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Yamazaki et al.

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(54) **PORTABLE INFORMATION TERMINAL**

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D20/10, 21; 52/234; 160/118
CPC ... G06F 1/1616; G06F 1/1652; G06F 1/1647;
G06F 1/1618; G06F 1/1641; H04M 1/0216;
H04M 1/0268; H04M 1/0214; H04M 1/0247;
A47G 1/065; A47G 5/00; A47G 1/04; G09G
2300/023

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

715,376 A * 12/1902 Harper 40/733
3,292,285 A * 12/1966 Kitayama 40/701

(Continued)

FOREIGN PATENT DOCUMENTS

KR 30-0473786 12/2007
TW D149341 9/2012

OTHER PUBLICATIONS

Bendable OLED panel (GEEK), available Jun. 6, 2014, [online], [site visited May 7, 2015]. Available from internet, <URL: <http://www.geek.com/mobile/bendable-oled-display-can-withstand-100000-folds-1596020/>>.*

(Continued)

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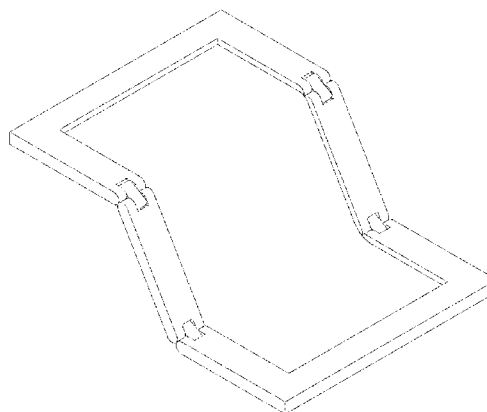
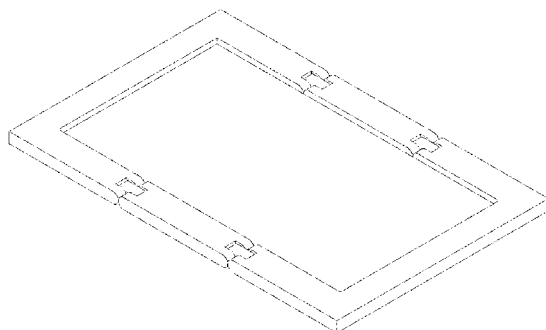
(57) **CLAIM**

We claim, the ornamental design for a portable information terminal, as shown and described.

DESCRIPTION

FIG. 1 is a front view of a portable information terminal showing our new design;
FIG. 2 is a rear view thereof;
FIG. 3 is a right side view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a top plan view thereof;
FIG. 6 is a bottom plan view thereof;
FIG. 7 is a bottom right side perspective view thereof;
FIG. 8 is a bottom right side perspective view thereof in a state where the portable information terminal is partly bent;
FIG. 9 is a bottom right side perspective view thereof in a state where the portable information terminal is folded; and,
FIG. 10 is a top left side perspective view thereof in a state where the portable information terminal is folded.
The portable information terminal includes a flexible display screen that can be used while in a bent state.
The portable information terminal can function as a computer, a media reproducing device (e.g., a music player, a movie player, or a game player), a media storage device, a communication device (e.g., a mobile phone), or the like, for example.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,106,544	A *	8/1978	Dixon et al.	160/199
D357,707	S *	4/1995	Moore	D20/10
D370,129	S *	5/1996	Freudenfeld	D6/301
5,626,926	A *	5/1997	Roberts	428/14
D406,468	S *	3/1999	Byers	D6/312
5,887,373	A *	3/1999	Byers	40/733
D415,619	S *	10/1999	Gandy	D6/301
D424,971	S *	5/2000	Churchville	D11/132
D426,391	S *	6/2000	Rowan	D6/332
6,353,529	B1 *	3/2002	Cies	361/679.05
6,421,942	B1 *	7/2002	Galello	40/738
D477,634	S *	7/2003	Malone	D19/26
6,637,139	B1 *	10/2003	Chan	40/725
D483,575	S *	12/2003	Chan	D6/310
D514,826	S *	2/2006	Sakaguchi	D6/312
D543,707	S *	6/2007	Chan	D6/312
D544,922	S *	6/2007	Shaffer	D20/10
D552,851	S *	10/2007	Abrahamian	D6/301
D572,024	S *	7/2008	Shapiro	D6/301
7,469,961	B2 *	12/2008	Liu	297/16.1
D590,365	S *	4/2009	Kim et al.	D14/138 AB
7,522,944	B2 *	4/2009	Hyun et al.	455/575.1
D594,028	S *	6/2009	Fuchsberg et al.	D14/496
7,920,320	B2 *	4/2011	Watson et al.	359/296
8,005,522	B2 *	8/2011	Ou	455/575.3
D653,226	S *	1/2012	Nara	D14/138 AB
8,393,749	B1 *	3/2013	Daicos	362/142
D694,754	S *	12/2013	Nakada	D14/373
8,605,421	B2 *	12/2013	Verschoor et al.	361/679.3
8,971,031	B2 *	3/2015	Mok et al.	361/679.27
9,013,864	B2 *	4/2015	Griffin et al.	361/679.21
2003/0217817	A1 *	11/2003	Niehausmeier	160/118
2004/0212602	A1 *	10/2004	Nako et al.	345/173
2006/0146488	A1 *	7/2006	Kimmel	361/681
2010/0064564	A1 *	3/2010	Bemelmans et al.	40/607.01
2010/0157518	A1 *	6/2010	Ladouceur et al.	361/679.09
2010/0201604	A1 *	8/2010	Kee et al.	345/1.3
2011/0241998	A1 *	10/2011	McKinney et al.	345/168
2011/0242026	A1 *	10/2011	Ishigaki	345/173
2012/0001858	A1 *	1/2012	Matsuda et al.	345/173
2012/0002360	A1 *	1/2012	Seo et al.	361/679.01
2012/0044620	A1 *	2/2012	Song et al.	361/679.01
2012/0206896	A1 *	8/2012	Suzuki et al.	361/807
2012/0264489	A1 *	10/2012	Choi et al.	455/566
2013/0053100	A1 *	2/2013	Song et al.	455/556.1
2013/0307805	A1 *	11/2013	Arai	345/173
2013/0307816	A1 *	11/2013	Lee et al.	345/174
2013/0342090	A1 *	12/2013	Ahn et al.	312/258
2014/0003006	A1 *	1/2014	Ahn	361/749
2014/0054935	A1 *	2/2014	Loney	297/16.1
2014/0111954	A1 *	4/2014	Lee et al.	361/749
2014/0213324	A1 *	7/2014	Tan et al.	455/566

2014/0218321	A1 *	8/2014	Lee et al.	345/173
2014/0240264	A1 *	8/2014	Im et al.	345/173
2014/0319550	A1 *	10/2014	Yamazaki et al.	257/88
2014/0347806	A1 *	11/2014	Totani	361/679.27
2015/0055287	A1 *	2/2015	Seo	361/679.27
2015/0062028	A1 *	3/2015	Go et al.	345/173
2015/0062927	A1 *	3/2015	Hirakata et al.	362/362
2015/0116917	A1 *	4/2015	Aono	361/679.04

OTHER PUBLICATIONS

OLED folding screen (OH GIZMO!), available Nov. 3, 2014, [online], [site visited May 7, 2015]. Available from internet, <URL: <http://www.ohgizmo.com/2014/11/03/prototype-oled-screen-can-fold-thirds/>>.*

Feno notebook (Yanko Design), available May 2, 2011, [online], [site visited May 13, 2015]. Available from internet, <URL: <http://www.yankodesign.com/2011/05/02/a-different-kind-of-fold/>>.*

Flexbook (designboom), available May 11, 2011, [online], [site visited May 13, 2015]. Available from internet, <URL: <http://www.designboom.com/design/flexbook-by-hao-chun-huang-fujitsu-design-award-2011-competition-shortlisted-entry/>>.*

Kyocera EOS (engadget), available Apr. 16, 2009, [online], [site visited May 13, 2015]. Available from internet, <URL: <http://www.engadget.com/2009/04/16/kyocera-shows-off-preposterous-beautiful-eos-folding-oled-phone/>>.*

iPhone flexible concepts (Concept Phones), available Apr. 30, 2012, [online], [site visited May 13, 2015]. Available from internet, <URL: <http://www.concept-phones.com/apple/seamless-flexible-display-iphone-concepts-ace-jocker/>>.*

Foldable Display (OH GIZMO!), available Jan. 8, 2009, [online], [site visited May 7, 2015]. Available from internet, <URL: <http://www.ohgizmo.com/2009/01/08/ces-2009-oled-association-shows-off-a-bunch-of-cool-toys-including-the-worlds-first-foldable-amoled-display/>>.*

Schott Flexible Glass, available Dec. 19, 2012, [online], [site visited May 13, 2015]. Available from internet, <URL: http://www.us.schott.com/advanced_optics/english/products/wafers-and-thin-glass/glass-wafer-and-substrates/ultra-thin-glass/index.html>.*

Yoshiharu, et al., "Image Display Device", U.S. Appl. No. 29/478,750, filed Jan. 8, 2014, Specification and Drawings.

Yamazaki et al., "Portable Information Terminal", U.S. Appl. No. 29/478,765, filed Jan. 8, 2014, Filing Receipt, Specification and Drawings.

Yamazaki, et al., "Portable Information Terminal", U.S. Appl. No. 29/478,786, filed Jan. 8, 2014, Filing Receipt, Specification and Drawings.

Yamazaki, et al. "Portable Information Terminal", U.S. Appl. No. 29/478,760, filed Jan. 8, 2014, Filing Receipt, Specification and Drawings.

* cited by examiner

Fig.1

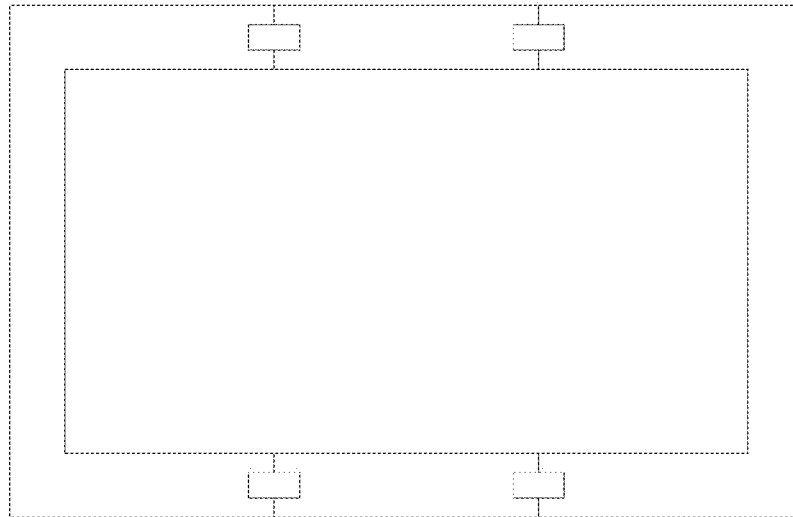


Fig.2

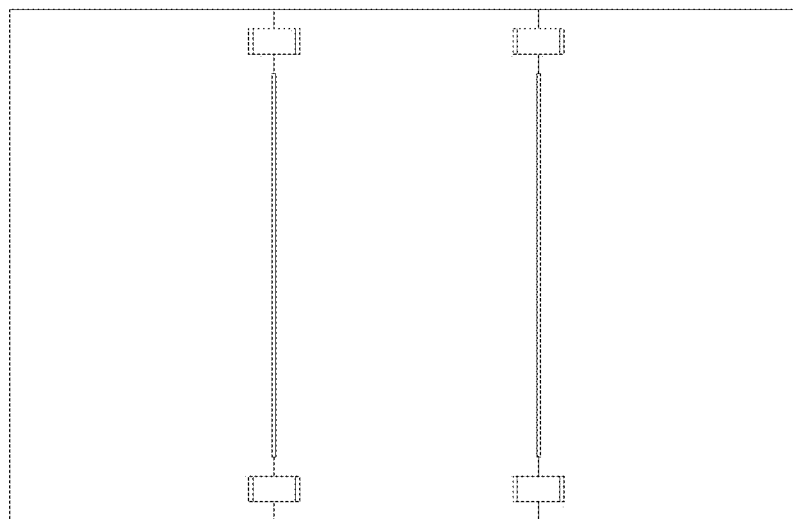


Fig. 3



Fig. 4

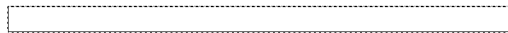


Fig. 5

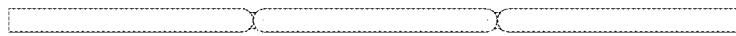


Fig. 6

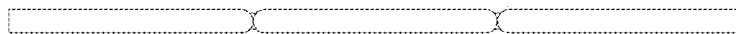


Fig. 7

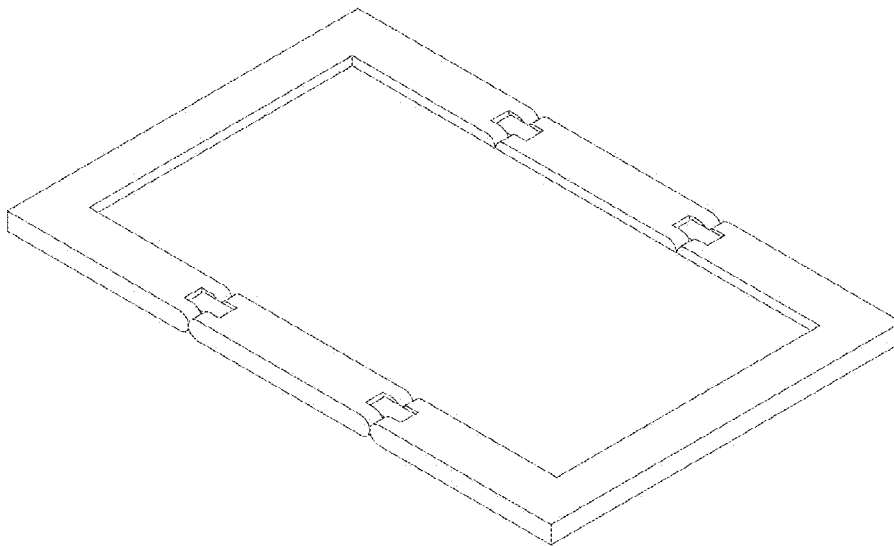


Fig. 8

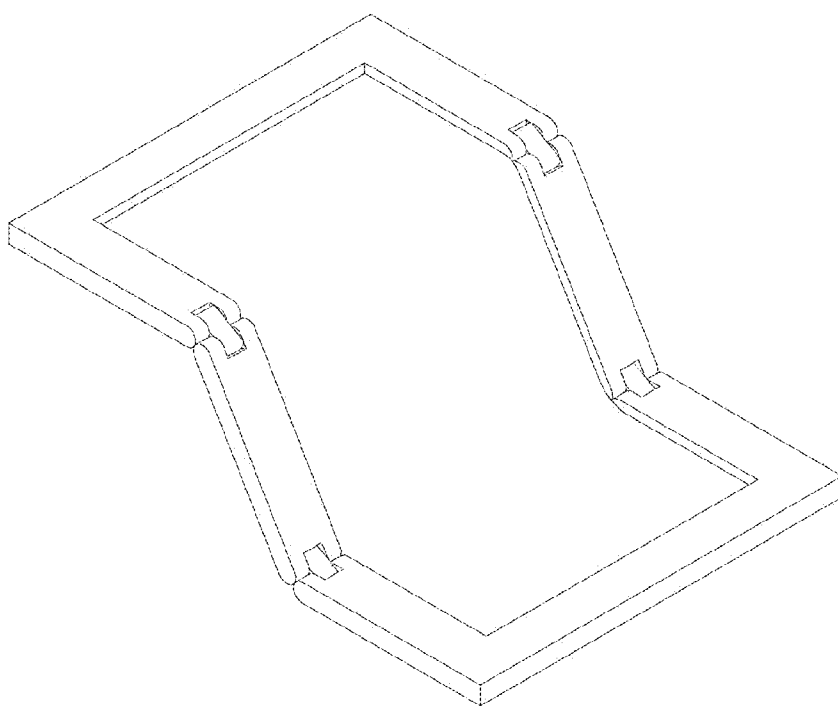


Fig. 9

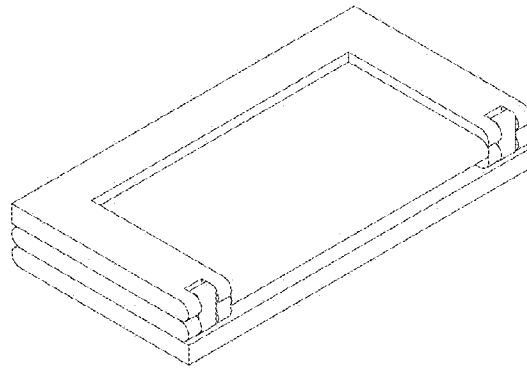


Fig. 10

