



US008289688B2

(12) **United States Patent**
Behar et al.

(10) **Patent No.:** **US 8,289,688 B2**
(45) **Date of Patent:** **Oct. 16, 2012**

(54) **PORTABLE COMPUTER WITH MULTIPLE DISPLAY CONFIGURATIONS**

(75) Inventors: **Yves Behar**, Oakland, CA (US); **Joshua Morenstein**, San Francisco, CA (US); **Christopher Hibmacronan**, Oakland, CA (US); **Naoya Edahiro**, San Francisco, CA (US); **Matthew David Day**, San Francisco, CA (US)

5,200,913 A	4/1993	Hawkins et al.
5,268,817 A	12/1993	Miyagawa et al.
5,436,954 A	7/1995	Nishiyama et al.
5,515,345 A	5/1996	Barreira
5,712,760 A	1/1998	Coulon
D391,927 S	3/1998	Faranda
D392,944 S	3/1998	Issa
D395,868 S	7/1998	Iino
5,790,371 A *	8/1998	Latocha et al. 361/679.32
5,793,355 A	8/1998	Youens
5,796,575 A	8/1998	Podwalny et al.

(Continued)

(73) Assignee: **LiTL, LLC**, Boston, MA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 182 days.

FOREIGN PATENT DOCUMENTS

DE 19952486 5/2001

(Continued)

OTHER PUBLICATIONS

<http://laptop.org/en/laptop/start/ebook.shtml> accessed on Sep. 29, 2008.

(Continued)

(21) Appl. No.: **12/170,939**

(22) Filed: **Jul. 10, 2008**

(65) **Prior Publication Data**

US 2009/0244832 A1 Oct. 1, 2009

Related U.S. Application Data

(60) Provisional application No. 61/041,365, filed on Apr. 1, 2008.

(51) **Int. Cl.**
G06F 1/16 (2006.01)
H05K 5/00 (2006.01)
H05K 7/00 (2006.01)

(52) **U.S. Cl.** **361/679.3; 361/679.27; 455/575.3**

(58) **Field of Classification Search** 361/679.21, 361/679.26, 679.27; 455/575.1-575.4; 345/168
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

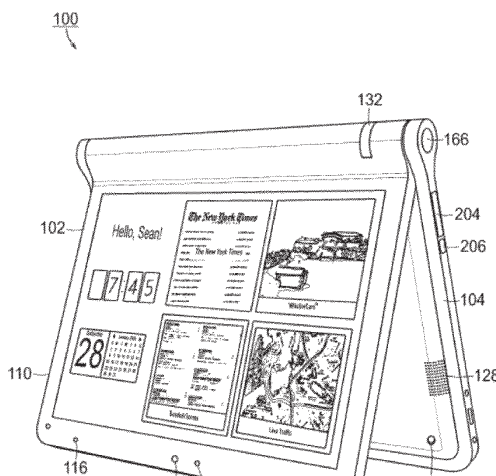
3,468,576 A	9/1969	Beyer et al.
4,939,514 A	7/1990	Miyazaki
D333,636 S	3/1993	Issa

Primary Examiner — Adrian S Wilson

(57) **ABSTRACT**

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 easel mode in which the base of the computer and its display component stand vertically forming an inverted "V." The portable computer includes a hinge assembly that couples the display component to the base of the computer, and allows the display component to be rotated about an axis along an interface between the display component and the base to configure the portable computer between a closed position, the laptop mode and the easel mode. The portable computer further comprises a scroll wheel and optional navigation buttons that permit a user to control or manipulate various aspects of operation of the portable computer (such as volume or display brightness) and/or content displayed the computer.

32 Claims, 25 Drawing Sheets



U.S. PATENT DOCUMENTS

D399,526 S 10/1998 Brady
 5,825,352 A 10/1998 Bisset et al.
 5,841,631 A 11/1998 Shin et al.
 5,847,698 A 12/1998 Reavey
 5,900,848 A * 5/1999 Haneda et al. 345/1.1
 5,926,364 A * 7/1999 Karidis 361/679.27
 5,949,643 A 9/1999 Batio
 D416,003 S 11/1999 Schiefer et al.
 5,987,704 A * 11/1999 Tang 16/354
 6,005,767 A * 12/1999 Ku et al. 361/679.27
 6,067,224 A 5/2000 Nobuchi
 6,144,358 A * 11/2000 Narayanaswamy et al. .. 345/102
 6,222,507 B1 * 4/2001 Gouko 345/1.1
 6,223,393 B1 5/2001 Knopf
 6,262,885 B1 7/2001 Emma et al.
 6,266,236 B1 * 7/2001 Ku et al. 361/679.27
 6,275,376 B1 * 8/2001 Moon 361/679.06
 6,295,038 B1 * 9/2001 Rebeske 345/1.1
 6,302,612 B1 * 10/2001 Fowler et al. 403/76
 6,323,846 B1 11/2001 Westerman et al.
 D452,238 S 12/2001 Sugano
 6,327,482 B1 * 12/2001 Miyashita 455/566
 6,341,061 B1 * 1/2002 Eisbach et al. 361/679.46
 6,343,006 B1 * 1/2002 Moscovitch et al. 361/679.04
 6,377,444 B1 4/2002 Price et al.
 D462,069 S 8/2002 Gatto
 6,437,974 B1 * 8/2002 Liu 361/679.27
 D463,797 S 10/2002 Andre
 6,464,195 B1 10/2002 Hildebrandt
 6,492,974 B1 * 12/2002 Nobuchi et al. 345/156
 6,510,049 B2 1/2003 Rosen
 D476,326 S 6/2003 Tanimura
 D479,708 S 9/2003 Hwang
 6,628,267 B2 * 9/2003 Karidis et al. 345/168
 6,642,909 B1 11/2003 Oliva
 6,659,516 B2 * 12/2003 Wang et al. 292/251.5
 6,661,426 B1 12/2003 Jetha
 6,665,175 B1 12/2003 deBoer
 6,697,055 B1 2/2004 Bullister
 D491,177 S 6/2004 Andre
 D491,936 S 6/2004 Jao
 D494,162 S 8/2004 Kondo
 6,771,494 B2 * 8/2004 Shimano 361/679.06
 D495,674 S 9/2004 Yoo
 D495,694 S 9/2004 Chase
 6,788,527 B2 9/2004 Doczy et al.
 6,819,304 B2 * 11/2004 Branson 345/1.3
 6,829,140 B2 * 12/2004 Shimano et al. 361/679.09
 6,859,219 B1 * 2/2005 Sall 345/1.1
 D504,128 S 4/2005 Maskatia
 6,882,335 B2 * 4/2005 Saarinen 345/156
 6,944,012 B2 9/2005 Doczy et al.
 6,963,485 B2 11/2005 Hong
 D512,997 S 12/2005 Lee
 D513,509 S 1/2006 Kawa
 D516,552 S 3/2006 Iseki
 D517,541 S 3/2006 Maskatia
 D518,042 S 3/2006 Kanayama
 7,035,665 B2 4/2006 Kido et al.
 D523,429 S 6/2006 Lin
 7,061,472 B1 * 6/2006 Schweizer et al. 345/168
 7,072,179 B1 7/2006 Curran et al.
 D528,541 S 9/2006 Maskatia
 D528,993 S 9/2006 Wilson
 7,138,962 B2 * 11/2006 Koenig 345/1.3
 D534,531 S 1/2007 Ogasawara
 D535,292 S 1/2007 Shi

D544,846 S 6/2007 Kindle
 7,239,508 B2 7/2007 Ferrucci
 7,250,207 B1 7/2007 Heal et al.
 7,428,142 B1 * 9/2008 Ligtenberg et al. 361/679.55
 D581,371 S 11/2008 Richmond
 7,467,356 B2 12/2008 Gettman et al.
 7,522,946 B2 4/2009 Im
 D593,085 S 5/2009 Behar et al.
 D593,086 S 5/2009 Behar et al.
 D593,091 S 5/2009 Behar et al.
 D605,635 S 12/2009 Edahiro et al.
 7,698,407 B2 4/2010 Mattox, Jr. et al.
 7,869,834 B2 1/2011 Seol et al.
 2002/0005818 A1 * 1/2002 Bruzzone 345/6
 2002/0010707 A1 1/2002 Chang
 2002/0021258 A1 * 2/2002 Koenig 345/1.1
 2003/0048595 A1 3/2003 Hsieh
 2003/0107603 A1 6/2003 Clapper
 2003/0109232 A1 6/2003 Park
 2004/0001049 A1 1/2004 Oakley
 2004/0203535 A1 10/2004 Kim
 2004/0228076 A1 11/2004 Clapper
 2005/0018396 A1 1/2005 Nakajima
 2005/0041378 A1 2/2005 Hamada
 2005/0063145 A1 3/2005 Homer
 2005/0083642 A1 4/2005 Senpuku et al.
 2005/0128695 A1 6/2005 Han
 2005/0146845 A1 * 7/2005 Moscovitch 361/681
 2005/0210399 A1 9/2005 Filner
 2005/0221865 A1 10/2005 Nishiyama et al.
 2005/0257400 A1 11/2005 Sommerer
 2005/0282596 A1 12/2005 Park
 2006/0126284 A1 * 6/2006 Moscovitch 361/681
 2006/0238439 A1 10/2006 Fuller et al.
 2006/0264243 A1 * 11/2006 Aarras 455/566
 2006/0268500 A1 * 11/2006 Kuhn 361/683
 2007/0138806 A1 6/2007 Ligtenberg et al.
 2007/0182663 A1 * 8/2007 Biech 345/1.1
 2007/0242421 A1 * 10/2007 Goschin et al. 361/681
 2007/0247446 A1 10/2007 Orsley et al.
 2008/0024388 A1 * 1/2008 Bruce 345/1.1
 2008/0024465 A1 1/2008 Hawkins et al.
 2008/0042987 A1 2/2008 Westerman et al.
 2008/0062625 A1 * 3/2008 Batio 361/680
 2008/0158795 A1 * 7/2008 Aoki et al. 361/681
 2008/0284738 A1 * 11/2008 Hovden et al. 345/173
 2009/0190295 A1 * 7/2009 Chin et al. 361/679.27
 2009/0244012 A1 10/2009 Behar
 2009/0275366 A1 * 11/2009 Schilling 455/566
 2009/0300511 A1 12/2009 Behar
 2009/0303676 A1 12/2009 Behar
 2009/0322790 A1 12/2009 Behar
 2010/0174993 A1 7/2010 Pennington

FOREIGN PATENT DOCUMENTS

EP 0588210 3/1993
 EP 0588210 A1 3/1994
 KR 10-2000-0036647 A 7/2000

OTHER PUBLICATIONS

Office Action L2039-700111 dated Apr. 4, 2011, U.S. Appl. No. 12/170,951.
 Miller, M., "Creating a Digital Home Entertainment System with Windows Media Center", Apr. 2006, Que.
 Office Action dated Apr. 4, 2011, U.S. Appl. No. 12/170,951.

* cited by examiner

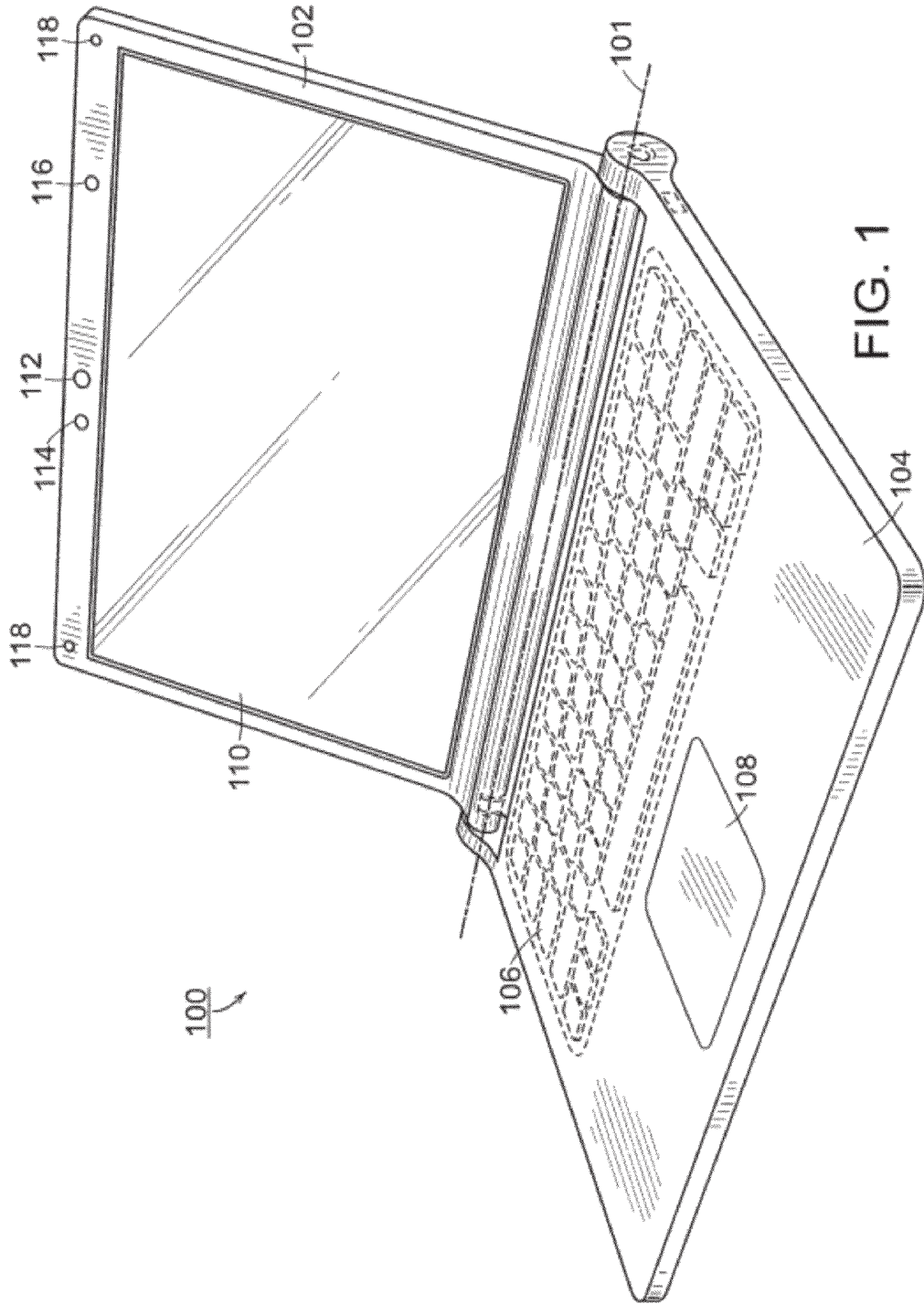


FIG. 1

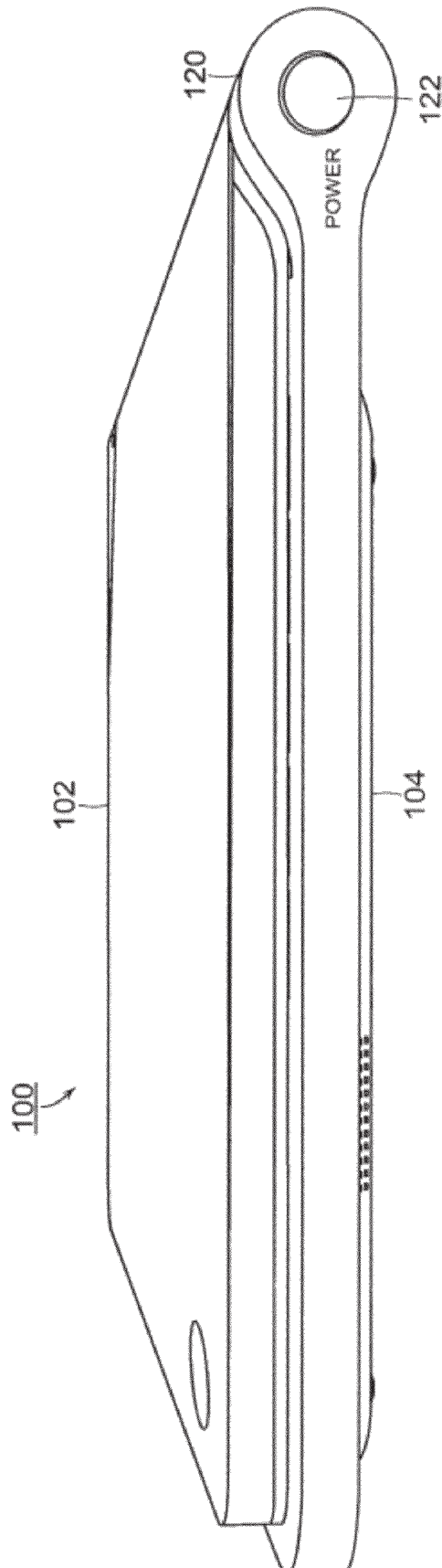


FIG. 2

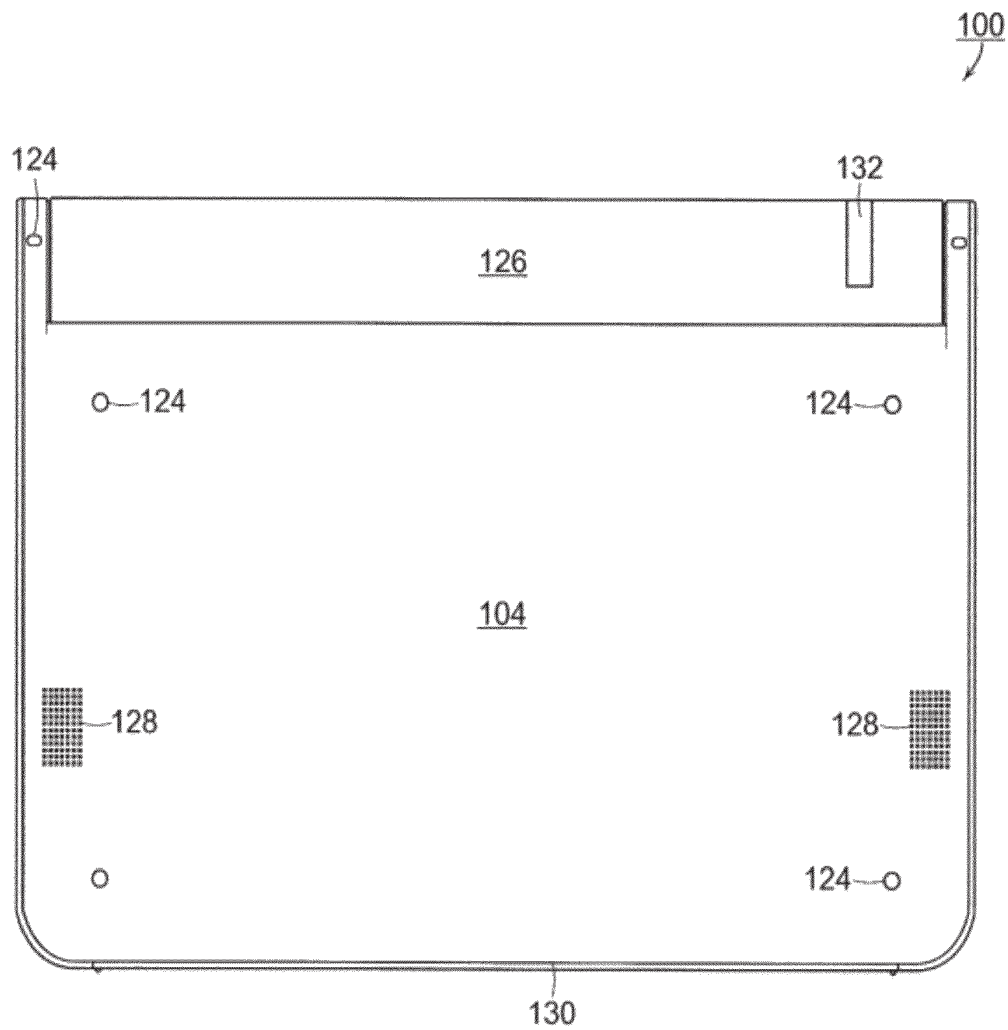


FIG. 3

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.