display modes in its easel and laptop modes, as taught by Ledbetter.*** As explained above in Section IX., Lane renders claims 10 and 16 obvious. To the extent Patent Owner argues that the claims somehow require that the two content modes include different types of content, the claims are still obvious over Lane in further view of Ledbetter, as Ledbetter expressly teaches this concept of changing the type of displayed content depending on the display mode.

164. A POSITA would have been motivated, with a reasonable expectation of success, to implement Ledbetter's different modes of content in different display modes in the Lane computer because these two display modes, as taught by Ledbetter, are better suited for different kinds of uses/content. Specifically, a POSITA would have been motivated to display a first mode of content (*e.g.*, Ledbetter's shortcuts and other information used for working/productivity) on Lane's main display component when in the laptop mode, since, as recognized by Ledbetter, modes like Lane's laptop mode and Ledbetter's workstation mode (where the keyboard is accessible) may be optimized/best suited for working/productivity. Similarly, a POSITA would

have been motivated to display a second mode of content (*e.g.*, Ledbetter's media player) on Lane's display in the easel mode, since, as recognized by Ledbetter, modes like Lane's easel mode and Ledbetter's media consumption mode (where the keyboard is inaccessible) may be optimized/best suited for watching videos. *E.g.*, Ledbetter, ¶¶ [0031], [0057].

165. A POSITA would have reasonably expected to succeed in implementing these different content modes without any undue experimentation as they would have required only minor software modifications using simple computer code that was well within the skill of a POSITA. For example, the code would have needed only to instruct the processor of Lane's computer to load programs/applications for working/productivity (e.g., word processor) when it detects Lane's computer is transitioning to, or has entered, Lane's laptop mode, and to load programs/applications for media consumption (e.g., media player) when it detects Lane's computer is transitioning to, or has entered, Lane's easel mode. The fact that the '844 Patent itself provides no express teaching on how to automatically load mode-specific content confirms that this would have been well within the skill of a POSITA to implement without any undue experimentation. *See, e.g.*, '844 Patent, 13:64–14:13 (generally discussing changing the displayed content when transitioning from laptop to easel mode, without providing any instruction on how to do so).

A. Claim 10

[10.1] 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 permit an operator to interact with a single display screen in each of the plurality of display modes, the portable computer comprising:

166. Lane discloses this limitation for at least the reasons provided above for element 10.1 in Section IX.A.

[10.2] a base including a keyboard;

167. Lane discloses this limitation for at least the reasons provided above for element 10.2 in Section IX.A.

[10.3] a main display component rotatably coupled to the base and including the single display screen which displays content;

168. Lane satisfies this limitation for at least the reasons provided above for element 10.3 in Section IX.A.

[10.4] a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode,
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

169. Lane teaches this this limitation for at least the reasons discussed above for element 10.4 in Section IX.A.

[10.5] 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;

170. Lane teaches this this limitation for at least the reasons discussed above for element 10.5 in Section IX.A. Further, to the extent Patent Owner argues that the first content mode requires a particular kind of content, this limitation is obvious in further view of Ledbetter.

171. Specifically, Ledbetter teaches that its computer ("computer system 120") is configured to display different modes of content depending on the physical positioning of its main display component ("display monitor"). *E.g.*, Ledbetter, ¶¶ [0023], [0055–57]. For example, Ledbetter discloses displaying "media player software," "a touch-screen shell program configured to provide convenient access to walk-up types of information (*e.g.*, weather, messages, the internet

and so forth), and "shortcuts and other information used for working/productivity." Ledbetter, ¶ [0057]. A POSITA would understand these to constitute the claimed content modes, since they are the same and/or similar kinds of content modes discussed by the '844 Patent itself. For example, the '844 patent states that the modes of content can include a media player mode that loads a media player, a connect mode that loads email, instant messaging, etc., a web mode that provides access to the internet, and an application mode that provides access to applications or programs for working/productivity, such as a word processor.

> examples discussed below. According to one example, the modes of content **172** accessible via the home screen **170** may include "media" **172***a*, "connect" **172***b*, "web" **172***c*, "applications" **172***d*, and "channels" **172***e*. Using the map user interface, information, programs, features and applications may be grouped into the various modes of content **172**. By selecting any mode of content **172**, for example, by using the scroll wheel **132** and/or navigation buttons **166**, **168**, as discussed further below, the user may access the content organized within that mode. For example, the media mode **172***a* may provide access to a medial player to play, view, search and organize media such as music, video, photos, etc. The connect mode **172***b* may provide access to features such as, for example, email, voice-over-IP, instant messaging, etc., and the web mode **172***c* may provide access to internet browsing and searching. The application mode **172***d* may provide access to, for example, computer applications or programs, such as word processor, spreadsheet, calculator, etc. In one example, these applications or programs may be provided as web-based services rather than programs or applications residing on the portable computer **100**. The channels mode

'844 Patent, 11:35–55.

172. Ledbetter explains that these display modes may each display unique or mode-specific types of content because each mode "may be generally optimized to match typical

computer usage modes." Ledbetter, Abstract. That is, each display mode may be best suited for unique use(s) and thus is configured to display content optimized to match those use(s).

173. Further, Ledbetter teaches a display mode ("workstation mode") that is very similar to the claimed laptop mode, and specifically teaches displaying a first content mode ("typical shortcuts and other information used for working/productivity") in the laptop-like mode ("workstation mode"). *E.g.*, Ledbetter, ¶ [0057].

Ledbetter's Workstation Mode

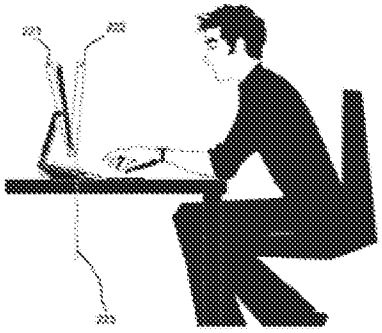


FIG. 2

Ledbetter, FIG. 2 (with annotations).

> **[0008]** FIG. **2** is a representation of a workstation mode in which a monitor is substantially upright and positioned to provide access to input devices.

Ledbetter, ¶ [0008].

174. A POSITA would have understood based on Ledbetter's teachings that Lane's laptop mode is similar to Ledbetter's workstation mode and is thus well-suited for working/productivity, as taught by Ledbetter. *E.g.*, Ledbetter, ¶ [0057]. Specifically, Ledbetter's workstation mode and Lane's laptop mode are very similar because the keyboards of Lane's and

Ledbetter's computer are accessible in both these modes, and the display component is positioned at the far end of the keyboard in a substantially vertical, but slightly leaned back, orientation.

Ledbetter's Workstation Mode

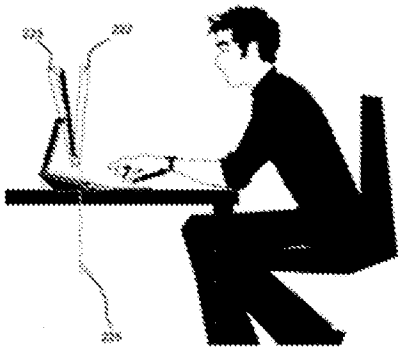


FIG. 2

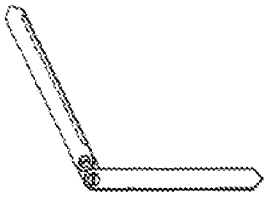


FIG 20

Ledbetter, FIG. 2 (with annotations); Lane, FIG. 20 (with annotations).

> [0027] FIG. 2 provides an example of a workstation mode, such as in a position with the monitor having a backward tilt angle from −5 degrees (dashed box 222) to +15 degrees (dashed box 223) from vertical (dashed line 225), although another range such as plus or minus fifteen degrees or more is also configurable. The actual angle may be user configurable; for example, the user may set up the mechanism such that the arm has a stop when the monitor is at a backward tilt angle of +10 degrees to vertical.
>
> [0028] In the example of FIG. 2, this user's workstation position is also set such that the bottom of display is approximately four inches off of the desk, with access to input devices, e.g., a keyboard and pointing device. If present, an auxiliary display is also likely visible in such a mode.

Ledbetter, ¶¶ [0027–28].

175. Like in the claimed laptop mode, Ledbetter teaches displaying the first content mode ("typical shortcuts and other information used for working/productivity") in the workstation mode.

> loaded. In the workstation mode, typical shortcuts and other information used for working/productivity or other computer usage (e.g., gaming) may be displayed.

Ledbetter, ¶ [0057].

176. Thus, based on Ledbetter's teachings, a POSITA would have been motivated to display a first mode of content (*e.g.*, Ledbetter's shortcuts and other information used for working/productivity) on Lane's main display component when in the laptop mode, since, as recognized by Ledbetter, modes like Lane's laptop mode and Ledbetter's workstation mode (where the display component is substantially vertical or tilted slightly backwards, and the keyboard is accessible) may be optimized/best suited for working/productivity.

177. As such, a POSITA would have been motivated to follow Ledbetter's teachings to have Lane's computer display working/productivity type content (e.g., word processors) when Lane's computer is in laptop mode. *E.g.*, Ledbetter, ¶ [0057]; *see also*, Pogue, 263 (discussing word processors).

[10.6] 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

178. Lane teaches this limitation for at least the reasons discussed above for element 10.6 in Section IX.A.

179. To the extent Patent Owner argues that the first and second content modes require displaying different modes of content (e.g., media player vs. web content vs. email vs. programs such as word processor) to the user, Ledbetter teaches this. Specifically, as explained above for element 10.5 in this Section (X.A), Ledbetter teaches displaying different content modes depending on the physical positioning of its main display component ("display monitor").

180. Further, Ledbetter teaches a mode that is very similar to easel mode ("media consumption mode"), and specifically teaches displaying a second content mode ("media player software") in this media consumption mode that is different than the first content mode ("typical shortcuts and other information used for working/productivity") that is presented in Ledbetter's laptop-like mode ("workstation mode"). *E.g.*, Ledbetter ¶¶ [0010], [0031], [0057], FIG. 4.

Ledbetter's Media Consumption Mode

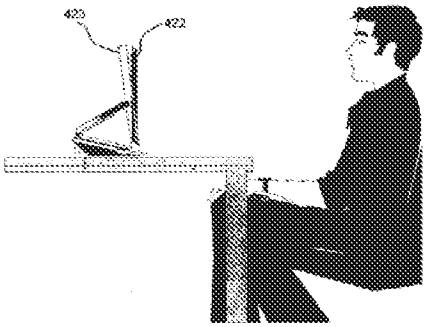


FIG. 4

Ledbetter, FIG. 4 (with annotations).

> **[0010]** FIG. **4** is a representation of a media consumption mode in which a monitor is positioned to facilitate viewing while concealing input devices to an extent.

Ledbetter, ¶ [0010].

181. Ledbetter's media consumption mode is very similar to Lane's easel mode because, like Lane's easel mode, the keyboard is inaccesible but an operator can still interact with displayed content, such as via "touch-screen operation." *E.g.*, Ledbetter, ¶ [0031]. Further, like Lane's easel mode, the display is oriented substantially vertically but slightly leaned back.

Ledbetter's Media Consumption Mode

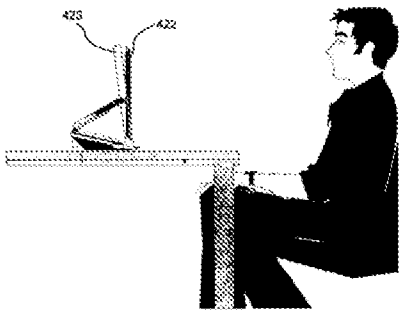


FIG. 4

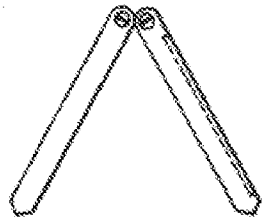


FIG 28

Ledbetter, FIG. 4 (with annotations); Lane, FIG. 28 (with annotations).

> **[0031]** FIG. **4** provides an example of a media consumption mode, typically for viewing video where the bulk of user interaction is simply viewing. In FIG. **4**, the arm is hinged such that the monitor screen **422** has been positioned forward, resulting in the input devices barely visible, if at all. The represented monitor screen **422** has zero vertical tilt, but the tilt may be adjustable within a reasonable range (dashed box **423**). As described above with reference to FIG. **1**, any necessary interaction, such as to get a movie started, may be accomplished in the modes of FIG. **2** or **3**, or via remote control and/or touch-screen operation while in the media consumption mode exemplified in FIG. **4**.

Ledbetter, ¶ [0031].

182. Like in the claimed easel mode, Ledbetter also teaches loading and executing the second content mode ("media player software") in the media consumption mode.

> **[0057]** By way of example, when the arm is positioned such that the display monitor is in the media consumption mode, media player software may be loaded and automatically executed. In the tablet mode, tablet operating system

Ledbetter, ¶ [0057].

183. Thus, based on Ledbetter's teachings, a POSITA would have been motivated to display a second mode of content (*e.g.*, Ledbetter's media player) on Lane's display in the easel mode, since, as recognized by Ledbetter, modes like Lane's easel mode may be optimized/best suited for watching videos. *E.g.*, Ledbetter, ¶¶ [0031], [0057]. Thus, a POSITA would have been motivated to follow Ledbetter's teachings to display media consumption content (e.g., a media player) when Lane's computer is in easel mode. *E.g.*, Ledbetter, ¶ [0057].

[10.7] a navigation control accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen

184. Lane satisfies this limitation for at least the reasons provided above in for element 10.7 in Section IX.A.

[10.8] wherein the plurality of modes includes 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.

185. Lane discloses this limitation for at least the reasons provided above for element 10.8 in Section IX.A.

B. Claim 16

[16.1] The portable computer of claim 10, wherein an operating display mode is selected from the plurality of display modes based on a physical orientation of the portable computer.

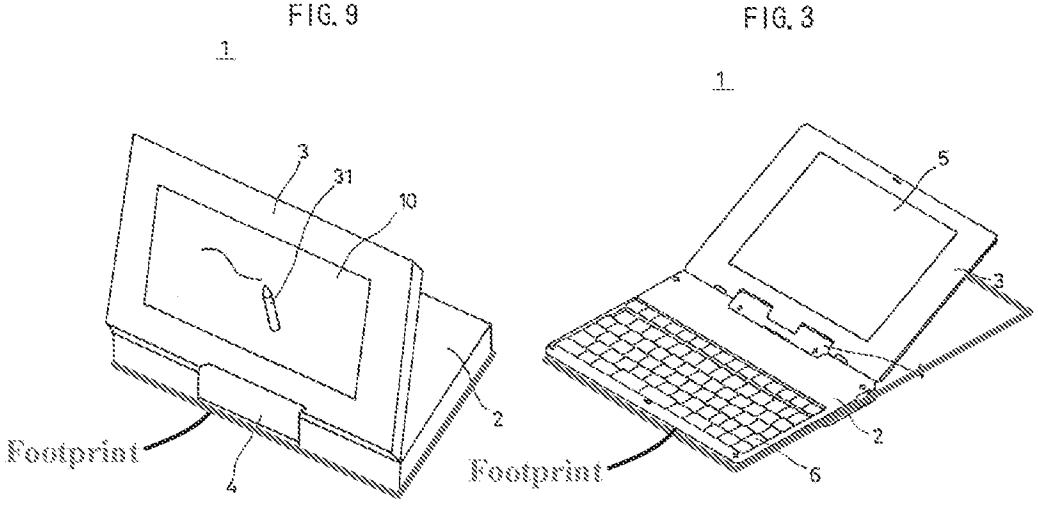
186. Lane renders this claim obvious for at least the reasons provided above in Section IX.B.

XI. GROUND 3: KAMIKAKAI AND SHIMURA RENDER OBVIOUS CLAIMS 10 AND 16 OF THE '844 PATENT

187. ***A POSITA Would Have Found It Obvious To Implement Kamikakai's Computer With Shimura's Easel Mode and Content Display Orientation Teachings.*** As explained in more detail below in Sections XI.A. and XII.A., Kamikakai discloses or teaches all elements of claims 10 and 16 except for the easel mode and the different content display orientations. A POSITA implementing the Kamikakai configurable computer would have been motivated, with a reasonable expectation of success, to include Shimura's easel mode and content orientation features. A POSITA would have been motivated to provide Shimura's easel mode in order to benefit from its smaller, space-saving footprint. *E.g.*, Shimura, [0017]. Doing so would have increased device flexibility and permitted usage even with limited table / counter space. Shimura explains that "the area taken up by the computer on the table can be greatly reduced" by using the easel mode shown in FIG. 5. Shimura, ¶ [0017], FIG. 5. A POSITA implementing Kamikakai would have been particularly interested in space-saving solutions like the Shimura easel mode, because Kamikakai expressly states a desire to provide a device with space-saving features. Kamikakai, 2:31–36 (describing object of providing "a portable information processing apparatus which enables easy operation . . . even when the portable information processing apparatus is set up on a small surface").

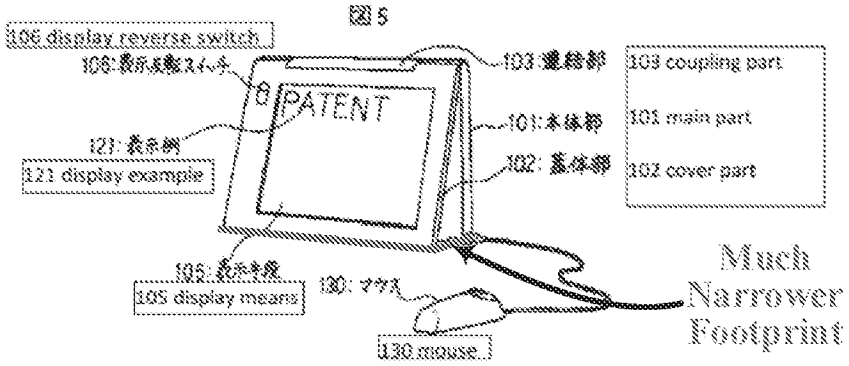
188. The additional space-saving benefits of Shimura's easel mode would have been recognized by a POSITA upon comparing the depictions of the Kamikakai frame and laptop modes to the Shimura easel mode:

Kamikakai's Frame Mode **Kamikakai's Laptop Mode**



Kamikakai, FIGS. 3, 9 (with annotations).

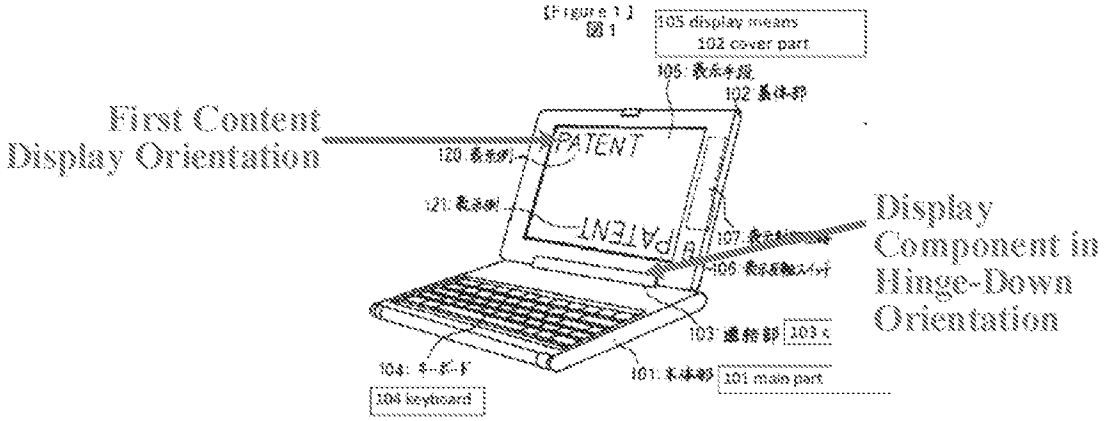
Shimura's Easel Mode



Shimura, FIG. 5 (with annotations).

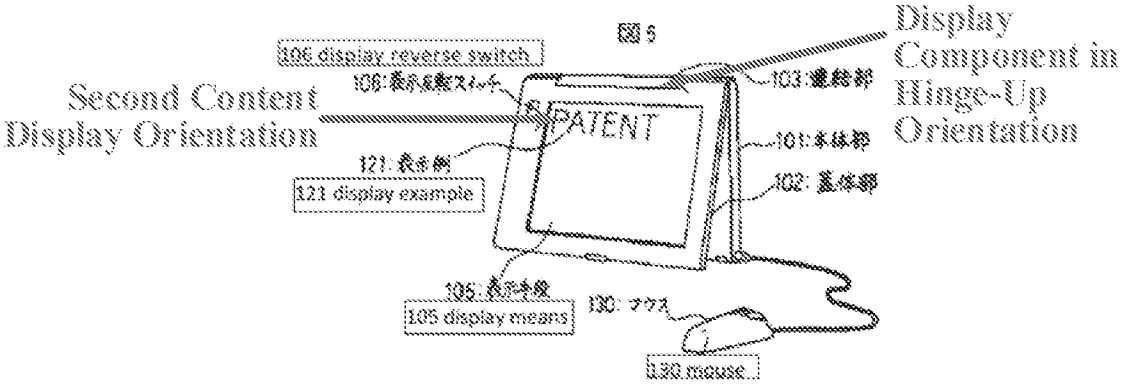
189. A POSITA implementing Kamikakai with such an easel mode, would have naturally done so such that the content was properly orientated "face up" for ease of viewing by the user. Indeed, Shimura teaches orienting the content displayed on the screen depending on the different modes (Shimura, ¶¶ 12, 14, 17 FIGS. 1, 5), with laptop mode displaying the content in a first orientation and easel mode in a second orientation, as shown in Shimura's figures:

Shimura's Laptop Mode



Shimura, FIG. 1 (with annotations).

Shimura's Easel Mode



Shimura, FIG. 5 (with annotations).

190. And, a POSITA would have reasonably expected to succeed in implementing Kamikakai with an easel mode with no undue experimentation. The Kamikakai configurable computer already provided full rotation of the display screen relative to the base and used a hinge that would lock/retain the display and base at any relative angle chosen by the user. *E.g.*, Kamikakai, 3:52–64, 4:10–5:27. Indeed, in Kamikakai's frame mode, the display and base are retained at a very similar relative angle as in Shimura's easel mode, thus confirming the ease of

providing this mode. *E.g., compare* Kamikakai, FIG. 8 *to* Shimura, FIG. 5. Easel mode would merely have required positioning the overall Kamikakai device with the hinge facing up.

191. Moreover, a POSITA would have had a reasonable expectation of success and no technical difficulty in ensuring that the displayed content was oriented properly (i.e., inverted) in easel mode, such that a user could view it right-side-up. A POSITA would have recognized that this could have been done manually using Shimura's display reverse switch 106, as Shimura expressly teaches using this switch 106 to invert displayed content. *E.g.*, Shimura, ¶¶ 12, 14, 17 FIGS. 1, 5. The POSITA would have recognized that, alternatively, it would have been trivial to implement the configurable computer to have reoriented displayed content automatically using a sensor and associated software, given that this was well described in the art. *See, e.g.*, Hisano, ¶¶ [0098–99]; Tsuji, ¶¶ [0049], [0055], [0059–61], [0074], FIG. 14; Schweizer, 5:23–35; Shigeo, Abstract, ¶¶ [0004], [0014–16], FIGS. 2, 4(b).

192. The result of this natural combination would be a computing device that can be configured into at least laptop, frame, and easel display modes, and that would be configured to display content in different orientations depending on the display mode to ensure that content is presented right-side-up in each display mode for easy user viewing. As explained in the following paragraphs, this natural combination renders obvious at least claims 10 and 16.

A. Claim 10

[10.1[4]] 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 permit an operator to interact with a single display screen in each of the plurality of display modes, the portable computer comprising:

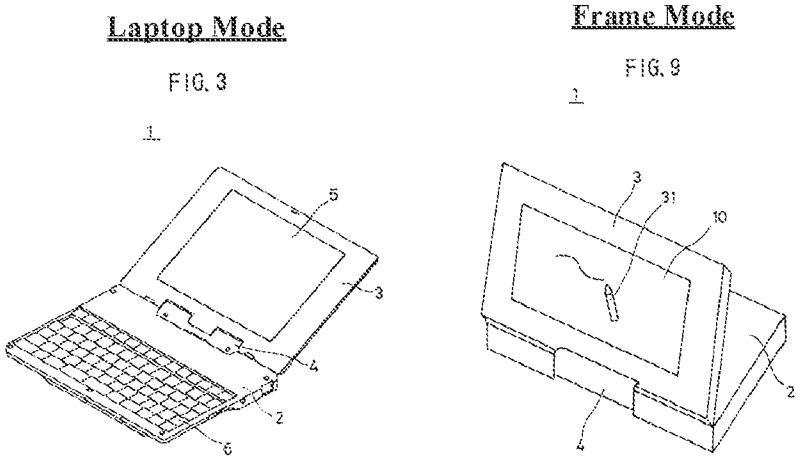
[4] Reference numbers in the format of [claim#.limitation#] are added throughout for ease of reference.

193. Together, Kamikakai and Shimura teach this limitation.

The Kamikakai–Shimura computer is configurable between a plurality of display modes including a laptop mode and an easel mode.

194. Both Kamikakai and Shimura disclose portable computers configurable between a plurality of display modes. Kamikakai does not explicitly disclose an easel mode. Shimura does, however, and expressly teaches the benefits of providing such a mode. As explained further below, a POSITA would have found it obvious to implement Kamikakai's configurable computer such that it included the easel mode taught by Shimura.

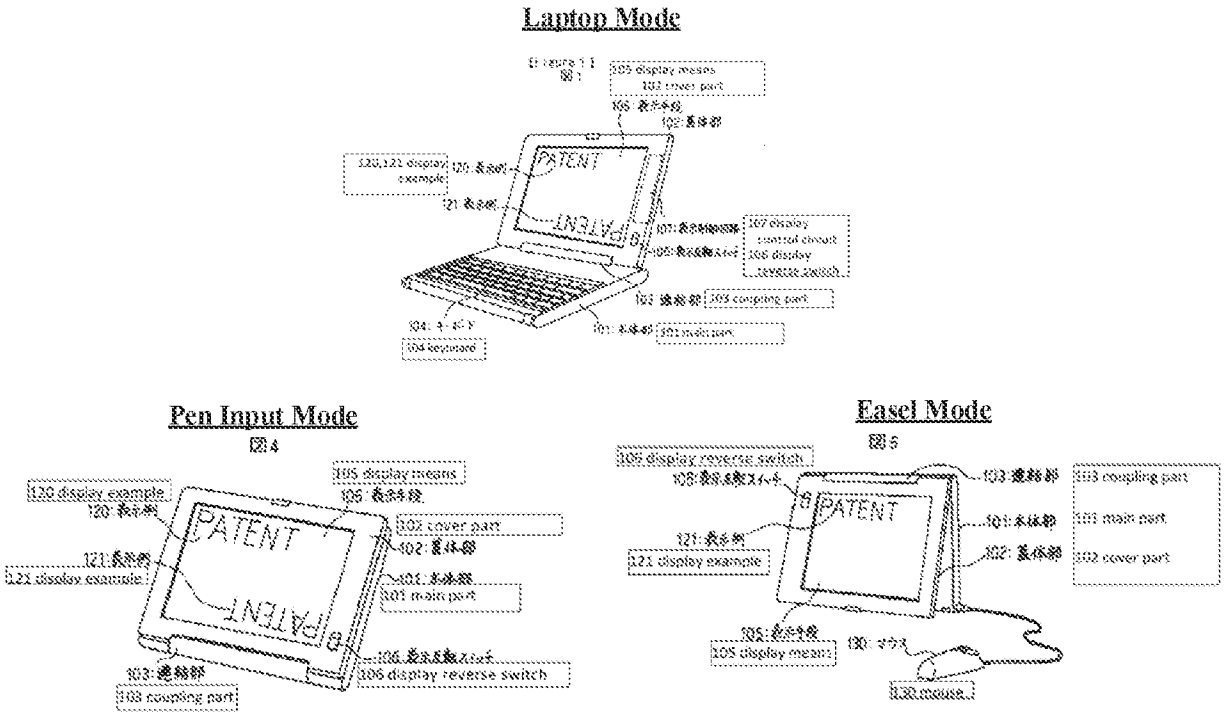
195. Kamikakai discloses a portable computer ("portable information processing apparatus 1") configurable between a plurality of display modes including a laptop mode (FIG. 3) and a frame mode (FIGS. 8–9). *E.g.*, Kamikakai, FIGS. 3, 9 (reproduced below).



Kamikakai, FIGS. 3, 9 (with annotations).

196. Shimura explicitly discloses the easel mode and provides explicit motivation for including this display mode, namely space savings. Specifically, Shimura discloses a portable computer ("personal computer") configurable between a plurality of display modes including a laptop mode (Figure 1), easel mode (Figure 5), and pen input mode (Figure 4). *E.g.*, Shimura,

Figures. 1, 4, 5 (reproduced below), ¶ [0014] (laptop mode), ¶ [0016] (pen input mode), ¶ [0017] (easel mode).

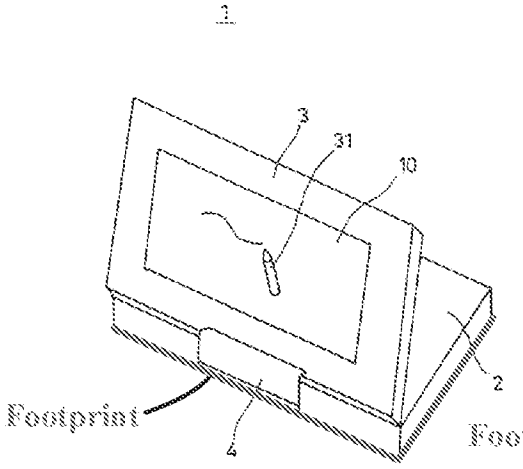


Shimura, Figures. 1, 4, and 5 (with annotations).

197. As explained by Shimura, "the area taken up by the computer on the table can be greatly reduced" in the easel mode. Shimura, ¶ [0017]. Thus, a POSITA would been motivated to ensure that Kamikakai's computer included an easel mode, since it provides a smaller footprint than Kamikakai's other display modes. Specifically, in all of Kamikakai's display modes, the footprint of the computer is at least as big as the perimeter of the base since the base is oriented roughly horizontally in all of the display modes. *E.g.*, Kamikakai, FIGS. 3, 7–9.

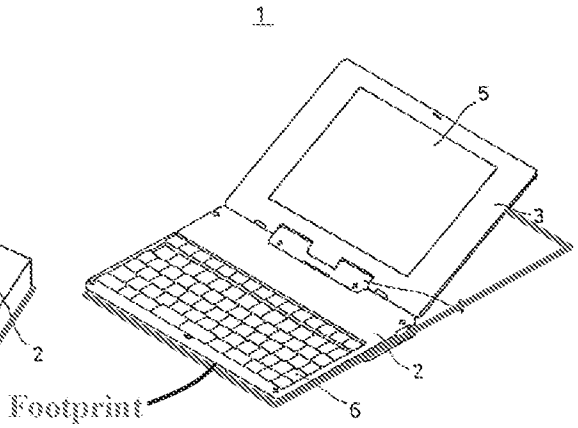
Kamikakai's Frame Mode

FIG. 9



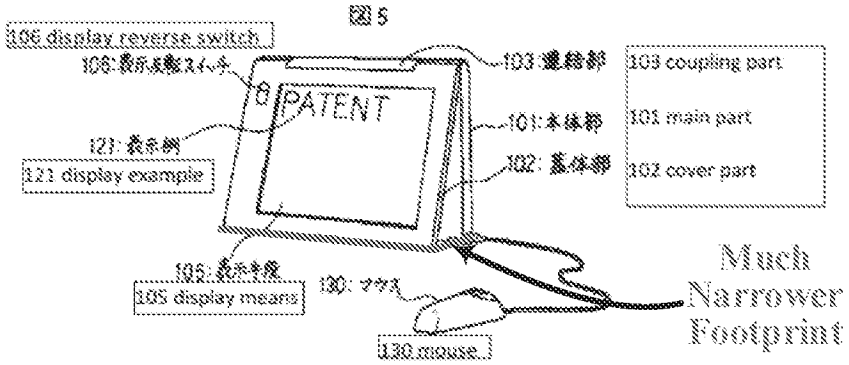
Kamikakai's Laptop Mode

FIG. 3



Kamikakai, FIGS. 3, 9 (with annotations).

Shimura's Easel Mode



Shimura, Figure 5 (with annotations).

198. However, as shown above in Figure 5 of Shimura, in easel mode, the footprint is much smaller than Kamikakai's other display modes because the computer is oriented vertically, such that the computer's footprint is only defined by the small angle between the display and base. As such, the footprint is much narrower in easel mode than it is in the frame mode or laptop mode. Thus, a POSITA would have been motivated to ensure that Kamikakai's computer can be

configured to this easel mode in order to conserve counter space and/or to ensure that a user is still able to use and place the computer on a table, even when space is limited.

199. Moreover, a POSITA would have looked to Shimura for motivation when modifying Kamikakai's device because of how similar Shimura's device is to Kamikakai's device. Not only are Shimura and Kamikakai's devices both laptops, but they are laptops that are openable by up to 360° via similar dual-axis hinge assemblies. Thus, given their level of similarity, a POSITA would have been motivated to share features between these two devices. As mentioned above, the easel mode would have been particularly obvious since Kamikakai's hinge assembly is capable of supporting that (and many other) positions. *E.g.*, Kamikakai, 3:52–64, 4:10–5:27.

200. A POSITA would have reasonably expected Kamikakai's portable computer to be capable of achieving the easel mode for at least the reason that the hinge assembly ("connection part 4") is strong enough to hold the display component ("display part 3") up against the force of gravity in the frame mode. *E.g.*, Kamikakai, 3:52–64, 4:10–5:27, FIGS. 8–9. Kamikakai confirms that the hinge assembly ("connection part 4") locks the base ("main body 2") and display component ("display part 3") at any arbitrary angle whenever a user stops actively turning them, due to the friction that exists between the components of the hinge assembly. *E.g.*, Kamikakai, 3:52–64, 4:10–5:27.

> When the user stops turning the main body **2** or stops turning the connection part **4** with respect to the main body **2**, the main body **2** or the connection part **4** stops turning due to the friction between the bearing member **23** and the rotary shaft **21**. An angle formed between the main body **2** and the connection part **4** is fixed to that at the time when the rotary manipulation force is released, and the main body **2** and the connection part **4** are supported at this angular position.

Kamikakai, 5:1–8 (discussing how the base ("main body 2") is locked in position relative to the hinge assembly ("connection part 4") when a user stops actively turning them relative to one another).

> When the user stops turning the display part **3** or stops turning the connection part **4** with respect to the main body **2**, the display part **3** or the connection part **4** stops turning due to the friction between the bearing member **26** and the rotary shaft **24**. An angle formed between the display part **3** and the connection part **4** is fixed to that at the time when the rotary manipulation force is released, and the display part **3** and the connection part **4** are supported at this angular position.

Kamikakai, 5:19–27 (discussing how the main display component ("display part 3") is locked in position relative to the hinge assembly ("connection part 4") when a user stops actively turning them relative to one another).

201. Aside from the obviousness of the claimed easel mode's physical configuration, it also would have been obvious to have inverted displayed content in this easel mode to ensure the content is presented right-side up to a user, since the display is inverted in easel mode relative to the laptop and frame modes. *See* element 10.6 in this Section (XI.A.).

202. For at least these reasons, a POSITA would have implemented the Kamikakai device (with its laptop and frame modes) to also include Shimura's easel mode wherein transitions between the plurality of display modes permit an operator to interact with a single display screen in each of the plurality of display modes.

203. Further, Requester submits that the claimed easel mode would have been obvious in view of Kamikakai alone. Specifically, this easel mode would have been an obvious design choice variation of Kamikakai's frame mode, since ***a user*** would have only had to rotate the entire device by approximately 90° from Kamikakai's frame mode to transition to the easel mode.

Kamikakai's main display component ("display part 3") and base ("main body 2") are at roughly the same relative angle in frame mode as in the claimed easel mode. To reach easel mode from Kamikakai's frame mode, a user need only turn the entire computer approximately 90° until the base and display rest on edge in a substantially vertical manner. Moroever, Kamikakai's laptop would support such an easel mode, since it can support this same base-display angle in frame mode, as well as any other arbitary rotary positions, as explained above. *E.g.*, Kamikakai, 3:52–64, 4:10–5:27.

204. The obviousness of this easel mode is further evidenced by the multitude of references disclosing this easel-mode like position. *See, e.g.*, Lane, FIG. 28; Välikangas, FIG. 4A; CN '170, FIG. 19; Shimura, Figure 5; Hisano, ¶¶ [0054], [0098], FIG. 9; Podwalny, 4:16–26, FIG. 4; Schweizer, 1:49–2:4, FIGS. 2, 4, 6. Thus, given how little is required to transition Kamikakai's computer from the frame mode to the easel mode, and given how well known this easel mode was in the art before the alleged priority date of the '844 patent, it would have been an obvious design choice variation to Kamikakai's existing display modes.

205. It also would have been obvious to a POSITA to have inverted displayed content when transitioning from easel mode to frame mode to ensure displayed content is presented right-side up to a user, given the numerous prior art references that 1) recognize the need to do so when changing the orientation of the display, and that 2) provide various means for doing so. *See, e.g.*, Lane's position-indicating mechanism 38 and associated software for automatically reorienting displayed content (5:23–6:2); Välikangas, Abstract; Shimura's manual reverse switch 106, Nobuchi's display changing position 7/17. The display orientation in frame mode also is the same orientation as would be presented in Kamikakai's existing laptop mode (the display is in roughly

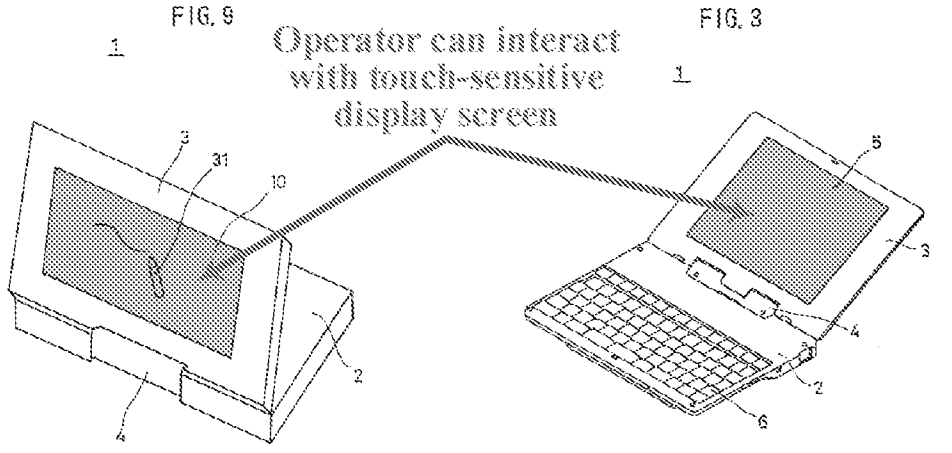
the same orientation with respect to gravity in both modes), making the content inversion when transitioning from easel to frame mode even more obvious.

The Kamikakai–Shimura computer permits an operator to interact with a single display screen in each of the plurality of display modes.

206. As can be seen from FIGS. 3, and 9, the Kamikakai device permits an operator to interact with a single display screen ("display panel 5") of the portable computer in each of the plurality of display modes since the display screen is accessible (faces the operator) in all of the display modes. *E.g.*, Kamikakai, FIGS. 3, 8, 9, 3:39–46, 5:48–6:13, 6:28–50, 7:4–18.

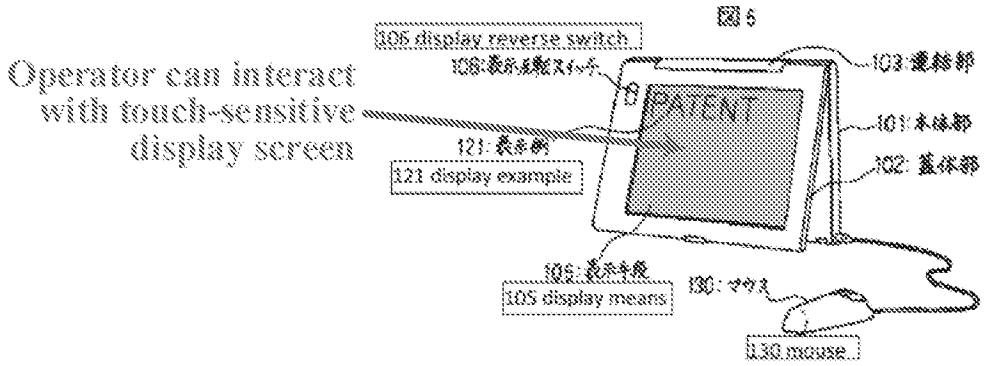
207. As can be seen from Figures 1, 4, and 5 above, an operator can interact with a single display screen ("display means 105") in each of the plurality of display modes. *E.g.*, Shimura, Figures. 1, 4, 5 (reproduced below), ¶ [0014] (laptop mode), ¶ [0016] (pen input mode), ¶ [0017] (easel mode).

Kamikakai's Frame Mode **Kamikakai's Laptop Mode**



Kamikakai, FIGS. 3, 9 (with annotations).

Shimura's Easel Mode



Shimura, Figure 5 (with annotations).

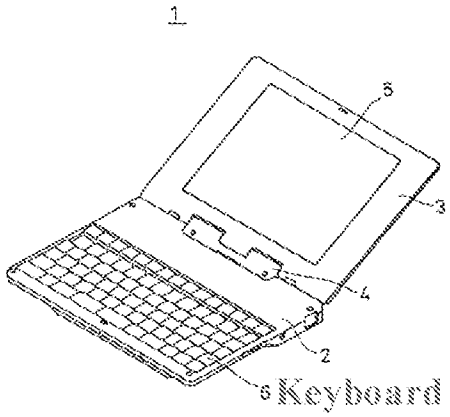
[10.2] a base including a keyboard;

208. Kamikakai discloses this limitation. Specifically, Kamikakai discloses that the portable computer ("portable information processing apparatus 1") comprises a base ("main body 2") including a keyboard ("keyboard 6"). *E.g.*, Kamikakai, 3:39-43 (reproduced below), FIG. 3 (reproduced below with annotation).

> As shown in FIGS. **3** through **5**, a portable information processing apparatus **1** generally includes a main body **2**, a display part **3** which can open and close with respect to the main body **2**, and a connection part **4**. The main body **2** includes a keyboard **6** for inputting data. On the other hand,

Kamikakai, 3:39-43.

FIG. 3



Kamikakai, FIG. 3 (with annotation).

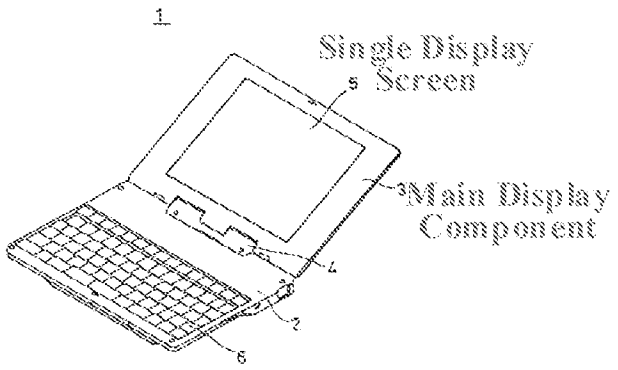
[10.3] a main display component rotatably coupled to the base and including the single display screen which displays content;

209. Kamikakai discloses this limitation. Specifically, Kamikakai discloses that the portable computer ("portable information processing apparatus 1") comprises a display component ("display part 3") including the single display screen ("display panel 5") that displays content. *E.g.*, Kamikakai, 3:43-46 (reproduced below), FIGS. 3, 9.

> includes a keyboard **6** for inputting data. On the other hand, the display part **3** includes a liquid crystal display panel **5**, and a pen input part **10** which is formed on the surface of the liquid crystal display panel **5**.

Kamikakai, 3:43-46.

FIG. 3



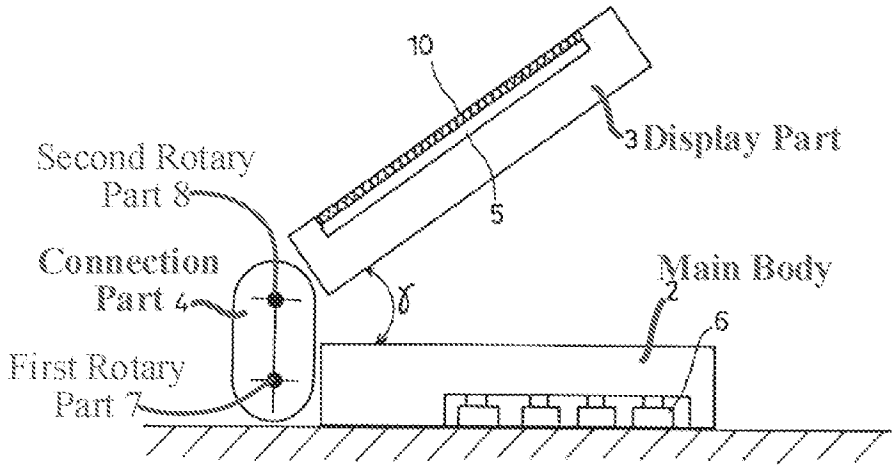
Kamikakai, FIG. 3 (with annotations).

210. Kamikakai's display component also is rotatably coupled to the base via a hinge assembly ("connection part 4"). *E.g.*, Kamikakai, 3:52-64, 4:10-42, FIG. 3, 5-9.

> The display part **3** and the main body **2** are connected via the connection part **4**. The connection part **4** is linked to related ends or edges, of the display part **3** and the main body **2** which confront each other in a folded or closed state of the display part **3**. The connection part **4** includes a first rotary part **7** and a second rotary part **8**. The first rotary part **7** is linked to the main body **2**, and enables turning of the main body **2** when a rotary manipulation force greater than or equal to a predetermined value is applied on the main body **2**. On the other hand, the second rotary part **8** is linked to the display part **3**, and enables turning of the display part **3** when a rotary manipulation force greater than or equal to a predetermined value is applied on the display part **3**.

Kamikakai, 3:52-64.

Annotated FIG. 8 of Kamikakai



Kamikakai, FIG. 8 (with annotations).

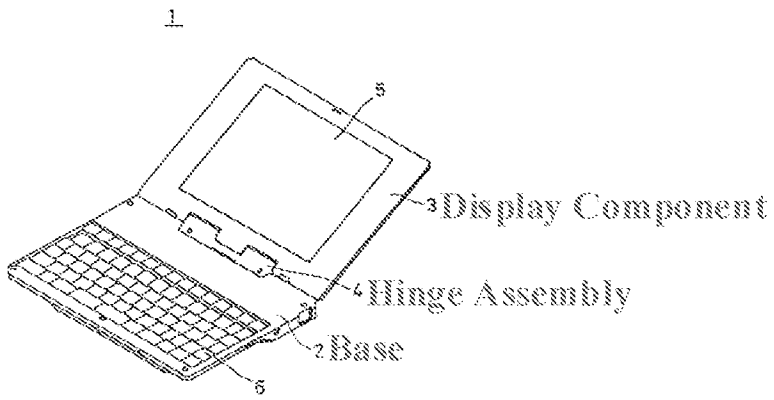
[10.4] a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode,
wherein the 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

211. Together, Kamikakai and Shimura teach this limitation.

A Hinge Assembly Disposed At Least Partially Within the Base and Main Display

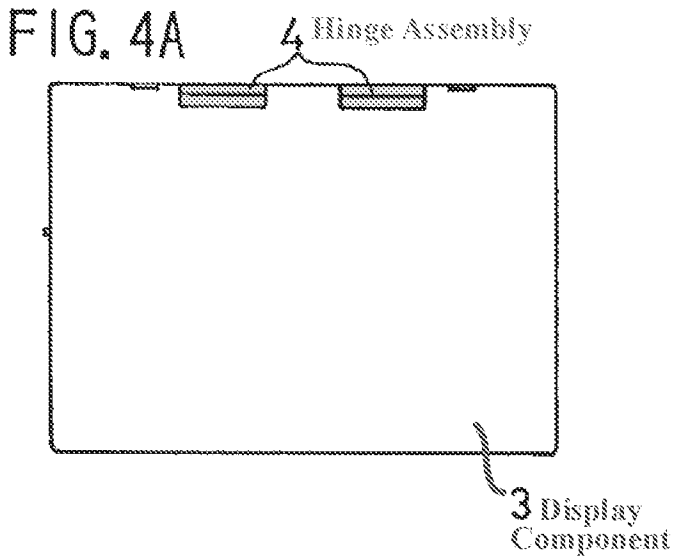
212. Kamikakai discloses that the portable computer comprises a hinge assembly ("connection part 4"). As shown in FIGS. 3, 4A, and 4F of Kamikakai, this hinge assembly is disposed at least partially within the base ("main body 2") and the main display component ("display part 3").

FIG. 3



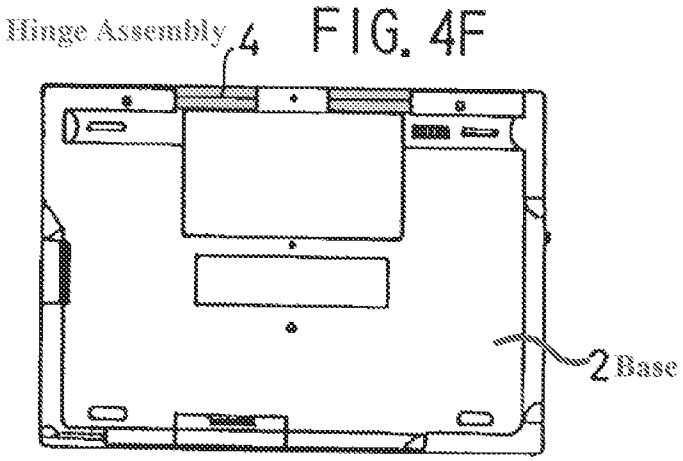
Kamikakai, FIG. 3 (with annotations).

Top View of Kamikakai's Computer



Kamikakai, FIG. 4A (with annotations).

Bottom View of Kamikakai's Computer

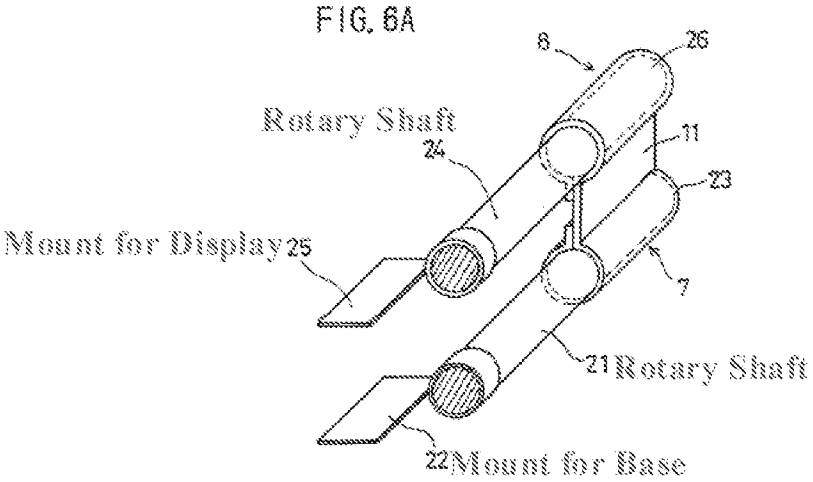


Kamikakai, FIG. 4F (with annotations).

213. As shown in FIGS. 4A and 4F, the hinge assembly is clearly disposed at least partially within the base and the display component, as the base and display component surround the hinge assembly on three sides.

214. Kamikakai's Description of the Preferred Embodiments confirms that the hinge assembly is at least partially disposed within the base ("main body 2") since "[a] part of the [hinge assembly's] rotary shaft 21 is mounted on the main body 2 via a mounting part 22." Kamikakai, 4:11-12. Kamikakai's Description of the Preferred Embodiments also confirms that the hinge assembly is at least partially disposed within the main display component ("display part 3") since "[a] part of the [hinge assembly's] rotary shaft 24 is mounted on the display part 3 via a mounting part 25." Kamikakai, 4:28-29.

Kamikakai's Hinge Assembly



Kamikakai, FIG. 6A (with annotations).

The Hinge Assembly Defines an Axis of Rotation About Which Both the Base and the Main Display Component are Rotatable

215. Although the claim limitation recites "***an*** axis of rotation" ('844 Patent, 18:38-39), in district court litigation, Patent Owner contends the recited "hinge assembly …" reads on the accused product's dual-axis hinge assembly. First Amended Complaint (Ex. 1032), ¶ 155 (p. 75). Assuming the broadest reasonable interpretation (BRI) of this claim limitation encompasses Patent Owner's advanced construction in district court litigation, then Kamikakai's dual-hinge assembly satisfies this claim limitation. Specifically, Kamikakai's hinge assembly defines an axis of rotation (the axis defined by the second rotary part 8) about which the main display component is rotatable relative to the hinge assembly ("connection part 4") and defines an axis of rotation (the axis defined by first rotary part 7) about which the base is rotatable relative to the hinge assembly. *E.g.*, Kamikakai, 3:52-64, FIGS. 5-9.

> The display part **3** and the main body **2** are connected via the connection part **4**. The connection part **4** is linked to related ends or edges, of the display part **3** and the main body **2** which confront each other in a folded or closed state of the display part **3**. The connection part **4** includes a first rotary part **7** and a second rotary part **8**. The first rotary part **7** is linked to the main body **2**, and enables turning of the main body **2** when a rotary manipulation force greater than or equal to a predetermined value is applied on the main body **2**. On the other hand, the second rotary part **8** is linked to the display part **3**, and enables turning of the display part **3** when a rotary manipulation force greater than or equal to a predetermined value is applied on the display part **3**.

Kamikakai, 3:52-64.

216. Thus, under Patent Owner's apparent construction of the recited "hinge assembly defines an axis of rotation about which the base and main display component rotate relative to one another," this element is met by Kamikakai's hinge assembly. That is, if Patent Owner attempts to read this claim limitation so broadly as to cover the dual-axis hinge assembly of Lenovo's accused ThinkPad X1 Yoga product, then Kamikakai's similar dual-axis hinge assembly satisfies the claim limitation.

The Portable Computer is Rotatable About the Axis of Rotation to Transition Between At Least the Laptop and Easel Modes

217. As discussed above for element 10.1, Kamikakai's display component and base are rotatable about the axes of rotation of Kamikakai's hinge assembly hinge to transition Kamikakai's computer to any arbitrary rotary angle between 0° and 360°, which includes Kamikakai's laptop and frame modes, and, when implementing Kamikakai's computer with Shimura's easel mode, inherently includes this easel mode. *E.g.*, Kamikakai, 3:52-64, 4:10-5:27. That is, easel mode takes on just one of these arbitrary rotary angles to which Kamikakai's display component and base can rotate. According the '844 Patent, this angle is the same as and/or similar to the angle in frame mode. '844 Patent, 16:5-8. Thus, by transitioning to the frame mode, Kamikakai's display

component and base have effectively rotated about the axes of rotation to the easel mode's angle; all that is required to transition to easel mode is to turn the entire computer until it is in the upright, inverted "V" configuration of the claimed easel mode, as described above for element 10.1.

The Operator Can Operate the Computer While Viewing the Single Display Screen in Each of the Plurality of Display Modes

218. Further, the operator is able to operate the portable computer while viewing the single display screen in each of the plurality of display modes. For example, the operator is able to utilize the keyboard to operate the portable computer in the laptop mode (Kamikakai, FIG. 3) and is able to utilize the touch-sensitive pen input part 10 to operate the portable computer in the frame mode (*Id.*, FIGS. 8-9). *E.g.*, *Id.*, 3:42-43, 6:43-50.

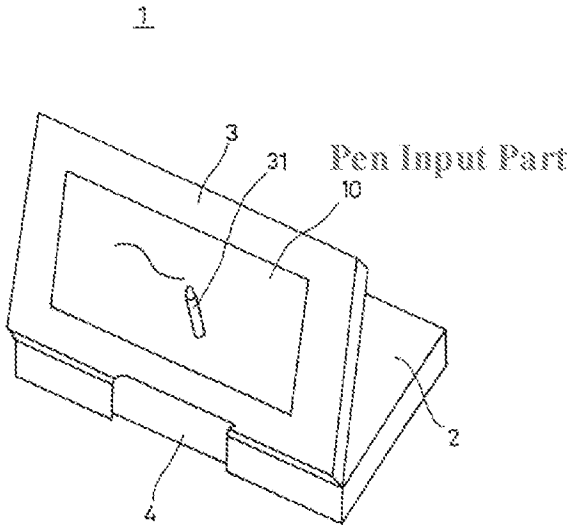
> main body **2**, and a connection part **4**. The main body **2** includes a keyboard **6** for inputting data. On the other hand,

Kamikakai, 3:42-43.

> **8**. In addition, the pen input part **10** is easily accessible by the user, because the area occupied by the portable information processing apparatus **1** in this state is not much different from that in the folded state of the display part **3** and the portable information processing apparatus **1** can easily be maintained in a stable state. Accordingly, the user can easily input data from the pen input part **10** by manipulating a pen (not shown) with respect to the pen input part.

Kamikakai, 6:43-50.

FIG. 9



Kamikakai, FIG. 9 (with annotations).

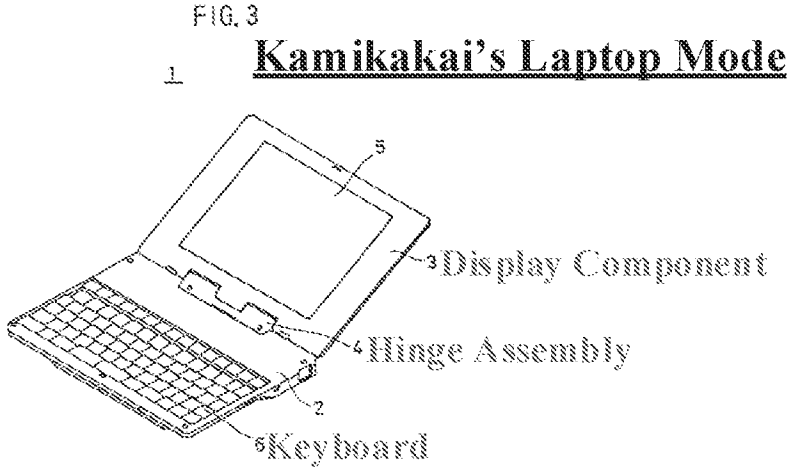
219. A POSITA also would have understood that Kamikakai, as modified in view of Shimura, also "allows the operator to operate the portable computer while viewing the single display screen" in easel mode, since Shimura's screen is accessible in easel mode. That is, when implementing Kamikakai's computer with Shimura's easel mode, Kamikakai's touch screen ("pen input part 10") would be accessible to an operator in the easel mode just like Shimura's is in easel mode. Further, an operator could operate Kamikakai's computer in the easel mode by touching Kamikakai's touch screen, just like they would in Kamikakai's frame mode. Additionally, it would have been obvious to a POSITA to include an external mouse like Shimura's external mouse 130 to provide another way for a user to operate the Kamikakai computer in the easel mode.

[10.5] 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;

220. Together, Kamikakai and Shimura teach this limitation. As explained above for element 10.1, Kamikakai teaches the laptop mode.

A Laptop Mode with the Main Display Oriented Towards User and the Keyboard Oriented to Receive Input from User

221. As shown in FIG. 3 of Kamikakai below, Kamikakai's main display component is oriented towards the user and the keyboard is oriented to receive input from the user in the laptop mode.



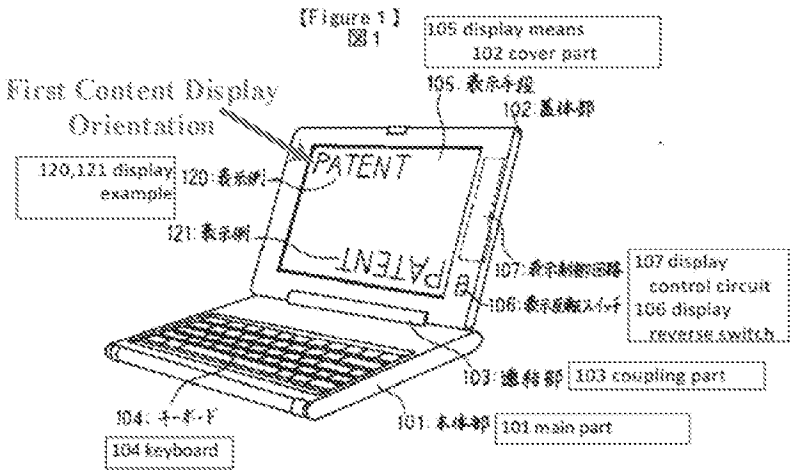
Kamikakai, FIG. 3 (with annotations).

The Laptop Mode is Configured to Display a First Content Mode Having a First Content Display Orientation

222. While Kamikakai does not explicitly disclose its laptop mode displaying a first content mode having a first content display orientation, a POSITA would have understood that Kamikakai necessarily displays content in the laptop mode, and does so in a certain orientation (e.g., one in which content is presented right-side up to an operator). Otherwise, Kamikakai's display would effectively be useless.

223. Moreover, Shimura explicitly discloses a first content mode with a first content orientation. As shown in Figure 1 of Shimura below, Shimura's laptop mode is configured to display a first content mode having a first content display orientation ("normal mode") as indicated by display example 120. *See also*, Shimura, ¶ [0012].

Shimura's Laptop Mode



Shimura, FIG. 1 (with annotations).

224. Thus, a POSITA would have been motivated to implement Kamikakai's laptop mode to display content using a first display orientation so that the content is presented right-side up to an operator, just as expressly shown in Shimura. On its face, the claim limitation does not recite that the first content mode requires anything more than this first content display orientation. Thus, Kamiakai and Shimura satisfy it. However, to the extent Patent Owner argues that this claim limitation somehow requires that the first content mode include or display a particular *type* of content, this would have been obvious in further view of Ledbetter, as explained below in Section XII.A., *see also,* Ledbetter, ¶¶ [0055-57].

225. Thus, Kamikakai, as implemented with Shimura's easel mode, includes a laptop mode 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.

[10.6] 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

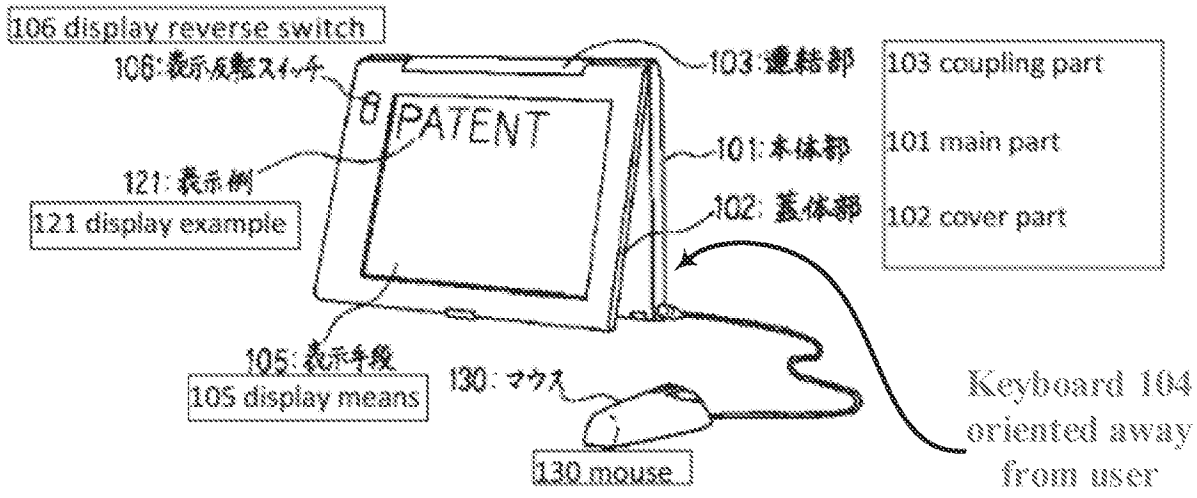
component oriented towards the user and the keyboard oriented away from the user, wherein the first and second content display orientations are 180 degrees relative to each other, and wherein the portable computer is operable in the easel mode to enable the user to interact with displayed content without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

226. Together, Kamikakai and Shimura teach this limitation. As discussed above for element 10.1, a POSITA would have implemented the Kamikakai configurable computer with an easel mode as taught by Shimura.

An Easel Mode with the Main Display Oriented Towards the User and the Keyboard Oriented Away from the User such that the Portable Computer is Operable in the Easel Mode to Enable the User to Interact with Displayed Content Without Interacting with the Keyboard

227. As shown in Figure 5 of Shimura below, in easel mode the display is oriented towards (i.e., is facing) the user and the keyboard is oriented away from the operator, on the backside of the computer.

Annotated FIG. 5 of Shimura



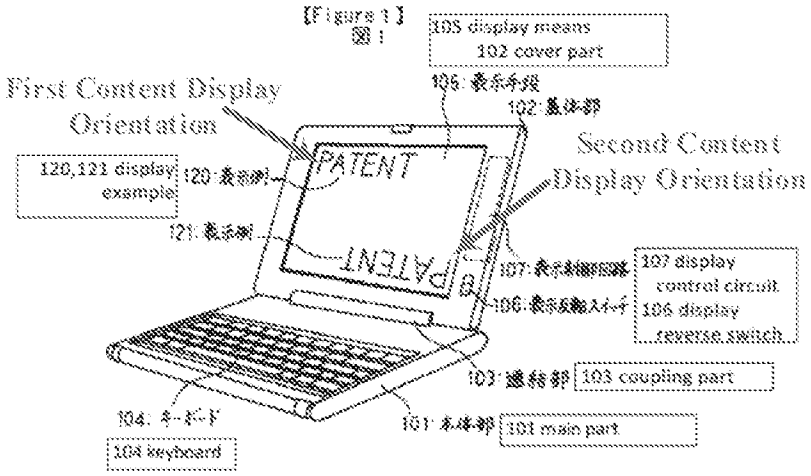
Shimura, FIG. 5 (with annotations).

228. Finally, when implemented with the easel mode, Kamikakai's computer would enable the user to interact with displayed content in this easel mode without interacting with the

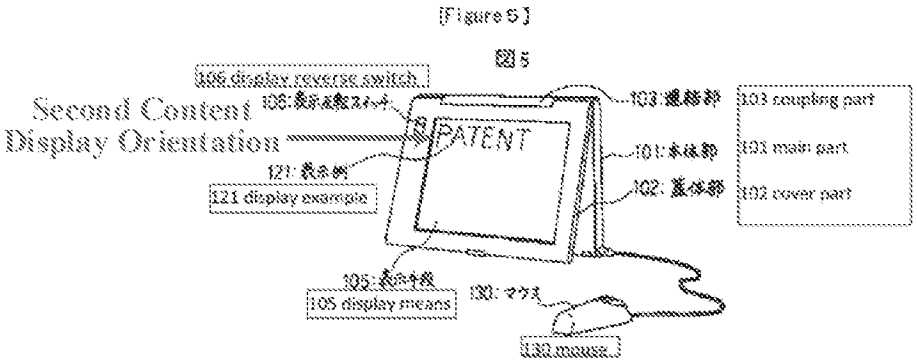
keyboard, either through Kamikakai's touch screen ("pen input part 10") or Shimura's mouse, as explained above for element 10.4 in this Section (XI.A).

The Easel Mode is Configured to Display a Second Content Mode Having a Second Content Display Orientation that is Inverted (Rotated 180°) Relative to the First Content Display Orientation

229. Shimura also discloses that its easel mode is configured to display a second content mode having a second content display orientation ("reverse mode"), as shown by display example 121 in Figure 5. Specifically, in reverse mode, the displayed content "can be rotated 180°" with respect to the first content display orientation ("normal mode"). *E.g.*, Shimura, ¶¶ [0012], [0017].



Shimura, FIG. 1 (with annotations).



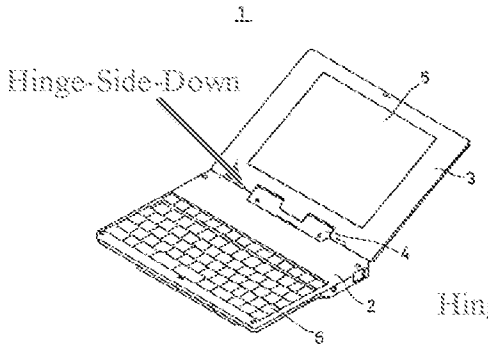
Shimura, FIG. 5 (with annotations).

230. Thus, when implementing an easel mode in Kamikakai's computer, a POSITA would have been motivated to similarly display content in Shimura's second content display orientation in the easel mode to ensure that it is presented right-side up to an operator, since the display would be upside down in easel mode relative to Kamikakai's other modes, just like it is for Shimura's computer. Specifically, Kamikakai's computer would be hinge-side-up in easel mode, just like in Shimura's easel mode, while Kamikakai's computer is hinge-side-down in laptop and frame modes, as illustrated in Kamikakai's annotated drawings below.

Kamikakai's Display Component is Hinge-Side-Down in Laptop and Frame Modes

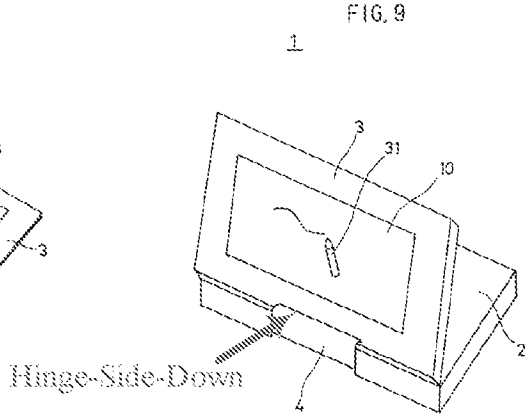
Kamikakai's Laptop Mode

FIG. 3



Kamikakai's Frame Mode

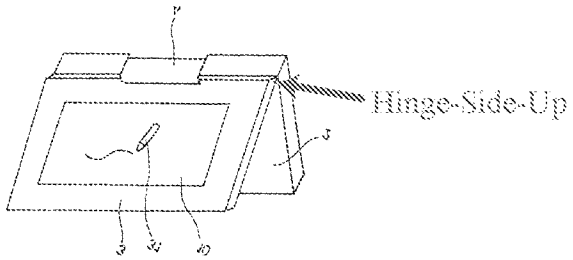
FIG. 9



Kamikakai, FIGS. 3, 9 (with annotations).

Kamikakai's Display Component Would be Hinge-Side-Up in Easel Mode

Kamikakai's Easel Mode



Kamikakai, FIG. 9 (rotated, with annotations).

231. Thus, because the main display component is inverted in easel mode, a POSITA would have understood that content would need to be displayed in Shimura's inverted second content orientation in order to be presented right-side-up to a user in easel mode.

232. Moreover, even absent Shimura's express teaching on inverting content, such content inversion would have been obvious to a POSITA given the state of the prior art. Specifically, before the '844 Patent's alleged priority date, it was very well known in the art to rotate content based on the orientation of a display to ensure the content is displayed right-side up to a user. For example, Välikangas, Hisano, Tsuji, Schweizer, and Shigeo all disclose inverting displayed content (i.e., rotating/reorienting it by 180°) when opening a display by more than 180° to a position where it is upside down relative to a conventional laptop mode. *See, e.g.*, Välikangas, Abstract, p. 5; Hisano, ¶¶ [0098-99]; Tsuji, ¶¶ [0049], [0055], [0059-61], [0074], FIG. 14; Schweizer, 5:23-35; Shigeo, Abstract, ¶¶ [0004], [0014-16], FIGS. 2, 4(b). In fact, Schweizer confirms that this kind of content reorienting involves "no inventive activity." Schweizer, 5:20-26. These references even teach that such content inversion can be done automatically using sensors, such as using hinge angle sensors that measure the angle between the base and the display

and/or by using accelerometers. *See, e.g.*, Hisano, ¶¶ [0098-99]; Tsuji, ¶¶ [0049], [0055], [0059-61], [0074], FIG. 14; Schweizer, 5:23-35; Shigeo, Abstract, ¶¶ [0004], [0014-16], FIGS. 2, 4(b).

233. Moreover, the '844 Patent itself acknowledges that it was known to use accelerometers (albeit to transition between landscape and portrait orientations). '844 Patent, 8:44-48. The Background section of one of Apple Inc.'s provisional patent applications that pre-dates the '844 Patent's alleged priority date by more than nine months, confirms that it was well known to "use one or more accelerometers to automatically adjust the orientation of the information on the screen." Ording, ¶ [0007].

234. Thus, given how well-known this content reorienting was in the art, it would have been obvious to a POSITA to have provided a means for inverting the content in Kamikakai's computer when implementing Shimura's easel mode to ensure the content is present to a user right-side up in the display's upside-down configuration in easel mode. Further, a POSITA would have been able to implement this content inversion without any undue experimentation given that it would have been well within the skill of a POSITA at the alleged priority date, as evidenced by the multitude of references disclosing such content reorienting.

235. On its face, the claim limitation does not recite that the first and second content modes differ other than that the content display orientations differ by 180 degrees. Thus, Kamikakai and Shimura satisfy it. To the extent patent owner argues that the first and second content modes somehow require different *types* of content (such that the claim requires that the laptop and easel modes be configured to display different content), the claim limitation would still be obvious in further view of Ledbetter because, as explained in greater detail below in Section XII.A., Ledbetter teaches displaying different *types* of content for different device configurations. *E.g., see* Ledbetter, ¶¶ [0055-57].

236. Thus, Kamikakai, as implemented in view of Shimura's easel mode teachings, would have included an easel mode 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.

[10.7] a navigation control accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen

237. In District Court litigation, Patent Owner contends the recited "navigation control" reads on the accused product's touch screen. First Amended Complaint (Ex. 1032), ¶ 160 (pp. 77-78). Assuming the broadest reasonable interpretation (BRI) of this claim limitation encompasses Patent Owner's advanced construction in District Court litigation, then Kamikakai's pen input part 10 satisfies this claim limitation since it too is a touch screen that is accessible in each of the plurality of Kamikakai's display modes. *See, e.g., supra,* elements 10.4 and 10.6 of this Section (XI.A). Moreover, both Kamikakai and Shimura's touch-sensitive display screens (pen input part 10 and display means 105, respectively) are accessible in each of their plurality of display modes—collectively, their laptop modes, Shimura's easel mode, Kamikakai's frame mode, and Shimura's pen input mode. *E.g.*, Shimura, Figures 1, 4-5, Abstract. ¶¶ [0004-5], [0011], [0016]; Kamikakai, 2:49-54, 3:21-23, 6:43-7:18, FIGS. 3, 8-9.

238. While neither Kamikakai nor Shimura explicitly disclose that their touch-sensitive screens are configured to permit a user to manipulate operating parameters and content displayed on the single display screen, a POSITA would have understood that, being input devices, these

touch-sensitive screens would have been configured to permit a user to manipulate displayed content and operating parameters, since this is what input devices did before the alleged priority date and continue to do. The '844 Patent itself acknowledges that then-existing "portable computers [were] able to accept user inputs via a touch screen." '844 Patent, 1:32-33; *also see, e.g.,* Pogue, 583-586 (explaining how a user can navigate documents, manipulate data and adjust settings via the touch screen).

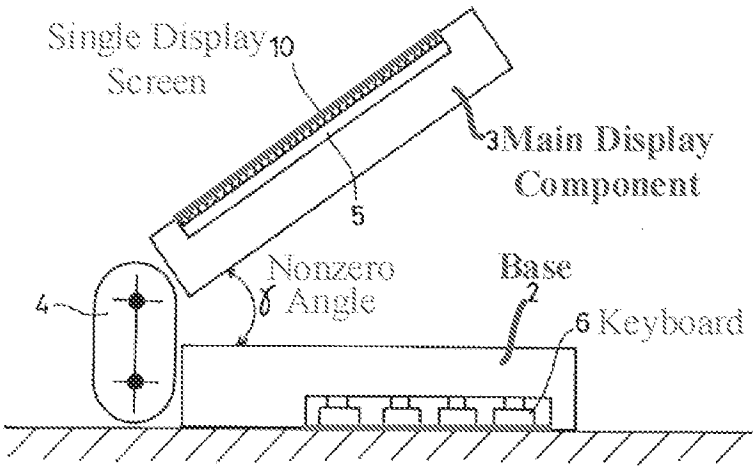
239. A POSITA would have expected that interacting with (i.e., touching) this type of input device (a touch-sensitive screen) would have changed the displayed content just like it would have with any other type of input device (e.g., mouse, keyboard, scroll wheel, etc.). For example, whether selecting content, navigating forward and/or backward (e.g., on a web page), and/or opening and/or closing a window or application with a touch-sensitive screen or another input device, a POSITA would have understood that using any input device to perform these actions would have caused the computer to change the displayed content (e.g., to open or close a file, window, or application, to go back to a previous web page or go forward to a new one, etc.). Moreover, because it was well known for user to be able to adjust operating parameters—like volume (see, e.g., Nishiyama, 4:27-29, 5:51-56)—via an input device, it would have been obvious to a POSITA for Kamikakai's and Shimura's computers to have enabled a user to adjust operating parameters via their touch-sensitive screens.

240. Thus, under Patent Owner's apparent construction of the recited "navigation control" this element is met by Kamikakai's pen input part 10. That is, if Patent Owner attempts to read this claim limitation so broadly as to cover the touch-sensitive screen of Lenovo's accused ThinkPad X1 Yoga product, then Kamikakai and/or Shimura's similar touch-sensitive screens satisfy the claim limitation.

[10.8] wherein the plurality of modes includes 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.

241. Kamikakai discloses this limitation. As shown in FIG. 8 of Kamikakai, the base ("main body 2") contacts a substantially horizontal surface with the keyboard ("keyboard 6") facing down towards the surface. The main display component ("display part 3") is oriented towards the operator with the single display screen ("pen input part 10") facing up. In addition, and as required by the Board in the non-instituted IPR proceeding, Kamikakai's main display component is at a nonzero angle relative to the base.

Kamikakai's Frame Mode



Kamikakai, FIG. 8 (with annotations).

> In FIG. **8**, the main body **2** is set up on the flat set-up surface with the keyboard **6** facing down, and the display part **3** and the main body **2** form an angle within an angular range of 270° to 360° in this, state. Hence, an angle γ formed between the surface **3***a* of the display part **3**, opposite to the surface **3***b* provided with the liquid crystal display panel **5** and the pen input part **10**, and the surface **2***a* of the main body **2**, opposite to the surface **2***b* provided with the keyboard **6**, is within an angular range of 0° to 90°.

Kamikakai, 6:27-36.

B. Claim 16

[16.1] The portable computer of claim 10, wherein an operating display mode is selected from the plurality of display modes based on a physical orientation of the portable computer.

242. To the extent Patent Owner argues that the "operating display mode" is a content display orientation, Kamikakai and Shimura satisfy the claim, as Shimura teaches the elements added to claim 10 by this dependent claim. Specifically, Shimura discloses that a display orientation is selected (by an operator) by moving the display reverse switch 106. *E.g.*, Shimura, ¶ [0012].

> main part 101. Meanwhile, coupling part 103 is fastened by a hinge and one end of cover part 102. Display reverse switch 106 is a switch which is operated by the user and can be placed in two states, a normal state and a reverse state. This state is inputted to display control circuit 107.
>
> * * *
>
> 106. This means that when display reverse switch 106 is in normal mode, the display is carried out as indicated in display example 120. Meanwhile, when display reverse switch 106 is in reverse mode, it can be turned upside
>
> * * *
>
> down as indicated in display example 121, that is, it can be rotated 180° centered on the vertical line of the display surface.

Shimura, ¶ [0012] (with portions omitted for conciseness).

243. A POSITA would have understood that a user would move this display reverse switch based on the physical orientation of Shimura's computer to ensure the content is displayed right-side up. For example, when Shimura's computer is physically oriented in the laptop mode shown in Figure 1, a user may place the display reverse switch 106 in the normal ("natural") mode. *E.g.*, Shimura, ¶ [0014]. However, when the computer is physically oriented in the easel mode

shown in Figure 5, a user sets the display reverse switch 106 to the reverse mode so that the content is rotated 180° relative to the laptop mode and is presented right-side up. *E.g.*, Shimura, ¶ [0017].

244. Thus, a POSITA would have been motivated to include a similar reverse switch in Kamikakai's computer so that a user could always ensure the content is displayed right-side up, depending on the physical orientation of the computer.

245. Additionally or alternatively, given how well known it was in the art to automatically reorient content based on the physical orientation of a computer, such as by using an accelerometer, a POSITA would have found it obvious to have included software in Kamikakai's computer configured to select an operating display mode based on feedback from an accelerometer or other sensor that provides an indication of the physical orientation of the computer. *See, e.g.*, Lane, 5:23-6:3; Hisano, ¶¶ [0098-99]; Tsuji, ¶¶ [0049], [0055], [0059-61], [0074], FIG. 14; Schweizer, 5:23-35; Shigeo, Abstract, ¶¶ [0004], [0014-16], FIGS. 2, 4(b).

XII. GROUND 4: KAMIKAKAI, SHIMURA, HISANO, AND LEDBETTER RENDER OBVIOUS CLAIMS 10 AND 16 OF THE '844 PATENT

246. To the extent Patent Owner argues that claims 10 and 16 somehow require *automatic* content reorienting and that the two different content modes require display of *different* content, those claims would have been obvious further in view of Hisano and Ledbetter.

247. ***A POSITA would have found it obvious to implement the Kamikakai-Shimura computer to automatically reorient content as taught by Hisano and to present different content modes as taught by Ledbetter.*** As explained above, a POSITA would have naturally implemented the Kamikakai configurable device with an easel mode as taught by Shimura. Hisano, in turn, teaches automatically reorienting content based on the display mode. *E.g., see* Hisano, FIGS. 1, 9, ¶¶ [0098–100].

248. ***With respect to Hisano,*** by 2008, a POSITA would have been motivated to include a sensor, like Hisano's gravity sensor, in Kamikakai's laptop to make the device easier to use, rather than rely solely on Shimura's manual switch from nearly fifteen years earlier. Specifically, by automating the content inversion, the operator would no longer have to manually flip Shimura's display reverse switch 106 every time they transition to and from the easel mode, thereby improving the user experience and reducing annoyance to the user.

249. A POSITA also would have reasonably expected to succeed in implementing Kamikakai's computer with Hisano's gravity sensor and associated content inversion software to automatically invert displayed content when transitioning to and from easel mode. For example, a POSITA would have understood that Hisano's gravity sensor could have been included in Kamikakai's display component to provide an indication of the orientation of the display component relative to the direction of gravity. *E.g.*, Hisano, ¶ [0099].

250. Thus, when implemented in Kamikakai's display component, Hisano's gravity sensor would sense the inversion of Kamikakai's display component when it transitions to and from easel mode and would have provided an indication of this change in the orientation of the display component to Kamikakai's processor. Based on this feedback, Kamikakai's processor would invert the displayed content when transitioning to and from easel mode to ensure displayed content is presented right-side-up to the user.

251. ***With respect to Ledbetter,*** Ledbetter teaches that its computer ("computer system 120") is configured to display various content modes depending on the physical positioning of its main display component ("display monitor"), because some modes may be better suited for particular content than others. *E.g.*, Ledbetter, ¶¶ [0023], [0055–57]. Thus, based on Ledbetter's teachings, a POSITA would have been motivated to display different content modes in the laptop

and easel modes. Specifically, a POSITA would have been motivated to display a first mode of content (*e.g.*, Ledbetter's shortcuts and other information used for working/productivity) on Kamikakai's main display component when in the laptop mode, since, as recognized by Ledbetter, modes like Kamikakai's laptop mode and Ledbetter's workstation mode (where the display component is substantially vertical or tilted slightly backwards, and the keyboard is accessible) may be optimized/best suited for working/productivity. Similarly, a POSITA would have been motivated to display a second mode of content (*e.g.*, Ledbetter's media player) on Kamikakai's display in the easel mode, since, as recognized by Ledbetter, modes like Shimura's easel mode and Ledbetter's media consumption mode may be optimized/best suited for watching videos. *E.g.*, Ledbetter, ¶¶ [0031], [0057].

252. A POSITA would have reasonably expected to succeed in implementing these different content modes without any undue experimentation as they would have required only minor software modifications using simple computer code that was well within the skill of a POSITA. For example, the code would have needed only to instruct the processor of the Kamikakai-Shimura computer to load programs/applications for working/productivity (e.g., word processor) when it detects the Kamikakai-Shimura computer is transitioning to, or has entered, the laptop mode, and to load programs/applications for media consumption (e.g., media player) when it detects the Kamikakai-Shimura computer is transitioning to, or has entered, the easel mode. The fact that the '844 Patent itself provides no express teaching on how to automatically load mode-specific content confirms that this would have been well within the skill of a POSITA to implement without any undue experimentation. *See, e.g.*, '844 Patent, 13:64–14:13 (generally discussing changing the displayed content when transitioning from laptop to easel mode, without providing any instruction on how to do so).

A. **Claim 10**

[10.1] 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 permit an operator to interact with a single display screen in each of the plurality of display modes, the portable computer comprising:

253. The Kamikakai-Shimura combination teaches this limitation for at least the reasons provided above in Section XI.A.

[10.2] a base including a keyboard;

254. Kamikakai discloses this limitation for at least the reasons provided above in Section XI.A.

[10.3] a main display component rotatably coupled to the base and including the single display screen which displays content;

255. Kamikakai discloses this limitation for at least the reasons provided above in Section XI.A.

[10.4] a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode,

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

256. The Kamikakai-Shimura combination teaches this limitation for at least the reasons provided above in Section XI.A.

[10.5] 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;

257. As explained above in Section XI.A., Kamikakai and Shimura teach this limitation. Specifically, Kamikakai teaches the laptop mode and Shimura teaches the different display orientations. To the extent Patent Owner argues that the first and second content modes require displaying different modes of content (e.g., media player vs. web content vs. email vs. programs such as word processor) to the user, Ledbetter teaches this.

258. Specifically, Ledbetter teaches that its computer ("computer system 120") is configured to display various content modes depending on the physical positioning of its main display component ("display monitor"). *E.g.*, Ledbetter, ¶¶ [0023], [0055-57]. For example, Ledbetter discloses displaying "media player software," "a touch-screen shell program configured to provide convenient access to walk-up types of information (*e.g.*, weather, messages, the internet and so forth), and "shortcuts and other information used for working/productivity." Ledbetter, ¶ [0057]. A POSITA would understand these to constitute the claimed content modes, since they are the same and/or similar kinds of content modes discussed by the '844 Patent itself. For example, the '844 patent states that the modes of content can include a media player mode that loads a media player, a connect mode that loads email, instant messaging, etc., a web mode that provides access to the internet, and an application mode that provides access to applications or programs for working/productivity, such as a word processor.

> examples discussed below. According to one example, the modes of content **172** accessible via the home screen **170** may include "media" **172***a*, "connect" **172***b*, "web" **172***c*, "applications" **172***d*, and "channels" **172***e*. Using the map user interface, information, programs, features and applications may be grouped into the various modes of content **172**. By selecting any mode of content **172**, for example, by using the scroll wheel **132** and/or navigation buttons **166**, **168**, as discussed further below, the user may access the content organized within that mode. For example, the media mode **172***a* may provide access to a medial player to play, view, search and organize media such as music, video, photos, etc. The connect mode **172***b* may provide access to features such as, for example, email, voice-over-IP, instant messaging, etc., and the web mode **172***c* may provide access to internet browsing and searching. The application mode **172***d* may provide access to, for example, computer applications or programs, such as word processor, spreadsheet, calculator, etc. In one example, these applications or programs may be provided as web-based services rather than programs or applications residing on the portable computer **100**. The channels mode

'844 Patent, 11:35-55.

259. Further, Ledbetter teaches a display mode ("workstation mode") that is very similar to the claimed laptop mode, and specifically teaches displaying a first content mode ("typical shortcuts and other information used for working/productivity") in the laptop-like mode ("workstation mode"). *E.g.*, Ledbetter, ¶ [0057].

Ledbetter's Workstation Mode

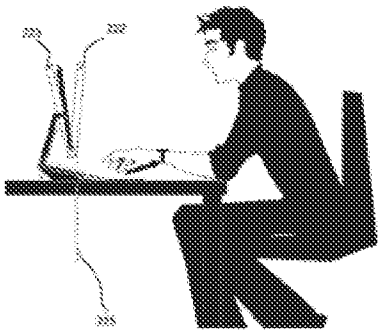


FIG. 2

Ledbetter, FIG. 2 (with annotations).

> [0008] FIG. 2 is a representation of a workstation mode in which a monitor is substantially upright and positioned to provide access to input devices.

Ledbetter, ¶ [0008].

260. Ledbetter's workstation mode is akin to the claimed laptop mode because, like in the claimed laptop mode, Ledbetter's display faces an operator and the keyboard is accessible for use in the workstation mode. *E.g.*, Ledbetter, Ledbetter ¶¶ [0027-28].

> [0027] FIG. 2 provides an example of a workstation mode, such as in a position with the monitor having a backward tilt angle from −5 degrees (dashed box 222) to +15 degrees (dashed box 223) from vertical (dashed line 225), although another range such as plus or minus fifteen degrees or more is also configurable. The actual angle may be user configurable; for example, the user may set up the mechanism such that the arm has a stop when the monitor is at a backward tilt angle of +10 degrees to vertical.
>
> [0028] In the example of FIG. 2, this user's workstation position is also set such that the bottom of display is approximately four inches off of the desk, with access to input devices, e.g., a keyboard and pointing device. If present, an auxiliary display is also likely visible in such a mode.

Ledbetter, ¶¶ [0027-28].

261. Further, like in the claimed laptop mode, Ledbetter teaches displaying the first content mode ("typical shortcuts and other information used for working/productivity") in the workstation mode.

> loaded. In the workstation mode, typical shortcuts and other information used for working/productivity or other computer usage (e.g., gaming) may be displayed.

Ledbetter, ¶ [0057].

262. Ledbetter teaches displaying different content modes depending on the current display mode since, as recognized by Ledbetter, each display mode may be optimized for a particular content mode or modes. *E.g.*, Ledbetter, Abstract, ¶¶ [0055-57]. Specifically, Ledbetter states that preset monitor positions "may be generally optimized to match typical computer usage modes" and that "[s]oftware such as user interface code can change to match the current position." Ledbetter, Abstract.

263. Thus, based on Ledbetter's teachings, a POSITA would have been motivated to display a first mode of content (*e.g.*, Ledbetter's shortcuts and other information used for working/productivity) on Kamikakai's main display component when in the laptop mode, since, as recognized by Ledbetter, modes like Kamikakai's laptop mode and Ledbetter's workstation mode (where the display component is substantially vertical or tilted slightly backwards, and the keyboard is accessible) may be optimized/best suited for working/productivity.

264. Thus, Kamikakai, Shimura, and Ledbetter teach that 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.

[10.6] 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

265. As explained above in Section XI.A., the Kamikakai-Shimura combination teaches this limitation. Specifically, Shimura discloses the easel mode and it would have been obvious to have oriented Kamikakai's computer into this easel mode to, for example, conserve table space. As also discussed in Section XI.A., it would have been obvious to have inverted displayed content (i.e., rotated/reoriented it by 180°), as taught by Shimura, when transitioning Kamikakai's computer between the laptop and easel modes, to ensure the content is displayed right-side-up to the user.

266. To the extent Patent Owner argues that the content inversion must be performed automatically by the computer, such as based on an indication of the orientation of the display provided by a sensor, the claim is still obvious in further view of Hisano. As argued above for

element 10.6 in Section XI.A., numerous prior art references disclose computers capable of performing such automatic, sensor-based content reorienting in order to ensure that content is displayed right-side up when the user changes the orientation of the display screen. *See supra*, Section XI.A. Moreover, Hisano explicitly discloses changing the content display orientation by 180° when transitioning to and from easel mode to ensure the content is always presented right-side up. *E.g.*, *see* Hisano, FIGS. 1, 9, ¶¶ [0098-100].

Hisano's Laptop Mode

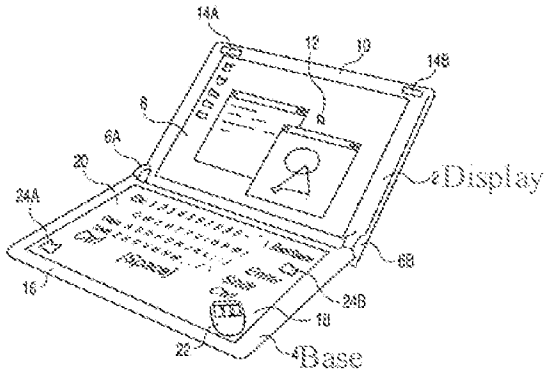


FIG. 1

Hisano's Easel Mode

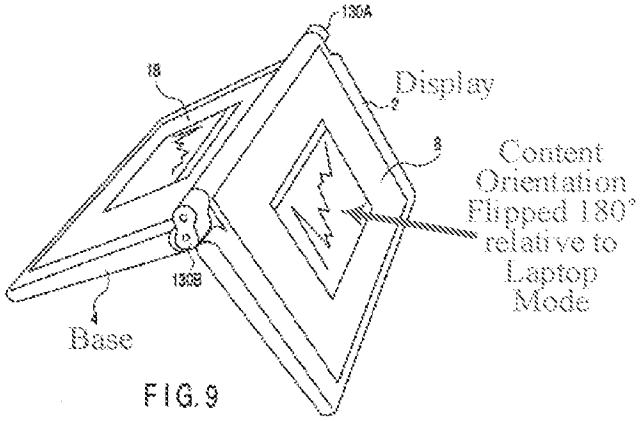


FIG. 9

Hisano, FIGS. 1, 9 (with annotations).

267. In discussing FIG. 9 (Hisano, ¶¶ [0098-99]), Hisano goes on to explain how this content inversion can be performed automatically based the angle of the hinges (i.e., based on a hinge angle sensor) and/or based on a gravity sensor that provides an indication of the orientation of the display. *E.g.*, Hisano, ¶ [0099].

> When the personal computer according to the embodiment of the present invention is used in this form, the rotating angle of the hinges **130A** and **130B** may be used to switch between the display of a side of the screen closer to the hinges as the top and the display of a side of the screen farther from the hinges **130A** and **130B** as the top. Further, the personal computer may comprise a sensor that senses the direction of gravity so as to automatically switch the top and bottom of the display screen regardless of the angle of the hinges **130A** and **130B** or the placement of the personal computer.

Hisano, ¶ [0099].

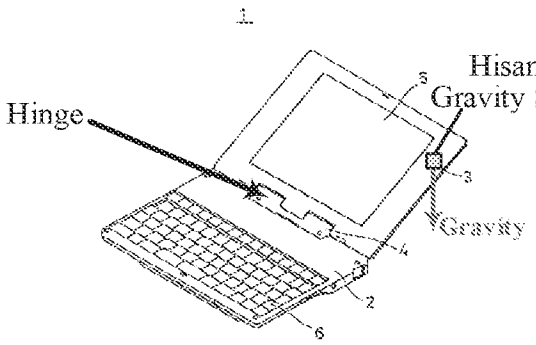
268. By 2008, a POSITA would have been motivated to include a sensor, like Hisano's gravity sensor, in Kamikakai's laptop to make the device easier to use, rather than rely on Shimura's manual switch from nearly fifteen years earlier. Specifically, by automating the content inversion, the operator would no longer have to manually flip Shimura's display reverse switch 106 every time they transition to and from the easel mode, thereby improving the user experience and reducing annoyance to the user.

269. A POSITA also would have reasonably expected to succeed in implementing Kamikakai's computer with Hisano's gravity sensor and associated content inversion software to automatically invert displayed content when transitioning to and from easel mode. For example, a POSITA would have understood that Hisano's gravity sensor could have been included in Kamikakai's display component to provide an indication of the orientation of the display component relative to the direction of gravity. *E.g.*, Hisano, ¶ [0099]. For example, gravity points roughly in the direction of the hinge when in the laptop mode and frame modes, and roughly away from the hinge when in easel mode.

Kamikakai's Display Component in Roughly the Same Orientation with Respect to Gravity in Frame and Laptop Modes

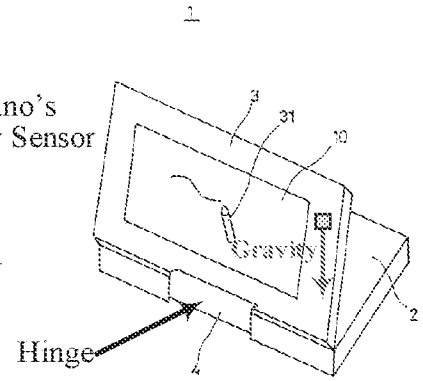
Kamikakai's Laptop Mode

FIG. 3



Kamikakai's Frame Mode

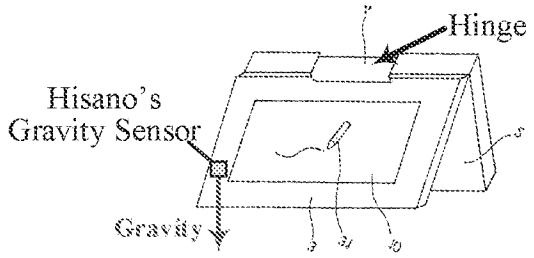
FIG. 9



Kamikakai, FIGS. 3, 9 (with annotations).

Kamikakai's Display Component in Roughly Opposite Orientation with Respect to Gravity in Easel Mode

Kamikakai's Easel Mode



Kamikakai, FIG. 9 (rotated, with annotations).

270. Thus, when implemented in Kamikakai's display component, Hisano's gravity sensor would sense this reversal in the relative orientation of Kamikakai's display component with respect to gravity and would have provided an indication of this change in the orientation of the display component to Kamikakai's processor.

271. It also would have been well within the skill of a POSITA to have programmed Kamikakai's computer with the associated software (computer code) needed to automatically invert content based on this feedback from Hisano's gravity sensor, given how well-known this was in the art at the alleged priority date. *See, e.g.*, Hisano, ¶¶ [0098-99]; Tsuji, ¶¶ [0049], [0055], [0059-61], [0074]; Schweizer, 5:23-35; Shigeo, Abstract, ¶¶ [0004], [0014-16]; Ording, ¶ [0007].

272. Moreover, the '844 Patent itself provide no details how to implement its accelerometer, confirming that doing so was well within the skill of a POSITA. In fact, the only details the '844 Patent provides on implementing its accelerometer are in the following four lines of text.

> In one example, the orientation sensor includes an accelerometer whose output is fed to the computer operating system (or to dedicated logic circuity) which then triggers a display inversion as appropriate.

'844 Patent, 8:31-34. The '844 Patent provides no other details on how to automatically invert displayed content, including no details on the necessary software instructions, thus confirming that such instructions could be implemented by a POSITA without any undue experimentation.

273. To the extent Patent Owner argues that the first and second content modes require displaying different modes of content (e.g., media player vs. web content vs. email vs. programs such as word processor) to the user, Ledbetter teaches this. Specifically, as explained above for element 10.5 in this Section (XII.A.), Ledbetter teaches display different content modes depending on the physical positioning of its main display component ("display monitor").

274. Further, Ledbetter even teaches a mode that is very similar to easel mode ("media consumption mode"), and specifically teaches displaying a second content mode ("media player software") in this media consumption mode that is different than the first content mode ("typical

shortcuts and other information used for working/productivity") that is presented in Ledbetter's laptop-like mode ("workstation mode"). *E.g.*, Ledbetter ¶¶ [0010], [0031], [0057], FIG. 4.

Ledbetter's Media Consumption Mode

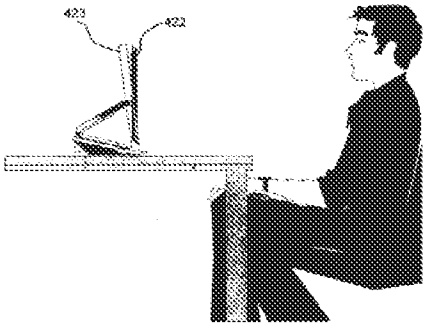


FIG. 4

Ledbetter, FIG. 4 (with annotations).

> **[0010]** FIG. **4** is a representation of a media consumption mode in which a monitor is positioned to facilitate viewing while concealing input devices to an extent.

Ledbetter, ¶ [0010].

275. Ledbetter's media consumption mode is akin to the claimed easel mode because, like Kamikakai's easel mode, the keyboard is inaccesible in the media consumption mode but an operator can still interact with displayed content, such as via "touch-screen operation." *E.g.*, Ledbetter, ¶ [0031]. Further, the display is oriented substantially vertically.

> [0031] FIG. **4** provides an example of a media consumption mode, typically for viewing video where the bulk of user interaction is simply viewing. In FIG. **4**, the arm is hinged such that the monitor screen **422** has been positioned forward, resulting in the input devices barely visible, if at all. The represented monitor screen **422** has zero vertical tilt, but the tilt may be adjustable within a reasonable range (dashed box **423**). As described above with reference to FIG. **1**, any necessary interaction, such as to get a movie started, may be accomplished in the modes of FIG. **2** or **3**, or via remote control and/or touch-screen operation while in the media consumption mode exemplified in FIG. **4**.

Ledbetter, ¶ [0031].

276. Like in the claimed easel mode, Ledbetter also teaches loading and executing the second content mode ("media player software") in the media consumption mode.

> [0057] By way of example, when the arm is positioned such that the display monitor is in the media consumption mode, media player software may be loaded and automatically executed. In the tablet mode, tablet operating system

Ledbetter, ¶ [0057].

277. Thus, based on Ledbetter's teachings, a POSITA would have been motivated to display a second mode of content (*e.g.*, Ledbetter's media player) on Kamikakai's display in the easel mode, since, as recognized by Ledbetter, modes like Shimura's easel mode may be optimized/best suited for watching videos. *E.g.*, Ledbetter, ¶¶ [0031], [0057].

278. Thus, Kamikakai, Shimura, and Ledbetter teach that 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.

[10.7] a navigation control accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen

279. Kamikakai and Shimura teach this limitation for at least the reasons provided above in Section XI.A.

[10.8] wherein the plurality of modes includes 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.

280. Kamikakai discloses this limitation for at least the reasons provided above in Section XI.A.

B. Claim 16

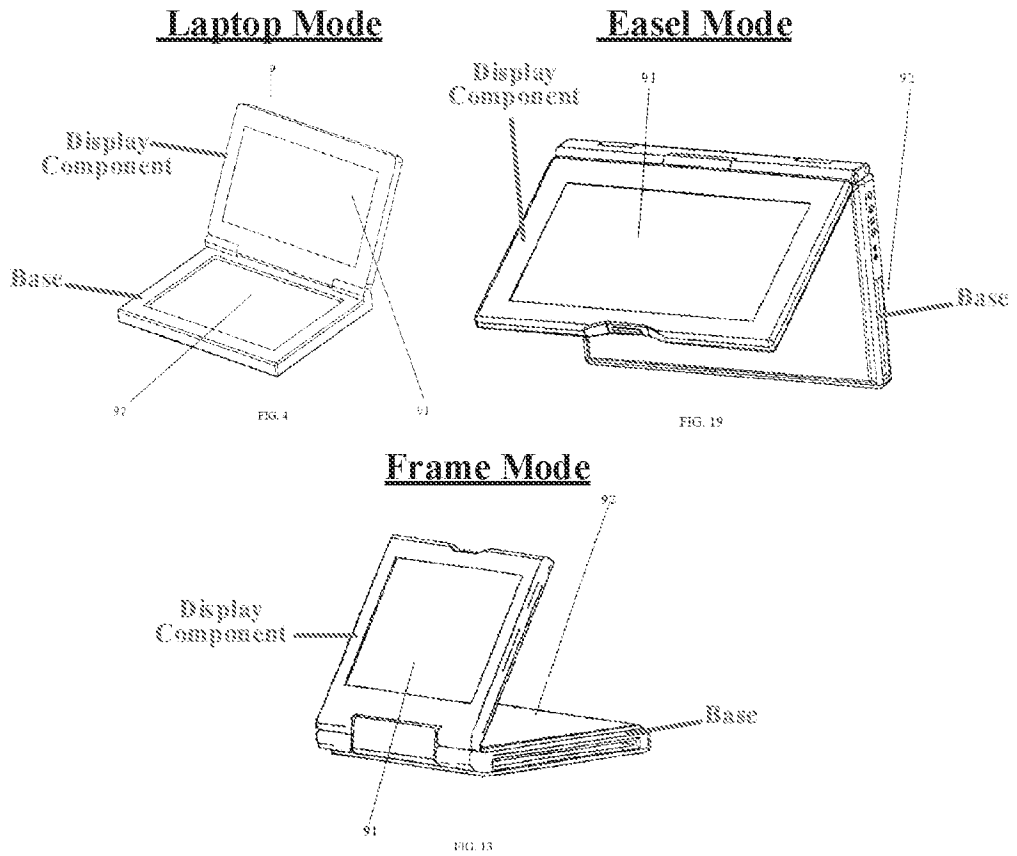
[16.1] The portable computer of claim 10, wherein an operating display mode is selected from the plurality of display modes based on a physical orientation of the portable computer.

281. Kamikakai and Shimura satisfy this claim for at least the reasons provided above in Section XI.B.

XIII. GROUND 5: CN '170 AND SHIMURA RENDER OBVIOUS CLAIMS 1 AND 16 OF THE '844 PATENT

282. ***A POSITA would have found it obvious to implement CN '170's computer with a touch-sensitive display screen that would invert displayed content in easel mode, as taught by Shimura.***

283. ***Shimura's Content Orientation Teachings***. CN '170 expressly discloses all of the claimed display modes, including the easel mode. *E.g.*, CN '170, FIGS. 4, 13, 19.



CN '170, FIGS. 4, 19, 13 (with annotations).

284. While CN '170 discloses an easel mode, it does not explicitly disclose inverting displayed content in easel mode (relative to content orientation in laptop and frame modes). As explained above, however, a POSITA would have been motivated, with a reasonable expectation of success, to do so to ensure content is presented right-side-up to a user. *Supra*, Sections XI.A., XII.A.

285. ***Shimura's Touch-Sensitive Display Screen.*** Although CN '170 does not expressly describe how a user interacts with displayed content when the keyboard and mouse 32 are inaccessible (i.e., in the frame and easel modes), touchscreens were well-known and regularly used in portable devices before the alleged priority date in 2008, and enabled users to interact directly with the display screen simply by touching it. *See, e.g.*, Lane, 3:13–14; Shimura, Abstract, ¶¶

[0004–5], [0009], [0016], [0020]; Kamikakai; 2:49–54, 3:21–23, 6:43–7:18. The '844 Patent itself even acknowledges that then-existing "portable computers [were] able to accept user inputs via a touch screen." '844 Patent, 1:32–33; *also see, e.g.,* Pogue, 583–586 (explaining how a user can navigate documents, manipulate data and adjust settings via the touch screen).

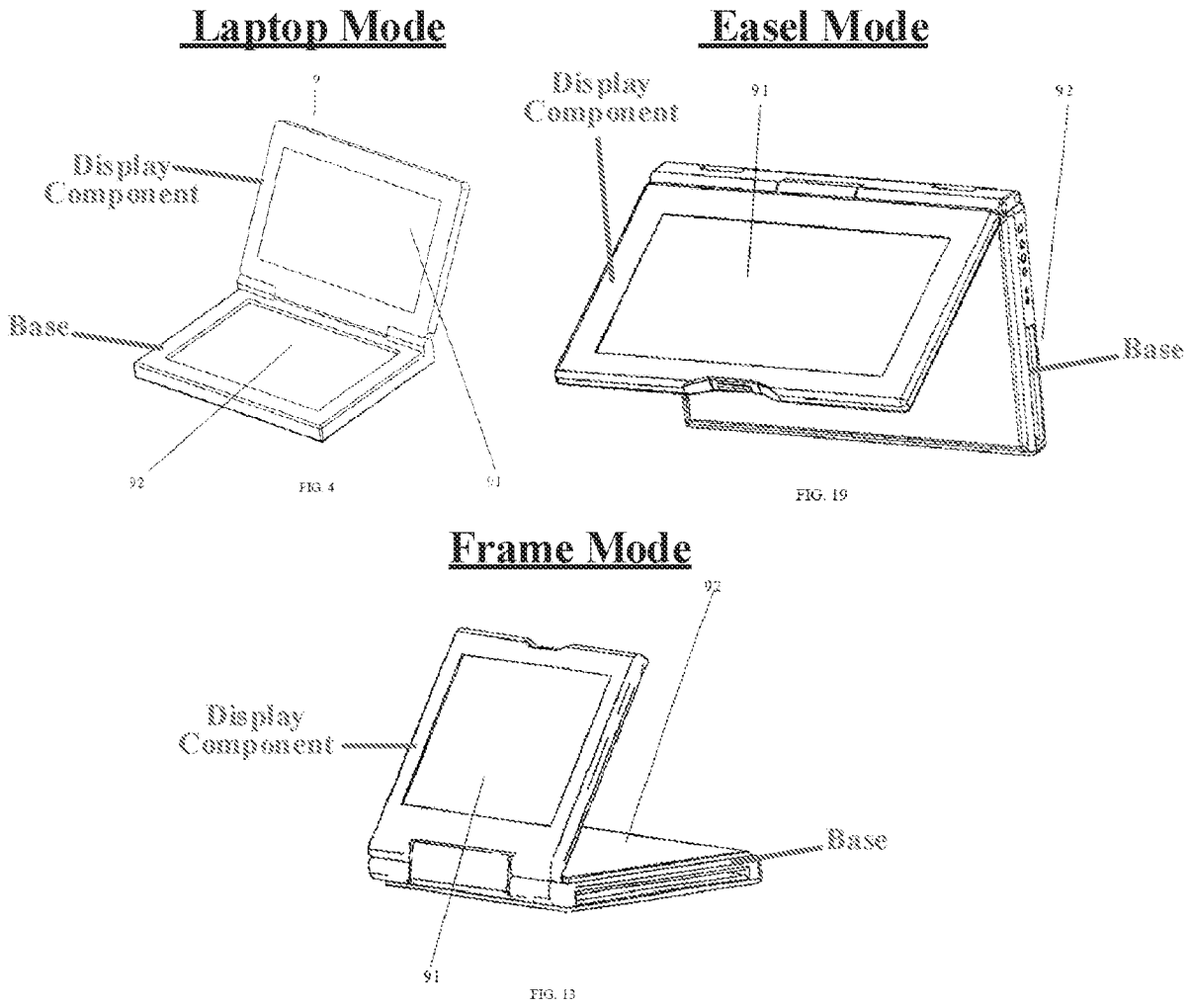
286. Thus, even in the absence of an express teaching, a POSITA would have understood CN '170 to disclose a touchscreen, or, at the very least, that a touchscreen would have been an obvious implementation detail that could have been easily implemented. To the extent Patent Owner argues otherwise, a POSITA implementing CN '170's computer would have sought out teachings on user interaction without a keyboard and naturally encountered Shimura, which expressly teaches a touch-sensitive screen ("display means 105") that a user can interact with using a pen. *E.g.,* Shimura, Abstract, ¶¶ [0005], [0009], [0011], [0016]. A POSITA would have been motivated to include Shimura's touch-sensitive screen in CN '170's computer so that a user can still interact with the computer in easel and frame modes where all of the other input devices (e.g., the keyboard) are inaccessible. A POSITA would have reasonably expected to succeed in implementing Shimura's touch-sensitive screen by simply ensuring its existing display screen includes the requisite touch-sensitive hardware and that the computer is programmed with the requisite software.

A. Claim 10

[10.1] 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 permit an operator to interact with a single display screen in each of the plurality of display modes, the portable computer comprising:

287. To the extent the preamble is limiting, CN '170 discloses it. Specifically, CN '170 discloses a portable computer ("electronic product such as a notebook computer") that is

configurable between a plurality of display modes including a laptop mode, an easel mode, and a frame mode. *E.g.*, CN '170, FIGS. 4, 13, 15, 17–19, 6:8–13, 7:1–18.



CN '170, FIGS. 4, 19, 13 (with annotations).

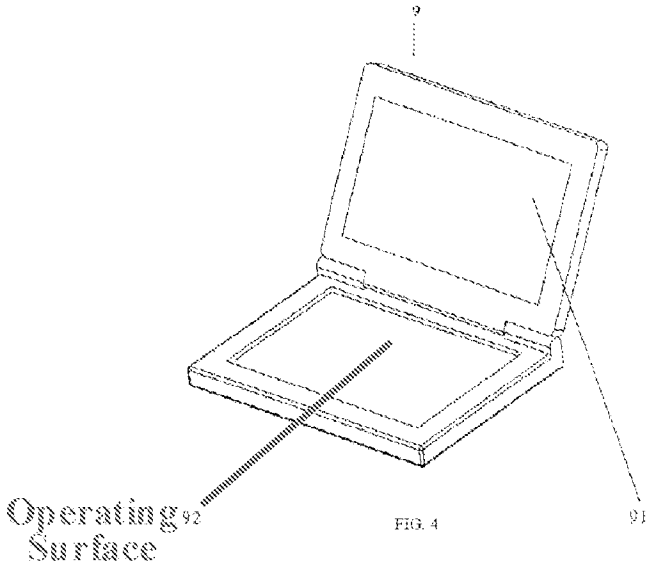
288. As can be seen from FIGS. 4, 13, and 19, an operator can interact with the single display screen ("display screen 91") in each of the display modes since the display screen is facing and accessible to the operator in each of the display modes.

289. Further, although FIGS. 4, 19, 13 do not show the surface on which the portable computer rests, a POSITA would understand that the drawings are drawn right-side up with respect to the surface on which they rest, such that the bottom of the base would rest on a surface in the

laptop mode shown in FIG. 4, the edges of the base and the display component would rest on the surface in an upright, inverted "V" configuration in the easel mode shown in FIG. 19, and that the top of the base (i.e., "operating surface 92") would rest on the surface in frame mode shown in FIG. 19. For example, a POSITA would understand that in the easel mode, both the edges of the display component and the base need to rest on the surface in order to balance the device. Nothing in CN '170 suggests that the device can balance on just the edge of its base. Moreover the weight of the display component would tip the computer over until it rests on the edges of both the display component and the base.

[10.2] a base including a keyboard;

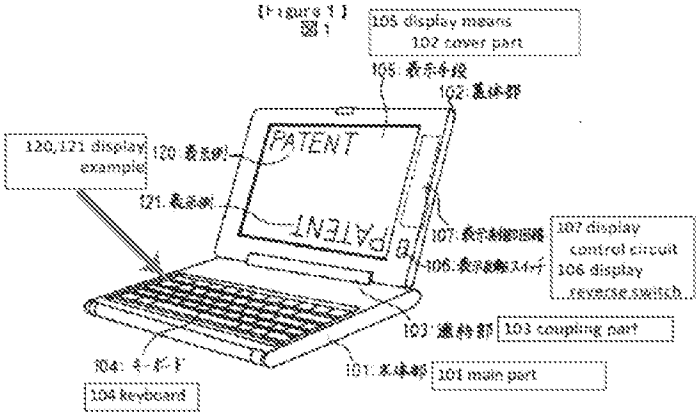
290. In its drawings, CN '170 shows a base including an operating surface 92. *E.g.*, *see generally*, CN '170, FIGS. 4–6, 10–11, 13, 15, 17–21. It would have been obvious to a POSITA when implementing CN '170's operating surface 92 to have made it a keyboard since CN '170 implies that it is a keyboard, referring to it as a "key operating surface" (CN '170, 4:10, Abstract). CN '170 also describes how a "user makes appropriate operations through the operating surface 92" (CN '170, 6:12–13), including "through buttons set on the product body" (CN '170, 4:14). These buttons and keys all strongly suggest and/or imply a keyboard.



CN '170, FIG. 4 (with annotations).

291. Moreover, CN '170 notes that its electronic product could be a notebook computer (CN '170, 8:8), which typically included keyboards. For example, Shimura's computer includes such a keyboard ("keyboard 104").

Shimura's Keyboard



Shimura, FIG. 1 (with annotations)

292. Thus, it would have been obvious to a POSITA to have included a keyboard in the computer of CN '170 in order to enable typing, such as for writing, messaging, web browsing,

and/or other typical laptop uses. As such, even if CN '170 does not inherently disclose this claim limitation, CN '170 in view of Shimura and/or the multitude of other prior art references cited herein render it obvious.

[10.3] a main display component rotatably coupled to the base and including the single display screen which displays content;

293. CN '170 discloses this claim limitation. Specifically, the main display component and base are rotatable relative to one another via a hinge assembly (various embodiments of which are shown in FIGS. 7, 14, 16 of CN '170), as evidenced by the various angles and display modes to which the main display component can be opened. *See e.g.*, CN '70, FIGS. 4, 13, 15, and 17–21. Further, the main display component includes the single display screen ("display screen 91").

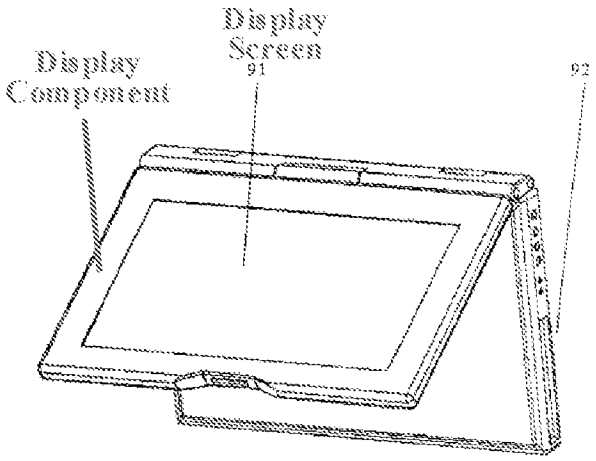


FIG. 19

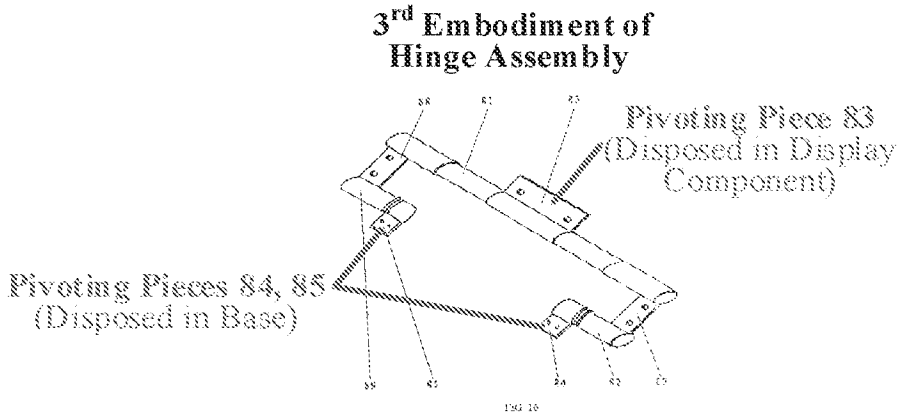
CN '170, FIG. 19 (with annotations).

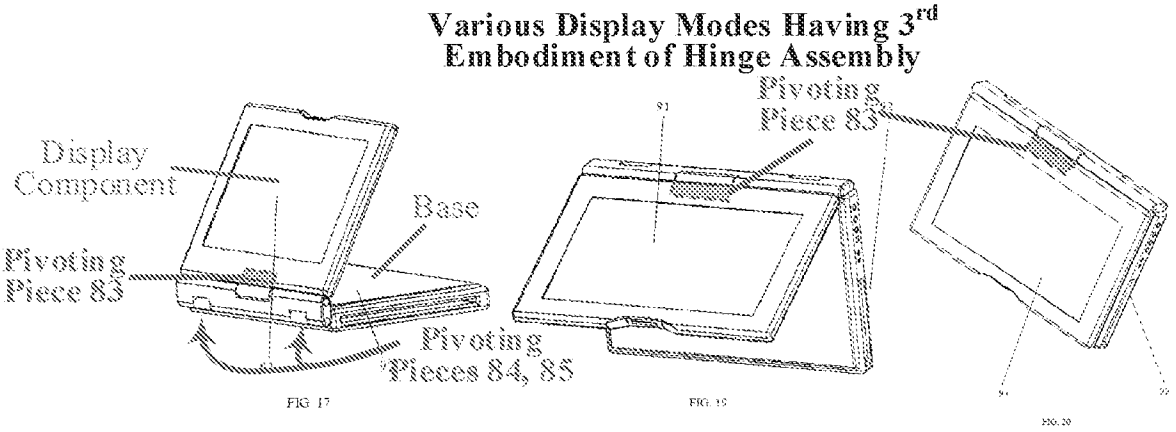
[10.4] a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode,
wherein the 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

294. CN '170 and Shimura satisfy this claim limitation.

CN '170's computer comprises a hinge assembly disposed at least partially within the base and the main display component.

295. As seen in FIG. 16, for example, CN '170's computer comprises hinge assembly. As can be seen in FIGS. 17, 19, and 20 below, this hinge assembly is at least partially disposed in the base and the display component of CN '170's computer. Specifically, a POSITA would have understood that the pivoting piece 83 extends into the display component and that the pivoting pieces 84 and 85 extend into the base in order to mechanically couple the two components.





CN '170, FIGS. 16, 17, 19, 20 (with annotations).

The hinge assembly defines an axis of rotation about which both the base and the main display component are rotatable to transition CN '170's portable computer between at least the laptop mode and the easel mode.

296. Although the hinge assembly in CN '170 is a dual-axis type hinge (and thus defines two axes of rotation), CN '170 satisfies this claim element for at least the reasons that Kamikakai (which also discloses a dual-axis type hinge) satisfies this claim element, as discussed above in, for example, Section XI.A. (for element 10.4). As can be seen in FIGS. 17, 19, and 20 above, the base and display component are rotatable about the two axes of the hinge assembly to transition between the various display modes, including the easel mode (FIG. 19) and the frame mode (FIG. 17).

The transition between CN '170's laptop mode and easel mode allows the operator to operate the portable computer while viewing the single display screen in each of the plurality of display modes.

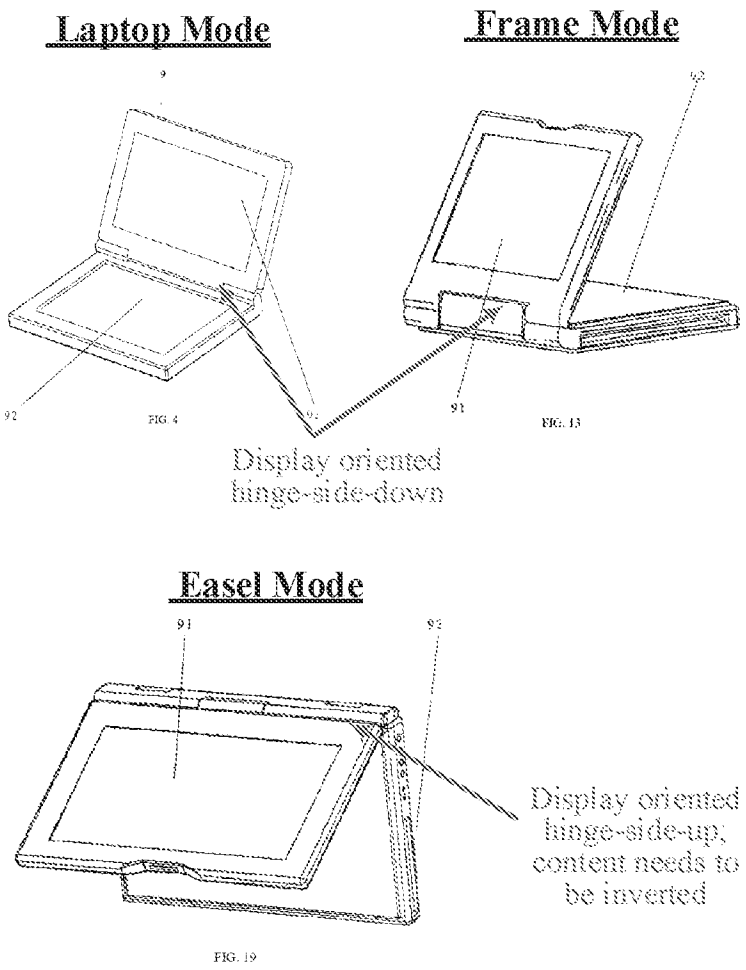
297. As discussed above for element 10.1 in this Section, an operator is able to view the single display screen in each of the plurality of display modes since the display faces the operator in each of the display modes. *See, e.g.*, CN '170, FIGS. 4, 17–21. Although CN '170 does not explicitly disclose that its display screen is touch-sensitive, it would have been obvious to a POSITA to have implemented it as such—like Shimura's display means 105 (*e.g.*, Shimura, Abstract, ¶¶ [0005], [0011])—so that a user still has a way to interact with the portable computer when the operating surface 92 is inaccessible, such as in the display modes shown in FIGS. 17–21 (e.g., easel and frame modes). Thus, this claim limitation is obvious in view of CN '170 and Shimura.

[10.5] 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;

298. Shimura discloses this claim limitation for at least the reasons provided above for element 10.5 in Section XI.A. Like for Kamikakai's computer, it would have been obvious to a POSITA to have configured the computer of CN '170 to, in laptop mode, display Shimura's first content mode having the first content display orientation so that the displayed content is presented right-side up to a user. *Supra,* Section XI.A.

[10.6] 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

299. Shimura discloses this claim limitation for at least the reasons provided above for element 10.6 in Section XI.A. Like for Kamikakai's computer, it would have been obvious to a POSITA to have configured the computer of CN '170 to, in easel mode, display Shimura's second content mode having the second content display orientation so that the displayed content is presented right-side up to a user. *Supra,* Section XI.A.



CN '170, FIGS. 4, 13, 19 (with annotations).

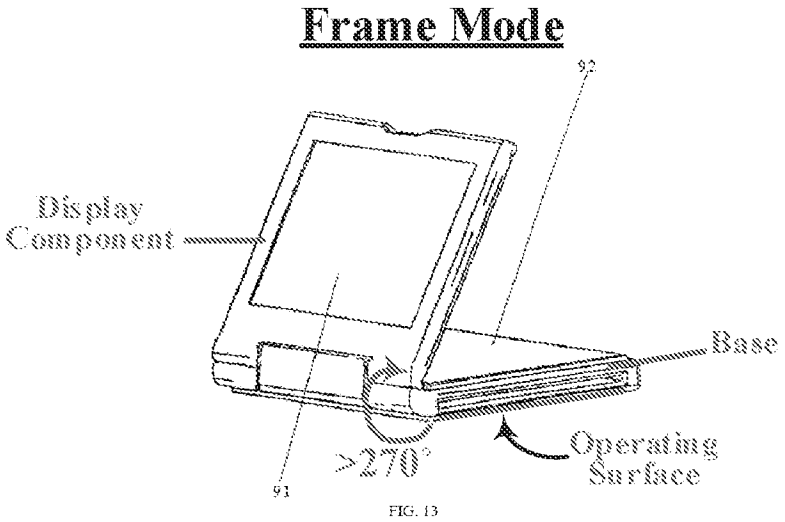
[10.7] a navigation control accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen

300. In district court litigation, Patent Owner contends the recited "navigation control" reads on the accused product's touch screen. First Amended Complaint (Ex. 1032), ¶ 160 (pp. 77–78). Assuming the broadest reasonable interpretation (BRI) of this claim limitation encompasses Patent Owner's advanced construction in district court litigation, then it is obvious over CN '170 in view of Shimura since Shimura's discloses such a touch-sensitive screen. Specifically, Shimura discloses that its display means 105 is touch-sensitive and that a user can interact with the screen

using a pen. *E.g.*, Shimura, Abstract, ¶¶ [0005], [0009], [0011], [0016]. A POSITA would have been motivated to include Shimura's touchscreen functionality in CN '170's computer so that a user can still interact with the computer when the operating surface is inaccessible, such as in easel and frame modes. Such touchscreen functionality satisfies this limitation under Patent Owner's construction advanced in its amended complaint, as explained above for element 10.7 in Section XI.A.

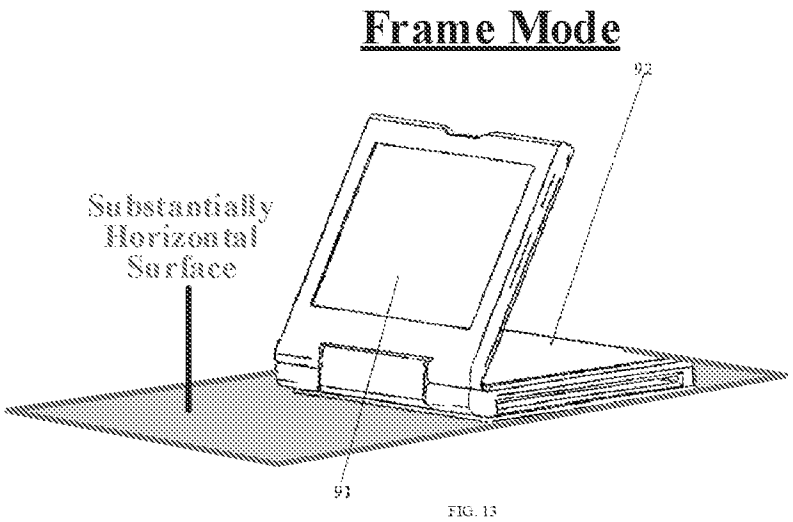
[10.8] wherein the plurality of modes includes a frame mode in which the main display component is oriented towards the operator, the base contacts a substantially horizontal surface, and the keyboard faces the substantially horizontal surface.

301. As discussed above for element 10.1 of this Section, CN '170 discloses a frame mode. *See, e.g.*, FIGS. 13, 15, 17–18. Specifically, as shown in FIG. 13 of CN '170, the base—specifically the operating surface 92—faces downwards and the main display component is oriented towards the operator with the single display screen ("display screen 91") facing up. In addition, and as required by the Board in the non-instituted IPR proceeding, the main display component is at a nonzero angle relative to the base.



CN '170, FIG. 13 (with annotations).

302. Although the lead line for the operating surface 92 points to the backside of the base, a POSITA would have understood that the operating surface 92 is on the underside of the base in FIG. 13 since the display has been opened by more than 270° in FIG. 13. Further, and as explained above for element 10.1 of this Section, a POSITA would have understood that when placed on a surface in this frame mode, the computer would be placed on the surface in the same orientation shown in FIG. 13. Thus, the base would contact the substantially horizontal surface, with the operating surface 92 facing the substantially horizontal surface.



CN '170, FIG. 13 (with annotations).

303. CN '170 confirms that the base can contact the substantially horizontal surface and support the rest of the device, since it discloses that "any surface may serve as a support." CN '170, Abstract, 5:8, 7:13.

304. Thus, CN '170 satisfies this limitation, even under the Board's interpretation of "frame mode."

B. Claim 16

[16.1] The portable computer of claim 10, wherein an operating display mode is selected from the plurality of display modes based on a physical orientation of the portable computer.

305. This claim is obvious over CN '170 in view of Shimura for at least the same and/or similar reasons provided above in Section XI.B. that the claim is obvious over Kamikakai in view of Shimura. This is because the same teachings in Shimura that are relied on for the above-recited limitations that claim 16 adds to claim 10 (i.e., using Shimura's display reverse switch to invert displayed content), apply equally to CN '170.

XIV. GROUND 6: CN '170, SHIMURA, HISANO, AND LEDBETTER RENDER OBVIOUS CLAIMS 10 AND 16 OF THE '844 PATENT

306. To the extent Patent Owner argues that claims 10 and 16 somehow require *automatic* content reorienting and that the two different content modes require display of *different* content, these claims would have been obvious further in view of Hisano and Ledbetter, as explained above in Section XII.A.

307. ***A POSITA would have found it obvious to implement the CN '170-Shimura computer to automatically reorient content as taught by Hisano and to present different content modes as taught by Ledbetter.*** As explained above in Section XII.A., a POSITA would have been motivated, with a reasonable expectation of success, to automatically invert content when transitioning to and from the easel mode of the Kamikakai-Shimura device. For the same and/or similar reasons, a POSITA also would have been motivated, with a reasonable expectation of success, to do so for the CN '170 device. Specifically, a POSITA would have been motivated to automatically invert the displayed content in eased mode to make the device easier to use, as the operator would not have to manually flip Shimura's display reverse switch 106 every time they

transition to and from the easel mode, thereby improving the user experience and reducing annoyance to the user.

308. Like in the Kamikakai-Shimura device, a POSITA also would have reasonably expected to succeed in implementing CN '170's computer with Hisano's gravity sensor and associated content inversion software to automatically invert displayed content when transitioning to and from easel mode. For example, a POSITA would have understood that Hisano's gravity sensor could have been included in CN '170's display component to provide an indication of the orientation of the display component relative to the direction of gravity. *E.g.*, Hisano, ¶ [0099].

309. As also explained above in Section XII.A. a POSITA would have been motivated, with a reasonable expectation of success to display a first mode of content (*e.g.*, Ledbetter's shortcuts and other information used for working/productivity) on CN '170's main display component when in the laptop mode (CN '170, FIG. 4), since, as recognized by Ledbetter, modes like CN '170's laptop mode and Ledbetter's workstation mode (where the display component is substantially vertical or tilted slightly backwards, and the keyboard is accessible) may be optimized/best suited for working/productivity

Ledbetter's Workstation Mode

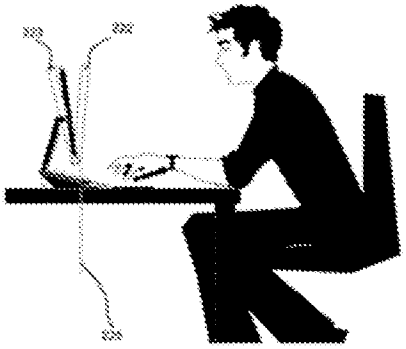


FIG. 2

CN '170's Laptop Mode

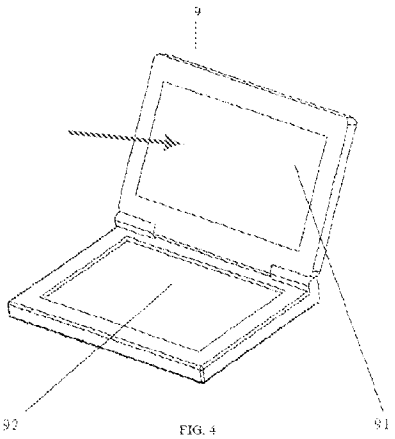


FIG. 4

Ledbetter, FIG. 2; CN '170, FIG. 4 (with annotations).

310. Similarly, a POSITA would have been motivated to display a second mode of content (*e.g.*, Ledbetter's media player) on CN '170's display in the easel mode (CN '170, FIG. 19), since, as recognized by Ledbetter, modes like CN '170's easel mode and Ledbetter's media consumption mode may be optimized/best suited for watching videos. *E.g.*, Ledbetter, ¶¶ [0031], [0057].

Ledbetter's Media Consumption Mode

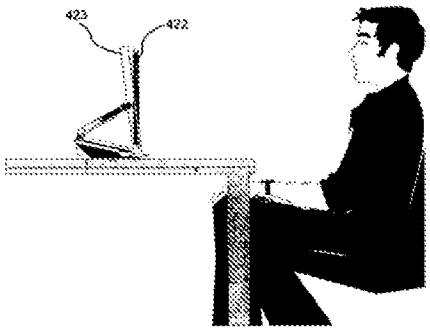


FIG. 4

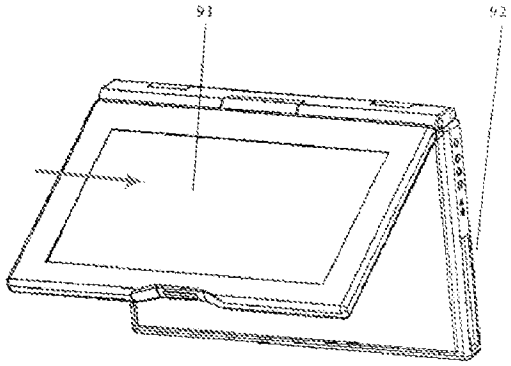


FIG. 19

Ledbetter, FIG. 4; CN '170, FIG. 19 (with annotations).

311. A POSITA would have reasonably expected to succeed in implementing these different content modes without any undue experimentation as they would have required only minor software modifications using simple computer code that was well within the skill of a POSITA. For example, the code would have needed only to instruct the processor of the CN '170-Shimura computer to load programs/applications for working/productivity (e.g., word processor) when it detects the CN '170-Shimura computer is transitioning to, or has entered, the laptop mode, and to load programs/applications for media consumption (e.g., media player) when it detects the CN '170-Shimura computer is transitioning to, or has entered, the easel mode. The fact that the

'844 Patent itself provides no express teaching on how to automatically load mode-specific content confirms that this would have been well within the skill of a POSITA to implement without any undue experimentation. *See, e.g.*, '844 Patent, 13:64–14:13 (generally discussing changing the displayed content when transitioning from laptop to easel mode, without providing any instruction on how to do so).

A. Claim 10

[10.1] 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 permit an operator to interact with a single display screen in each of the plurality of display modes, the portable computer comprising:

312. CN '170 discloses this limitation for at least the reasons provided above for element 10.1 in Section XIII.A.

[10.2] a base including a keyboard;

313. CN '170 and Shimura render obvious this limitation for at least the reasons provided above for element 10.2 in Section XIII.A.

[10.3] a main display component rotatably coupled to the base and including the single display screen which displays content;

314. CN '170 satisfies this limitation for at least the reasons provided above for element 10.3 in Section XIII.A.

[10.4] a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode,
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

315. This limitation is obvious over CN '170 in view of Shimura for at least the reasons provided above for element 10.4 in Section XIII.A.

[10.5] 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;

316. CN '170 and Shimura satisfy this limitation for at least the reasons discussed above for element 10.5 in Section XIII.A. Further, to the extent Patent Owner argues that the first content mode requires a particular kind of content, this limitation is obvious in further view of Ledbetter for at least the same and/or similar reasons it is obvious over Kamikakai and Shimura in view of Ledbetter, as explained above for element 10.5 in Section XII.A. *E.g., supra,* Section XII.A.

[10.6] 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

317. CN '170 and Shimura satisfy this limitation for at least the reasons discussed above for element 10.6 in Section XIII.A.

318. Further, to the extent Patent Owner argues that the claim requires the content to be inverted automatically by the computer (such as based on feedback from a sensor), this claim is obvious in further view of Hisano, for at least the same and/or similar reasons it is obvious over Kamikakai and Shimura in view of Hisano, as explained above for element 10.6 in Section XII.A. *E.g., supra,* Section XII.A.

319. Further, to the extent Patent Owner argues that the first and second content modes require different kinds of content, this limitation is obvious in further view of Ledbetter for at least the same and/or similar reasons it is obvious over Kamikakai and Shimura in view of Ledbetter,

as explained above for element 10.6 in Section XII.A. *E.g., supra,* Section XII.A. Ledbetter's teachings of displaying different content depending on the display mode apply equally to Kamikakai–Shimura and CN '170's computers since they are both portable computers that are configurable into laptop and easel display modes that may be better suited for different types of content.

[10.7] a navigation control accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen

320. CN '170 satisfies this limitation for at least the reasons provided above in for element 10.7 in Section XIII.A.

[10.8] wherein the plurality of modes includes 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.

321. CN '170 discloses this limitation for at least the reasons provided above for element 10.8 in Section XIII.A.

B. Claim 16

[16.1] The portable computer of claim 10, wherein an operating display mode is selected from the plurality of display modes based on a physical orientation of the portable computer.

322. CN '170, Shimura, Hisano, and Ledbetter satisfy this claim for at least the reasons provided above in Section XIII.B.

I, Christopher M. Schmandt, do hereby declare and state, that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: 24 Feb 2022

Signature

HP Inc. - Exhibit 1005 - Page 3855

APPENDIX A

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Education

M.I.T., Master of Science, Visual Studies (Computer Graphics), 1980

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Professional Experience -- MIT

Media Laboratory, Principal Research Scientist, 1985-2018 (retired)
Director, Living Mobile Research Group (formerly Speech + Mobility)

Architecture Machine Group, Research Associate, 1980-1984

Architecture Machine Group, Research Assistant, 1979-1980

Architecture Machine Group, Graphics Programmer, 1977-1979

Departmental Undergraduate Research Opportunities Program Coordinator, 1984-2018

Laboratory Intellectual Property Committee 2001-2016, chair 2002-2009

Departmental Committee on Graduate Studies, 1996-2001, 2007-2018

Sponsored Research Activities

Alerting and Mobile Messaging, Digital Life Consortium, MIT Media Lab, 1997-2018

Acoustical Cues to Discourse Structure, National Science Foundation, Principal Investigator, 1995-1998

Parsing Radio, News in the Future Consortium, MIT Media Lab, 1993-1999

Desktop Audio, SUN Microsystems, Inc., Principal Investigator, 1989-1996

Voice Interaction in Hand Held Computer, Apple Computer, Principal Investigator, 1991-1993

Voice Interfaces for Network Services, AT&T, Principal Investigator, 1989-1991

Back Seat Driver, NEC, Principal Investigator, 1988-1991

Acoustic and Visual Cues for Speech Recognition, DARPA, co-Principal Investigator, 1986-1988

Personal Computers and Telephony, NTT Public Corporation, Principal Investigator, 1984-1989

Home Telecomputing, Atari, Inc., Principal Investigator, 1983

Testifying legal engagments within the last five years, representing party in italics

- *Facebook* v. Windy City, 2017
- *Facebook* v. EVERYMD.COM LLC, 2017
- *Comcast* v. Promptu, 2017
- Express Mobile, Inc v. *Big Commerce*, 2017
- *Facebook* v. Hypermedia, 2017
- *Microsoft* v. Uniloc 2017 LLC, 2019
- *Microsoft* v. SpeakWare, 2019
- *Bumble Trading LLC* v. Match Group LLC, 2019
- *Tile Inc.* v. Cellwitch Inc, 2019
- Blackberry Ltd v. *Facebook, Inc* 2020
- *EROAD Ltd* v. PerDiem Co, 2020
- *Snap Inc.* v. SRK Technology LLC, 2020
- *Shopify Inc* Ltd v. Express Mobile Inc, 2020
- Express Mobile Inc, v *Wix Ltd* 2020
- *Motorola Mobility LLC* v. Ironworks patents, LLC. 2021
- Express Mobile Inc, v *GoDaddy Inc* 2021
- *Bumble Trading LLC* v. Kinectus, LLC. 2021
- *Tile, Inc* v. Linquet Technologies, Inc. 2021
- *Unified Patents, LLC* v.Gesture Technology Partner, LLC. 2021
- Quantum Metric, Inc v.*Content Square Isreal, Ltd.* 2021

Professional Experience -- Intellectual Property

Co-inventor on U.S. Patents

- 5,177,685 for "Automobile navigation system using real time spoken driving instructions"
- 6,728,348 for "System for storing voice recognizable identifiers using a limited input device such as a telephone key pad"
- 6,937,986 for "Automatic dynamic speech recognition vocabulary based on external sources of information"
- 7,098,776 for "Methods and apparatus for vibrotactile communication"
- 7,392,280 for "Method for summarization of threads in electronic mail"
- 7,738,637 "Interactive voice message retrieval"
- 7,443,283 for "Methods and apparatus for connecting an intimate group by exchanging awareness cues and text, voice instant messages, and two-way voice communications"
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- 8,121,653 for "Methods and apparatus for autonomously managing communications using an intelligent intermediary"
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Co-inventor on U.S. Patent Applications

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- 20030144846 "Method and system for modifying the behavior of an application based upon the application's grammar"
- 20030158903 "Calendar bar interface for electronic mail interaction"

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Behar	Serial No.:	N/A
Control No.:		Group No.:	N/A
Patent No.:	8,624,844	Examiner:	N/A
Filed:	July 10, 2008		
Entitled:	Portable Computer with Multiple Display Configurations		

REQUEST FOR *EX PARTE* REEXAMINATION UNDER 35.U.S.C. §§ 302-307 AND 37 C.F.R. § 1.510

EFS Web Filed
Central Reexamination Unit
Commissioner for Patents
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LIST OF EXHIBITS

No.	Description
1001	U.S. Patent No. 8,624,844 ("**'844 Patent**") to Behar et al. assigned to LITL LLC
1002	File History of U.S. Patent No. 8,624,844
1003	Information Disclosure Statement by Third Party Requester
1004	Declaration of Chris Schmandt ("**Schmandt**")
1005	U.S. Patent No. 6,154,359 to Kamikakai et al. ("**Kamikakai**") issued November 28, 2000
1006	JP H6-242853 to Shimura et al. published September 2, 1994
1007	Certified English Translation of JP H6-242853 ("**Shimura**")
1008	U.S. Patent Application Publication No. 2007/0058329 to Ledbetter et al. ("**Ledbetter**") published March 15, 2007
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1010	JP 2005-71297A to Kanamori published March 17, 2005
1011	Certified English Translation of JP 2005-71297A ("**Kanamori**")
1012	CN 2627170Y to Ruijiang issued July 21, 2004
1013	Certified English Translation of CN 2627170Y ("**CN '170**")
1014	U.S. Patent No. 6,492,974 to Nobuchi et al. ("**Nobuchi**") issued December 10, 2002
1015	U.S. Patent No. 7,061,472 to Schweizer et al. ("**Schweizer**") issued June 13, 2006
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1017	U.S. Patent Application Publication No. 2005/0122318 to Tonouchi et al. ("**Tonouchi**") published June 9, 2005
1018	U.S. Patent Application Publication No. 2005/0062715 to Tsuji et al. ("**Tsuji**") published March 24, 2005
1019	INTENTIONALLY LEFT BLANK
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1022	Japanese Patent Application Publication No. H08-179851 to Shigeo published July 12, 1996
1023	Certified English Translation of Japanese Patent Application Publication No. H08-179851 ("**Shigeo**")
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1027	U.S. Patent Application Publication No. 2008/0211778 to Ording et al. (the '778 Publication) published September 4, 2008
1028	U.S. Provisional Patent Application No. 60/946,970 to Ording et al. ("**Ording**") filed June 28, 2007
1029	David Pogue, *Windows Vista: The Missing Manual*, 1st edition, 2nd printing, published February 2007 ("**Pogue**")
1030	*Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822, Paper 1 ("**Petition**") (PTAB May 4, 2021)
1031	*Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822, Paper 6 ("**Decision**") (PTAB October 21, 2021)
1032	First Amended Complaint ("**Complaint**"), *LiTL LLC v. Lenovo (United States), Inc. et al,* No. DDE-1-20-cv-00689 (U.S. Dist. Ct., Dist. Delaware)
1033	Declaration of Dan Fauxsmith, VP of Publishing Operations at O'Reilly Media, Inc. ("**Fauxsmith**")
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1040	European Patent No. EP 2 283 407 B1 ("**EP '407**") to Behar et al. assigned to LITL LLC
1041	File History (Excerpts) of European Patent No. EP 2 283 407 B1
1042	UK Patent Application Publication No. GB 2 321 982 A to Välikangas ("**Välikangas**") published August 12, 1998
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I. INTRODUCTION

This Request shows substantial new questions of patentability ("SNQs"), raised by prior art and arguments not previously considered by the Office, regarding claims 10 and 16 of U.S. Patent No. 8,624,844 ("the '844 Patent," Ex. 1001). For example, primary prior art references Lane (Ex. 1038), Kamikakai (Ex. 1005), and CN '170 (Ex. 1013) were neither cited during prosecution nor presented in a previously denied IPR petition. Each of these primary references discloses a configurable device having a "frame mode," which was the alleged distinction over the prior art during prosecution of the '844 patent. Lane alone raises SNQs as to claims 10 and 16. Additional SNQs are raised by Lane in combination with a secondary reference. And each of Kamikakai and CN '170, in combination with secondary references, raises additional, distinct SNQs as to claims 10 and 16. This Request explains why these SNQs warrant reexamination and how the prior art renders these claims unpatentable, thus warranting their cancellation.

The '844 Patent relates generally to a portable computer (e.g., laptop) that can be configured into additional "display modes" besides just a traditional laptop mode, such as the easel and frame modes shown below. *E.g.*, '844 Patent (Ex. 1001), 5:43–48.

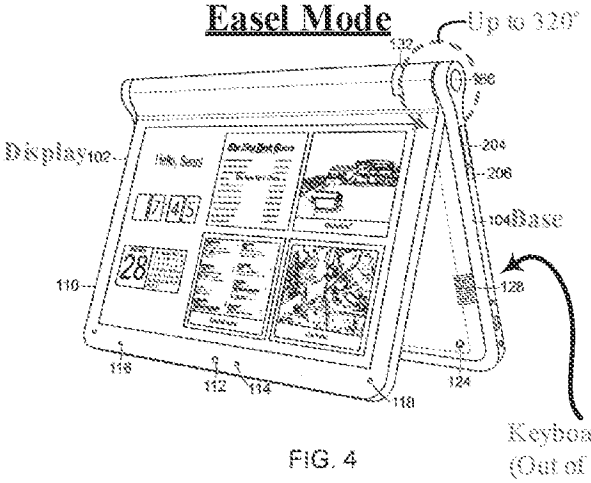


FIG. 4

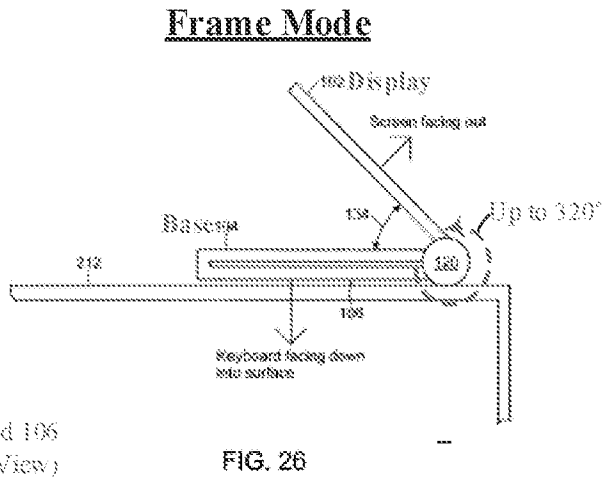


FIG. 26

'844 Patent, FIGS. 4, 26 (with annotations).

The claims were ultimately allowed based on the following "frame mode" limitation, added through examiner's amendment entered with the notice of allowability :

> wherein the plurality of modes includes 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. 1002, 987–989.

The PTAB also denied institution of an IPR challenging the '844 Patent, based on this "frame mode." Decision (Ex. 1031), 12–13. In denying institution of the IPR, the Board read in additional limitations to the "frame mode" beyond what is explicitly recited in the issued claims. Specifically, in addition to the claim's explicit requirements that the keyboard face the horizontal surface with the display component oriented towards the operator in the frame mode, the Board asserted that the frame mode also requires that the display and base form a "nonzero angle," something not recited in the claims. *Id.*, 10.[1] According to the PTAB, this additional "nonzero angle" limitation allegedly distinguished the claims over the prior art presented in the petition. *Id.*

This Request presents previously unconsidered prior art references—namely Lane (Ex. 1038), Kamikakai (Ex. 1005), and CN '170 (Ex. 1013)—each of which discloses this allegedly distinctive "frame mode," even under the Board's construction requiring that the display and base form a nonzero angle, as shown in the following exemplary figures from each of these references:

[1] Hereinafter, this Request uses the phrase "the Board's frame mode" to refer to the Board's construction of "frame mode" in *Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822 (PTAB) (Ex. 1031).

Lane's Frame Mode

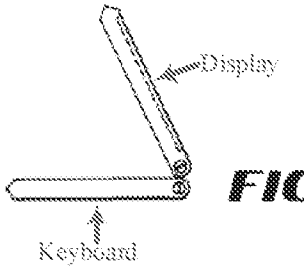
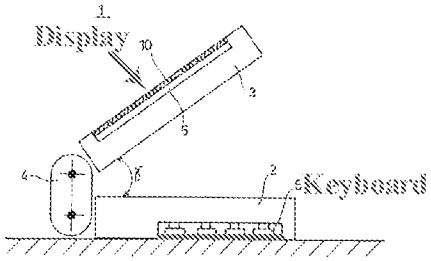


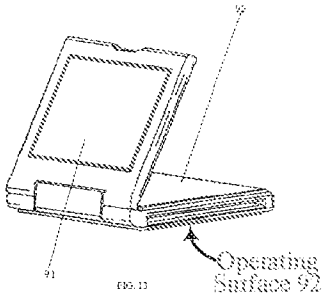
FIG 25

Kamikakai's Frame Mode

FIG. 8



CN '170's Frame Mode



Screen

Kamikakai, FIG. 8 (with annotations); Lane, FIG. 25 (with annotations); CN '170, FIG. 13 (with annotations).

Each of these new "frame mode" references, alone and/or in combination with other prior art references, present substantial new questions of patentability ("SNQs") not previously considered by the Office. Specifically, challenged claims 10 and 16 are obvious over **1)** Lane alone, **2)** Kamikakai in combination with Shimura, and **3)** CN '170 in combination with Shimura. These challenged claims are also obvious in further view of Hisano and Ledbetter. None of these prior art combinations or arguments have been presented to the Office in any post-grant proceeding involving the '844 Patent, including any petition for *inter partes* review of the '844 Patent. The Request also raises SNQs based on the declaration of Chris Schmandt (Ex. 1004), whose testimony informs how a POSITA would have understood that the newly-presented prior art satisfies the Board's frame mode and that the prior art as a whole renders all claims unpatentable.

Based on these SNQs, Requester Lenovo (United States) Inc. ("Requester" or "Lenovo") respectfully requests that the Office institute *ex parte* reexamination of Claims 10 and 16 of the '844 Patent under 35 U.S.C. §§ 302–307 and 37 C.F.R. § 1.510. The Office should reexamine, find unpatentable, and issue a Certificate of Reexamination canceling each of these claims.

II. REQUIREMENTS FOR EX PARTE REEXAMINATION UNDER 37 C.F.R. § 1.510

A. 37 C.F.R. § 1.510 (b)(1): Statement Pointing Out Each Substantial New Question Of Patentability

A statement pointing out each substantial new question of patentability ("SNQ") based on the cited references in accordance with 37 C.F.R. § 1.510(b)(1), is presented below in Section IX.

A chart of proposed SNQs is provided here for reference:

SNQ	Claims Affected
Lane	10, 16
Lane and Ledbetter	10, 16
Kamikakai and Shimura	10, 16
Kamikakai, Shimura, Hisano, and Ledbetter	10, 16
CN '170 and Shimura	10, 16
CN '170, Shimura, Hisano, and Ledbetter	10, 16

B. 37 C.F.R. § 1.510 (b)(2): Identification Of Every Claim For Which Reexamination Is Requested

In accordance with 37 C.F.R. § 1.510(b)(2), reexamination is requested for Claims 10 and 16 of the '844 Patent.

C. 37 C.F.R. § 1.510 (b)(2): Detailed Explanation Of The Pertinency And Manner Of Applying The Prior Art

A detailed explanation of the pertinency and manner of applying the cited prior art to each claim for which reexamination is requested, is provided below in Section X.

D. 37 C.F.R. § 1.510 (b)(3): Copy Of Every Patent Or Printed Publication Relied Upon Or Referred To

A copy of every patent or printed publication relied upon herein is submitted as Exhibits 1005–1008, 1010–1018, 1022–1024, 1027–1029, 1038, and 1042, each of which is listed on the accompanying Form PTO-SB/08 (Exhibit 1003). Each of these cited prior art references constitutes effective prior art as to the claims of the '844 Patent under pre-AIA 35 U.S.C. § 102.[2]

E. 37 C.F.R. § 1.510 (b)(4): Copy Of The Entire Patent For Which Reexamination Is Requested

A full copy of the '844 Patent is submitted herein as Exhibit 1001 and its corresponding file history is submitted as Exhibit 1002.

F. 37 C.F.R. § 1.510 (b)(5): Certification That A Copy Of The Request Has Been Served In Its Entirety On The Patent Owner

A copy of this request has been served in its entirety on the Patent Owner at the following PAIR correspondence address of record:

Wolf Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, MA 02210-2206

G. 37 C.F.R. § 1.510 (b)(6): Certification By The Third Party Requester

Lenovo certifies that the statutory estoppel provisions of 35 U.S.C. §§ 315(e)(1), 325(e)(1) do not prohibit Lenovo from filing this *ex parte* reexamination request. Lenovo previously petitioned for IPR of the '844 patent, but the Board did not reach a final written decision in that case. *See infra,* Section II.I.

H. 37 C.F.R. § 1.510 (a): Fee For Requesting Reexamination

[2] As the '844 patent alleges priority to April 1, 2008, unless otherwise noted, all citations herein are to the pre-AIA versions of Sections 102 and 103.

The Office is authorized to charge all fees associated with this Request, including the fee specified by 37 C.F.R. § 1.510 (a), to Deposit Account No. 0-24550.

I. Related Matters

The '844 Patent was the subject of a petition for *inter partes* review, in IPR2021-00822. As the Board denied institution of that IPR, it never reached a final written decision. *E.g.*, *Ex Parte Finjan, Inc.*, Appeal No. 2018-007444, 2018 WL 4740168, at *5 (PTAB Sept. 28, 2018) ("Because no trial was instituted in the *inter partes* review, there was no 'final holding of invalidity' or 'concluded examination or review' ...."), *see also In re Vivint, Inc.*, 14 F.4th 1342, 1349 (Fed. Cir. 2021) ("[A] question of patentability is new until it has been considered and decided on the merits.").

This Request presents substantially different obviousness combinations than the IPR Petition. Specifically, this Request presents entirely new primary references (Lane, Kamikakai, and CN '170), none of which were cited or relied on in the IPR Petition. This Request also presents a new secondary reference (Ledbetter) that also was not cited or relied on in the IPR Petition.

The '844 Patent is also asserted in district court litigation captioned *LiTL LLC v. Lenovo (United States), Inc.*, Case No. 20-cv-00689 (D. Del.), which has not reached a final holding of invalidity as to any claim of the '844 Patent. In that case, the complaint has been answered. The district court judge recently denied a motion that the '844 Patent is invalid for lack of eligible subject matter under Section 101 for reasons that do not bear on this Request. *Id.*, Mem. Op., ECF No. 46, at 11. None of the prior art references or issues presented in this Request have been litigated to a verdict in any district court case.

Requester notes that USPTO policy dictates that patent reexaminations involved in concurrent litigation are to be accorded a special status. "Any cases involved in litigation, whether

they are reexamination proceedings or reissue applications, will have priority over all other cases." MPEP § 2261. As such, it is respectfully requested that the USPTO accord this proceeding special status such that it may advance to a timely conclusion.

III. REEXAMINATION SHOULD BE GRANTED DESPITE THE EARLIER-DENIED PETITION FOR INTER PARTES REVIEW

Patent Owner may suggest that the Office deny or terminate reexamination under Section 325(d), citing the Federal Circuit decision *In re: Vivint, Inc.* 14 F.4th 1342 (Fed. Cir. Sept. 29, 2021). The Office should not do so because this reexamination request is filed under circumstances far different from the narrow fact pattern of *Vivint*, and the narrow holding of *Vivint* does not apply here. The narrow holding in *Vivint* only bars Reexamination when the request is "nearly identical" to an IPR petition that the PTO previously denied for "abusive filing practices" under 325(d). *Id.* at 1354 ("Our ruling today is limited.").

In *Vivint*, the party requesting reexamination—Alarm.com—had already filed *three* failed petitions for *inter partes* review against a single patent. *Id.* at 1346. In denying the last of those IPR petitions, the Board "relied on § 325(d) considerations" in finding that the multiple petitions was an abuse of process. *Id.* at 1353. Alarm.com then filed a reexamination request nearly identical to its abusive IPR petition. *Id.* at 1347. The Federal Circuit effectively held that since the Office found the IPR petition to be abusive, it could not reverse course and find otherwise for the "nearly identical" reexamination request. *Id.* at 1354.

The present Request is far different, with only a single prior IPR petition, which was not denied under Section 325(d), let alone for "abusive filing practices." Moreover, the present Request presents new primary prior art references, secondary references, and combinations, which were not previously presented to or considered by the Office. Indeed, the *Vivint* decision

specifically noted that even swapping out just a single secondary reference from a previously presented ground is sufficient to raise an SNQ. *Id.* at 1350. This Request does far more than that.

IV. OVERVIEW OF THE '844 PATENT AND ITS PROSECUTION HISTORY

A. The '844 Patent

The '844 Patent purports to provide a portable computer having a hinge assembly that permits the computer to be transitioned to multiple display modes. *E.g.*, '844 Patent (Ex. 1001), 2:2–9; *see also* Schmandt Declaration (Ex. 1004), ¶ 22.[3]

The '844 Patent admits that prior art laptops were configurable into different display modes, such as a tablet mode, where the keyboards were inaccessible. *E.g.*, '844 Patent, 1:32–46. It purports to provide an improved configurable computer with a display component 102 rotatable up to 320° relative to a base component 104, thus providing a plurality of display modes, including: conventional ***laptop mode*** (FIG. 1), ***easel mode*** (FIG. 4), and ***frame mode*** (FIG. 26). *E.g.*, '844 Patent, 2:19–38, 2:60–3:2, FIGS. 1–2, 4, 26.

[3] While the prior art alone presents SNQs and renders the claims unpatentable, as discussed below in Sections IX–X, this Request is further supported by the declaration of Chris Schmandt, an expert in the field of the '844 patent during the relevant time period.

Closed Position

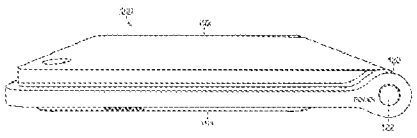


FIG. 2

Laptop Mode

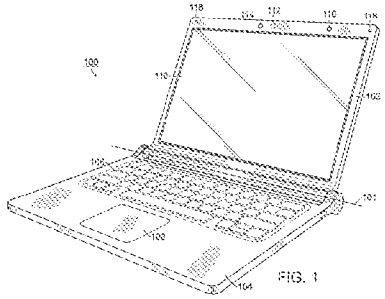


FIG. 1

Easel Mode

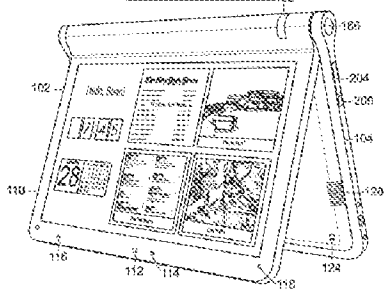


FIG. 4

Frame Mode

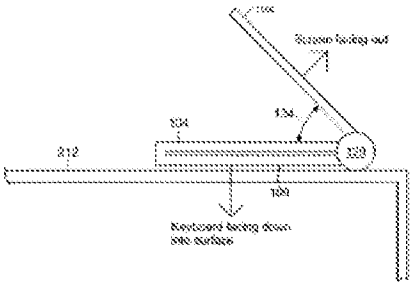
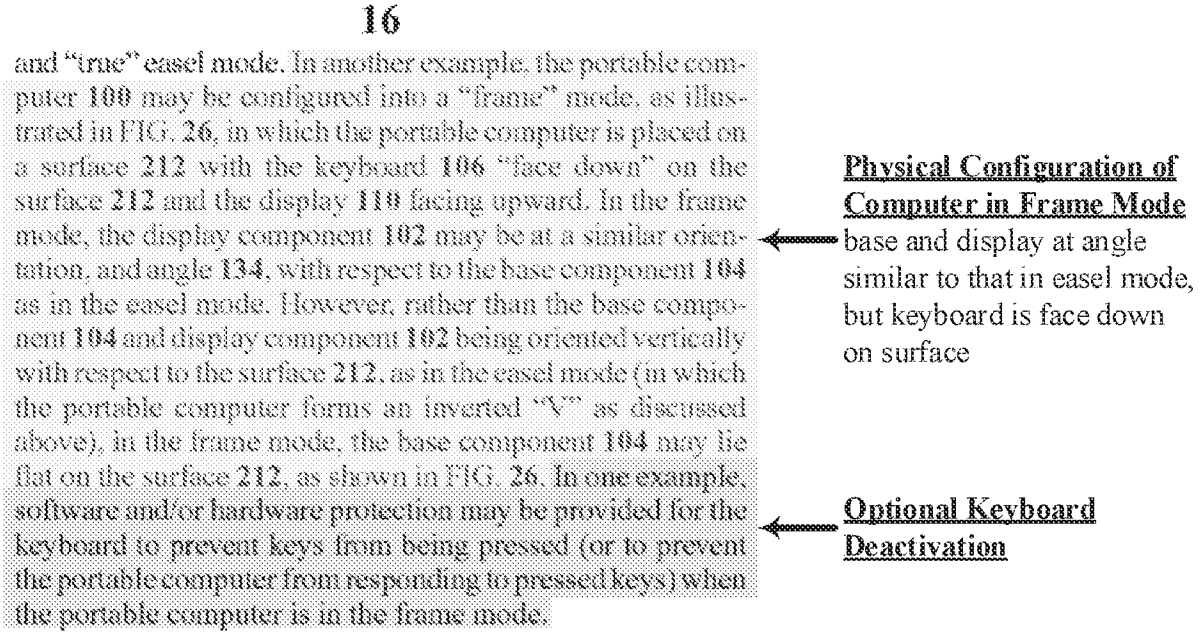


FIG. 26

'844 Patent, FIGS. 1, 2, 4, 26 (with annotations).

In the frame and easel modes, the display component 102 is opened (rotated) by more than 270° relative to the base component 104 from the initial closed position, such that the display screen 110 and keyboard 106 face away from each other. *E.g.*, *id.*, FIGS. 4, 26. The difference between the easel and frame modes is apparently just the orientation of the device *as a whole*, as the '844 patent notes that "[i]n ***the frame mode***, the display component 102 ***may be at a similar orientation, and angle 134,*** with respect to the base component 104 ***as in the easel mode***." *Id.*, 16:5–8 (emphases added); *see also id.*, 16:8–13. Thus, frame mode is like easel mode, just rotated approximately 90° such that the keyboard is horizontal (face down on surface 212) rather than nearly vertical like in easel mode.

Although the original Examiner's allowance focused on the "frame mode," the '844 patent itself gives it little more than a passing mention in just 17 lines of text in the detailed description:



16

and "true" easel mode. In another example, the portable computer **100** may be configured into a "frame" mode, as illustrated in FIG. **26**, in which the portable computer is placed on a surface **212** with the keyboard **106** "face down" on the surface **212** and the display **110** facing upward. In the frame mode, the display component **102** may be at a similar orientation, and angle **134**, with respect to the base component **104** as in the easel mode. However, rather than the base component **104** and display component **102** being oriented vertically with respect to the surface **212**, as in the easel mode (in which the portable computer forms an inverted "V" as discussed above), in the frame mode, the base component **104** may lie flat on the surface **212**, as shown in FIG. **26**. In one example, software and/or hardware protection may be provided for the keyboard to prevent keys from being pressed (or to prevent the portable computer from responding to pressed keys) when the portable computer is in the frame mode.

Physical Configuration of Computer in Frame Mode
base and display at angle similar to that in easel mode, but keyboard is face down on surface

Optional Keyboard Deactivation

'844 Patent, 16:1–17 (with annotations). Other than this, the term "frame mode" appears only a few other places in the specification. It is used once in the Summary of Invention where the claim language is parroted in paragraph form (*id.*, 2:21–22), once in the Brief Description of the Drawings when briefly describing FIG. 26 (*id.*, 5:35–37), once in the very beginning of the Detailed Description when giving an overview of the invention (*id.*, 5:43–49), and once at 16:25 when describing how the keyboard is concealed and not easily accessible in the easel and frame modes (*id.*, 16:25–27). Thus, the only details the '844 patent provides on the frame modes are its physical configuration (i.e., that the keyboard is face down on a surface with the display facing upward) and that the keyboard may be deactivated in the frame mode. The patent provides no explanation as to why or how this frame mode is advantageous/beneficial. Furthermore, ***the patent's specification does not disclose how the displayed content is oriented in the frame mode*** (yet this is recited in issued claim 8).

The '844 patent also describes flipping the orientation of displayed content (i.e., inverting it) when transitioning to and from the easel mode to ensure it is presented right-side up to a user. *E.g.*, *id.*, 9:30–45, 8:7–48; *compare id.* FIGS. 1, 4, and 26. Thus, "when the portable computer 100 is configured into the easel mode, the visual display on the display screen 110 is automatically rotated 180 degrees such that the information appears 'right-way-up,' even through the display screen is upside-down compared to when the portable computer is in the laptop mode." *Id.*, 8:7–12. The '844 patent goes to describe how the content can be flipped automatically by including an orientation sensor in the computer that provides an indication of the relative angle between the display and the base (*e.g.*, an angular sensor in the hinge assembly) and/or an indication of the overall orientation of the display and/or base relative to gravity (*e.g.*, an accelerometer in the base and/or display). *E.g.*, *id.*, 9:30–45. The patent admits that such "[a]ccelerometers ha[d] been used in portable devices" such as to "switch the display between portrait or landscape mode" prior to the patent's alleged priority date. *Id.*, 8:35, 8:47.

B. Prosecution History Of The '844 Patent

1. Overview

The claimed "frame mode" was critical to allowance of the claims. Ex. 1002, 988. While Patent Owner repeatedly argued for allowance without this frame mode limitation, those arguments were repeatedly rebuffed by the Examiner, who only allowed the claims after adding the "frame mode" via Examiner amendment. Ex. 1002, 988. The Notice of Allowance itself states that the claims were allowed because the prior art of record did not teach the frame mode. *Id.*, 989.

Patent Owner did try to distinguish at least some of the cited art based on the easel mode being configured to display content in an inverted orientation relative to the laptop mode. However, the Examiner explicitly rejected these arguments, citing at least one prior art reference

that clearly discloses this concept of inverting content based on device configuration, U.S. Patent No. 7,061,472 (Ex. 1015, "Schweizer"). *Id.*, 439; Schweizer, 4:65–67.

2. Filing Of Application

The '844 Patent, titled "Portable Computer with Multiple Display Configurations" issued on January 7, 2014 from Application No. 12/170,951, filed on July 10, 2008. *E.g.*, Ex. 1002, 1030. The '844 Patent also alleges priority to Provisional Application No. 61/041,365, filed on April 1, 2008. *E.g.*, *id.*, cover page. The originally filed claims of the non-provisional application were very broad. Two of the three independent claims (1 and 13) did not even recite the easel mode, let alone the frame mode. Ex. 1002, 26–28. For example, original claim 1 recited:

> 1. A portable computer comprising:
>
> a base;
>
> a display component rotatably coupled to the base such that the display component and the base are rotatable with respect to one another about a longitudinal axis running along an interface between the display component and the base, the display component including a display screen; and
>
> a scroll wheel disposed at least partially within the base and rotatable about the longitudinal axis, the scroll wheel configured to permit a user to control at least one of operating parameters of the portable computer and content displayed on the display screen.

Id., 26.

3. First Office Action

The first Office action was mailed on April 4, 2011, rejecting all pending claims 1–17. Ex. 1002, 216–224. All of the independent claims and many of the dependent claims were rejected under 35 U.S.C. § 103 as being obvious over U.S. Patent Application Publication No. 2006/0264243 ("Aarras") in view of European Patent 0588210 ("EP Nishiyama"). *Id.*, 217–222.

The other dependent claims were rejected as being obvious over Aarras and Nishiyama in further view of U.S. Patent Application Publication No. 2007/0247446 ("Orsley"). *Id.*, 222–224.

4. Response To First Office Action

In response to the first Office action, the Patent Owner amended all independent claims (claims 1, 7, and 13) to recite that the portable computer's hinge assembly defines a ***single*** longitudinal axis, in an effort to distinguish Aarras's alleged dual axis hinge. *Id.*, 258–260, 263–267.

Patent Owner further amended independent claims 1 and 13 to recite the easel mode, as was similarly recited in the original version of the other independent claim (claim 7). *Id.*, 27, 258, 260.

Patent Owner also cancelled claim 9 and added new claims 18–21. *Id.*, 258–261. Claim 19 (same as issued claim 16) recites selecting an operating display mode based on a physical orientation of the computer. *Id.*

5. Second (Final) Office Action

A final Office action was mailed on October 28, 2011, rejecting all pending claims 1–8 and 10–21 as obvious over a U.S. counterpart to EP Nishiyama—U.S. Patent No. 5,436,954 ("Nishiyama")—in view of Aarras. *Id.*, 291–297.

6. Response To Second (Final) Office Action

In response to the final Office action, the Patent Owner amended all of the independent claims (1, 7, and 13) to recite, *inter alia*, that the easel mode is configured to display a second content mode having a content display orientation that is 180 degrees relative to the content display orientation of the first content mode displayed in laptop mode. Ex. 1002, 338–341.

Patent Owner also ***broadened*** all of the independent claims by ***removing the requirement*** that the longitudinal axis be a ***"single"*** longitudinal axis (*id.*, 338–341). The issued claims thus recite only "a longitudinal axis," not "a single longitudinal axis." '844 Patent, 17:9–51 (claim 1), 18:27–19:2 (claim 10), 19:32–20:30 (claim 18).

Finally, Patent Owner added new claims 22–24. Ex. 1002, 342–346.

7. Third (Non-Final) Office Action

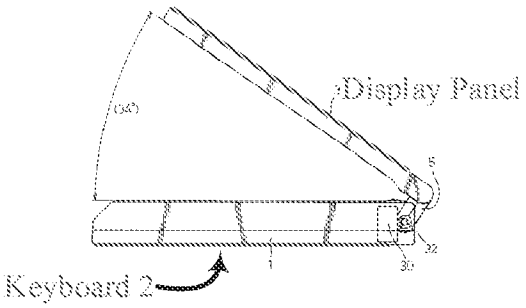
A non-final Office action was mailed June 7, 2012, rejecting all pending claims 1–8 and 10–24 as obvious over U.S. Patent No. 6,492,974 ("Nobuchi") in view of Aarras and further in view of Nishiyama. Ex. 1002, 367–376. Claims 7, 10–11, and 22–24 were also provisionally rejected based on non-statutory obviousness-type double patenting grounds over claims 13, 26, 27, 29, and 34 of co-pending Application No. 12/170,939, which issued as U.S. Patent No. 8,289,688 ("the '688 Patent"). *Id.*, 362–366.

Regarding the frame mode limitation of dependent claim 22, the Office action found that "Nobuchi further discloses, wherein the plurality of modes includes a frame mode in which the single display (3 in fig. 14) component is oriented towards the operator, the base (1 in fig. 14) contacts a substantially horizontal surface, and the keyboard is directed towards the substantially horizontal surface. (see fig. 14)." *Id.*, 375.

The Examiner relied on FIG. 14 of Nobuchi, which shows a position at which a "sensor switch" performs an "ON-OFF changing action." Nobuchi, 7:52–65.

Nobuchi's FIG. 14

Fig.14



Nobuchi, FIGS. 11(a), 14 (with annotations).

8. Response To Third (Non-Final) Office Action

In response to the non-final Office action, Patent Owner did not amend any claims, instead relying on argument alone. Ex. 1002, 393–403. Patent Owner made similar arguments to those previously presented, namely that the cited references do not teach the claimed easel mode and its required features (*e.g.*, that it is configured to display a second content mode having a content display orientation that is 180 degrees relative to the content display orientation of the first content mode displayed in laptop mode). *Id.*

After filing the response, Patent Owner initiated an interview with the Examiner to discuss the rejection of claim 1, but no agreement was reached during the interview. *Id.*, 415.

9. Fourth (Non-Final) Office Action

A non-final Office action was mailed on February 1, 2013, rejecting all pending claims 1–8 and 10–24 as obvious over U.S. Patent No. 7,061,472 ("Schweizer") in view of Nishiyama. Ex. 1002, 439–448. The Office action also rejected all pending claims based on non-statutory obviousness-type double patenting over '688 Patent in view of Nishiyama. *Id.*, 429–438.

Regarding the different display orientations, the Examiner pointed to FIG. 4 of Schweizer which shows Schweizer's computing device in easel mode, and to column 4, lines 65–67 of Schweizer, which state that in the easel mode of FIG. 4, "[t]he customer can observe the image correctly on the main display screen, if it is electronically rotated by 180 degrees." *E.g.*, Ex. 1002, 439.

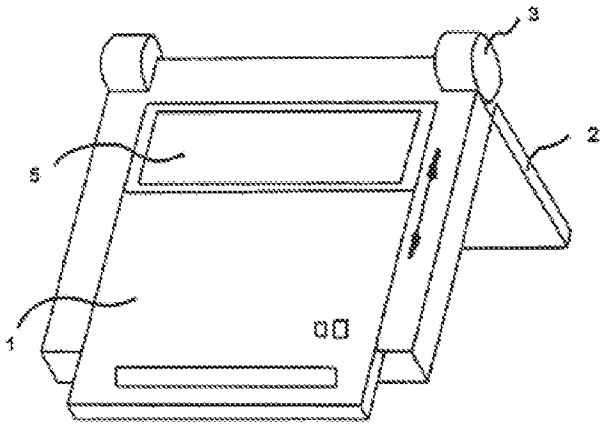


Fig. 4

Schweizer, FIG. 4

10. Applicant-Initiated Interview

On June 6, 2013, Patent Owner and the Examiner discussed the rejections of claims 1 and 22 (the dependent claim reciting the frame mode) during an Applicant-initiated interview. Ex. 1002, 467. While the Examiner maintained that Schweizer teaches an easel mode, the Examiner encouraged Patent Owner to amend independent claim 1 to include the frame mode limitation of claim 22 "in order to overcome [the] Schweizer reference." *Id.*

11. Response To Fourth (Non-Final) Office Action

In response to the non-final Office action, Patent Owner amended the independent claims to recite that the computer is configurable ***between a plurality of display modes*** but did not amend them to explicitly include the frame mode as suggested by the Examiner during the June 6, 2013,

interview. Ex. 1002, 470–474. Patent Owner also amended the independent claims to recite that an operator can interact with the single display screen in each of the plurality of display modes. *Id.*

In all of the independent claims, Patent Owner also amended the claims to remove the phrase "scroll wheel" and instead recite simply a "navigation control." *Id.*

12. Examiner's Amendment And Notice Of Allowance

A Notice of Allowance was mailed on August 22, 2013 and included an Examiner's amendment which amended all of the independent claims (claims 1, 7, and 13) to include the frame mode limitation of claim 22. Ex. 1002, 985, 988. The Examiner's stated reason for allowance was that:

> 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schweizer (US 7,061,472) and Nishiyama (US 5,436,954) as a whole teach most of the limitations which is similar to the applicant's claimed invention but fail to teach of said claimed features.
>
> The following is an examiner's statement of reasons for allowance: none of cited reference teaches "wherein the plurality of modes includes 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." (fig. 26) cited in claims 1, 7 & 13. Claims 1 – 8, 10 – 21 and 23 - 24 are therefore allowed over the prior art of record.

Id., 989.

Dependent claim 22 was cancelled and all remaining pending claims (claims 1–8, 10–21, and 23–24) were allowed. *Id.*

C. Issued Claims

Issued independent claim 10 reflects at least the following concepts:

- three display modes, including:
  - a laptop mode;
  - an easel mode; and
  - a frame mode;
- wherein the laptop and easel modes are configured to display different content modes having different display orientations; and
- a navigation control.

In its entirety, independent claim 10 recites:

> 10. 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 permit 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 and including the single display screen which displays content;
>
> a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode, 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 accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen wherein the plurality of modes includes 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.

'844 Patent, 18:27–19:2 (with annotations).

The other independent claims (claims 1 and 18) are not at issue in this Request. Among other things, independent claim 1 requires that the navigation control be "disposed at least partially

within the base and rotatable about the longitudinal axis" (*id.*, 17:42–43), and claim 18 requires that the navigation control be "disposed at least partially about the longitudinal axis" (*id.*, 20:24–25).

V. CLAIM CONSTRUCTION

For purposes of this Request, the claim terms are presented by the Requester in accordance with 37 C.F.R. § 1.555(b) and MPEP § 2111. Each claim term is to be given its "broadest reasonable construction" consistent with the specification. MPEP § 2111; *In re Swanson*, No. 07-1534 (Fed. Cir. 2008); *In re Trans Texas Holding Corp.*, 498 F.3d 1290, 1298 (Fed. Cir. 2007) (citing *In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984)).

The rationale underlying the "broadest reasonable construction" standard is that it reduces the possibility that a claim, after issue or certificate of reexamination, will be interpreted more broadly than is justified. 37 C.F.R. § 1.555(b), MPEP § 2111. Although the District Court has yet to rule on the scope of these claim limitations, the Federal Circuit noted in *Trans Texas* that the Office has traditionally applied a broader standard than a Court does when interpreting claim scope. MPEP § 2111.

Because the claim interpretation standards used in the courts are different from the claim interpretation standards used in the Office, any claim interpretations submitted herein for the purpose of demonstrating an SNQ are neither binding upon Requester in any litigation related to the '844 Patent, nor do they necessarily correspond to the construction of claims under the legal standards that are mandated to be used by the courts in patent litigation. *See* 35 U.S.C. § 507; *see also* MPEP § 2286.04 II (determination of an SNQ is made independently of a court's decision on validity because of different standards of proof and claim interpretation employed by the District

Courts and the Office); *see also Trans Texas Holding*, 498 F.3d at 1297–98; *In re Zletz*, 893 F.2d 319, 322, 13 USPQ 2d 1320, 1322 (Fed. Cir. 1989).

The interpretation and/or construction of the claims in the '844 Patent presented either implicitly or explicitly should not be viewed as constituting, in whole or in part, Requester's own interpretation and/or construction of such claims, but instead should be viewed as constituting an interpretation and/or construction of such claims as may be raised through a broadest reasonable claim construction. In fact, Requester expressly reserves the right to present its own interpretation of such claims at a later time, which interpretation may differ, in whole or in part, from that presented herein.

VI. PERSON OF ORDINARY SKILL IN THE ART

The person of ordinary skill in the art in April of 2008 ("POSITA") would have possessed at least a bachelor's degree in computer science, computer engineering, or electrical engineering and would have had at least two years of experience in the design and architecture of personal computers (e.g., laptops) and other portable electronic devices (or equivalent degree or experience). Schmandt (Ex. 1004), ¶ 44.)

VII. SUMMARY OF THE PRIOR ART RELIED ON IN THE GROUNDS

A. Lane (Exhibit 1038)

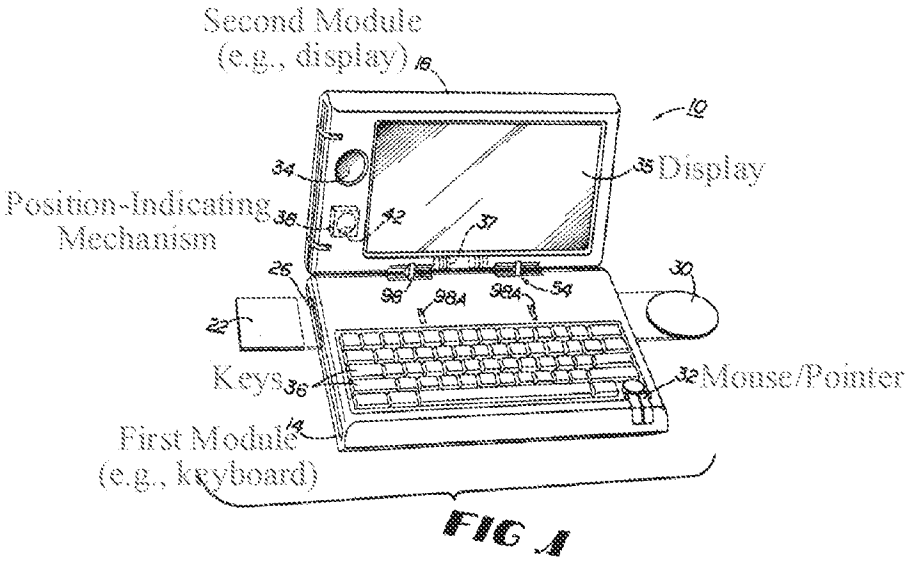
Lane (WO 95/24007) is a publication of a PCT international patent application that published on September 8, 1995—more than 12 years before the alleged priority date of the '844 Patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA).

Lane was neither cited during prosecution of the '844 patent nor presented in the non-instituted IPR proceeding. Lane was, however, relied on by the European Patent Office (EPO)

during prosecution of a foreign counterpart to the '844 patent, EP 2283407 B1 (Ex. 1040). The EPO Examiner rejected similar claims based on Lane, finding that it disclosed the three claimed display modes—laptop, easel, and frame—as well as an accelerometer for detecting the current display mode in order to automatically reorient content, e.g., when transitioning to / from easel mode. Ex. 1041, 4–5.

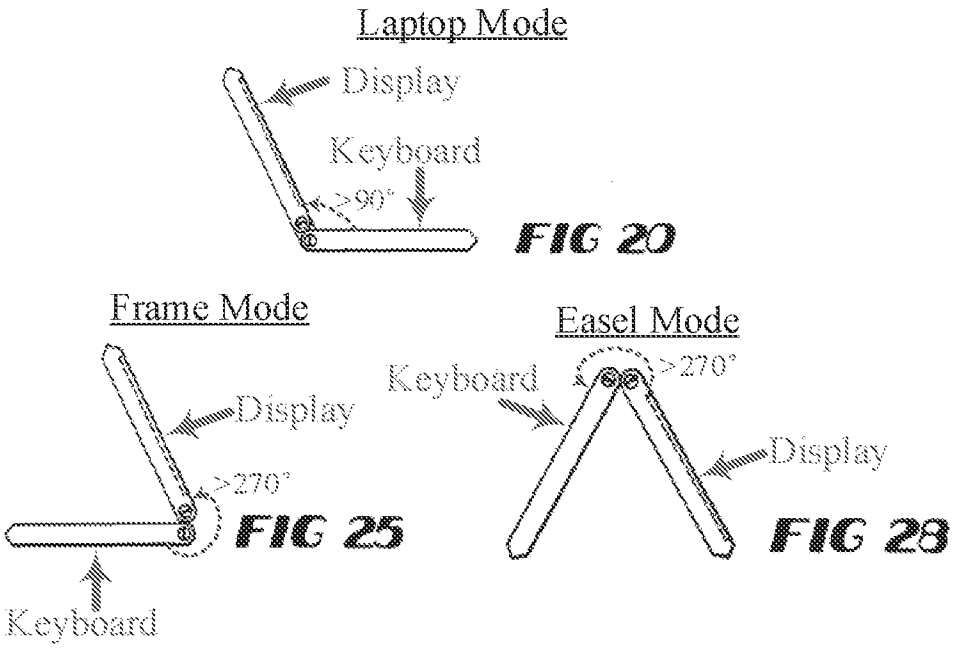
As noted by the EPO Examiner (Ex. 1041, 11–15), Lane discloses a portable computer having a first module 14 (base) and a second module 18 (display component) that are rotatable relative to one another by up to 360° to transition the computer into various modes, including all three of the '844 Patent's claimed display modes—the laptop, easel, and frame modes. *E.g.*, Lane, 3:5–14, 10:24–31, FIGS. 20, 25, 28.

Lane's Primary Components



Lane, FIG. 1 (with annotations).

Lane's Display Modes



Lane, FIGS. 20, 25, 28 (with annotations).

Lane also teaches that the computer includes software for automatically reorienting displayed content based on an indication of the spatial orientation of the first and/or second modules 14, 18 provided by a position-indicating mechanism 38. *E.g.*, Lane, 5:23–6:6.

B. Kamikakai (Exhibit 1005)

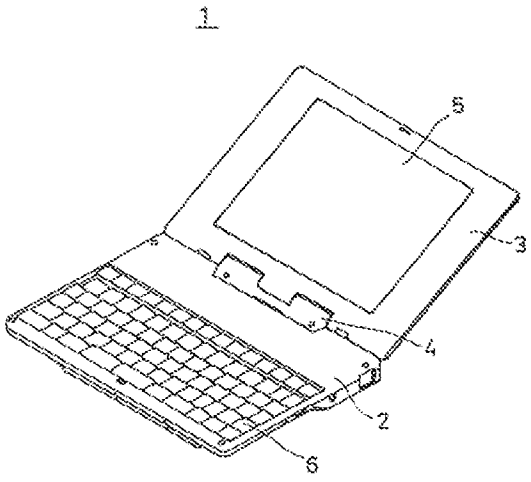
Kamikakai (U.S. 6,154,359) issued November 28, 2000—more than seven years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under 35 U.S.C. §§ 102(a-b) (pre-AIA).

Kamikakai was neither cited during original prosecution of the '844 patent nor presented in the non-instituted IPR proceeding.[4]

Kamikakai discloses a configurable portable electronic device having a display part 3 and a main part 2. The portable electronic device is configurable into different display modes, including at least a conventional laptop mode and a frame mode. *E.g.*, Kamikakai, FIGS. 3, 8, 9.

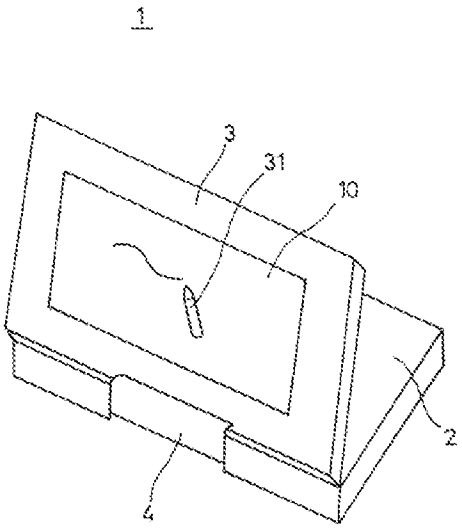
Kamikakai's Laptop Mode

FIG. 3



Kamikakai's Frame Mode

FIG. 9



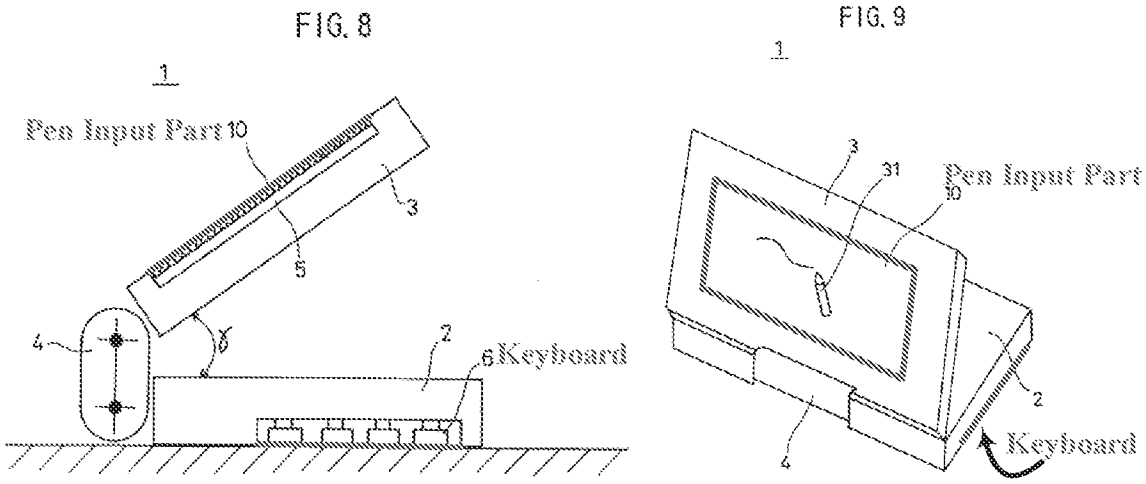
Kamikakai, FIGS. 3, 9 (with annotations).

In the frame mode, the keyboard is placed face down on a surface and the display part's touch-sensitive pen input part 10 faces up at a nonzero angle with respect to the base, as shown in the perspective view of FIG. 9 and the cross-sectional view of FIG. 8:

[4] "The non-instituted IPR proceeding" is used throughout this Request to refer to *Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00822 (PTAB).

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Kamikakai's Frame Mode



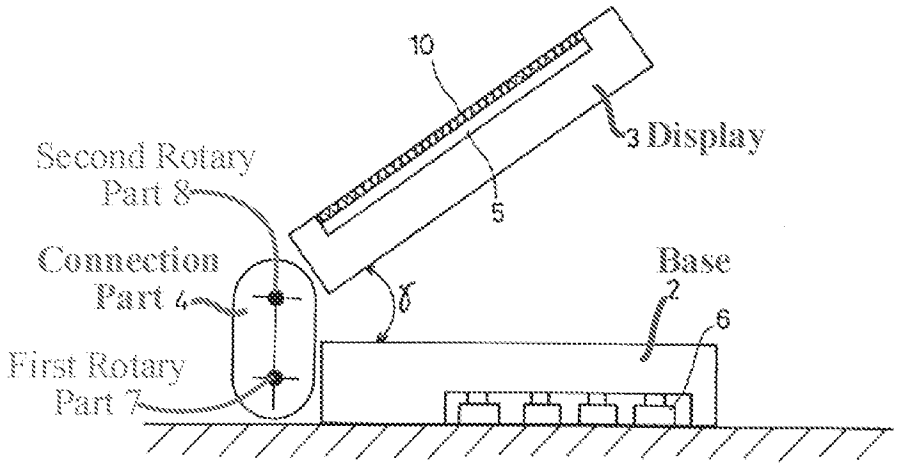
Kamikakai, FIGS. 8, 9 (with annotations).

As described by Kamikakai, this frame mode allows a user to "easily input data from the pen input part 10 by manipulating a pen." *Id.*, 6:49–50.

Kamikakai's portable electronic device also comprises a hinge assembly, referred to as a "connection part 4," (*Id.*, 3:39–42) that is capable of holding the display part 3 in this frame mode (against the force of gravity), as well any other rotary position relative to the base between 0° and 360°, due to friction that exists between components of the connection part's first and second rotary parts 7 and 8, respectively. *See, e.g.*, Kamikakai, 4:10–42 (discussing how friction between the bearing part 26 and the rotary shaft 24 of the second rotary part 8 resists rotation of the display part 3 relative to the connection part 4 and how friction between the bearing part 23 and the rotary shaft 21 of the first rotary part 7 resists rotation of the main body 2 relative to the connection part 4). As such, at least a predetermined rotary manipulation force is required to rotate the main body 2 and/or display part 3 relative to the connection part 4; otherwise the main body 2 and/or display part 3 remain fixed relative to the connection part 4. *E.g.*, *id.*, 3:52–64, 5:1–27. Thus, Kamikakai's

hinge assembly not only allows the portable electronic device to be opened to any angle between 0° and 360°, but also is capable of holding the portable electronic device in any of these arbitrary rotary positions. *E.g.*, *id.*, 3:52–64, 4:59–5:47, 6:28–36, FIGS. 3, 8–9.

Kamikakai's Hinge Assembly



Kamikakai, FIG. 8 (with annotations).

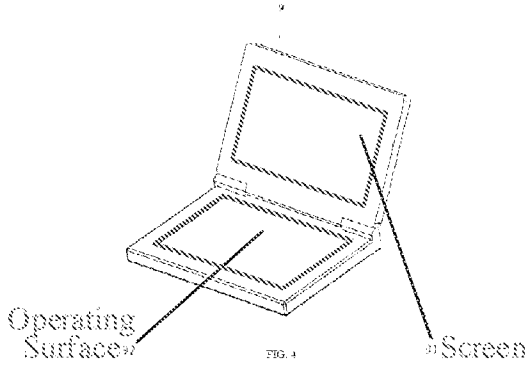
C. CN '170 (Exhibit 1013)

CN '170 (CN 2627170Y) is a certified English translation of a Chinese Patent issued on July 21, 2004—more than 4 years before the alleged priority date of the '844 Patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a-b) (pre-AIA). CN '170 was neither cited during prosecution of the '844 patent nor presented in the non-instituted IPR proceeding.

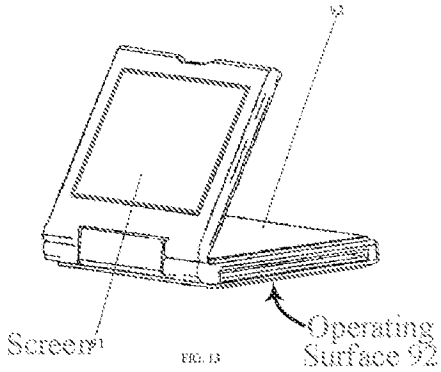
CN '170 is directed to a configurable electronic device, such as a laptop, that can be configured into a plurality of display modes including, laptop, easel, and frame modes. *E.g.*, CN '170, FIGS. 4, 13, 15, 17–19. Specifically, in the frame mode, the operating surface 92 is horizontal and facing down and the display screen 91 is facing upward at a nonzero angle relative to the

operating surface 92. *E.g.*, CN '170, 4:7–10, 7:11–14, FIGS. 13, 15, 17, 18. In the easel mode, the screen 91 and operating surface 92 are at an angle similar to that in the frame mode, but the laptop is vertically oriented in an inverted "V" configuration. *E.g.*, CN '170, FIG. 19, 5:43–44, 7:11–14.

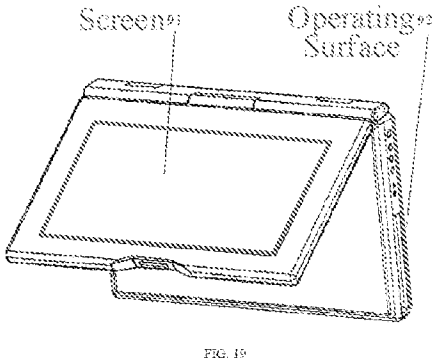
CN '170's Laptop Mode



CN '170's Frame Mode



CN '170's Easel Mode



CN '170, FIGS. 4, 13, 19 (with annotations).

D. Shimura (Exhibit 1007)

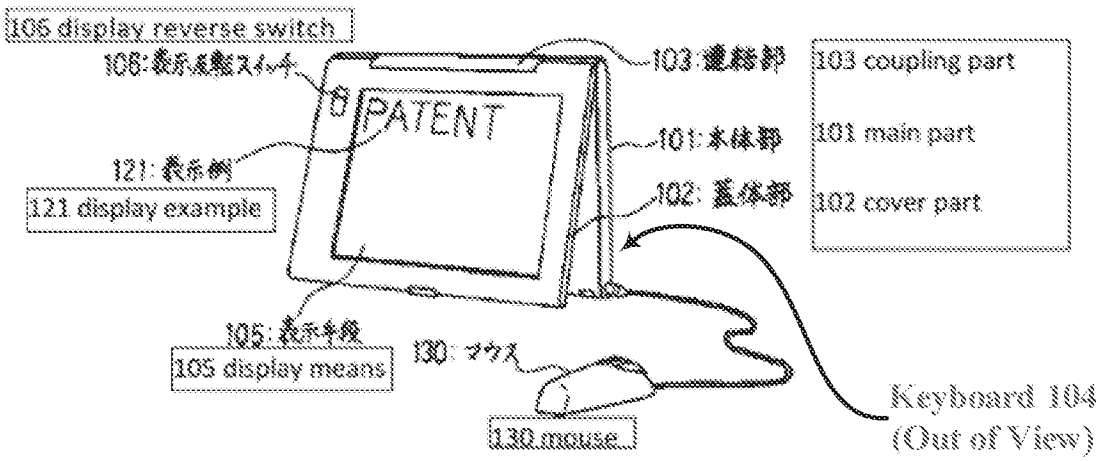
Shimura (JP H06-242853) is a certified English translation of a Laid-Open Japanese Patent that published on September 2, 1994—more than 13 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA).

Shimura was not cited or relied on by the Examiner during prosecution of the '844 patent[5]. Petitioner presented Shimura in the non-instituted IPR proceeding.

Like Kamikakai, Shimura is directed to a personal computer comprising a touch-sensitive screen ("display means") connected to a base ("main part") having a keyboard that can be disabled when placed face down on a table. *E.g.*, Shimura, ¶¶ [0008], [0011], [0018]. Shimura's computer also has a similar hinge assembly ("coupling part") that permits the screen to be rotated to "any angle relative to the main part within a range of 0° to 360°." *Id.* ¶¶ [0013]-[0017].

Extending on Kamikakai's frame mode (FIG. 8 Kamikakai shown above at VII.B.), Shimura shows how, with the screen ("display means 105") and base ("main part 101") in a similar relative orientation (approximately 340°), the computer can be placed on a table in an inverted "V" configuration to conserve table space. *E.g.*, *id.*, ¶ [0017], Figure 5 (reproduced below with annotations).

Annotated Figure 5 of Shimura



Shimura, Figure 5 (with annotations).

[5] Shimura is included on the list of "references cited" on the face of the '844 Patent, but it was not relied on or discussed by the Examiner in any rejection during original prosecution.

Shimura explains that this easel mode configuration is advantageous because "the area taken up by by the computer on the table can be greatly reduced." *Id.*, ¶ [0017].

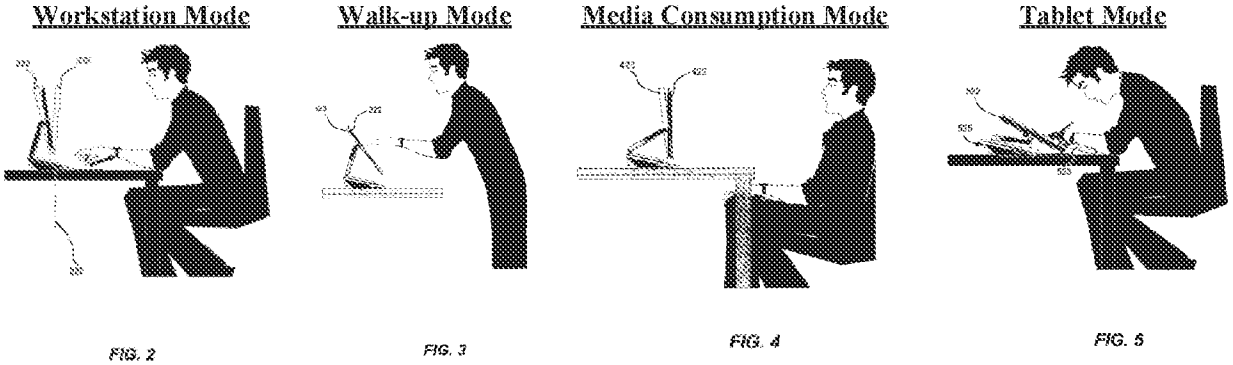
Since the display screen is upside down in this easel mode, Shimura includes a switching means, such as a physical display reverse switch 106, for re-orienting/flipping the displayed content to ensure it is right-side up. *E.g.*, *id.*, ¶¶ [0008], [0012], [0016–18].

E. Ledbetter (Exhibit 1008)

Ledbetter (U.S. 2007/0058329) is a publication of a U.S. Patent Application that published on March 15, 2007—more than one year before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA).

Ledbetter was not cited or relied on by the Examiner during prosecution of the '844 patent ('844 Patent, Cover); nor was it presented in the non-instituted IPR proceeding.

Ledbetter is also directed to a computer system with multiple configurations, comprising a touch-sensitive screen ("monitor screen") and a base having a keyboard. *E.g.*, Ledbetter, ¶¶ [0023–25]. Ledbetter's screen is connected to the base via a display arm that is configured to move the screen to various different modes/positions, such as the ones shown below in Ledbetter's annotated FIGS. 2–5. *Id.*, ¶¶ [0027–32], FIGS. 2–5.



Ledbetter, FIGS. 2–5 (with annotations).

Like then-existing computers, Ledbetter's computer displays several different modes of content, such as: the internet, messages, and media player software. *Id.*, ¶ [0057].

Ledbetter also recognizes that a given physical configuration (i.e., display mode) of a computer may be optimized for a particular content usage. For example, media consumption mode may be better suited for watching videos, tablet mode may be better suited for handwriting, and workstation mode may be better suited for working and gaming. *Id.*, ¶ [0057]. Thus, Ledbetter teaches automatically changing the displayed content when the screen position/mode changes to ensure it matches the current monitor position/mode. *E.g.*, Ledbetter, Abstract, ¶¶ [0004], [0055–57].

F. Hisano (Exhibit 1016)

Hisano (U.S. 2006/0034042) is a publication of a U.S. Patent Application that published on February 16, 2006—more than 2 years before the alleged priority date of the '844 Patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). Hisano was not relied on by the Examiner during prosecution of the '844 patent ('844 Patent, Cover) but it was relied on by the Petitioner in the non-instituted IPR proceeding.

Hisano is directed to an electronic apparatus, such as a notebook personal computer, that includes a virtual keyboard 20, rather than a conventional mechanical keyboard, that is displayed on one of two display panels. *E.g.*, Hisano, ¶¶ [0054], [0058]. The two display panels are included in two housings 2, 4 that are rotatably coupled to one another and that can be configured into an easel mode whereby the display panels face outward and away from one another in an upright, inverted "V" configuration. *E.g.*, Hisano, ¶¶ [0054], [0098], FIG. 9.

Hisano's Easel Mode

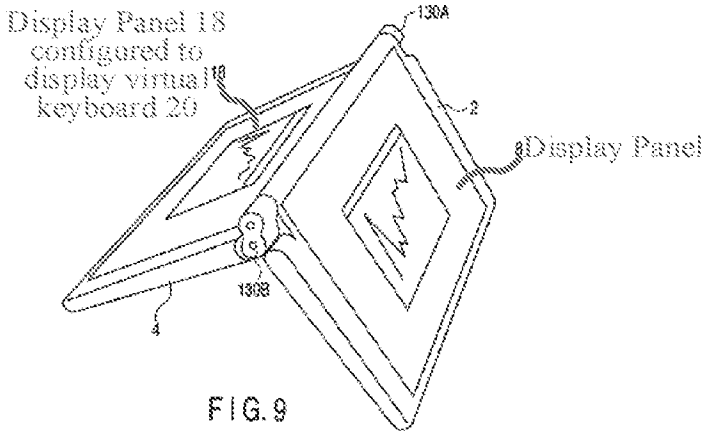


FIG. 9

Hisano, FIG. 9 (with annotations).

Importantly, Hisano discloses automatically rotating the content displayed on the display panel 8 of the housing 2 by 180° (i.e., inverting it) when transitioning from the laptop mode to the easel mode, thus ensuring that it is presented right-side up to a user in the easel mode, as is shown in Hisano's FIG. 9. *E.g.*, Hisano, ¶¶ [0098–99], FIG. 9.

Hisano's Laptop Mode

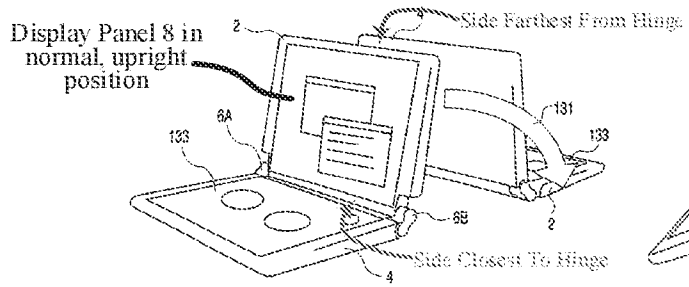


FIG. 10

Hisano's Easel Mode

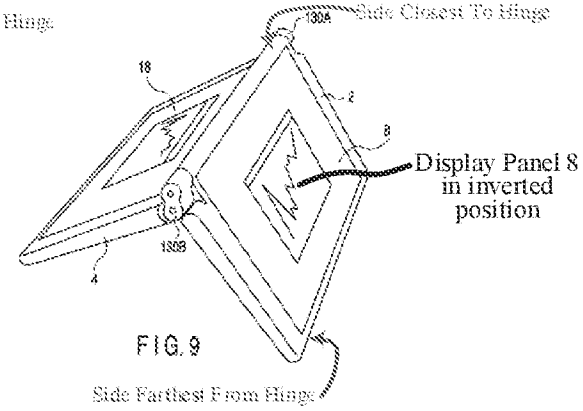


FIG. 9

Hisano, FIGS. 9, 10 (with annotations).

Hisano recognizes that the content can be inverted automatically based on the angle of the device's hinges and/or based on a gravity sensor, stating that "the rotating angle of the hinges 130A

and 130B may be used to switch between the display of a side of the screen closer to the hinges as the top and the display of a side of the screen farther from the hinges 130A and 130B as the top. Further, the personal computer may comprise a sensor that senses the direction of gravity so as to automatically switch the top and bottom of the display screen regardless of the angle of the hinges 130A and 130B or the placement of the personal computer." Hisano, ¶ [0099].

VIII. ADDITIONAL BACKGROUND PRIOR ART REFERENCES

This section describes numerous other background prior art references that teach and disclose pertinent aspects of the challenged claims.

A. Additional Reference Disclosing The Frame Mode

In addition to Kamikakai, Lane, and CN '170, at least two other prior art references also disclose the claimed frame mode, providing further evidence that this claimed frame mode was well known in the art before the alleged priority date of the '844 Patent.

1. Välikangas (Exhibit 1042)

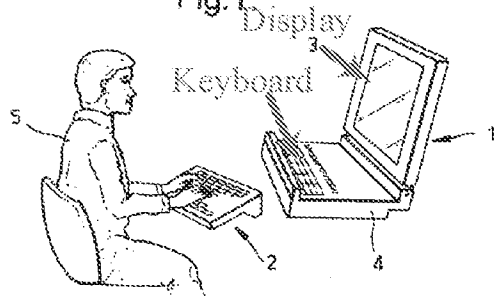
Välikangas (GB 2321982 A) is a publication of a UK patent application that published on August 12, 1998—nearly 10 years before the alleged priority date of the '844 Patent (April 1, 2008)— and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). Välikangas was not relied on by the Examiner during prosecution of the '844 patent ('844 Patent, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

That said, during prosecution of one of Patent Owner's counterpart European Patent, EP 2283407 B1 (Exhibit 1040), the European Patent Office (EPO) Examiner cited to Välikangas, alleging it discloses all three of the '844 Patent's claimed display modes—the laptop, easel, and frame modes. Ex. 1041, 11, 14. To be sure, Välikangas does in fact disclose a notebook computer that is configurable to the laptop, easel, and frame modes. *See, e.g.,* Välikangas, FIGS. 1, 2, 4, 4A.

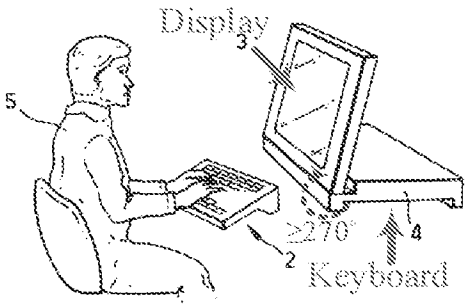
Specifically, Välikangas's notebook computer comprises a body 4 (base) having an integral keyboard 4B and a screen 3 (display component) that are rotatable relative to one another by more than 270° to configure the computer into the laptop, easel, and frame modes. *E.g.*, Välikangas, pp. 3–5, FIGS. 1, 2, 4A.

Valikangas's Display Modes

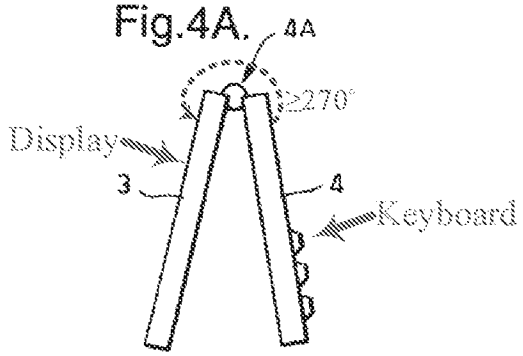
Laptop Mode



Frame Mode

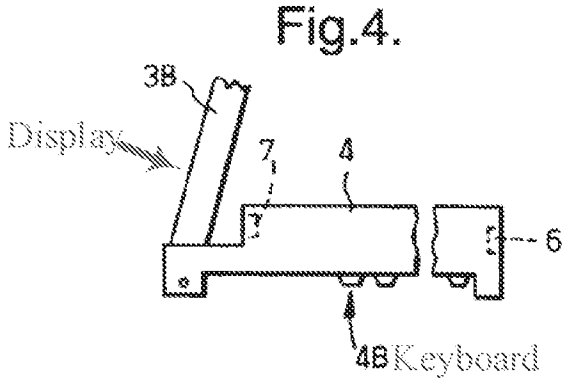


Easel Mode



Välikangas, FIGS. 1, 2, 4A (with annotations).

Välikangas confirms that the keyboard is face down in FIG. 2, like in the '844 Patent's frame mode, stating that "in Figure 2 . . . the notebook computer has been opened up to the order of 270° and the body has been positioned on a work top ***with the integral keyboard facing downwards***." Välikangas, p. 4. (emphasis added.) FIG. 4 of Välikangas also shows a side view of the frame mode, with the integral keyboard 4B being visible on the bottom.



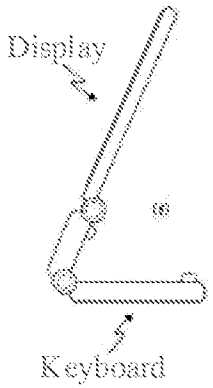
Välikangas, FIG. 4 (with annotations).

2. Kanamori (Exhibit 1011)

Kanamori (JP2005-71297A) is a certified English translation of a Japanese patent application published on March 17, 2005—more than 3 years before the alleged priority date of the '844 Patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). Kanamori was not relied on by the Examiner during prosecution of the '844 patent ('844 Patent, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

Like Kamikakai, Kanamori discloses a laptop-type personal computer (*e.g.*, Kanamori, ¶ [0001]) that can be configured into a frame mode where the keyboard is placed "on and in contact with the surface of the floor or a table . . . and the display held high." Kanamori, ¶ [0042]. *See also, e.g.*, Kanamori, ¶¶ [0053], [0069], FIGS. 6(4), 8(g), 11(f).

Kanamori's Frame Mode



Kanamori, FIG. 11(f) (with annotations).

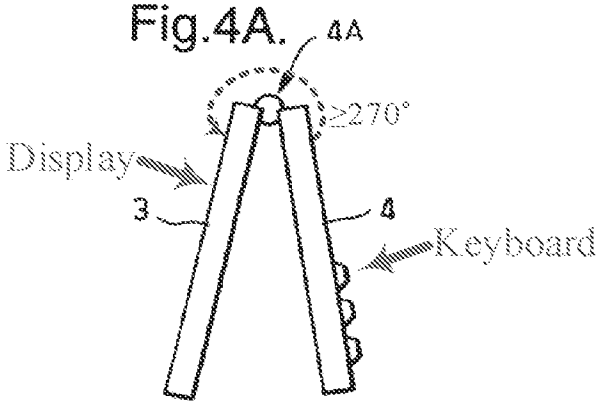
B. Additional References Disclosing Easel Mode

In addition to Shimura, Lane, Hisano, and CN '170, other prior art references also disclose a display/base configuration just like the claimed easel mode. These supplementary prior art references are introduced briefly below just to show how well known it was prior to the alleged priority date of the '844 patent to configure a laptop computer into an upright "V" configuration like the claimed easel mode.

1. Välikangas (Exhibit 1042)

As introduced above (VIII.A.1.), Välikangas shows the claimed easel mode in FIG. 4A.

Valikangas's Easel Mode



Välikangas, FIG. 4A. Välikangas confirms that "the notebook can be stood on its ends in an 'A' shaped configuration." Välikangas, p. 1, Abstract.

Further, Välikangas recognizes the need to "invert" or "revers[e], top to bottom" the displayed content when in easel mode since the display is upside down in this mode but does not explicitly provide details on how to do this. *E.g.*, Välikangas, pp. 1 (Abstract), 5, 7 (claim 5).

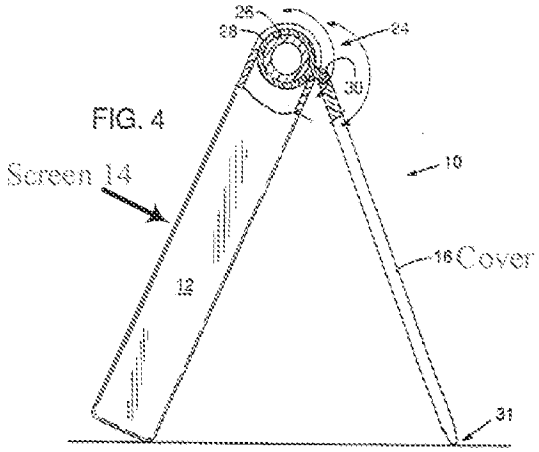
2. Podwalny (Exhibit 1024)

Podwalny (U.S. 5,644,516) is a U.S. Patent that issued on July 1, 1997—more than 10 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). Podwalny was not relied on by the Examiner during prosecution of the '844 patent ('844 Patent, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

Podwalny is directed to a portable computer that includes a housing 12 having a screen 14 and a cover 16 rotatably coupled to the housing 12. *E.g.*, Podwalny, 1:9–12, 2:32–39. Podwalny's computer can be configured into an easel mode-like position whereby the cover 16 and housing 12 (which includes the screen 14) are placed in an upright, inverted "V" configuration. *E.g.*,

Podwalny, 4:16–26, FIG. 4. Specifically, Podwalny's computer includes a hinge 24 that includes a detent mechanism that effectively locks the hinge in a particular position, "permit[ting] the computer to be stably arranged in the easel-like fashion depicted in FIG. 4." Podwalny, 4:21–23, FIG. 4.

Podwalny's Easel Mode-like Position



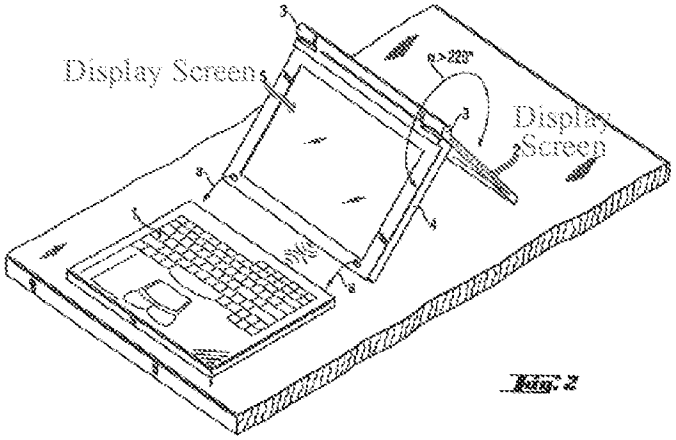
Podwalny, FIG. 4 (with annotations).

3. Schweizer (Exhibit 1015)

Schweizer (U.S. 7,061,472) is a U.S. Patent that issued on June 13, 2006—more than one year before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). As introduced above in Section IV.B.1., Schweizer was relied on by the Examiner during prosecution of the '844 patent.

Schweizer is directed to a laptop computer that has a detachable keyboard and two display screens that can be configured into an easel-mode like position. *E.g.*, Schweizer, 1:49–2:4, FIGS. 2, 4, 6.

Schweizer's Easel Mode-like Position



Schweizer, FIG. 2 (with annotations).

C. Additional References Disclosing Different Display Orientations

In addition to Shimura, Lane, and Hisano, several other prior art references also disclose reorienting displayed content to ensure it is presented right-side up. These references show how well-known this claimed feature was prior to the alleged priority date of the '844 patent.

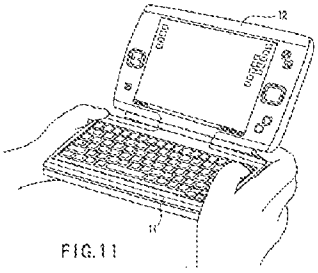
1. Tsuji (Exhibit 1018)

Tsuji (U.S. 2005/0062715) is a publication of a U.S. Patent Application that published on March 24, 2005—more than 3 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). Tsuji was not relied on by the Examiner during prosecution of the '844 patent ('844 Patent, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

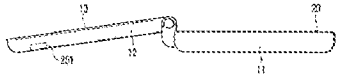
Tsuji relates to an information processing apparatus, such as a portable computer (Tsuji, ¶ [0003]), that includes a display unit 12 that can rotate relative to the main body 11 (which contains the keyboard 111) by more than 180°, and that can swivel about a single axis 15b between a tablet mode in which the backside of the display rests against the keyboard 111, and an open position

similar to a conventional laptop mode. *E.g.*, Tsuji, ¶¶ [0033–34], [0049–50], [0057], FIGS. 1–2, 5–9.

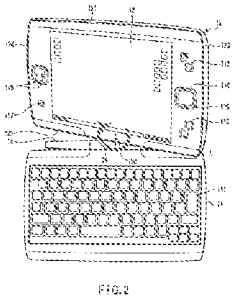
Tsuji's Laptop Mode

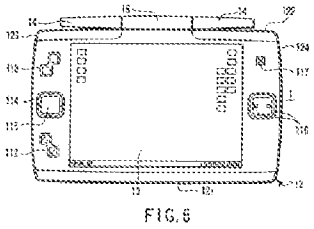


> 180° Rotation



Swivel to Tablet Mode





Tsuji, FIGS. 2, 6, 9, 11 (with annotations).

As explained by Tsuji, the display can be opened by more than 180° to, for example, "present the screen image to [a] partner who faces the user." *E.g.*, Tsuji, ¶ [0049]. Tsuji teaches automatically rotating the screen image 180 degrees relative to the default orientation (i.e., the orientation presented in laptop mode), so that "a user can present the screen image . . . in a correct orientation." Tsuji, ¶ [0049]. Tsuji goes on to state that a rotation angle sensor 202 can be used to "sense an angle formed between the front surface of the display unit 12 and the top surface of the computer main body 11." Tsuji, ¶ [0061]. A POSITA would have understood that this rotation angle sensor 202 could have been used to sense when the display unit 12 has been rotated by more than 180° relative to the main body 11 in order to perform the automatic content reorienting prescribed by Tsuji in paragraph 49. Schmandt, ¶ 89. Further, when in the tablet mode, Tsuji

teaches using a gravity sensor to automatically reorient the displayed content to ensure it is right-side up, regardless of the device's orientation. *E.g.*, Tsuji, ¶¶ [0055], [0059–60].

FIG. 14 of Tsuji and its corresponding description also disclose that the content is inverted when the display is rotated more than 180° to a position where it is upside down (position (b) in FIG. 14) to ensure the content is displayed right-side-up. *E.g.*, Tsuji, FIG. 14, ¶ [0074].

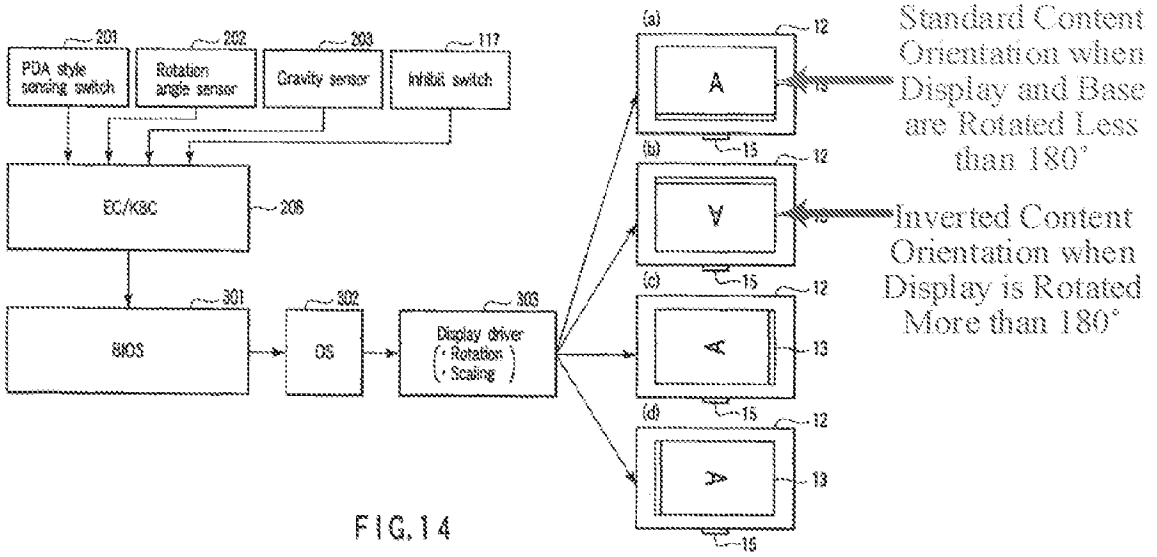


FIG. 14

Tsuji, FIG. 14 (with annotations).

Tsuji's description of FIG. 14 confirms that this content inversion occurs when the display is rotated more than 180°.

> (step **S113**). If the angle is smaller than 180 degrees (NO in step **S113**), the BIOS **301** controls the display driver **303** such that the orientation of the screen image is set in that of a default (corresponding to (a) in **FIG. 14**) in the PC style (step **S114**). If the angle is 180 degrees or greater (YES in step **S113**), the BIOS **301** controls the display driver **303** to display the screen image in the orientation (corresponding to (b) in **FIG. 14**) in which the screen image rotates 180 degrees relative to the orientation of a default in the PC style (step **S115**).

Tsuji, ¶ [0074].

2. Schweizer (Exhibit 1015)

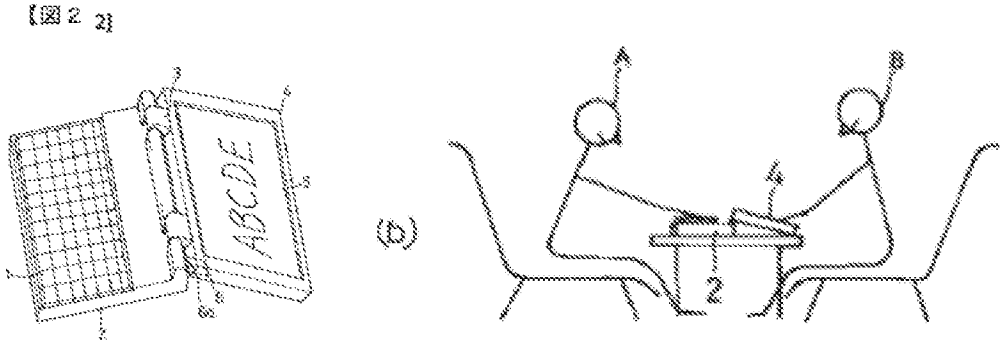
Schweizer (introduced above at VII.B.3.) teaches rotating an image on the main display screen by 180 degrees when the main display screen is rotated by an angle of at least 220 degrees relative to the display screen 5, such as to the position shown in FIG. 2. *E.g.*, Schweizer, 5:28–33, claim 1 (6:4–20). Schweizer also confirms that such content inversion was well known in the art, stating that "the creation of the control electronics for rotating the image of the main display screen by 180 degrees" involves "no inventive activity." Schweizer, 5:23–35.

3. Shigeo (Exhibit 1023)

Shigeo is a certified English translation of a Laid-Open Japanese Disclosure that published on July 12, 1996—more than 11 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). Shigeo was not relied on by the Examiner during prosecution of the '844 patent[6] but was relied on by Petitioner in the non-instituted IPR proceeding.

Shigeo relates to a portable computer whereby the content presented on the display is rotated by 180 degrees when the user opens the display wider than 180 degrees relative to the main body 2. *E.g.*, Shigeo, Abstract, ¶¶ [0004], [0014–16]. As shown in FIGS. 2 and 4(b) of Shigeo and explained throughout Shigeo, reorienting the content in this way (i.e., inverting it) allows another user sitting across from the primary user to view the displayed content right-side up. *E.g.*, Shigeo, Abstract, ¶¶ [0004], [0014–16], FIGS. 2, 4(b).

[6] Shigeo is included on the list of "references cited" on the face of the '844 Patent, but it was not relied on or discussed by the Examiner in any rejection during original prosecution. '844 Patent, Cover.



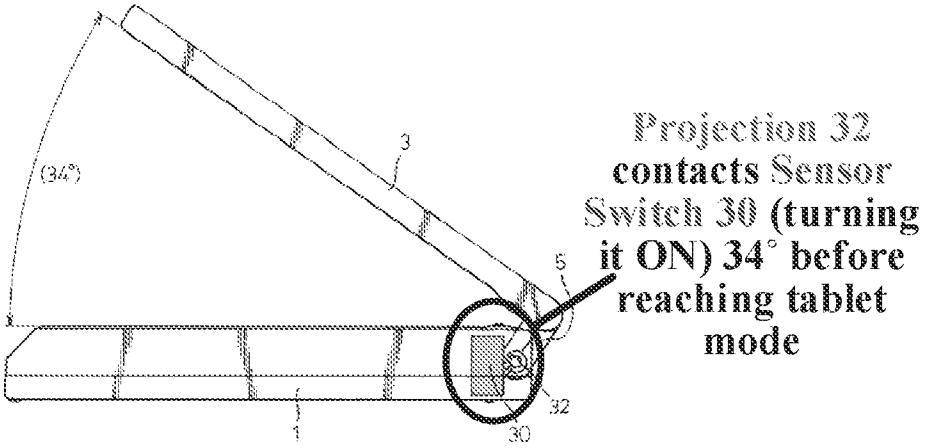
Shigeo, FIGS. 2, 4(b).

4. Nobuchi (Exhibit 1014)

Nobuchi (U.S. 6,492,974) is a U.S. Patent that issued on December 10, 2002—more than 5 years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). As introduced above in the discussion of the '844 Patent's prosecution history (Section IV.B.), Nobuchi was cited by the Examiner. Nobuchi is primarily directed to a means for automatically reorienting a laptop's displayed content by 90° when the display panel 3 is rotated relative to the body 1 by more than a threshold angle as it transitions to a tablet mode. *E.g.*, Nobuchi, Abstract, 7:5–15, 7:40–8:1.

Specifically, Nobuchi discusses using a sensor switch 30 that, when turned ON, automatically triggers rotation of display content by 90°. *E.g.*, Nobuchi, 7:5–15. The sensor switch 30 is turned on by a projection 32 coming into contact with the switch 30, which occurs when the display is rotated by more than a threshold angle. *E.g.*, Nobuchi, 7:32–51. This threshold angle can be adjusted by changing the position of the projection 32. *E.g.*, Nobuchi, 7:40–65, FIGS. 11–14 (showing various positions at which the projection 32 first makes contact with the sensor switch 30 to turn it ON). For example, FIG. 14 of Nobuchi shows one example where the projection 32 turns the sensor switch 30 ON when the laptop is 34° away from tablet mode.

Fig. 14

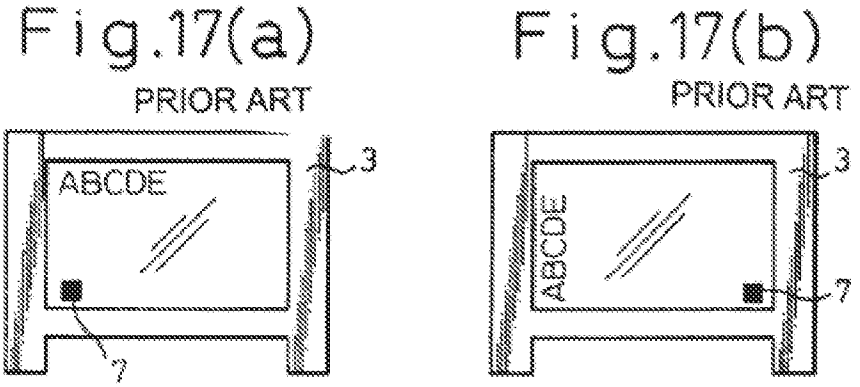


Nobuchi, FIG. 14 (with annotations).

Also, when describing the related prior art that existed in 2002, Nobuchi discloses that it was well known to display an icon ("display changing actuation position 7/17") on a display screen that a user could touch or otherwise select to rotate displayed content.

> Therefore, as shown in FIGS. **17**(*a*) and **17**(*b*), a display changing actuation position **17** is conventionally provided in the liquid crystal display **3** so that, when the operator touches this position with a tip of the pen **4**, the orientation of the liquid crystal display **3** is turned by 90°. If the position is touched again, the orientation of the liquid crystal display **3** is turned back to the initial state.

Nobuchi, 2:1–7.



Nobuchi, FIGS. 17(a), 17(b).

5. U.S. 2008/0211778 And U.S. 60/946,970 (Exhibits 1027 And 1028)

U.S. 2008/0211778 is a publication of a U.S. Patent Application filed December 19, 2007, and thus qualifies as prior art at least under Section 102(e) (pre-AIA). The '778 publication also claims priority to U.S. Provisional Patent Application No. 60/946,970 ("Ording"), which was filed on June 28, 2007, and which would have become publicly available on Patent Application Information Retrieval (PAIR) when the non-provisional application published on September 4, 2008.

The '970 Provisional Patent Application confirms that as of its filing date on June 28, 2007 (more than nine months before the '844 patent's alleged priority date), it was known for portable devices to "use one or more accelerometers to automatically adjust the orientation of the information on the screen." Ording, ¶ [0007].

6. Välikangas (Exhibit 1042)

As introduced above, Välikangas discloses an easel mode and teaches that the displayed content needs to be inverted/reversed in easel mode relative to the laptop and frame modes. *E.g.*, Välikangas, pp. 1 (Abstract), 5, 7 (claim 5). Although Välikangas does not disclose how to perform this content inversion, it is nonetheless recited in one of Välikangas's claims (claim 5), strongly

suggesting that a POSITA could have implemented this content inversion without any undue experimentation circa 1998 when Välikangas published. In sum, Välikangas's lack of teaching on how to implement this content inversion evidences that even as early as 1998 (roughly 10 years before the alleged priority of the '884 Patent), inverting displayed content when a display is upside down was something that was well within the ordinary skill of a POSITA.

D. Additional References Disclosing Different Modes of Content

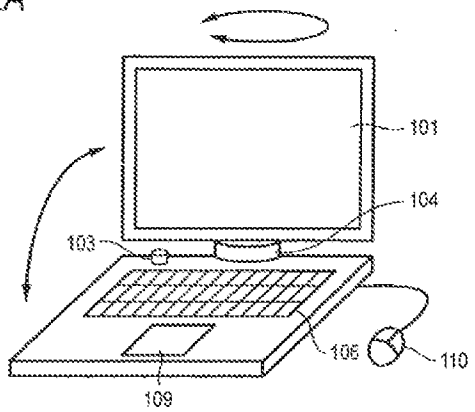
Besides Ledbetter, several other prior art references also disclose displaying different modes of content, including changing the mode of content based on a change in the display mode. For example, Tonouchi (Ex. 1017) teaches loading different user interfaces and/or software based on whether the computer is in a laptop mode or a tablet mode. *E.g.*, Tonouchi, ¶¶ [0009–10], [0014]. Moreover a guidebook to an operating system (OS) that existed before the '844 patent's alleged priority date (Windows Vista) confirms that these different kinds of content modes were typical of then-existing computer systems.

1. Tonouchi (Exhibit 1017)

Tonouchi (U.S. 2005/0122318) is a publication of a U.S. Patent Application that published June 9, 2005—more than two years before the alleged priority date of the '844 patent (April 1, 2008)—and thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). Tonouchi was not relied on by the Examiner during prosecution of the '844 patent ('844 Patent, Cover) but was relied on by Petitioner in the non-instituted IPR proceeding.

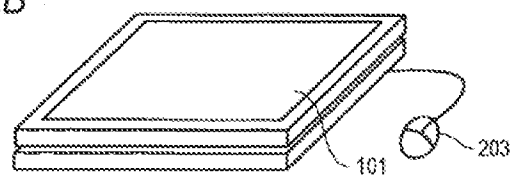
Tonouchi discloses a computer comprising a swiveling display that can be configured into a normal laptop or notebook mode and a tablet mode. *E.g.*, Tonouchi, FIGS. 2A-2B, 4A-4D, ¶ [0030].

FIG. 2A



NOTEBOOK MODE
ROTATION SWITCH: 0°
RECLOSABLE SWITCH: OPEN

FIG. 2B



TABLET MODE
ROTATION SWITCH: 180°
RECLOSABLE SWITCH: CLOSED

Tonouchi, FIGS. 2A, 2B.

Tonouchi teaches switching the user interface and/or the software to be operated when transitioning between these two modes. *E.g.*, ¶¶ [0009–10], [0014]. Specifically, Tonouchi teaches determining whether or not the computer is in the tablet mode or the laptop (notebook) mode based on the state of two switches, and teaches switching a user interface and/or software based on that determination. *Id.*

2. Pogue (Exhibit 1029)

Pogue is a manual for the Windows Vista Operating System (OS). In discussing the various features of this well-known and commonly-used prior art operating system, Pogue confirms that it displayed the same kinds of modes of content described in the '844 patent. These include, web browsers (*e.g.*, Pogue, 367–390), word processors (*e.g.*, Pogue, 263), media players (*e.g.*, Pogue, 463–482), and email and messaging services (*e.g.*, Pogue, 391–420).

As explained in the following paragraphs, Pogue is a printed publication that was published, known, and readily available at least by March 2007. It thus qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA). Pogue was not relied on by the Examiner during

prosecution of the '844 patent ('844 Patent, Cover) and also was not relied on by Petitioner in the non-instituted IPR proceeding.

Pogue was published by a well-known commercial publisher (O'Reilly Media, Inc.) and bears conventional markers of publication that predate the alleged priority date, including: a copyright notice from 2007, ISBN numbers[7], two printing dates (January 2007 edition and February 2007 second printing), a library stamp, and a library call number from 2007[8]. This makes out more than a *prima facie* case that Pogue was a "printed publication" available to skilled artisans no later than March 2007, and likely before. *See Ex parte Grillo-Lopez,* Appeal 2018-006082 (PTAB Jan. 31, 2020) (precedential) (holding that in the examination context, once the Office makes a *prima facie* case of publication date, the burden shifts to applicant to "come forward with rebuttal evidence or argument to overcome a prima facie case"). *Id.* at 2. The Board's precedential *Grillo-Lopez* decision cited earlier Board decisions where the "examiner met his burden of proof by setting forth the nominal publication date." *Id.* (citing *Ex Parte Albert*, 18 USPQ 2d 1325 (BPAI 1984); *see also FLIR Sys., Inc. v. Leak Surveys, Inc.*, IPR2014-00411, Paper 9 at 19 (PTAB Sept. 5, 2014) (finding that a "Copyright notice prima facie establishes a prior art date").

Indeed, the evidence establishes Pogue as prior art even under the higher standard imposed by the Board in *inter partes* review proceedings. *See Hulu, LLC v. Sound View Innovations,* LLC, IPR2018-01039, Paper 29 at 17–20 (PTAB Dec. 10, 2019) (precedential) (finding a reasonable likelihood that the reference in question was a printed publication because it bore conventional

[7] ISBN-10: 0-596-52827-2, ISBN-13: 978-0-596-52827-0

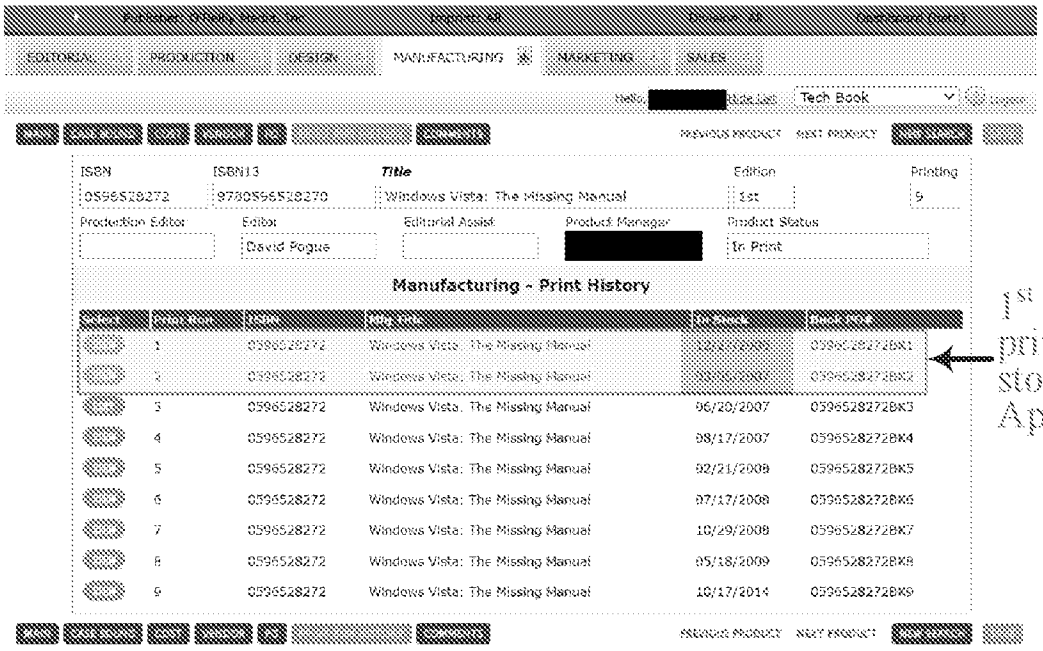
[8] The call number—QA 76.76.063 P63525—appears on page v (1st page in the Table of Contents) and on the spine of the hard copy of Pogue being relied on herein, and bears a 2007 date.

markers of publication and was published by an established publisher, O'Reilly Media, Inc). Pogue not only bears the same conventional markers of publication as in *Hulu* (copyright notice, ISBN numbers, library stamp, and printing dates), but also was published ***by the same established publisher*** (O'Reilly Media).

While the above-noted evidence establishes public availability of Pogue sufficient to qualify it as prior art, Requester notes the following additional evidence that leaves no doubt.

Pogue was for sale on the publisher's (O'Reilly's) website more than one year before the alleged priority date. Authenticated internal records from Pogue's publisher (O'Reilly Media, Inc.) show that Pogue was available for sale, and sold, to the public before April 1, 2007, thus confirming that Pogue was publicly accessible more than one year before the alleged priority date of the '844 Patent. *See,* Fauxsmith (Ex. 1033). Specifically, O'Reilly's internal records show that the 1st and 2nd printings of the 1st Edition were in stock before April 1, 2007 and that ***17,014 copies of this 1st Edition had been sold before April 1, 2007***. *See* Fauxsmith, Exhibit B.

O'Reilly's Print Run Records



Fauxsmith, Exhibit A (with annotations).

O'Reilly's Sales Records

9780596528270 : Windows Vista: The Missing Manual (Edition 1)

Sequential view | Crosstab view | Lifetime Valuation

▪ Summary

Metadata		Inventory		Lifetime Value		Average After Sell In	
Pub Date	2006-12-27	Current QOH	0	Gross Units	58,267	Gross Units	382
Page Count	848	BO Qty	0	Return Units	(5,837)	Return Units	(51)
Price	$29.99	Committed Qty	0	Net Units	52,409	Net Units	332
Unit Cost	$7.77	Avail Qty	0	Comp Units	2,478	Comp Units	2
				Gross Dollars	$936,829.30	Gross Dollars	$5,253.61
				Return Dollars	($ 101,167.09)	Return Dollars	($ 674.17)
				Net Dollars	$835,020.42	Net Dollars	$5,253.31

Sales

Month	2006				2007				2008			
January	0	0	0	0	2,714	583	(7)	2,707	1,341	0	(49)	1,292
February	0	0	0	0	4,823	1,412	(15)	4,808	1,720	0	(52)	1,168
March	0	0	0	0	2,735	54	(52)	2,682	965	0	(123)	842
April	0	0	0	0	1,575	13	(281)	1,294	1,772	0	(41)	1,731
May	0	0	0	0	1,938	55	(68)	1,875	1,012	1	(130)	882
June	0	0	0	0	2,184	18	(272)	1,912	634	0	(202)	432
July	0	0	0	0	3,426	15	(62)	3,364	1,199	0	(204)	995
August	0	0	0	0	1,654	11	(118)	1,723	3,724	0	(161)	3,563
September	0	0	0	0	1,399	32	(97)	1,335	843	1	(65)	779
October	0	0	0	0	1,792	0	(68)	1,724	1,119	0	(92)	1,027
November	0	0	0	0	2,223	0	(52)	2,171	614	1	(61)	553
December	7,564	279	0	7,564	1,046	0	(68)	978	1,209	0	(79)	1,130
Totals:	7,564	279	0	7,564	26,687	2,193	(1,074)	25,792	15,752	3	(1,259)	14,494

17,014 copies sold before April 1, 2007

Fauxsmith, Exhibit B (with annotations).

Moreover O'Reilly itself confirms that the substantive content of all copies of the 1st and 2nd printings are identical. Fauxsmith, ¶ 12. Thus, although the copy of Pogue being relied on in this Request is from the 2nd printing, it contains the same substantive content as the copies of the earlier 1st printing that were sold as early as December of 2006. *Id.*

The Internet Archive's Wayback Machine® corroborates the publisher's records. Specifically, the Wayback Machine® confirms that Pogue was available for sale on both O'Reilly's and Amazon's websites before April 1, 2008, including more than one year before April 1, 2008. Ex. 1034, Exhibit A. Further, although the earliest date that the Wayback Machine® archived the Amazon webpage where Pogue was offered for sale was March 29, 2007 (still more

than one year before the alleged priority date of the '844 Patent), the Amazon reviews shown on this archived webpage date all the way back to January 12, 2007, confirming that Pogue was available on Amazon even earlier than this earliest archived date. *Id.*

Thus, Pogue was publicly available before the alleged priority date of the '844 Patent for at the least the reasons that: 1) it bears conventional markers of publication that predate the alleged priority date; 2) it was published by an established publisher in O'Reilly Media, Inc.; and 3) as confirmed by the publisher's internal records and the Wayback Machine®, was available for sale—and was actually sold—more than one year before the alleged priority date.

IX. SUBSTANTIAL NEW QUESTIONS OF PATENTABILITY UNDER 37 C.F.R. § 1.510(b)

The unpatentability grounds presented below in Section X. raise substantial new questions of patentability ("SNQs") for claims 10 and 16.

Every one of the grounds relies on a primary reference (either Lane or Kamikakai or CN '170) that discloses the sole claim feature—the frame mode—that 1) the Examiner found lacking in the prior art during original prosecution; and 2) that the Board found lacking in the non-instituted IPR proceeding. Moreover, these primary references were neither cited during original prosecution nor presented to the Patent Office in any post-grant proceeding, such as the non-instituted IPR proceeding. Thus, each ground of unpatentability is "new" at least because these primary references are "new."[9] Further, because the primary reference of each ground discloses the claim

[9] The primary references and grounds presented herein in Section X have not "been: (A) decided in a final holding of invalidity by a federal court in a decision on the merits involving the claim[s], after all appeals; (B) decided in an earlier concluded examination or review of the patent by the

feature that was solely responsible for the claims' initial allowance and the Board's denial of institution in the non-instituted IPR proceeding (the frame mode), each ground presents a "substantial" question of patentability. In sum, "a reasonable examiner would consider [at least] the [Kamikakai, Lane, and CN '170 references] important in deciding whether or not the claim[s] [are] patentable." MPEP § 2242(I).

The *importance* of the prior art presented herein is reflected in the fact that each ground actually establishes its respective claim(s) unpatentable (*infra* Section X), thus more than meeting the threshold of importance sufficient to qualify as "substantial" (*see* MPEP § 2242(I) ("'[A] substantial new question of patentability' as to a patent claim could be present even if the examiner would not necessarily reject the claim as … obvious in view of, the prior art patents or printed publications.")).

Additional particulars of each SNQ are discussed in the following sub-sections.

A. Lane Raises SNQs With Respect To Claims 10 And 16 Of The '844 Patent

As introduced above in Section VII.A., Lane qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA) because it issued more than 12 years before the alleged priority date of the '844 patent (April 1, 2008).

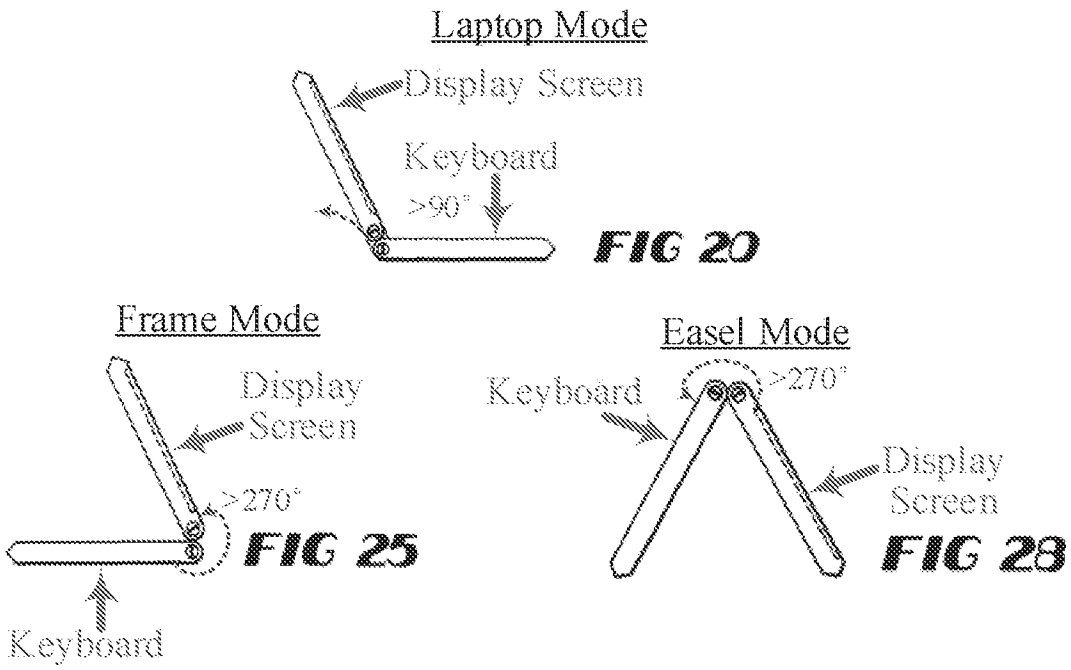
Lane also is new art. It 1) has not been raised in any invalidity contentions of the '844 Patent; 2) was not relied on, cited, or even referenced during original prosecution of the '844

Office; or (C) raised to or by the Office in a pending reexamination or supplemental examination of the patent." MPEP § 2242(I).

Patent; and 3) has not been raised in any other examination or review by the Office, including the non-instituted IPR proceeding. *See* MPEP § 2242(I).

Further, Lane raises substantial questions of patentability as it explicitly discloses the frame mode and further discloses, teaches, and/or strongly suggests all of the elements of claims 10 and 16, thereby rendering these claims obvious. Specifically, Lane discloses all three of the display modes (laptop, easel, and frame modes) (*e.g.*, Lane, 3:5–14, 10:24–31, FIGS. 20, 25, 28) and discloses automatically reorienting displayed content depending on the display component's orientation (*e.g.*, Lane, 5:23–6:6).

Lane's Display Modes



Lane, FIGS. 20, 25, 28 (with annotations).

Lane also discloses a touch-sensitive screen that is accessible in all of the display modes and that Lane implicitly teaches and/or strongly suggests can serve as a navigation control in each of these display modes. *E.g.*, Lane, 3:5–14, 10:17–20, FIGS. 20, 25, 28.

Thus, a reasonable examiner would find Lane's new, non-cumulative teachings—especially of the frame mode—to present substantial questions of patentability, since it was this frame mode that led to allowance of the '844 Patent's claims. Ex. 1002, 988–989. Moreover, the EPO Examiner's rejection of very similar claims (ones that also included the same laptop, easel, and frame modes) based on Lane, confirms this substantial new question of patentability. Ex. 1041, 4–5, 11–15.

Thus, Lane raises substantial new questions of patentability (SNQs) for claims 10 and 16 that warrant reexamination of these claims, as further confirmed by the detailed unpatentability ground presented below in Section X.A.

B. The Lane-Ledbetter Combination Raises SNQs With Respect To Claims 10 And 16 Of The '844 Patent

As discussed above in Section IX.A., Lane alone presents SNQs for claims 10 and 16. In the event Patent Owner argues that the claims require different types of content be displayed in the laptop and easel modes, these claims are obvious in further view of Ledbetter. This is because Ledbetter explicitly teaches this concept of displaying different modes of content (*e.g.*, internet, messages, media player software, handwriting recognition software, etc.), depending on the display mode (position of the display screen). *E.g.*, Ledbetter, ¶¶ [0055–57]. Specifically, Ledbetter recognizes that certain display modes are better suited for different uses, and thus, different modes of content. *E.g., Id.* For example, Ledbetter teaches displaying content for working/productivity in a workstation mode (similar to a laptop mode) and teaches displaying a

media player for watching videos in a media consumption mode (similar to an easel mode). *E.g.*, *id.*, ¶¶ [0055–57]. Thus, based on Ledbetter's teachings, a POSITA would have been motivated, with a reasonable expectation of success, to have implemented Lane's computer with software that would have changed the displayed modes of content when changing display modes in order to ensure the displayed modes of content match the current display mode. *E.g.*, *id.*, Abstract, ¶¶ [0004], [0055–57].

Thus, the Lane-Ledbetter combination raises substantial new questions of patentability (SNQs) for claims 10 and 16 that warrant reexamination of these claims, as further confirmed by the detailed unpatentability ground presented below in Section X.B.

As introduced above in Sections VII.E., Ledbetter qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA) because it published more than one year before the alleged priority date of the '844 patent (April 1, 2008). **Ledbetter also is new art** since it 1) was not relied on or discussed during original prosecution of the '844 Patent; 2) has not been the subject of any "concluded examination or review" by the Patent Office; 3) has not been considered "in an earlier ***concluded trial*** by the Patent Trial and Appeal Board"; and 4) also has not been the subject of any federal court invalidity holding relating to the '844 Patent. MPEP § 2242(I) (emphasis added.)

C. The Kamikakai-Shimura Combination Raises SNQs With Respect To Claims 10 And 16 Of The '844 Patent

As discussed above in Sections VII.B. and VII.D., Kamikakai and Shimura both qualify as prior art at least under 35 U.S.C. §§ 102(a-b) (pre-AIA) since they both published or issued more than one year before the alleged priority date of the '844 patent (April 1, 2008).

1. A *New* Question Of Patentability For Claims 10 And 16 Is Presented By The Kamikakai-Shimura Combination.

No concluded examination or review by the Patent Office, or any final holding of invalidity (such as by a federal court or the PTAB), has relied on either Kamikakai or Shimura individually, much less in combination. Neither Kamikakai or Shimura were relied on or discussed by the Examiner during prosecution of the '844 patent[10]. Kamikakai also was not relied on in the non-instituted IPR proceeding, or any other PTAB or federal court proceeding. Although Shimura was presented in the IPR, it was not presented along with Kamikakai and the Board never reached a final written decision in that proceeding. Instead, the Board denied institution of the IPR based on its construction of "frame mode." Decision, 12–13. Thus, Shimura also has not been the subject of any "concluded examination or review" and has not been considered "in an earlier ***concluded trial*** by the Patent Trial and Appeal Board." (emphasis added.) Thus, Shimura is also "new" art. (MPEP § 2242(I); *see also Ex Parte Finjan, Inc.*, Appeal No. 2018-007444, 2018 WL 4740168, at *5 (PTAB Sept. 28, 2018) ("Because no trial was instituted in the *inter partes* review, there was no 'final holding of invalidity' or 'concluded examination or review' ...").); *see also In re Vivint, Inc.*, 14 F.4th 1342, 1349 (Fed. Cir. 2021) ("[A] question of patentability is new until it has been considered and decided on the merits."). To Requester's knowledge, the Kamikakai-Shimura combination also has not been raised to or by the Patent Office in any pending reexaminations or supplemental examinations of the '844 Patent.

Kamikakai is distinct from and presents new teachings not found in the Nobuchi reference discussed during examination. Although Kamikakai shares some similarities with one

[10] Shimura is included on the list of "references cited" on the face of the '844 Patent, but it was not relied on or discussed by the Examiner in any rejection during original prosecution.

of the references cited by the Examiner during original prosecution (Nobuchi)[11], Kamikakai presents new teachings and disclosures not found in Nobuchi. Specifically, Kamikakai teaches that its frame mode is an actual display mode (i.e., a stable position at which a user can interact with the device). Nobuchi does not. Kamikakai also teaches a hinge assembly that is capable of stably holding the laptop in this frame mode (and virtually any rotary position between 0° and 360°). Nobuchi does not.

As background, Nobuchi was filed before Kamikakai[12], does not include the same disclosure as Kamikakai, and is directed to altogether different aspects of a portable electronic device (*e.g.*, laptop). Specifically, Nobuchi is primarily directed to a sensor switch for automatically rotating displayed content by 90° when transitioning to a tablet mode. *E.g.*, Nobuchi, FIGS. 8, 11(a), 12–14, Abstract, 2:49–59, 7:16–7:65, 8:35–52 (claim 1). The switch can be activated before the laptop reaches the tablet mode (shown in FIG. 8 of Nobuchi), presumably to ensure the content is actually rotated when the laptop reaches the tablet mode[13] and/or to provide

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[11] Kamikakai's inventors are also listed as inventors on Nobuchi, and the two references are assigned to the same entity (Fujitsu Limited). Both are generally directed to portable electronic devices, though they are primarily directed to different aspects of portable electronics devices.

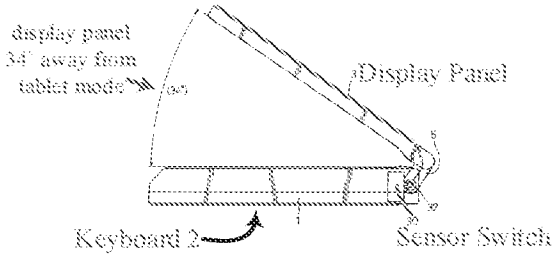
[12] Nobuchi was filed nearly seven months before Kamikakai (April 8, 1997 vs. October 31, 1997) and claims priority to a provisional patent application that was filed nearly two months before the provisional patent application to which Kamikakai claims priority (October 8, 1996 vs. December 2, 1996).

[13] A POSITA would have understood that it could take some time for the laptop to rotate the displayed content and that Nobuchi's sensor switch pre-emptively triggers the content rotation process before reaching tablet mode to account for this delay. Schmandt, ¶ 36. This ensures the content is rotated when the laptop reaches the tablet mode so that there is no delay for the user

feedback to a user that lets them know they are about to enter tablet mode. Schmandt, ¶¶ 32-36. For example, FIG. 14 of Nobuchi, which was cited by the Examiner as allegedly disclosing a frame mode, (Ex. 1002, 375–376) shows an example position where the sensor switch can be turned ON to trigger rotation of the displayed content before the device reaches the tablet mode (FIG. 8). *E.g.*, Nobuchi, 7:60–65.

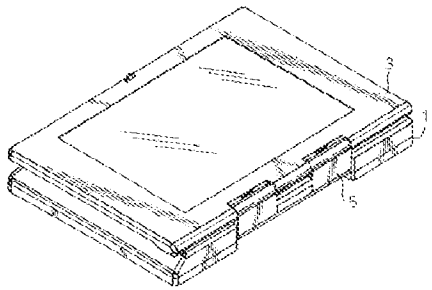
Example Position at Which Sensor Switch 30 is turned ON to Trigger Content Rotation

Fig 14



Nobuchi's Tablet Mode

Fig.8



Nobuchi, FIGS. 8, 14 (with annotations).

However, this and the other frame mode-like positions shown in Nobuchi's drawings (FIGS. 11(a), 12–14) are just example positions at which the sensor switch 30 can be turned ON when the laptop transitions to the tablet mode (FIG. 8). *E.g.*, Nobuchi, 7:16–65; Schmandt, ¶¶ 32-36.

(i.e., so that the user can immediately start using the laptop when the laptop reaches tablet mode). Schmandt, ¶ 36.

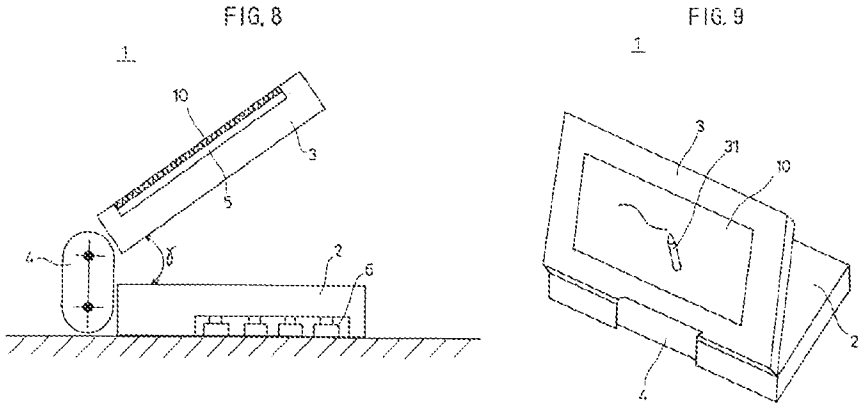
> The angle of the liquid crystal display panel **3**, with respect to the apparatus body **1**, at which the sensor switch **30** performs the ON-OFF changing action, can be suitably selected by changing the position of the projection **32**. For example, FIG. **13** shows a case in which the ON-OFF changing action is performed at a position of the liquid crystal display **3** which is turned by 355° with respect to the apparatus body **1** from the state shown in FIGS. **11**(*a*), **11**(*b*) and **12**. Also, FIG. **14** shows another case in which the projection **32** comes into touch with the contact **31** of the sensor switch **30** to perform the switch ON-OFF changing action at a position of the liquid crystal display panel **3** which is turned by 35° with respect to the apparatus body **1** from the state shown in FIGS. **11**(*a*), **11**(*b*) and **12**.

Nobuchi, 7:52–65.

Nobuchi does not explicitly disclose or suggest that these positions are anything more than sensor switching positions. For example, Nobuchi does not disclose or suggest that these are stable, fixed positions at which the user can interact with (i.e., touch) the display panel 3. Nor does Nobuchi provide any indication that its hinge member 5 is capable of holding the display panel 3 in these frame mode-like positions. Schmandt, ¶¶ 33-35.

Kamikakai, on the other hand, is primarily directed to this exact concept—i.e., that the frame mode is an actual display mode in which a user can interact with the device. Specifically, Kamikakai discloses a locking hinge assembly ("connection part 4") that stably holds the display in a frame mode (*e.g.*, Kamikakai FIGS. 8–9) so that an operator can use and interact with the laptop in this frame mode by, for example, touching the pen input part 10 of the display part 3 with a pen. *E.g.*, Kamikakai, FIGS. 8–9, 3:51–64, 4:10–5:27, 6:24–7:18; Schmandt, ¶ 54.

Kamikakai's Frame Mode



Kamikakai, FIGS. 8–9.

> In this case, the surface **2***b* of the main body **2**, forming the bottom surface of the portable information processing apparatus **1** in the folded state of the display part **3**, and the surface **3***a* of the display part **3**, forming the top surface of the portable information processing apparatus **1** in the folded state of the display part **3**, face each other as shown in FIG. **8**. In addition, the pen input part **10** is easily accessible by the user, because the area occupied by the portable information processing apparatus **1** in this state is not much different from that in the folded state of the display part **3** and the portable information processing apparatus **1** can easily be maintained in a stable state. Accordingly, the user can easily input data from the pen input part **10** by manipulating a pen (not shown) with respect to the pen input part.

Kamikakai, 6:37–50.

Kamikakai describes how, due to friction between components of the hinge assembly, the hinge assembly only rotates when a user provides sufficient rotary manipulation force. Otherwise, the hinge assembly ("connection part 4") holds the display part 3 and main body 2 at any angular position. *E.g.*, Kamikakai, 4:10–5:27.

> When the user stops turning the main body **2** or stops turning the connection part **4** with respect to the main body **2**, the main body **2** or the connection part **4** stops turning due to the friction between the bearing member **23** and the rotary shaft **21**. An angle formed between the main body **2** and the connection part **4** is fixed to that at the time when the rotary manipulation force is released, and the main body **2** and the connection part **4** are supported at this angular position.

Kamikakai, 5:1–8.

> When the user stops turning the display part **3** or stops turning the connection part **4** with respect to the main body **2**, the display part **3** or the connection part **4** stops turning due to the friction between the bearing member **26** and the rotary shaft **24**. An angle formed between the display part **3** and the connection part **4** is fixed to that at the time when the rotary manipulation force is released, and the display part **3** and the connection part **4** are supported at this angular position.

Kamikakai, 5:20–27.

Nobuchi provides none of these details. Nobuchi lacks Kamikakai's locking hinge assembly, and nothing in Nobuchi suggests that its frame mode-like sensor switching positions (shown in FIGS. 11(a), 12–14) are anything more than transient positions that the laptop passes through en route to the tablet mode. *E.g.*, Nobuchi, 7:26–7:65; Schmandt, ¶¶ 32-36.

Thus, Kamikakai is new and non-cumulative because it provides teachings of the claimed frame mode that Nobuchi lacks. Whereas Nobuchi provides no indication that a user can actually interact with (i.e., touch) the display 3 in any of the sensor switching positions, Kamikakai explicitly discloses that a user can interact with the display part 3 in the frame mode. Kamikakai, FIGS. 8–9, 6:24–7:18; Schmandt, ¶¶ 32-36, 52-54. Further, whereas Nobuchi provides no disclosure or suggestion as to how its hinge member 5 could stably hold the display 3 in any of the sensor switching positions, Kamikakai explicitly discloses a locking hinge assembly that is capable of stably holding the display part 3 in the frame mode. *E.g.*, Kamikakai, FIGS. 8–9, 3:51–64, 4:10–

5:27, 6:24–7:18. Thus, unlike Nobuchi, Kamikakai not only teaches its frame mode to be an actual display mode (i.e., a stable, fixed configuration in which an operator can use and interact with the laptop), but it also discloses how to achieve/maintain this frame mode (*e.g.*, by including a locking hinge assembly).

Thus, Kamikakai and Shimura each constitute new art, as does their combination.

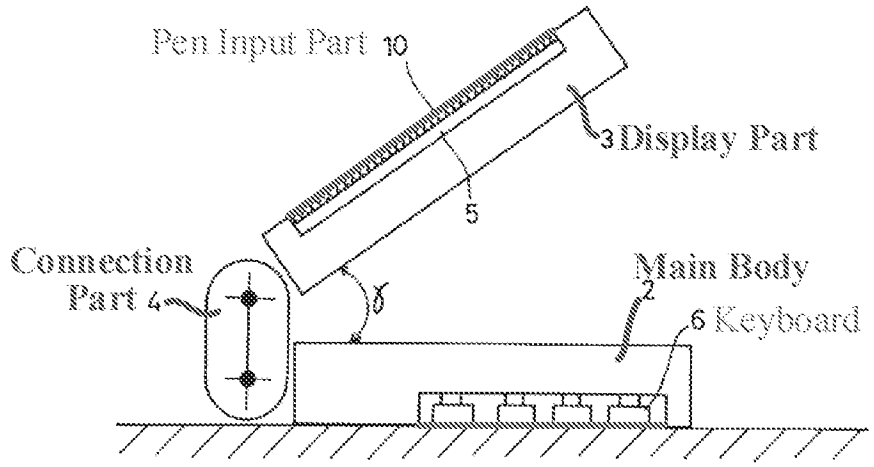
2. A *Substantial* Question Of Patentability For Claims 10 And 16 Is Raised By Shimura And Kamikakai (A Reasonable Examiner Would Consider The Teachings Of The References To Be Important In Deciding Whether Claims 10 And 16 Are Patentable)

Kamikakai and Shimura present substantial questions of patentability for at least the reason that Kamikakai discloses the sole claim element that the Examiner found lacking in the prior art: the frame mode. *See, e.g.*, Kamikakai, 6:28–36, FIGS. 8–9; Ex. 1002, 989. Specifically, the Examiner's only stated reason for allowing the claims was the cited prior art's lack of "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. 1002, 989. Thus, "a reasonable examiner would consider" at least Kamikakai "important in deciding whether or not [claims 10 and 16] [are] patentable" (MPEP § 2242(I).) since it discloses this frame mode limitation that was essential to the claims' allowance.

Moreover, a reasonable examiner would consider the combination of Kamikakai and Shimura important in deciding the patentability of claims 10 and 16 since the combination teaches all of the elements of the claims, rendering them obvious, as explained in greater detail below in Section X.B. (Ground 3). Specifically, Kamikakai teaches all of the elements of claim 10 other than the easel mode that is configured to display a content mode having a different display orientation than the laptop mode. For example, as introduced above in Section VII.B., Kamikakai

teaches a portable computer comprising a base ("main body 2") including a keyboard ("keyboard 6") and a main display component ("display part 3") including a single display screen ("display panel 5") that is rotatably coupled to the base via a hinge assembly ("connection part 4"). *E.g.*, Kamikakai, 3:39–64. Further, Kamikakai teaches that the portable computer is configurable into a plurality of display modes, including a laptop mode and a frame mode (*e.g.*, *id.*, FIGS. 3, 7–9) and that the portable computer includes a navigation control ("pen input part 10") that is accessible in all of the display modes (*e.g.*, *id.*, 3:43–46, FIGS. 3, 7–9).

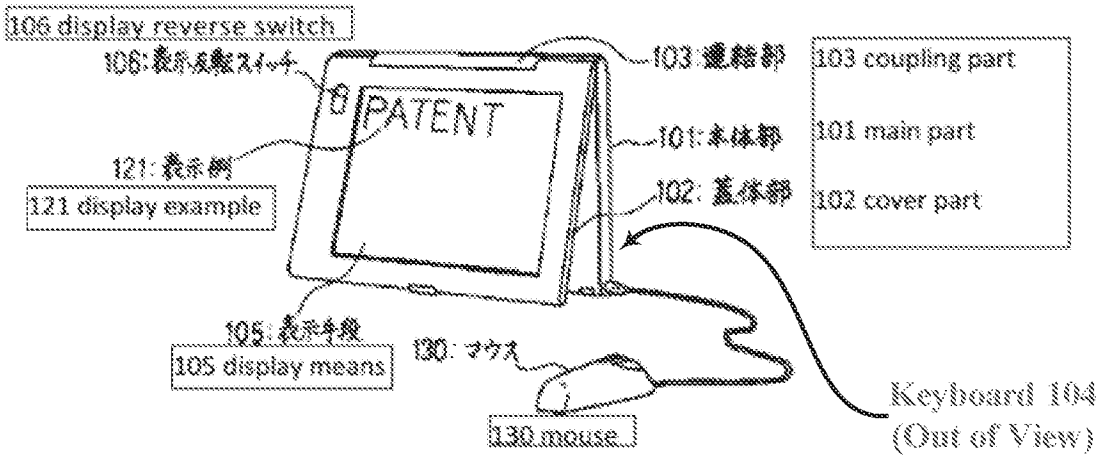
Annotated FIG. 8 of Kamikakai



Kamikakai, FIG. 8 (with annotations).

Shimura teaches the easel mode and the different display orientations. *E.g.*, Shimura, Figure. 5, ¶¶ [0008], [0012], [0016–18]. Specifically, Shimura teaches that the computer includes a means (*e.g.*, a switch 106) for selectively re-orienting/flipping the displayed content, such as when transitioning from the laptop mode to the easel mode, to ensure the content is right-side up, as recited in claim 16 (which depends from claim 10). *E.g.*, *id.*, ¶¶ [008], [0012], [0016–18].

Annotated FIG. 5 of Shimura



Shimura, FIG. 5 (with annotations).

Although, claim 10 recites a first content mode and a second content mode, the claim does not distinguish the two modes other than by their different content display orientations. Thus, under a broadest reasonable interpretation of the claim, all that is required of these two content modes is that they have different content display orientations. Under this interpretation, Shimura satisfies the claim. To the extent Patent Owner argues that the two content modes actually comprise different displayed content, the claim is obvious in further view of Ledbetter. As discussed in greater detail in Sections IX.D., and X.D., Ledbetter teaches displaying different modes of content (*e.g.*, internet, messages, media player software, handwriting recognition software, etc.), depending on the display mode (position of the display screen). *E.g.*, Ledbetter, ¶¶ [0055–57].

Claim 16 depends from claim 10 and specifies that an operating display mode is selected from the plurality of display modes based on a physical orientation of the computer. Under a broadest reasonable interpretation of this claim, Shimura satisfies it, as a user can select one of Shimura's content display orientations based on the laptop's physical orientation by flipping the display reverse switch 106. If Patent Owner were to argue that the claim somehow requires this

selecting be performed automatically by the computer and not the user, the claim is obvious in further view of Hisano. Such content reorienting was well known and a POSITA would have been able to implement this functionality without any undue experimentation, as evidenced by the plurality of other references discussed above in Section VIII.C that disclose such functionality. *Also see, infra,* Sections IX.D and X.D.

Thus, the combination of these "new" disclosures and teachings in Kamikakai and Shimura meets all of the elements of claims 10 and 16 and therefore raises substantial new questions of patentability (SNQs) that warrant reexamination of these claims, as further confirmed by the detailed unpatentability ground presented below in Section X.A.

D. The Kamikakai-Shimura-Hisano-Ledbetter Combination Raises SNQs With Respect To Claims 10 And 16 Of The '844 Patent

As introduced above in Sections VII.E. and VII.F., Ledbetter and Hisano both qualify as prior art at least under Sections 102(a) and 102(b) (pre-AIA) because they both published more than one year before the alleged priority date of the '844 patent (April 1, 2008).

Further, Ledbetter and Hisano themselves present "new art" since they were not relied on or discussed during original prosecution of the '844 Patent, have not been the subject of any "concluded examination or review" by the Patent Office, have not been considered "in an earlier ***concluded trial*** by the Patent Trial and Appeal Board," and also have not been the subject of any federal court invalidity holding relating to the '844 Patent. MPEP § 2242(I) (emphasis added.) Although Hisano was cited in the non-instituted IPR proceeding, the Board never reached a final written decision on the merits in that proceeding. Thus, Hisano also constitutes "new" art, for the same and/or similar reasons as Shimura, which was also cited in the non-instituted IPR proceeding.

As explained above in Section IX.B., to the extent Patent Owner argues that claims 10 and 16 somehow require that the laptop and easel modes' content modes comprise different types of displayed content, these claims would have been obvious in further view of Ledbetter. Specifically, Ledbetter teaches displaying different modes of content (*e.g.*, internet, messages, media player software, handwriting recognition software, etc.), depending on the display mode (position of the display screen). *E.g.*, Ledbetter, ¶¶ [0055–57].

Further, if Patent Owner were to argue that claim 10 and/or claim 16 require that the content display orientation be selected and/or changed automatically by the computer, such as based on a physical orientation of the computer provided by a sensor, this would have been obvious over Kamikakai and Shimura in further view of Hisano. Specifically, Hisano teaches that its computer automatically reorients displayed content depending on the physical orientation of the display panels based on feedback from one or more sensors, such as a gravity sensor. *E.g.*, Hisano, ¶¶ [0098–99].

Thus, even if Patent Owner argued an over-narrow construction for claims 10 and 16, the Kamikakai-Shimura-Hisano-Ledbetter combination still renders the claims obvious and presents SNQs that a reasonable examiner would consider important when evaluating the patentability of these claims. As such, the Kamikakai-Shimura-Hisano-Ledbetter combination raises additional SNQs that also warrant reexamination, as further confirmed by the detailed unpatentability ground presented below in Section X.D.

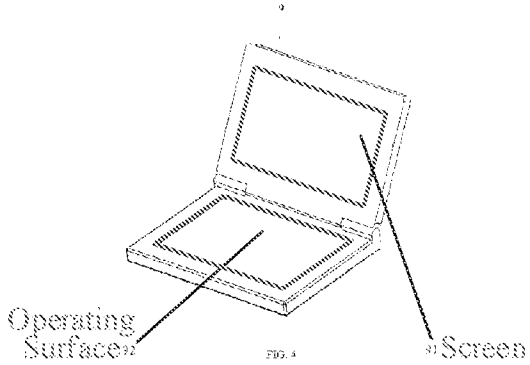
E. The CN '170-Shimura Combination Raises SNQs With Respect To Claims 10 And 16 Of The '844 Patent

As discussed above in Section VII.C., CN '170 qualifies as prior art at least under Sections 102(a) and 102(b) (pre-AIA) because it issued on July 21, 2004—more than 4 years before the alleged priority date of the '844 patent (April 1, 2008).

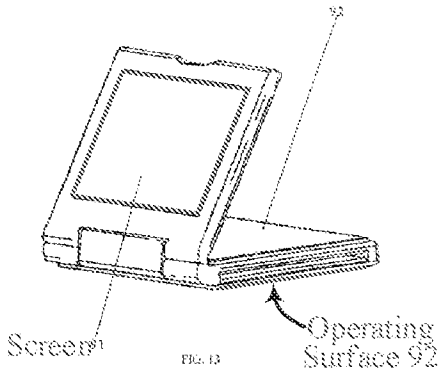
The CN '170-Shimura combination presents "new" art for at least the reason that CN '170 and Shimura present "new" art. Shimura is "new" for at least the reasons provided above in Section IX.C. CN '170 also is "new" art. It was not relied on by the Examiner during prosecution of the '844 patent, has not been the subject of any other Patent Office proceeding relating to the '844 Patent, including the non-instituted IPR proceeding, and also has not been the subject of any federal court invalidity holding relating to the '844 Patent.

Similar to Kamikakai, CN '170 is directed to an electronic product, such as a laptop, that can be configured into a plurality of display modes including the claimed laptop and frame modes. *E.g.*, CN '170, FIGS. 4, 13, 15, 17–18. However, CN '170 is different than Kamikakai in that it also teaches an easel mode. *E.g.*, CN '170, FIG. 19. Thus, CN '170 teaches all three of the claimed display modes.

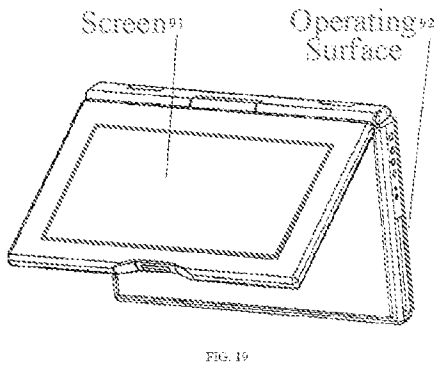
CN '170's Laptop Mode



CN '170's Frame Mode



CN '170's Easel Mode



CN '170, FIGS. 4, 13, 19 (with annotations).

Although CN '170 does not provide the same level of detail as Kamikakai on certain features (such as on the keyboard, the keyboard deactivation, and the screen being touch-sensitive to serve as a navigation control for claim 10), Shimura does. For example, Shimura explicitly discloses a keyboard and discloses deactivating the keyboard when transitioning to a mode like CN '170's frame mode, where the keyboard is placed in face-sharing contact with a surface that could cause erroneous inputs. *E.g.*, Shimura, ¶¶ [0009], [0011], [0018–19]. Shimura also discloses that its display screen is touch-sensitive, just like Kamikakai's. *E.g.*, Shimura, ¶¶ [0005], [0011], [0016].

Finally, as explained above in Section IX.C., Shimura also expressly discloses different display orientations for different modes, which is not *expressly* disclosed in Kamikakai and CN '170. Specifically, Shimura dislcoses a means for switching the display orientation depending on the physical orientation of the computer to ensure the content is displayed right-side up. *E.g.*, Shimura, ¶¶ [0008], [0012], [0016–18].

Thus, the CN '170-Shimura combination teaches all of the elements of claims 10 and 16. As such, the CN '170-Shimura combination raises additional SNQs that also warrant reexamination, as further confirmed by the detailed unpatentability ground presented below in Section X.E.

F. The CN '170-Shimura-Hisano-Ledbetter Combination Raises SNQs With Respect To Claims 10 And 16 Of The '844 Patent

The CN '170-Shimura-Hisano-Ledbetter combination presents SNQs for claims 10 and 16, and warrants reexamination of the claims, for at least the reasons provided above in Section IX.E. The addition of Ledbetter and Hisano further reinforces this combination for at least the reasons provided above in Section IX.D. Specifically, if Patent Owner were to argue that the claims require different types of content be displayed in the two content modes, the claims are obvious in further view of Ledbetter. Further, if Patent Owner were to argue that the claims require displayed content be inverted automatically by the computer when transitioning to and from the easel mode, the claims are obvious in further view of Hisano.

As such, the CN '170-Shimura-Hisano-Ledbetter combination raises additional SNQs that further warrant reexamination, as further confirmed by the detailed unpatentability ground presented below in Section X.F.

X. DETAILED EXPLANATION OF THE PERTINENCY AND MANNER OF APPLYING THE PRIOR ART REFERENCES TO EVERY CLAIM FOR WHICH REEXAMINATION IS REQUESTED AS REQUIRED BY 37 C.F.R. § 1.510(b)

The following sub-sections lay out unpatentability grounds that explain pertinent aspects of the prior art and how that prior art is applied to each respective claim for which reexamination is requested.

By applying the claim language of the '844 patent as set forth in the explanations provided below, the Requester is not admitting and/or acquiescing to the correctness and/or reasonableness of any particular construction for the purposes of the underlying litigation. Moreover, by mapping claim language to the prior art as set forth below, the Requester is not conceding that any particular language in the claims of the '844 patent is entitled to "patentable weight."

A. Lane Renders Obvious Claims 10 And 16 Of The '844 Patent (Ground 1)

Lane teaches all of the elements of claims 10 and 16, and thus renders them obvious, as explained in greater detail below. Although Lane does not expressly disclose inverting content in the easel mode, it does disclose automatically reorienting content depending on the orientation of the display component. Lane, 5:23–6:3. Thus, based on this general teaching to reorient content based on the orientation of the display component, it would have been obvious to a POSITA when implementing Lane's computer to have inverted the content orientation in easel mode so that the displayed content would appear right-side-up to a user. Schmandt, ¶ 111. The ease and obviousness of this implementation is confirmed by the numerous prior art references that recognize the common-sense need to change content orientation to correspond to the physical orientation of the display. *See, e.g.*, Hisano, ¶¶ [0098–99], FIG. 9; Tsuji, ¶¶ [0049], [0055], [0059–61], [0074], FIG. 14; Schweizer, 5:23–35; Shigeo, Abstract, ¶¶ [0004], [0014–16], FIGS. 2, 4(b); *supra*, Sections

VII.F., and VIII.C. To the extent Patent Owner argues that the claims require different types of content be displayed in the two content modes, these claims are obvious in further view of Ledbetter, as explained below in Section X.B.

1. Claim 10

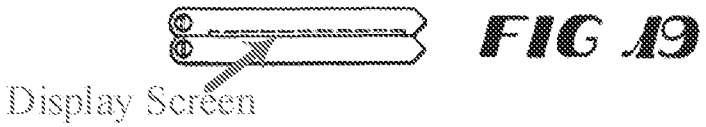
[10.1] A portable computer configurable between a plurality of display modes including a laptop mode and an easel mode wherein transitions between the plurality of display modes permit an operator to interact with a single display screen in each of the plurality of display modes, the portable computer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

To the extent the preamble is limiting, Lane discloses it for the following reasons.

Lane's portable computer is configurable between a plurality of display modes including a laptop mode and an easel mode.

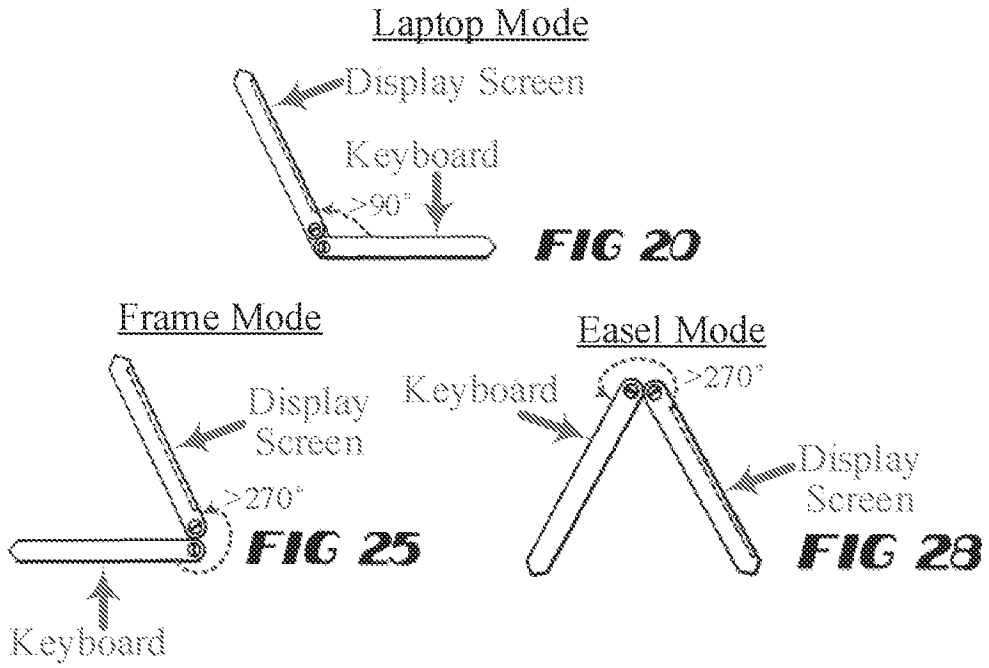
Lane discloses a "portable computer" (*e.g.*, Lane, 1:3–6) that is openable from a closed configuration (FIG. 19) to a plurality of display modes including a laptop mode and an easel mode, as well as a frame mode. *E.g.*, Lane, 3:5–14, 10:24–31, FIGS. 19, 20, 25, 28.

Lane's Closed Configuration



Lane, FIG. 19 (with annotations).

Lane's Display Modes



Lane, FIGS. 20, 25, 28 (with annotations).

Lane confirms that in FIGS. 25 and 28, the main display component ("second module 18") "is rotated more than 270" from the closed configuration shown in FIG. 19 so that "only the visual display 35 [is] accessible." Lane, 10:28–31. Thus, the dashed box in FIGS. 19–28 is the single display screen ("visual display 35") since it is the only part of the computer accessible to a user in the easel and frame modes shown in FIGS. 28 and 25, respectively. *See, e.g.*, Lane, 10:10–31, FIGS. 19–28; Schmandt, ¶ 114.

An operator can interact with Lane's single display screen in each of the plurality of display modes.

As can be seen in FIGS. 20, 25, and 28 of Lane, an operator can interact with Lane's single display screen ("visual display 35") in each of the plurality of display modes because Lane's single display screen ("visual display 35") is accessible in all of the display modes. Specifically, in FIG.

20, the main display component ("module 18") "is rotated more than 90° [from the nominally closed position shown in FIG. 19] to provide a standard 'desktop' orientation" where both the display screen and the keyboard ("keys 36") are accessible to the user. Lane, 10:26–28. In FIGS. 25 and 28, the main display component ("second module 18") "is rotated more than 270°" from the closed configuration shown in FIG. 19 so that "only the visual display 35 [is] accessible." Lane, 10:28–31; Schmandt, ¶ 115.

Thus, in laptop mode, an operator can interact with Lane's single display screen through either the display screen itself (since it is touch-sensitive; *see, e.g.*, Lane, 3:13–14, 8:18–19, 10:19–20), through the keyboard ("keys 36"), and/or through the mouse 32. In the easel and frame modes, the operator can interact only with Lane's single display screen (*e.g.*, by touching it with a pen or other instrument) since the keyboard and mouse 32 are inaccessible. *See, e.g.*, Lane, 3:13–14, 8:18–19, 10:19–20, 10:28–31, FIGS. 25, 28; Schmandt, ¶ 116. Moreover, a POSITA would have understood that a user could interact directly with Lane's touch sensitive screen in each of Lane's display modes since the '844 Patent itself acknowledges that then-existing "portable computers [were] able to accept user inputs via a touch screen." '844 Patent, 1:32–33; *also see, e.g.*, Pogue, 583–586 (explaining how a user can navigate documents, manipulate data and adjust settings via the touch screen); Schmandt, ¶ 116.

[10.2] a base including a keyboard;

Lane discloses this limitation. Specifically, Lane's "first module 14" is the base of the Lane's computer and includes a plurality of "keys 36" that make up a keyboard. *See, e.g.*, Lane, FIG. 1, 5:15–17, 6:5–6, 8:22–23. Claim 12 of Lane confirms that the portable computer "comprises a keyboard having a plurality of keys." Lane, p. 14, claim 12.

Lane's Base with Keyboard

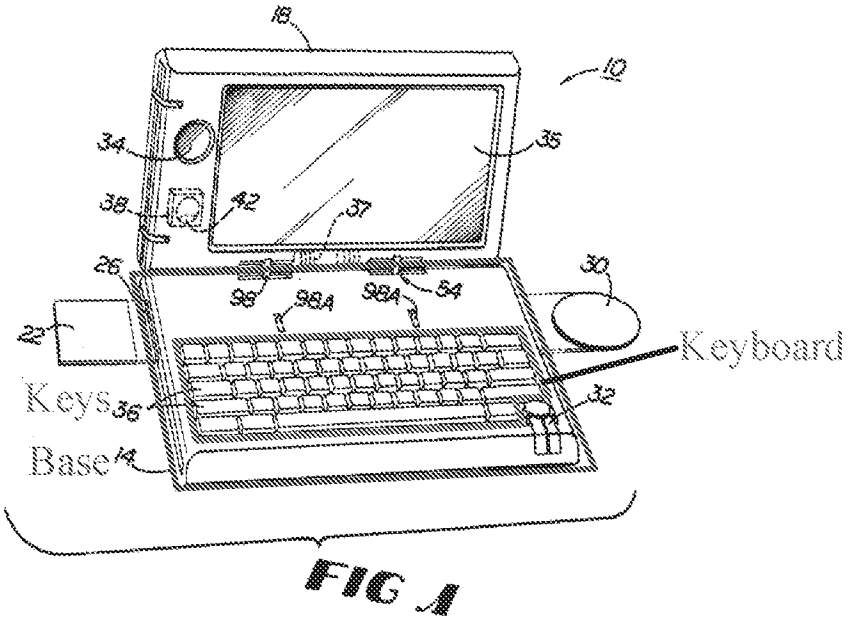


FIG 1

Lane, FIG. 1 (with annotations).

[10.3] a main display component rotatably coupled to the base and including the single display screen which displays content;

Lane discloses this claim limitation for the following reasons.

Lane's main display component is rotatably coupled to the base.

As discussed above for element 10.1 in this Section, Lane's "second module 18" is the main display component of Lane's computer since it includes the display screen ("visual display 35"). Lane even refers to the "second module 18" as a "display" at one point. *E.g.*, Lane, 5:6.

Lane's Main Display Component

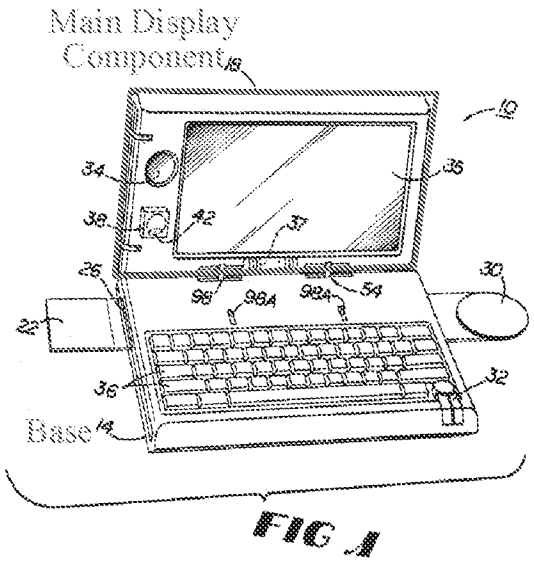


FIG. 1

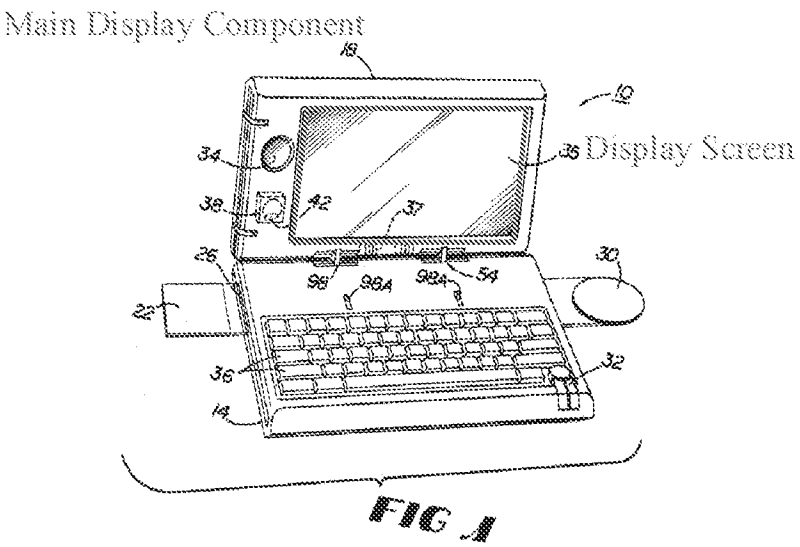
Lane, FIG. 1 (with annotations).

Further, Lane discloses that the main display component ("second module 18") is rotatably coupled to the base ("first module 14") such that computer can be opened to various different angles between 0 and 360° to configure the computer into a plurality of display modes, including the laptop, easel, and frame modes. *E.g.*, Lane, Abstract, 3:5–14, 10:24–11:16, FIGS. 19–28.

Lane's main display includes the single display screen which displays content.

Lane discloses this claim limitation. Specifically, the main display component ("second module 18") includes the single display screen ("visual display 35). *E.g.*, Lane, FIG. 1, 10:10–31.

Lane's Display Screen



Lane, FIG. 1 (with annotations).

Lane's display screen also displays content. Lane discloses "information to appear on visual display 35" (Lane, 5:37–6:1), and discloses the invented system can be used as "a television or telecommunications monitor or a pen-based computing tablet" (Lane, 3:12–14), all uses requiring content be displayed on the display screen. *E.g.*, Schmandt, ¶ 122. Moreover, a POSITA would have understood that Lane's display screen necessarily displays content since this is the entire purpose of a display screen. *Id.* The display screen would be effectively useless if it did not display content. *Id.*

[10.4] a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode,
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

Lane satisfies this limitation for the following reasons.

Lane's computer comprises a hinge assembly disposed at least partially within the base and the main display component.

Lane's computer comprises a hinge assembly, depicted in FIG. 3. The hinge assembly comprises an axle 102 in the base ("first module 14"), an axle 86 in the main display component ("second module 18"), and a connector 54 that is rotatably coupled to these two axles 86, 102 so that the base ("first module 14") can rotate about the longitudinal axis 58 defined by the axle 102 and the main display component ("second module 18") can rotate about the longitudinal axis 62 defines by the axle 86. *E.g.*, Lane, FIG. 3, 6:25–7:29; Schmandt, ¶ 124.

Lane's Hinge Assembly

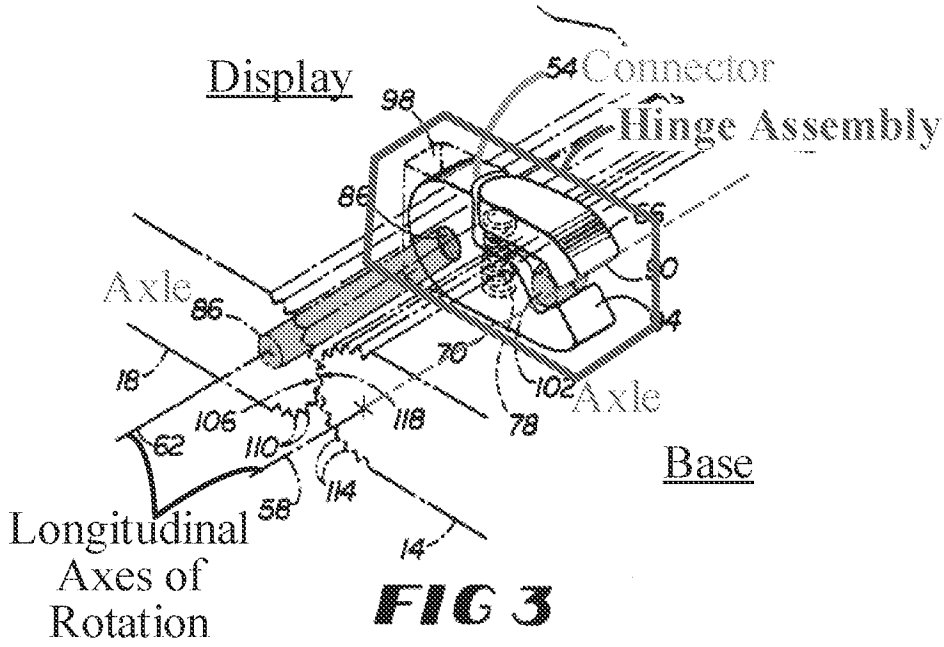


FIG 3

Lane, FIG. 3 (with annotations).

As shown in FIG. 3, Lane's hinge assembly is disposed at least partially within the base and the main display component, as the axle 102 and a portion of the connector 54 are disposed

within the base, and the axle 86 and another portion of the connector 54 are disposed within the main display component.

> ***The hinge assembly defines an axis of rotation about which both the base and the main display component are rotatable to transition Lane's portable computer between at least the laptop mode and the easel mode.***

As shown in Lane's annotated FIG. 3 above, the axles 86 and 102 define the longitudinal axes 62 and 58, respectively about which the base and main display component rotate. Schmandt, ¶ 126.

Lane's Parallel Axes of Rotation

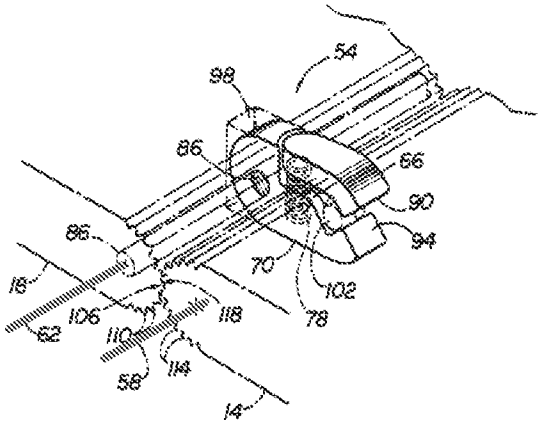


FIG 3

Lane, FIG. 3 (with annotations).

```
first and second modules 14 and 18.  As shown in
FIG. 3, for example, first module 14 defines a
primary axis of rotation 58, while second module 18
defines a corresponding primary axis of rotation 62
parallel to axis 58.  In some embodiments of device
```

Lane, 6:8–12.

Thus, Lane's base ("first module 14") is rotatable about its longitudinal axis ("primary axis of rotation 58") and Lane's main display component ("second module 18") is rotatable about its

longitudinal axis ("primary axis of rotation 62"). *E.g.*, Lane, 6:8–12, FIGS. 25, 28; Schmandt, ¶ 127.

As shown in FIGS. 20, 25, and 28, and described in Lane, the main display component and the base are rotatable about these two axes of rotation (58, 62) to transition between the various display modes, including the laptop and easel modes. *E.g.*, Lane, FIGS. 3, 19–28, 3:5–14, 6:7–22, 12 (claim 2), 10:24–11:16.

> The innovative system also is adapted to rotate about at least two adjacent, parallel axes. Consequently, the present invention permits components to be repositioned about each other throughout approximately 0-360°, allowing use of a visual display not only in a standard laptop computer format but also in formats facilitating use of the display as, for example, a television or telecommunications monitor or a pen-based computing tablet.

Lane, 3:5–14.

Laptop Mode

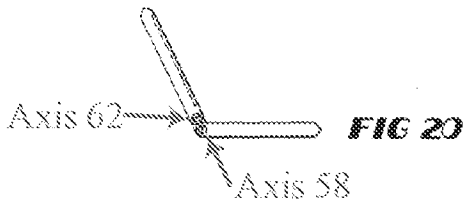
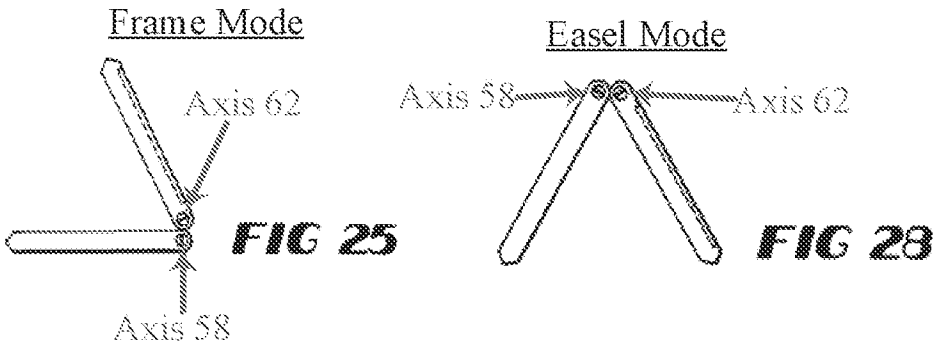


FIG 20



Lane, FIGS. 20, 25, 28 (with annotations).

Although the claim limitation recites "***an*** axis of rotation" ('844 Patent, 18:38–39), in district court litigation, Patent Owner appears to contend in the District Court litigation that the scope of this claim element covers computers having more than one rotational axis, as Patent Owner's Complaint alleges that Requester's dual-axis product(s) infringe claim 10 of the '844 Patent. First Amended Complaint (Ex. 1032), ¶ 155 (p. 75). Assuming the broadest reasonable interpretation (BRI) of this claim limitation encompasses Patent Owner's advanced construction in district court litigation, then Lane's similar dual-hinge assembly satisfies this claim limitation. Schmandt, ¶ 129. That is, if Patent Owner attempts to read this claim limitation so broadly as to cover the dual-axis hinge assembly of Requester's accused product(s), then Lane's similar dual-axis hinge assembly satisfies the claim limitation.

> ***The transition between Lane's laptop mode and Lane's easel mode allows the operator to operate the portable computer while viewing the single display screen in each of the plurality of display modes.***

As discussed above for element 10.1 in this Section, an operator is able to view the single display screen ("visual display 35") in each of the plurality of display modes since the display screen faces the operator in each of the display modes. *See, e.g.*, Lane, FIGS. 20, 25, 28. Moreover, an operator is able to operate (i.e., interact with) the computer in each of the plurality of display

modes, such as by using the keyboard ("keys 36"), mouse 32, and/or touch-sensitive display screen ("visual display 35") in the laptop mode (FIG. 20), and by using the touch-sensitive display screen ("visual display 35") in the frame and easel modes (FIGS. 25 and 28, respectively).

User Interaction in Lane's Display Modes

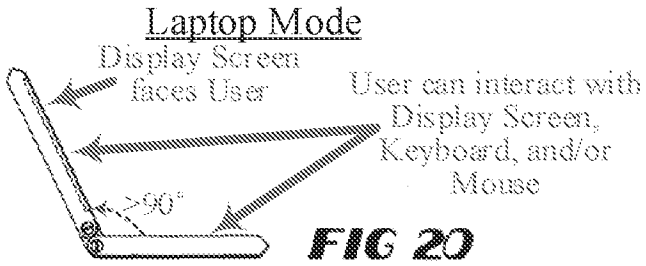


FIG 20

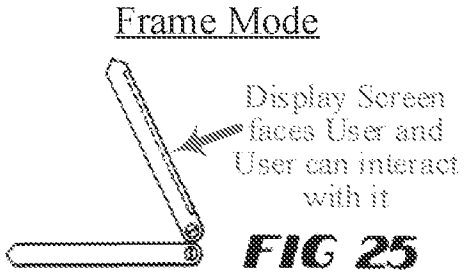


FIG 25

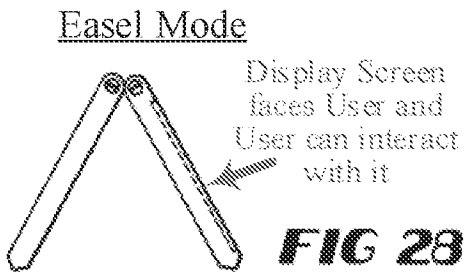


FIG 28

Lane, FIGS. 20, 25, 28 (with annotations).

Specifically, as discussed above for element 10.1, the keyboard ("keys 36") and mouse 32 are accessible to an operator in the laptop mode. *E.g.*, Lane, 10:26–28, FIGS. 1, 20. A POSITA would have understood that an operator could operate the portable computer with the keyboard and mouse since this is their very purpose as input devices. Schmandt, ¶ 131.

Further, a POSITA would have understood that an operator could utilize the display screen to operate the computer in the frame and easel modes since the display is touch sensitive. *See, e.g.*, Lane, 3:13–14, 8:18–19, 10:19–20 (discussing how the display screen can be used for pen-based

computing); Schmandt, ¶ 132. Even if this touch screen operability in easel and frame modes is not inherent in Lane's disclosure, it would nonetheless have been obvious to a POSITA when implementing Lane's computer. First, without such functionality, a user would not be able to interact with the computer in the easel and frame modes because the only other input devices (the keyboard and mouse) are inaccessible in these modes. Lane does not disclose any other input devices in the main display component that would be accessible to a user in these modes. Schmandt, ¶ 132. Thus, a POSITA naturally would have ensured that Lane's existing pen input functionality is operational in the frame and easel modes so that a user could still interact with the computer in the frame and easel modes. Schmandt, ¶ 132.

Second, a POSITA would have been motivated to ensure Lane's touch-sensitive functionality is operational in these modes so that the camera 34 can be used. As discussed by Lane, one desirable use for its computer—and one reason its computer includes the easel and frame modes—is for video conferencing. *See, e.g.,* Lane, 3:5–14 (discussing how the ability of its computer to open up to 360° (such as to frame mode) allows it to be used as a telecommunications monitor); Schmandt, ¶ 133. Moreover, even absent such disclosure, a POSITA would have recognized that Lane's frame mode is well-suited for using the camera 34, since the keyboard is out of the way and the camera is at both a desirable position and angle (slightly reclined and elevated position near the top of the main display component). *See e.g.,* Lane, FIG. 25; Schmandt, ¶ 133.

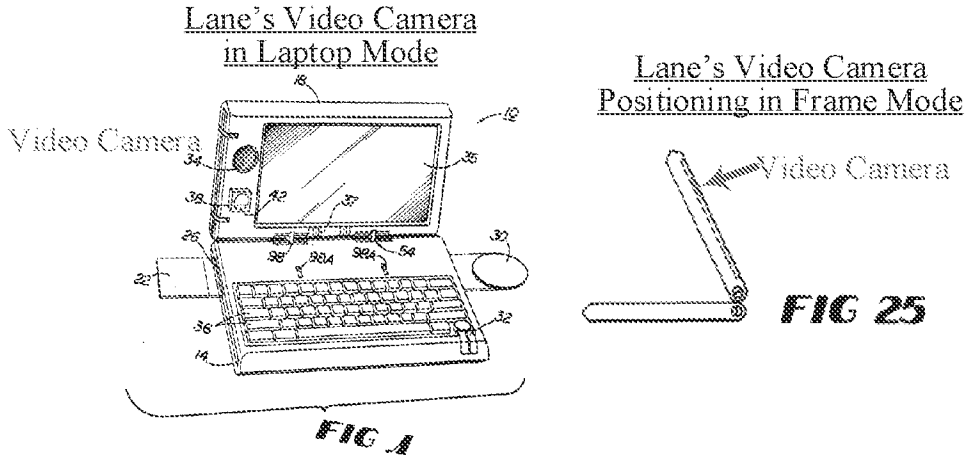


FIG 25

FIG 1

Lane, FIGS. 1, 25 (with annotations).

To operate the camera 34 in frame mode, a POSITA would have understood that a user would need to be able to interact with the touch-sensitive display screen since the other input devices (the keyboard and mouse 32), are inaccessible in frame mode. *E.g.*, Lane, FIG. 25, 10:29–31; Schmandt, ¶ 134. Thus, when implementing Lane's computer, a POSITA would have ensured that its existing touch-sensitive screen is operational in at least the frame mode so that a user can use the camera in this camera-friendly display mode. Schmandt, ¶ 134.

[10.5] 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;

Although Lane does not explicitly disclose a first content mode having a first content display orientation, this claim limitation is nonetheless obvious in view of Lane's teachings for the following reasons.

It would have been obvious to a POSITA that Lane's laptop mode is configured to display a first content mode having a first content display orientation

Lane teaches and/or strongly suggests this part of the claim limitation since it teaches automatically reorienting displayed content depending on an indication of the spatial orientation

of the main display component ("second module 18") provided by a position-indicating mechanism 38. *E.g.*, Lane, 5:23–6:3.

> Also shown in FIG. 1 (and FIG. 29) as part of second module 18 is position-indicating mechanism 38. Mechanism 38 includes a moveable conductor 42 (such as liquid mercury) in a spherical cavity 46 having contacts 50 spaced about its periphery. Conductor 42 responds via gravitational forces to spatial reorientation of mechanism 38 by moving relative to contacts 50 (to contact at least one contact 50 to close its respective circuit). Including mechanism 38 as a component of either first or second modules 14 or 18 would thus permit it to indicate the spatial orientation of that module. Doing so would also allow mechanism 38 to assist device 10 (and its associated software) in determining, for example, whether the information to appear on visual display 35 should be in "landscape" or "portrait" position as the visual display 35 is spatially configured, the direction

Lane, 5:23–6:3.

As recited above, Lane clearly teaches displaying content on the main display component, since it discusses "information to appear on visual display 35." Lane, 5:37–6:1. Further, Lane clearly teaches displaying this content in a particular orientation (i.e., one in which content is presented right-side-up to a user) since Lane includes a sensor and associated software to automatically do exactly this. *E.g.*, Lane, 5:23–6:3; Schmandt, ¶ 137.

For example, Lane teaches using the sensor mechanism 38 to "indicate the spatial orientation" of both the base and display (its first module 14 and second module 18). Lane, 5:32–35. Thus, a POSITA would have understood this to teach using the sensor 38 to determine whether,

e.g., Lane's display component ("first module 14") is orientated in Lane's laptop mode (FIGS. 1, 20) or in Lane's easel mode (FIG. 28). Lane further explains that this physical orientation information is correspondingly used to determine how the displayed *content* should be "position[ed]." Lane, 5:35–6:6. While Lane provides the specific examples of "'landscape' or 'portrait'" orientations, a POSITA would have understood that Lane more generally teaches orienting the content so that it is presented right-side-up in each display mode. Orienting content in any other way (e.g., sideways, upside down) would be nonsensical, as it would make it difficult, if not impossible, for a user to view the displayed content. Thus, a POSITA would have understood that the only logical and common-sense reason Lane includes its position-indicating mechanism 38 and associated software is to present content right-side-up to a user. Schmandt, ¶ 138.

As such, Lane's display of content in a right-side-up orientation in laptop mode is a first content mode having a first display orientation. A POSITA would have understood from Lane's disclosure that Lane's computer automatically displays information/content in this first display orientation in laptop mode, and that, like all of Lane's content display orientations for its other display modes, this first content display orientation is one in which the content is presented right-side-up to the user. Schmandt, ¶ 139. For example, a POSITA would have understood that Lane's laptop mode would display content right-side-up in the first content display orientation and that when in easel mode, where the main display component ("second module 18") is upside down, content would be displayed in a second, inverted orientation to ensure content also is displayed right-side-up in easel mode. Schmandt, ¶ 139; *infra*, Element 10.7.

In Lane's laptop mode, the main display component is oriented towards the user and the keyboard is oriented to receive input from the user laptop mode.

As discussed above for element 10.1 in this Section, Lane's keyboard ("keys 36") faces up towards a user in laptop mode and is therefore oriented to receive input from the user. *See, e.g.*, Lane, FIGS. 1, 20, 10:24–28. Further, Lane's main display component is opened by at least 90° in the laptop mode so that the display screen ("visual display 35") is oriented towards the user. *Id.*

Lane's Laptop Mode

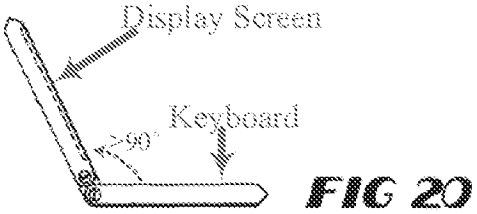


FIG 20

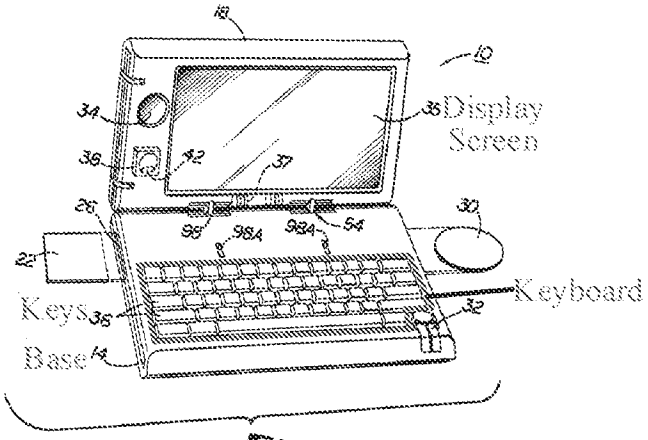


FIG 1

Lane, FIGS. 20, 1 (with annotations).

Thus, Lane teaches that its 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. Schmandt, ¶ 141.

[10.6] 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

Although Lane does not explicitly disclose a second mode having a second content display orientation, this claim limitation is nonetheless obvious in view of Lane's teachings for the following reasons.

It would have been obvious to a POSITA that Lane's easel mode is configured to display to the user on the main display component a second content mode having a second content display orientation that is 180 degrees relative to the first content display orientation.

As discussed above for element 10.5 in this Section, Lane teaches that its computer includes software for automatically determining a spatial orientation of the main display component ("second module 18") based on feedback from a position-indicating mechanism 38, and for reorienting displayed content based on this determined spatial orientation of the main display component. *E.g.*, Lane, 5:23–6:6; Schmandt, ¶ 143.

> Including mechanism 38 as a component of either first or second modules 14 or 18 would thus permit it to indicate the spatial orientation of that module. Doing so would also allow mechanism 38 to assist device 10 (and its associated software) in determining, for example, whether the information to appear on visual display 35 should be in "landscape" or "portrait" position as the visual display 35 is spatially configured, the direction

Lane, 5:32–6:3.

Although Lane only explicitly describes "portrait" and "landscape" content orientations, a POSITA would have understood that the entire purpose of Lane's automatic content reorienting is to ensure that content is displayed right-side-up to a user. Schmandt, ¶ 144. Lane provides no other reason why its computer would reorient content. Schmandt, ¶ 144. Moreover, ***more than a decade before the '844 Patent's alleged priority date***, others had already publicly recognized that

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displayed content "needs inverting" in easel mode. *See, e.g.,* Välikangas (Ex. 1042), Abstract (describing how displayed content needs to be inverted in its computer's easel mode ("A shaped configuration") shown in FIG. 4A), *also see* Välikangas, FIG. 4A, p. 5. Moreover, such content inverting would have been obvious given the state of the art at or before the alleged priority date, as evidenced by the multitude of prior art references that had disclosed such inverting when a screen is rotated more than 180° relative to its base from a closed position. *See, e.g.*, Hisano, ¶¶ [0098–99], FIG. 9; Tsuji, ¶¶ [0049], [0055], [0059–61], [0074], FIG. 14; Schweizer, 5:23–35; Shigeo, Abstract, ¶¶ [0004], [0014–16], FIGS. 2, 4(b); VII.F., and VIII.C.

Hisano's Inverted Content

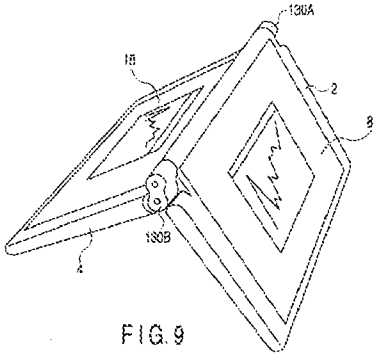


FIG. 9

Tsuji's Inverted Content

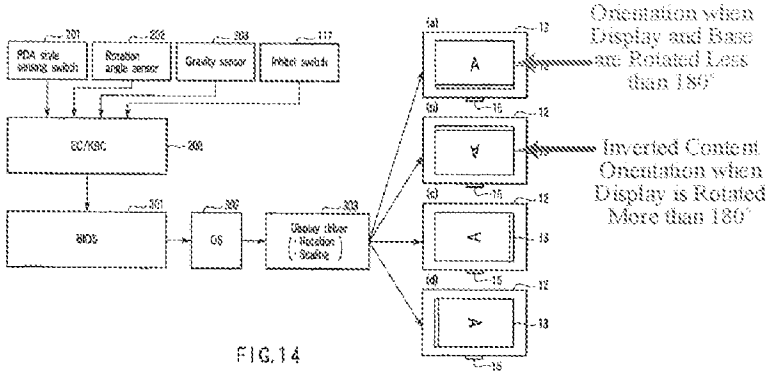
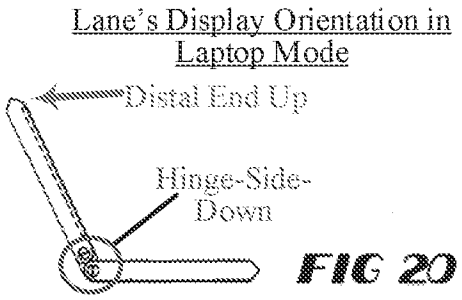
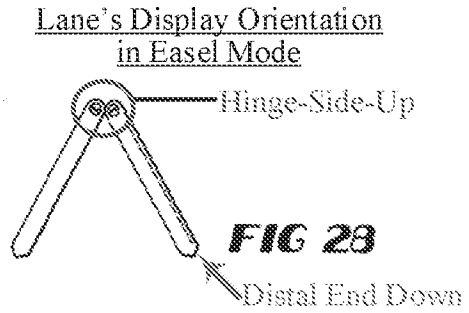


FIG. 14

Hisano, FIG. 9; Tsuji, FIG. 14 (with annotations).

Thus, a POSITA implementing Lane's computer would have understood that, when in easel mode, the content orientation would need to be inverted (i.e., rotated 180°) relative to laptop mode in order to present displayed content right-side-up to the user. As shown in Lane's FIGS. 20 and 28, this is due to the fact that Lane's main display component is upside down in easel mode relative to laptop mode. *E.g.,* Lane, FIGS. 20, 28. Specifically, the display is oriented hinge-side-up in easel mode and hinge-side-down in laptop mode). *E.g.,* Lane, FIGS. 20, 28; Schmandt, ¶ 145.





Lane, FIGS. 20, 28 (with annotations).

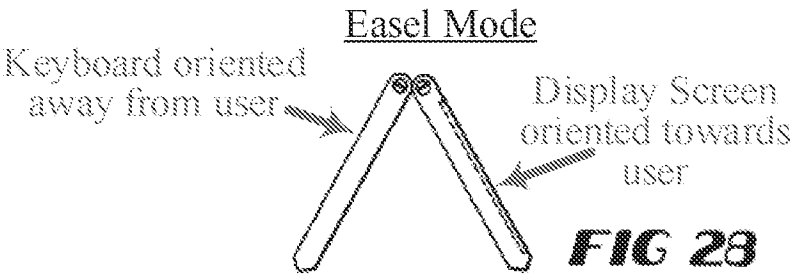
Thus, if the content orientation is not inverted in easel mode relative to laptop mode, content would not be presented right-side-up to a user, and the user would have a very difficult time viewing the content. Schmandt, ¶ 146. As explained above, however, it would be senseless for Lane's computer to not reorient content so that it is right-side-up in easel mode, given that Lane explicitly provides a means for doing so (an orientation sensor and associated software). Schmandt, ¶ 146. That is, to include such automatic content reorienting functionality and not present content right-side-up to a user would be nonsensical.

Thus, this portion of the claim limitation is obvious in view of Lane's explicit teaching to automatically reorient content based on the orientation of the main display component. Schmandt, ¶ 147. Specifically, a POSITA implementing Lane's computer would understand that Lane's easel mode is configured to display to the user on the main display component a second content mode having a second content display orientation that is 180 degrees relative to the first content display orientation of the laptop mode.

To the extent Patent Owner argues that the claim requires the first and second content modes include different types of content, this claim is obvious in further view of Ledbetter, as discussed in more detail below in Section X.B.

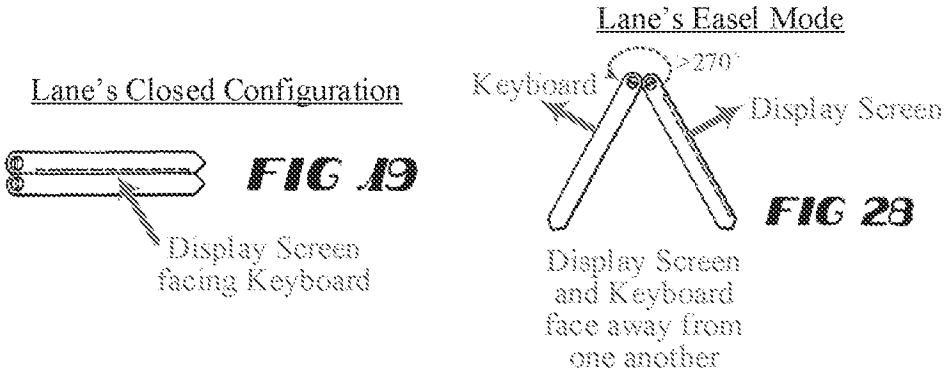
In Lane's easel mode, the main display component is oriented towards the user and the keyboard is oriented away from the user.

As shown in FIG. 28 of Lane, the main display component ("second module 18") is oriented towards the user and the keyboard is oriented away from the user.



Lane, FIG. 28 (with annotations).

Lane confirms that the display is oriented towards the user in easel mode, stating that in FIG. 28, "only the visual display 35 need be accessible." Lane, 10:30–31. Thus, the display 35 must be oriented towards the user to be accessible as prescribed by Lane. Schmandt, ¶ 150. Further, since only the "visual display 35" is accessible to the user in easel mode, the keyboard must be oriented away from the user. *E.g.*, Lane, 10:30–31; Schmandt, ¶ 150. Moreover, because the display screen faces the keyboard in the closed position, and because the display component is rotated more than 270° relative to the base to transition from the closed position to the easel mode, the display screen and keyboard must face away from one another in easel mode. *E.g.*, Lane, 10:12–17, 10:29–31; Schmandt, ¶ 150.



Lane, FIGS. 19, 28 (with annotations).

Thus, if the visual display 35 is oriented towards the user in easel mode, the oppositely facing keyboard must be oriented away from the user. Schmandt, ¶ 151.

Lane's portable computer is operable in the easel mode to enable the user to interact with displayed content without interacting with the keyboard.

As discussed above for element 10.5 in this Section, when implementing Lane's computer, a POSITA would have understood and/or would have ensured that a user could interact with displayed content via Lane's touch-sensitive screen ("visual display 35").

Specifically, because Lane's keyboard and mouse are inaccessible in easel mode (since they are oriented away from the user) a POSITA would have ensured that Lane's only other input device (its touch-sensitive screen) would be operational in easel mode so that a user could still interact with the computer in easel mode. *See, e.g.*, Lane, 3:13–14, 8:18–19, 10:19–20 (discussing how the display screen can be used for pen-based computing); Schmandt, ¶ 153. Thus, it would have been obvious to a POSITA based on Lane's teachings that Lane's computer is operable in the easel mode to enable the user to interact with displayed content via its touch-sensitive screen, without interacting with the keyboard.

[10.7] a navigation control accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen

In the related District Court litigation, Patent Owner appears to contend that the recited "navigation control" encompasses touch-sensitive display screens, as Patent Owner's Complaint alleges that Requester's touchscreen products infringe claim 10 of the '844 Patent. First Amended Complaint (Ex. 1032), ¶ 155 (p. 75). Assuming the broadest reasonable interpretation (BRI) of this claim limitation is as broad as the construction advanced by Patent Owner in district court litigation, then Lane's similar touch-sensitive display screen satisfies this claim limitation. Schmandt, ¶ 154. That is, if Patent Owner attempts to read this claim limitation so broadly as to cover the touchscreen of Requester's accused product(s), then Lane's similar touch-sensitive display screen satisfies the claim limitation.

Specifically, as argued above for element 10.4 in this Section, Lane's touch sensitive display screen ("visual display 35") permits a user to interact with Lane's computer. Though Lane does not explicitly disclose that the touch screen permits *manipulation of operating parameters and displayed content*, this would nonetheless have been obvious to a POSITA based on the fact that it would be very difficult, if not impossible, for a user to interact with the computer (as taught by Lane) without manipulating operating parameters and/or displayed content. Schmandt, ¶ 155. Every time a user touches a touch sensitive screen (or manipulates an input device/navigation control for that matter) the computer (i.e., its processor) responds by changing an operating parameter and/or changing what is displayed on the screen. Schmandt, ¶ 155. Without such associated software functionality, the touch screen would provide limited to no means for a user to actually interact with Lane's computer.

Moreover, because the mouse 32 and keyboard ("keys 36") are inaccessible in the easel and frame modes, a POSITA would have understood that Lane's touch sensitive screen incorporated the same functionality in the easel and frame modes, thus allowing a user to manipulate operating parameters and content just as they would be able to with a mouse and/or keyboard in laptop mode. Schmandt, ¶ 156. Since mice and keyboards conventionally functioned to allow users to manipulate operating parameters and displayed content, a POSITA would have understood that incorporating functionality from the mouse 32 and/or keyboard into the display screen in the easel and frame modes would necessarily have entailed including their ability to permit users to manipulate operating parameters and displayed content. Schmandt, ¶ 156.

Thus, under Patent Owner's apparent construction of the recited "navigation control" this element is met by Lane's touch-sensitive visual display 35. That is, if Patent Owner attempts to read this claim limitation so broadly as to cover the touch-sensitive screen of Lenovo's accused product(s), then Lane's similar touch-sensitive screen satisfies the claim limitation.

[10.8] wherein the plurality of modes includes 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.

As discussed above in element 10.1 of this Section, Lane discloses that its plurality of display modes includes a frame mode. Specifically, as shown in FIG. 25 of Lane, the keyboard ("keys 36") side of the base ("first module 14") faces down and the main display component ("first module 14") is oriented towards the operator with the single display screen ("visual display 35") facing up. *E.g.*, Lane, FIG. 25, 10:29–31; Schmandt, ¶ 158. In addition, and as required by the Board in the non-instituted IPR proceeding, Lane's main display component ("second module 18") is at a nonzero angle relative to the base ("first module 14") in the frame mode.

Lane's Closed Configuration



FIG 19

Lane's Frame Mode

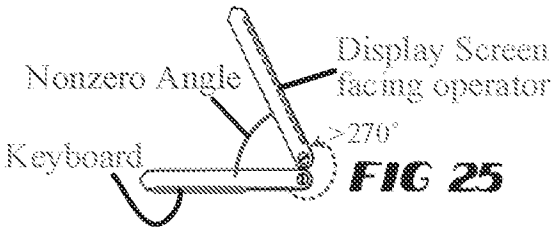


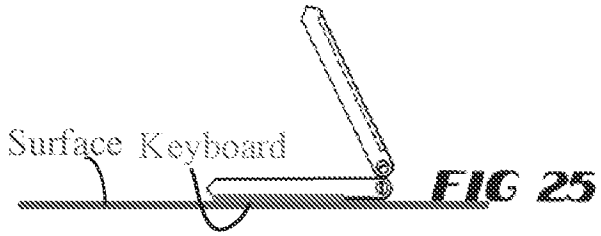
FIG 25

Lane, FIGS. 19, 25 (with annotations).

Moreover, the display screen and keyboard must be facing in the directions shown in annotated FIG. 25 above, since the main display component has been rotated relative to the base by more than 270° from the closed position shown in FIG. 19 in which the display screen and keyboard face one another. *E.g.*, Lane, 10:29–31; Schmandt, ¶ 159.

Although Lane does not explicitly show the computer placed on a surface in FIGS. 20–28, a POSITA would have understood that they are shown in the drawings in the same orientation as they would be placed on a surface. Schmandt, ¶ 160. For example, in the laptop mode of FIG. 20, a POSITA would have understood that the bottom of the base would have to be positioned on a surface in the same orientation shown in FIG. 20, in order for the keyboard and display to be accessible to the user, as required by Lane. *E.g.*, Lane, 5:15–17, FIGS. 1, 20; Schmandt, ¶ 160. Similarly a POSITA would have understood that the top of the base (where the keys 36 are positioned) would have to be positioned on the surface in the frame mode so that only the display screen ("visual display 35") is accessible to a user, as required by Lane. *E.g.*, Lane, 10:29–31; Schmandt, ¶ 160. Thus, a POSITA would have understood that Lane's keyboard ("keys 36") is face down on a surface when Lane's computer is placed on a surface in the frame mode shown in FIG. 25. *E.g.*, Lane, FIG. 25; Schmandt, ¶ 160.

Lane's Frame Mode



Lane, FIG. 25 (with annotations).

Thus, Lane satisfies this limitation, even under the Board's interpretation of "frame mode" in the non-instituted IPR proceeding.

2. Claim 16

[16.1] The portable computer of claim 10, wherein an operating display mode is selected from the plurality of display modes based on a physical orientation of the portable computer.

To the extent Patent Owner argues that the "operating display mode" is a "content display orientation," Lane renders this claim obvious. Specifically, Lane teaches automatically determining the current display mode of Lane's computer based on an indication of a physical orientation of the main display component ("second module 18") and/or the base ("first module 14") provided by a position-indicating mechanism 38. *E.g.,* Lane, 5:23–6:6. As argued above for elements 10.5 and 10.6 in Section X.A.1., a POSITA would have understood that Lane performs this content reorienting to ensure that displayed content is presented right-side-up to a user in every one of the display modes. *E.g., supra,* Section X.A.1.; Schmandt, ¶ 162. Thus, Lane's computer determines the computer's current display mode based on an indication of the physical orientation of the portable computer provided by the position-indicating mechanism 38, and then automatically orients the displayed content so that it is presented right-side-up to the user. *Id.*

B. Lane and Ledbetter Render Obvious Claims 10 And 16 Of The '844 Patent (Ground 2)

A POSITA would have found it obvious to implement Lane's computer such that it would display different display modes in its easel and laptop modes, as taught by Ledbetter. As explained above in Section X.A., Lane renders claims 10 and 16 obvious. To the extent Patent Owner argues that the claims somehow require that the two content modes include different types of content, the claims are still obvious over Lane in further view of Ledbetter, as Ledbetter expressly teaches this concept of changing the type of displayed content depending on the display mode.

A POSITA would have been motivated, with a reasonable expectation of success, to implement Ledbetter's different modes of content in different display modes in the Lane computer because these two display modes, as taught by Ledbetter, are better suited for different kinds of uses/content. Specifically, a POSITA would have been motivated to display a first mode of content (*e.g.*, Ledbetter's shortcuts and other information used for working/productivity) on Lane's main display component when in the laptop mode, since, as recognized by Ledbetter, modes like Lane's laptop mode and Ledbetter's workstation mode (where the keyboard is accessible) may be optimized/well-suited for working/productivity. Schmandt, ¶ 164. Similarly, a POSITA would have been motivated to display a second mode of content (*e.g.*, Ledbetter's media player) on Lane's display in the easel mode, since, as recognized by Ledbetter, modes like Lane's easel mode and Ledbetter's media consumption mode (where the keyboard is inaccessible) may be optimized/well-suited for watching videos. *E.g.*, Ledbetter, ¶¶ [0031], [0057]; Schmandt, ¶ 164.

A POSITA would have reasonably expected to succeed in implementing these different content modes without any undue experimentation as they would have required only minor

software modifications using simple computer code that was well within the skill of a POSITA. Schmandt, ¶ 165. For example, the code would have needed only to instruct the processor of Lane's computer to load programs/applications for working/productivity (e.g., word processor) when it detects Lane's computer is transitioning to, or has entered, Lane's laptop mode, and to load programs/applications for media consumption (e.g., media player) when it detects Lane's computer is transitioning to, or has entered, Lane's easel mode. The fact that the '844 Patent itself provides no express teaching on how to automatically load mode-specific content confirms that this would have been well within the skill of a POSITA to implement without any undue experimentation. *See, e.g.,* '844 Patent, 13:64–14:13 (generally discussing changing the displayed content when transitioning from laptop to easel mode, without providing any instruction on how to do so); Schmandt, ¶ 165.

1. Claim 10

[10.1] 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 permit an operator to interact with a single display screen in each of the plurality of display modes, the portable computer comprising:

Lane discloses this preamble for at least the reasons provided above for element 10.1 in Section X.A.1.

[10.2] a base including a keyboard;

Lane discloses this limitation for at least the reasons discussed above for element 10.2 in Section X.A.1.

[10.3] a main display component rotatably coupled to the base and including the single display screen which displays content;

Lane satisfies this limitation for at least the reasons discussed above for elements 10.3 in Section X.A.1.

[10.4] a hinge assembly disposed at least partially within the base and the main display component that defines an axis of rotation about which both the base and the main display component are rotatable to transition the portable computer between at least the laptop mode and the easel mode,
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

Lane discloses this limitation for at least the reasons discussed above for element 10.4 in Section X.A.1.

[10.5] 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;

Lane teaches this this limitation for at least the reasons discussed above for element 10.5 in Section X.A.1. Further, to the extent Patent Owner argues that the first content mode requires a particular kind of content, this limitation is obvious in further view of Ledbetter.

Specifically, Ledbetter teaches that its computer ("computer system 120") is configured to display different modes of content depending on the physical positioning of its main display component ("display monitor"). *E.g.*, Ledbetter, ¶¶ [0023], [0055–57]. For example, Ledbetter discloses displaying "media player software," "a touch-screen shell program configured to provide convenient access to walk-up types of information (*e.g.*, weather, messages, the internet and so forth), and "shortcuts and other information used for working/productivity." Ledbetter, ¶ [0057]. A POSITA would understand these to constitute the claimed content modes, since they are the

same and/or similar kinds of content modes discussed by the '844 Patent itself. For example, the '844 patent states that the modes of content can include a media player mode that loads a media player, a connect mode that loads email, instant messaging, etc., a web mode that provides access to the internet, and an application mode that provides access to applications or programs for working/productivity, such as a word processor.

> examples discussed below. According to one example, the modes of content **172** accessible via the home screen **170** may include "media" **172***a*, "connect" **172***b*, "web" **172***c*, "applications" **172***d*, and "channels" **172***e*. Using the map user interface, information, programs, features and applications may be grouped into the various modes of content **172**. By selecting any mode of content **172**, for example, by using the scroll wheel **132** and/or navigation buttons **166**, **168**, as discussed further below, the user may access the content organized within that mode. For example, the media mode **172***a* may provide access to a medial player to play, view, search and organize media such as music, video, photos, etc. The connect mode **172***b* may provide access to features such as, for example, email, voice-over-IP, instant messaging, etc., and the web mode **172***c* may provide access to internet browsing and searching. The application mode **172***d* may provide access to, for example, computer applications or programs, such as word processor, spreadsheet, calculator, etc. In one example, these applications or programs may be provided as web-based services rather than programs or applications residing on the portable computer **100**. The channels mode

'844 Patent, 11:35–55.

Ledbetter explains that these display modes may each display unique or mode-specific types of content because each mode "may be generally optimized to match typical computer usage modes." Ledbetter, Abstract. That is, each display mode may be best suited for unique use(s) and thus is configured to display content optimized to match those use(s).

Further, Ledbetter teaches a display mode ("workstation mode") that is very similar to the claimed laptop mode, and specifically teaches displaying a first content mode ("typical shortcuts and other information used for working/productivity") in the laptop-like mode ("workstation mode"). *E.g.*, Ledbetter, ¶ [0057].

Ledbetter's Workstation Mode

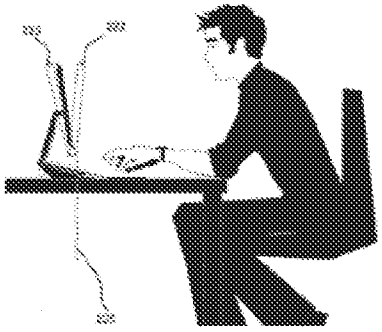


FIG. 2

Ledbetter, FIG. 2 (with annotations).

> **[0008]** FIG. **2** is a representation of a workstation mode in which a monitor is substantially upright and positioned to provide access to input devices.

Ledbetter, ¶ [0008].

A POSITA would have understood based on Ledbetter's teachings that Lane's laptop mode is similar to Ledbetter's workstation mode and is thus well-suited for working/productivity, as taught by Ledbetter. *E.g.*, Ledbetter, ¶ [0057]. Specifically, Ledbetter's workstation mode and Lane's laptop mode are very similar because the keyboards of Lane's and Ledbetter's computer are accessible in both these modes, and the display component is positioned at the far end of the keyboard in a substantially vertical, but slightly leaned back, orientation.

Ledbetter's Workstation Mode

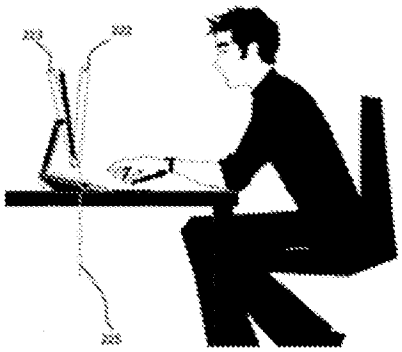


FIG. 2

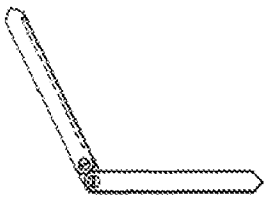


FIG 20

Ledbetter, FIG. 2 (with annotations); Lane, FIG. 20 (with annotations).

> [0027] FIG. 2 provides an example of a workstation mode, such as in a position with the monitor having a backward tilt angle from −5 degrees (dashed box 222) to +15 degrees (dashed box 223) from vertical (dashed line 225), although another range such as plus or minus fifteen degrees or more is also configurable. The actual angle may be user configurable; for example, the user may set up the mechanism such that the arm has a stop when the monitor is at a backward tilt angle of +10 degrees to vertical.
>
> [0028] In the example of FIG. 2, this user's workstation position is also set such that the bottom of display is approximately four inches off of the desk, with access to input devices, e.g., a keyboard and pointing device. If present, an auxiliary display is also likely visible in such a mode.

Ledbetter, ¶¶ [0027–28].

Like in the claimed laptop mode, Ledbetter teaches displaying the first content mode ("typical shortcuts and other information used for working/productivity") in the workstation mode.

> loaded. In the workstation mode, typical shortcuts and other information used for working/productivity or other computer usage (e.g., gaming) may be displayed.

Ledbetter, ¶ [0057].

Thus, based on Ledbetter's teachings, a POSITA would have been motivated to display a first mode of content (*e.g.*, Ledbetter's shortcuts and other information used for working/productivity) on Lane's main display component when in the laptop mode, since, as recognized by Ledbetter, modes like Lane's laptop mode and Ledbetter's workstation mode (where the display component is substantially vertical or tilted slightly backwards, and the keyboard is accessible) may be optimized/best suited for working/productivity. Schmandt, ¶ 176.

As such, a POSITA would have been motivated to follow Ledbetter's teachings to have Lane's computer display working/productivity type content (e.g., word processors) when Lane's computer is in laptop mode. *E.g.*, Ledbetter, ¶ [0057]; Schmandt, ¶ 177; *see also,* Pogue, 263 (discussing word processors).

[10.6] 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

Lane teaches this limitation for at least the reasons discussed above for element 10.6 in Section X.A.1.

To the extent Patent Owner argues that the first and second content modes require displaying different modes of content (e.g., media player vs. web content vs. email vs. programs such as word processor) to the user, Ledbetter teaches this. Specifically, as explained above for

element 10.5 in this Section (X.B.1), Ledbetter teaches displaying different content modes depending on the physical positioning of its main display component ("display monitor").

Further, Ledbetter teaches a mode that is very similar to easel mode ("media consumption mode"), and specifically teaches displaying a second content mode ("media player software") in this media consumption mode that is different than the first content mode ("typical shortcuts and other information used for working/productivity") that is presented in Ledbetter's laptop-like mode ("workstation mode"). *E.g.*, Ledbetter ¶¶ [0010], [0031], [0057], FIG. 4.

Ledbetter's Media Consumption Mode

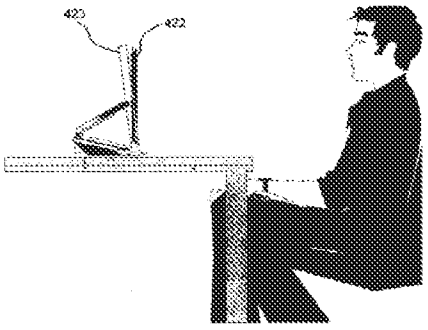


FIG. 4

Ledbetter, FIG. 4 (with annotations).

> **[0010]** FIG. **4** is a representation of a media consumption mode in which a monitor is positioned to facilitate viewing while concealing input devices to an extent.

Ledbetter, ¶ [0010].

Ledbetter's media consumption mode is very similar to Lane's easel mode because, like Lane's easel mode, the keyboard is inaccesible but an operator can still interact with displayed content, such as via "touch-screen operation." *E.g.*, Ledbetter, ¶ [0031]. Further, like Lane's easel mode, the display is oriented substantially vertically but slightly leaned back.

Ledbetter's Media Consumption Mode

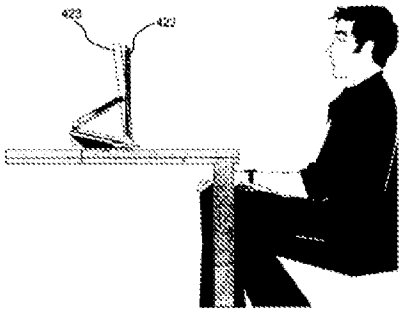


FIG. 4

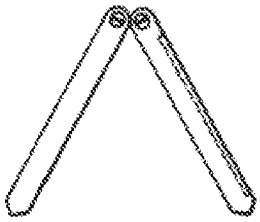


FIG 28

Ledbetter, FIG. 4 (with annotations); Lane, FIG. 28 (with annotations).

> [0031] FIG. **4** provides an example of a media consumption mode, typically for viewing video where the bulk of user interaction is simply viewing. In FIG. **4**, the arm is hinged such that the monitor screen **422** has been positioned forward, resulting in the input devices barely visible, if at all. The represented monitor screen **422** has zero vertical tilt, but the tilt may be adjustable within a reasonable range (dashed box **423**). As described above with reference to FIG. **1**, any necessary interaction, such as to get a movie started, may be accomplished in the modes of FIG. **2** or **3**, or via remote control and/or touch-screen operation while in the media consumption mode exemplified in FIG. **4**.

Ledbetter, ¶ [0031].

Like in the claimed easel mode, Ledbetter also teaches loading and executing the second content mode ("media player software") in the media consumption mode.

> [0057] By way of example, when the arm is positioned such that the display monitor is in the media consumption mode, media player software may be loaded and automatically executed. In the tablet mode, tablet operating system

Ledbetter, ¶ [0057].

Thus, based on Ledbetter's teachings, a POSITA would have been motivated to display a second mode of content (*e.g.*, Ledbetter's media player) on Lane's display in the easel mode, since, as recognized by Ledbetter, modes like Lane's easel mode may be optimized/best suited for watching videos. *E.g.*, Ledbetter, ¶¶ [0031], [0057]; Schmandt, ¶ 183. Thus, a POSITA would have been motivated to follow Ledbetter's teachings to display media consumption content (e.g., a media player) when Lane's computer is in easel mode. *E.g.*, Ledbetter, ¶ [0057]; Schmandt, ¶ 183.

[10.7] a navigation control accessible in each of the plurality of display modes and configured to permit a user to manipulate at least one of operating parameters of the portable computer and the content displayed on the single display screen

Lane discloses this limitation for at least the reasons provided above for element 10.7 in Section X.A.1.

[10.8] wherein the plurality of modes includes 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.

Lane discloses this limitation for at least the reasons provided above for element 10.8 in Section X.A.1.

2. Claim 16

[16.1] The portable computer of claim 10, wherein an operating display mode is selected from the plurality of display modes based on a physical orientation of the portable computer.

Lane renders this claim obvious for at least the reasons provided above in Section X.A.2.

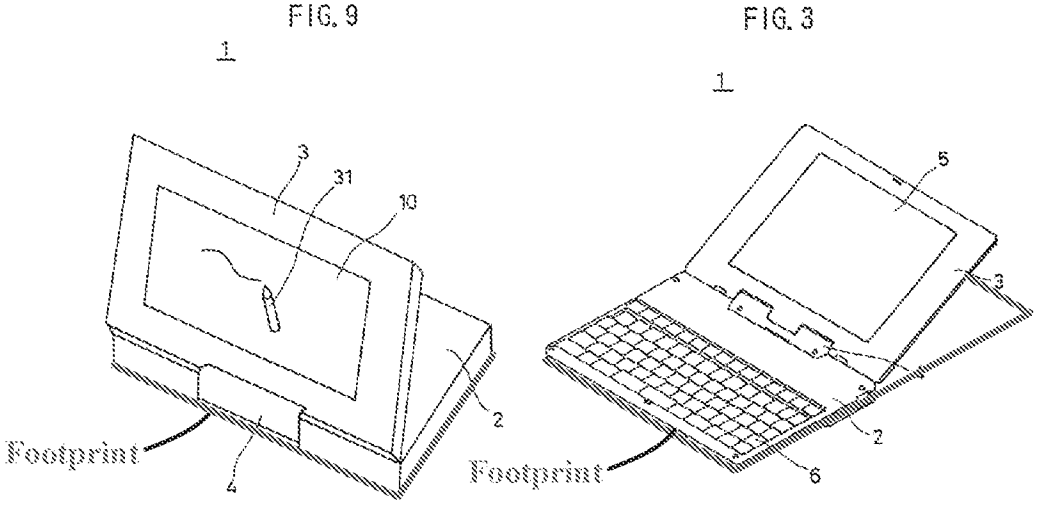
C. Kamikakai And Shimura Render Obvious Claims 10 And 16 Of The '844 Patent (Ground 3)

A POSITA Would Have Found It Obvious To Implement Kamikakai's Computer With Shimura's Easel Mode and Content Display Orientation Teachings. As explained in more detail

below in Sections X.C.1. and X.C.2., Kamikakai discloses or teaches all elements of claims 10 and 16 except for the easel mode and the different content display orientations. A POSITA implementing the Kamikakai configurable computer would have been motivated, with a reasonable expectation of success, to include Shimura's easel mode and content orientation features. A POSITA would have been motivated to provide Shimura's easel mode in order to benefit from its smaller, space-saving footprint. *E.g.*, Shimura, [0017]. Doing so would have increased device flexibility and permitted usage even with limited table / counter space. Schmandt, ¶ 187. Shimura explains that "the area taken up by the computer on the table can be greatly reduced" by using the easel mode shown in FIG. 5. Shimura, ¶ [0017], FIG. 5. A POSITA implementing Kamikakai would have been particularly interested in space-saving solutions like the Shimura easel mode, because Kamikakai expressly states a desire to provide a device with space-saving features. Kamikakai, 2:31–36 (describing object of providing "a portable information processing apparatus which enables easy operation . . . even when the portable information processing apparatus is set up on a small surface"). Schmandt, ¶ 187.

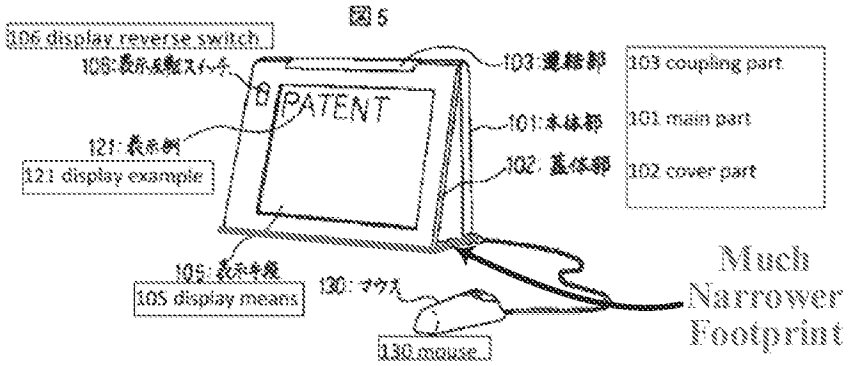
The additional space-saving benefits of Shimura's easel mode would have been recognized by a POSITA upon comparing the depictions of the Kamikakai frame and laptop modes to the Shimura easel mode:

Kamikakai's Frame Mode **Kamikakai's Laptop Mode**



Kamikakai, FIGS. 3, 9 (with annotations).

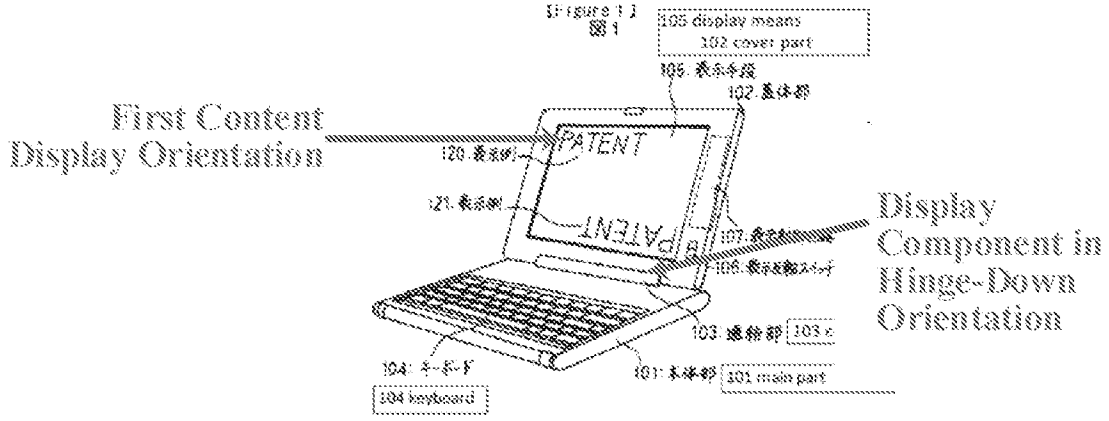
Shimura's Easel Mode



Shimura, FIG. 5 (with annotations).

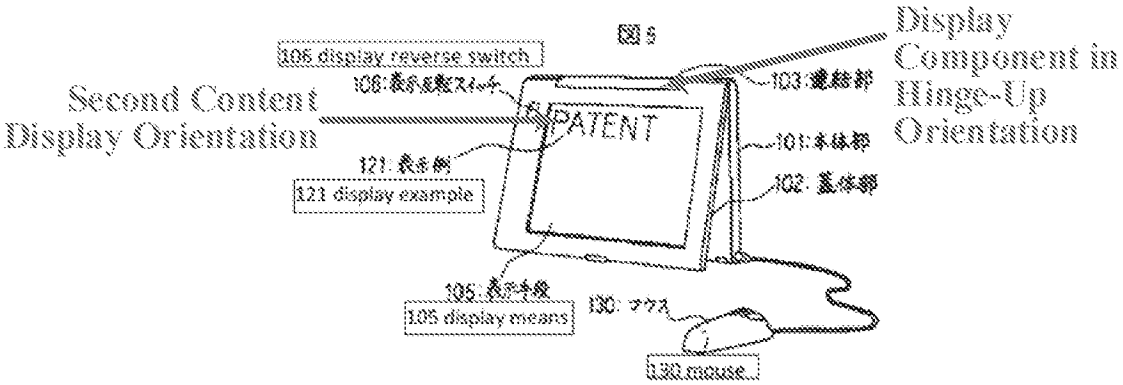
A POSITA implementing Kamikakai with such an easel mode, would have naturally done so such that the content was properly orientated "face up" for ease of viewing by the user. Indeed, Shimura teaches orienting the content displayed on the screen depending on the different modes (Shimura, ¶¶ 12, 14, 17 FIGS. 1, 5), with laptop mode displaying the content in a first orientation and easel mode in a second orientation, as shown in Shimura's figures:

Shimura's Laptop Mode



Shimura, FIG. 1 (with annotations).

Shimura's Easel Mode



Shimura, FIG. 5 (with annotations); *see also* Schmandt, ¶ 189.

And, a POSITA would have reasonably expected to succeed in implementing Kamikakai with an easel mode with no undue experimentation. The Kamikakai configurable computer already provided full rotation of the display screen relative to the base and used a hinge that would lock/retain the display and base at any relative angle chosen by the user. *E.g.*, Kamikakai, 3:52–64, 4:10–5:27; Schmandt, ¶ 190. Indeed, in Kamikakai's frame mode, the display and base are retained at a very similar relative angle as in Shimura's easel mode, thus confirming the ease of

providing this mode. *E.g.*, *compare* Kamikakai, FIG. 8 *to* Shimura, FIG. 5; Schmandt, ¶ 190. Easel mode would merely have required positioning the overall Kamikakai device with the hinge facing up. Schmandt, ¶ 190.

Moreover, a POSITA would have had a reasonable expectation of success and no technical difficulty in ensuring that the displayed content was oriented properly (i.e., inverted) in easel mode, such that a user could view it right-side-up. Schmandt, ¶ 191. A POSITA would have recognized that this could have been done manually using Shimura's display reverse switch 106, as Shimura expressly teaches using this switch 106 to invert displayed content. *E.g.*, Shimura, ¶¶ 12, 14, 17 FIGS. 1, 5; Schmandt, ¶ 191. The POSITA would have recognized that, alternatively, it would have been trivial to implement the configurable computer to have reoriented displayed content automatically using a sensor and associated software, given that this was well described in the art. *Infra* Section X.C.1.; *also see, e.g.*, Hisano, ¶¶ [0098–99]; Tsuji, ¶¶ [0049], [0055], [0059–61], [0074], FIG. 14; Schweizer, 5:23–35; Shigeo, Abstract, ¶¶ [0004], [0014–16], FIGS. 2, 4(b); *supra*, Sections VII.F. and VIII.C.

The result of this natural combination would be a computing device that can be configured into at least laptop, frame, and easel display modes, and that would be configured to display content in different orientations depending on the display mode to ensure that content is presented right-side-up in each display mode for easy user viewing. As explained in the following paragraphs, this natural combination renders obvious at least claims 10 and 16.

1. Claim 10

[10.1[14]] 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 permit an operator to interact with a single display screen in each of the plurality of display modes, the portable computer comprising:

Together, Kamikakai and Shimura teach this limitation.

The Kamikakai–Shimura computer is configurable between a plurality of display modes including a laptop mode and an easel mode.

Both Kamikakai and Shimura disclose portable computers configurable between a plurality of display modes. Kamikakai does not explicitly disclose an easel mode. Shimura does, however, and expressly teaches the benefits of providing such a mode. As explained further below, a POSITA would have found it obvious to implement Kamikakai's configurable computer such that it included the easel mode taught by Shimura.

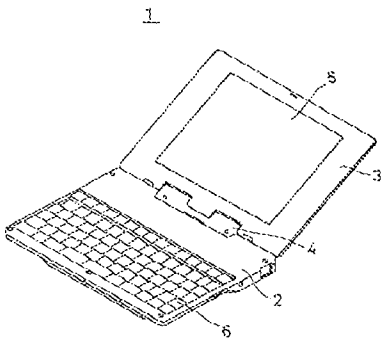
Kamikakai discloses a portable computer ("portable information processing apparatus 1") configurable between a plurality of display modes including a laptop mode (FIG. 3) and a frame mode (FIGS. 8–9). *E.g.*, Kamikakai, FIGS. 3, 9 (reproduced below).

[14] Reference numbers in the format of [claim#.limitation#] are added throughout for ease of reference.

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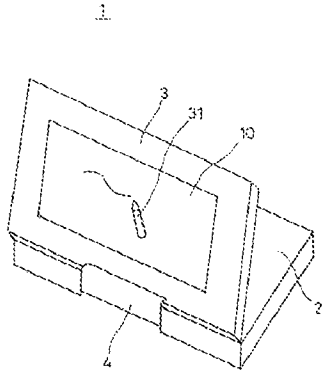
Laptop Mode

FIG. 3



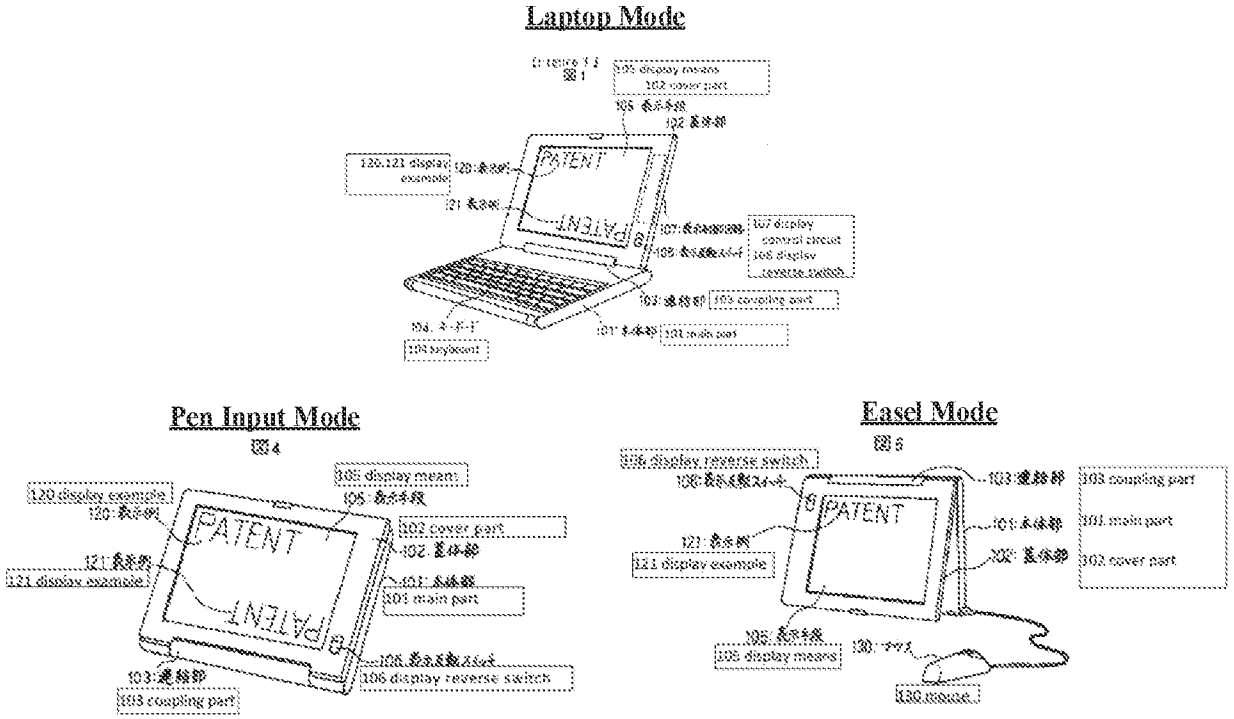
Frame Mode

FIG. 9



Kamikakai, FIGS. 3, 9 (with annotations).

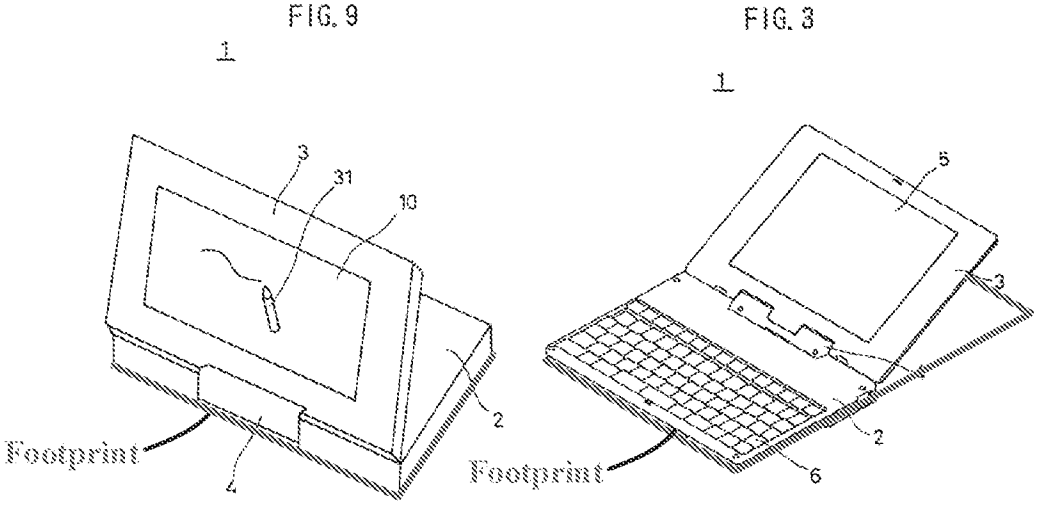
Shimura explicitly discloses the easel mode and provides explicit motivation for including this display mode, namely space savings. Specifically, Shimura discloses a portable computer ("personal computer") configurable between a plurality of display modes including a laptop mode (Figure 1), easel mode (Figure 5), and pen input mode (Figure 4). *E.g.*, Shimura, Figures. 1, 4, 5 (reproduced below), ¶ [0014] (laptop mode), ¶ [0016] (pen input mode), ¶ [0017] (easel mode).



Shimura, Figures. 1, 4, and 5 (with annotations).

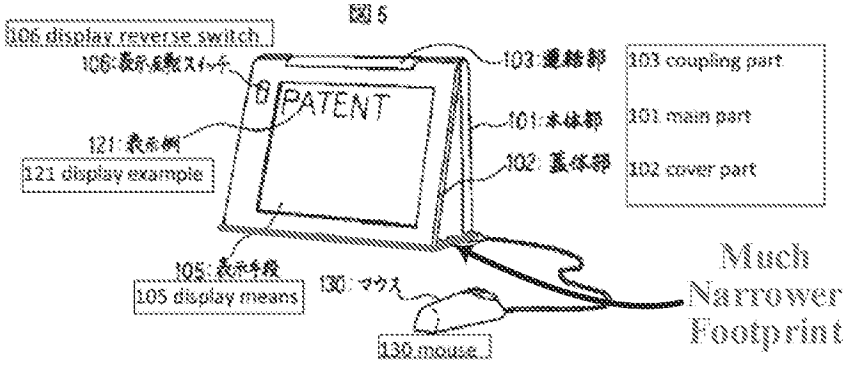
As explained by Shimura, "the area taken up by the computer on the table can be greatly reduced" in the easel mode. Shimura, ¶ [0017]. Thus, a POSITA would been motivated to ensure that Kamikakai's computer included an easel mode, since it provides a smaller footprint than Kamikakai's other display modes. Schmandt, ¶ 197. Specifically, in all of Kamikakai's display modes, the footprint of the computer is at least as big as the perimeter of the base since the base is oriented roughly horizontally in all of the display modes. *E.g.*, Kamikakai, FIGS. 3, 7–9.

Kamikakai's Frame Mode **Kamikakai's Laptop Mode**



Kamikakai, FIGS. 3, 9 (with annotations).

Shimura's Easel Mode



Shimura, Figure 5 (with annotations).

However, as shown above in Figure 5 of Shimura, in easel mode, the footprint is much smaller than Kamikakai's other display modes because the computer is oriented vertically, such that the computer's footprint is only defined by the small angle between the display and base. Schmandt, ¶ 198. As such, the footprint is much narrower in easel mode than it is in the frame mode or laptop mode. Schmandt, ¶ 198. Thus, a POSITA would have been motivated to ensure

that Kamikakai's computer can be configured to this easel mode in order to conserve counter space and/or to ensure that a user is still able to use and place the computer on a table, even when space is limited. Schmandt, ¶ 198.

Moreover, a POSITA would have looked to Shimura for motivation when modifying Kamikakai's device because of how similar Shimura's device is to Kamikakai's device. Not only are Shimura and Kamikakai's devices both laptops, but they are laptops that are openable by up to 360° via similar dual-axis hinge assemblies. Thus, given their level of similarity, a POSITA would have been motivated to share features between these two devices. As mentioned above, the easel mode would have been particularly obvious since Kamikakai's hinge assembly is capable of supporting that (and many other) positions. *E.g.*, Kamikakai, 3:52–64, 4:10–5:27; Schmandt, ¶ 199.

A POSITA would have reasonably expected Kamikakai's portable computer to be capable of achieving the easel mode for at least the reason that the hinge assembly ("connection part 4") is strong enough to hold the display component ("display part 3") up against the force of gravity in the frame mode. *E.g.*, Kamikakai, 3:52–64, 4:10–5:27, FIGS. 8–9; Schmandt, ¶ 200. Kamikakai confirms that the hinge assembly ("connection part 4") locks the base ("main body 2") and display component ("display part 3") at any arbitrary angle whenever a user stops actively turning them, due to the friction that exists between the components of the hinge assembly. *E.g.*, Kamikakai, 3:52–64, 4:10–5:27; Schmandt, ¶ 200.

> When the user stops turning the main body **2** or stops turning the connection part **4** with respect to the main body **2**, the main body **2** or the connection part **4** stops turning due to the friction between the bearing member **23** and the rotary shaft **21**. An angle formed between the main body **2** and the connection part **4** is fixed to that at the time when the rotary manipulation force is released, and the main body **2** and the connection part **4** are supported at this angular position.

Kamikakai, 5:1–8 (discussing how the base ("main body 2") is locked in position relative to the hinge assembly ("connection part 4") when a user stops actively turning them relative to one another).

> When the user stops turning the display part **3** or stops turning the connection part **4** with respect to the main body **2**, the display part **3** or the connection part **4** stops turning due to the friction between the bearing member **26** and the rotary shaft **24**. An angle formed between the display part **3** and the connection part **4** is fixed to that at the time when the rotary manipulation force is released, and the display part **3** and the connection part **4** are supported at this angular position.

Kamikakai, 5:19–27 (discussing how the main display component ("display part 3") is locked in position relative to the hinge assembly ("connection part 4") when a user stops actively turning them relative to one another).

Aside from the obviousness of the claimed easel mode's physical configuration, it also would have been obvious to have inverted displayed content in this easel mode to ensure the content is presented right-side up to a user, since the display is inverted in easel mode relative to the laptop and frame modes. *See* element 10.6 in this Section (X.C.) and Section X.D.

For at least these reasons, a POSITA would have implemented the Kamikakai device (with its laptop and frame modes) to also include Shimura's easel mode wherein transitions between the