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- (54) **COMPACT AND DURABLE MESSENGER DEVICE**
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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 412 days.

6,845,380 B2	1/2005	Su et al.	
6,848,078 B1	1/2005	Birsan et al.	
6,925,313 B2*	8/2005	Kweon et al.	455/566
2003/0023876 A1	1/2003	Bardsley et al.	
2003/0025668 A1	2/2003	Lin	
2003/0163737 A1	8/2003	Roskind	
2003/0204481 A1	10/2003	Lau	
2004/0060007 A1	3/2004	Gottlob et al.	
2004/0128296 A1	7/2004	Krishnamurthy et al.	
2004/0143581 A1	7/2004	Bohannon et al.	
2004/0158714 A1	8/2004	Peyravian	
2004/0261018 A1	12/2004	Dunne et al.	
2005/0022020 A1	1/2005	Fremberg	
2005/0041009 A1*	2/2005	Kuroda	345/102

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H04M 1/00 (2006.01)

(52) **U.S. Cl.** **455/575.1**; 455/566; 455/556.1; 345/173

(58) **Field of Classification Search** 455/550, 455/575.1, 566, 550.1, 575.3; 379/433.01, 379/433.13, 433.07, 368
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,044,152 A *	3/2000	Mendolia	379/433.07
6,230,269 B1	5/2001	Spies et al.	
6,662,300 B1	12/2003	Peters	
6,754,507 B2*	6/2004	Takagi	455/550.1

(Continued)

FOREIGN PATENT DOCUMENTS

JP 14-073553 A 3/2002

OTHER PUBLICATIONS

Netcraft, "Netcraft Toolbar Help Pages FAQ," 2004, available at: <http://toolbar.netcraft.com/help/faq/index.html>.

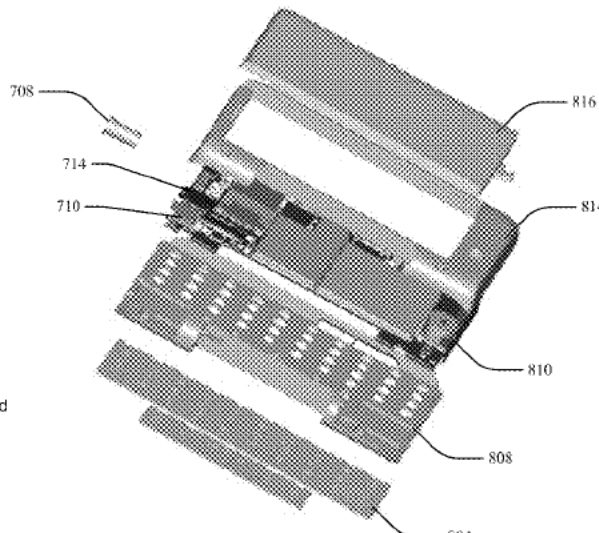
(Continued)

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(57) **ABSTRACT**

The subject innovation and/or methods relate to a compact durable communication device that can include a plurality of improvements to provide durability and thinness. The devices can be a clamshell smartphone, a messenger device, a thin smartphone, and/or any other suitable mobile communication device. The improvements can include a magnesium plate, an opening for an electrical component associated with the plate, internal antenna placement, an extended backlight for a dual display, and/or a mono hinge to provide connectivity.

15 Claims, 24 Drawing Sheets



804 - QWERTY Keyboard
808 - Magnesium Plate
810 - PCB
814 - Lower back case
816 - Battery Pack
708 - Joint
710 - USB

U.S. PATENT DOCUMENTS

2005/0049017	A1 *	3/2005	Yoda	455/575.1
2005/0068913	A1	3/2005	Tan et al.	
2005/0087769	A1 *	4/2005	Yamazaki et al.	257/202
2005/0108567	A1	5/2005	D'Souza et al.	
2005/0127820	A1 *	6/2005	Yamazaki et al.	313/501
2005/0177578	A1	8/2005	Chen	
2005/0179850	A1	8/2005	Du	
2005/0182778	A1	8/2005	Heuer et al.	
2005/0192990	A1	9/2005	Kharitidi et al.	
2005/0229097	A1	10/2005	Lander	
2005/0235358	A1	10/2005	Keohane et al.	
2006/0216469	A1	9/2006	Hashizume	
2006/0232495	A1 *	10/2006	Chang et al.	345/1.1
2006/0250312	A1	11/2006	Kobayashi	
2007/0005984	A1	1/2007	Florencio et al.	
2007/0006305	A1	1/2007	Florencio et al.	
2007/0199054	A1	8/2007	Florencio et al.	
2008/0015002	A1	1/2008	Crisp	

OTHER PUBLICATIONS

Boneh, et al., "Defending Against Online Identity Theft and Phishing," presentation given at Proceedings: United States—Japan Critical Information Infrastructure Protection Workshop, Sep. 2004, available at: <http://www2.gwu.edu/~usjpciiip/BonehD.pdf>.

Boneh, et al., "Web Password Hashing," 3 pages, last accessed Jun. 28, 2005, available at: <http://crypto.stanford.edu/PwdHash/>.

International Search Report dated Oct. 24, 2007 for PCT Application Serial No. PCT/US2007/004044, 3 Pages.

Adida, B. et al., "Fighting Phishing Attacks: A Lightweight Trust Architecture for Detecting Spoofed Emails," in Proceedings of DIMACS Workshop on Theft in E-Commerce: Content, Identity, and Service, Piscataway, New Jersey, Apr. 2005, 16 pages.

Adida, B. et al., "Separable Identity-based Ring Signatures: Theoretical Foundations for Fighting Phishing Attacks," in Proceedings of DIMACS Workshop on Theft in E-Commerce: Content, Identity, and Service, Piscataway, New Jersey, Feb. 28, 2005, 18 pages.

Chou, N. et al., "Client-Side Defense Against Web-Based Identity Theft," in Proceedings of 11th Annual Network and Distributed System Security Symposium (NDSS '04), San Diego, Feb. 2004, 16 pages.

Delany, M., "Domain-Based Email Authentication Using Public-Keys Advertised in the DNS (DomainKeys)," Internet Draft available at: <http://www.ietf.org/internet-drafts/draft-delany-domainkeys-base-03.txt>, Sep. 29, 2005, last checked Feb. 24, 2006, 40 pages.

Florencio, D. and Herley, C., "Stopping a Phishing Attack, Even When the Victims Ignore Warnings," Microsoft Research Technical Report, Oct. 2005. Available at: <http://research.microsoft.com/research/pubs/view.aspx?type=Publication&id=1489>, last accessed Feb. 24, 2006.

Gabber, E. et al., "How to Make Personalized Web Browsing Simple, Secure, and Anonymous," Financial Cryptography, 1997, pp. 17-32.

Halderman, J.A. et al., "A Convenient Method for Securely Managing Passwords," in Proceedings of the 14th International World Wide Web Conference (WWW 2005), Chiba, Japan, May 10-14, 2005, 9 pages.

Jakobsson, M. and Young, A., "Distributed Phishing Attacks," in Proceedings of DIMACS Workshop on Theft in E-Commerce: Content, Identity, and Service, Piscataway, New Jersey, Apr. 2005, 10 pages.

Kelsey, J. et al., "Secure Applications of Low-Entropy Keys," Lecture Notes in Computer Science, 1997, vol. 1396, pp. 121-134.

Oechslin, P., "Making a Faster Cryptanalytical Time-Memory Trade-Off," in Proceedings of Advances in Cryptology—CRYPTO 2003, 23rd Annual International Cryptology Conference, Santa Barbara, California, Aug. 17-21, 2003, 15 pages.

Ross, B. et al., "A Browser Plug-In Solution to the Unique Password Problem," in Proceedings of the 14th USENIX Security Symposium, Technical Report Stanford-SecLab-TR-2005-1, 2005, 15 pages.

Sahami, M. et al., "A Bayesian Approach to Filtering Junk Email," in AAAI '98 Workshop on Learning for Text Categorization, Jul. 1998, 8 pages.

<http://www.passport.com>, links directly to: <https://accountservices.passport.net/ppnetworkhome.srf?vv=330&lc=1033>, last accessed Feb. 28, 2006.

<http://www.spoofstick.com>, last accessed Feb. 28, 2006.

Anti-Phishing Working Group, at <http://www.antiphishing.org>, last accessed Feb. 28, 2006.

"Bloom Filter" <http://www.nist.gov/dads/HTML/bloomFilter.html> last viewed, Jan. 27, 2006, 1 page.

"Earthlink Toolbar Featuring ScamBlocker for Windows Users" <http://www.earthlink.net/software/free/toolbar/>, last accessed Mar. 7, 2006, 2 pages.

Ross, et al. "Stronger Password Authentication Using Browser Extensions" (2005) Proceedings of the 14th Usenix Security Symposium 15 pages.

"James F. Power, et al., A metrics suite for grammar-based software, Journal of Software Maintenance and Evolution: Research and Practice, 2004. <http://www.cs.nuim.ie/~jpower/Research/Papers/2004/jsme04.pdf>".

Luc Segoufin, Typing and Querying XML Documents: Some Complexity Bounds. <http://delivery.acm.org/10.1145/780000/773170/p167-segoufin.pdf?key1=773170&key2=7019847311&coll=GUIDE&dl=GUIDE&CFID=65860176&CFTOKEN=65663645>.

Mustafa H. Qureshi, et al., Determining the Complexity of XML Documents. <http://doi.ieeeecomputersociety.org/10.1109/ITCC.2005.126>.

Ralf Lammel, et al., Analysis of XML schema usage <http://homepages.cwi.nl/~ralf/xml05/html/paper.htm>.

Thomas J. McCabe, A complexity measure. <http://portal.acm.org/citation.cfm?id=807712&coll=GUIDE&dl=GUIDE&CFID=62736624&CFTOKEN=661444&ret=1#Fulltext>.

* cited by examiner

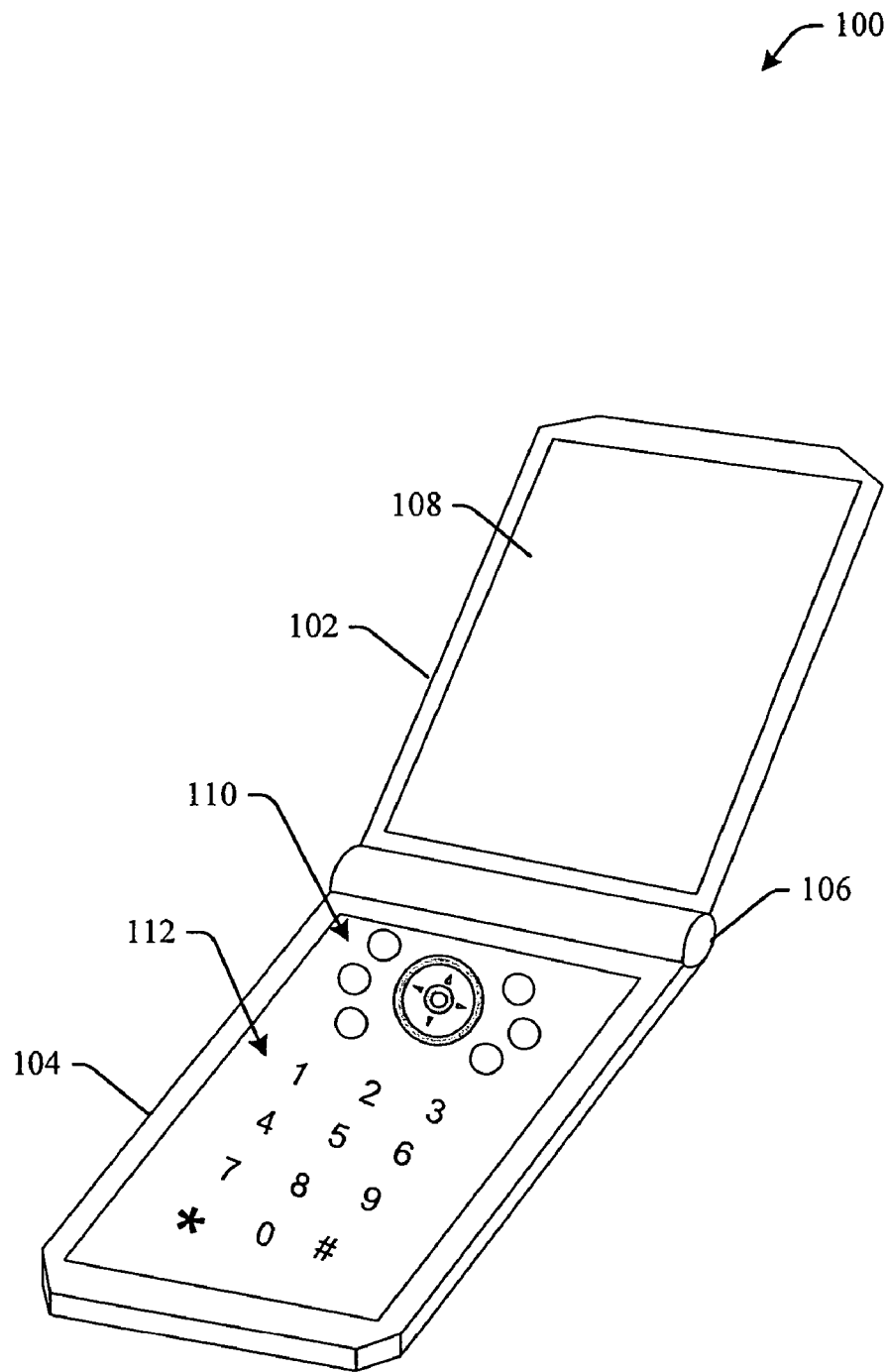


FIG. 1

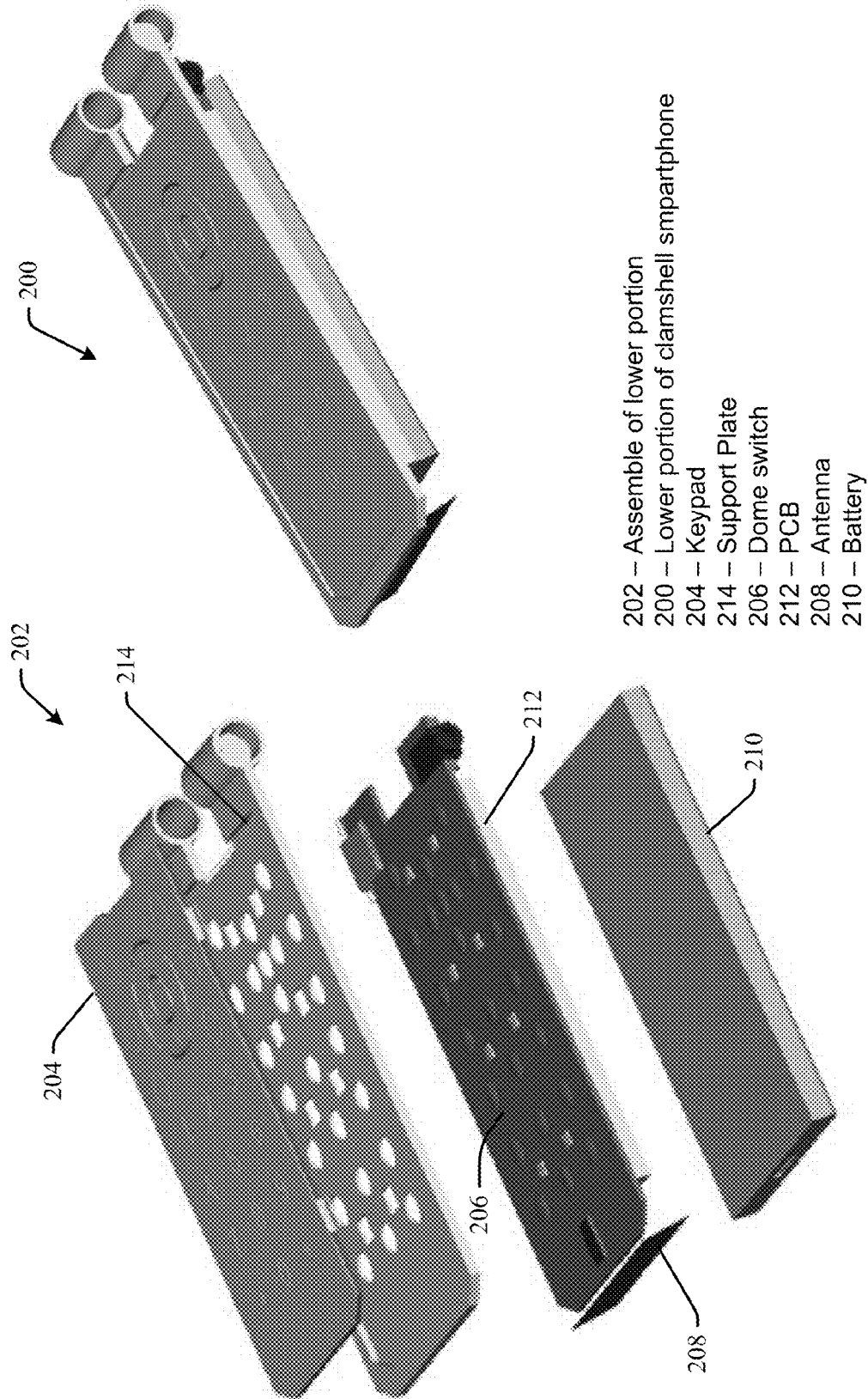


FIG. 2

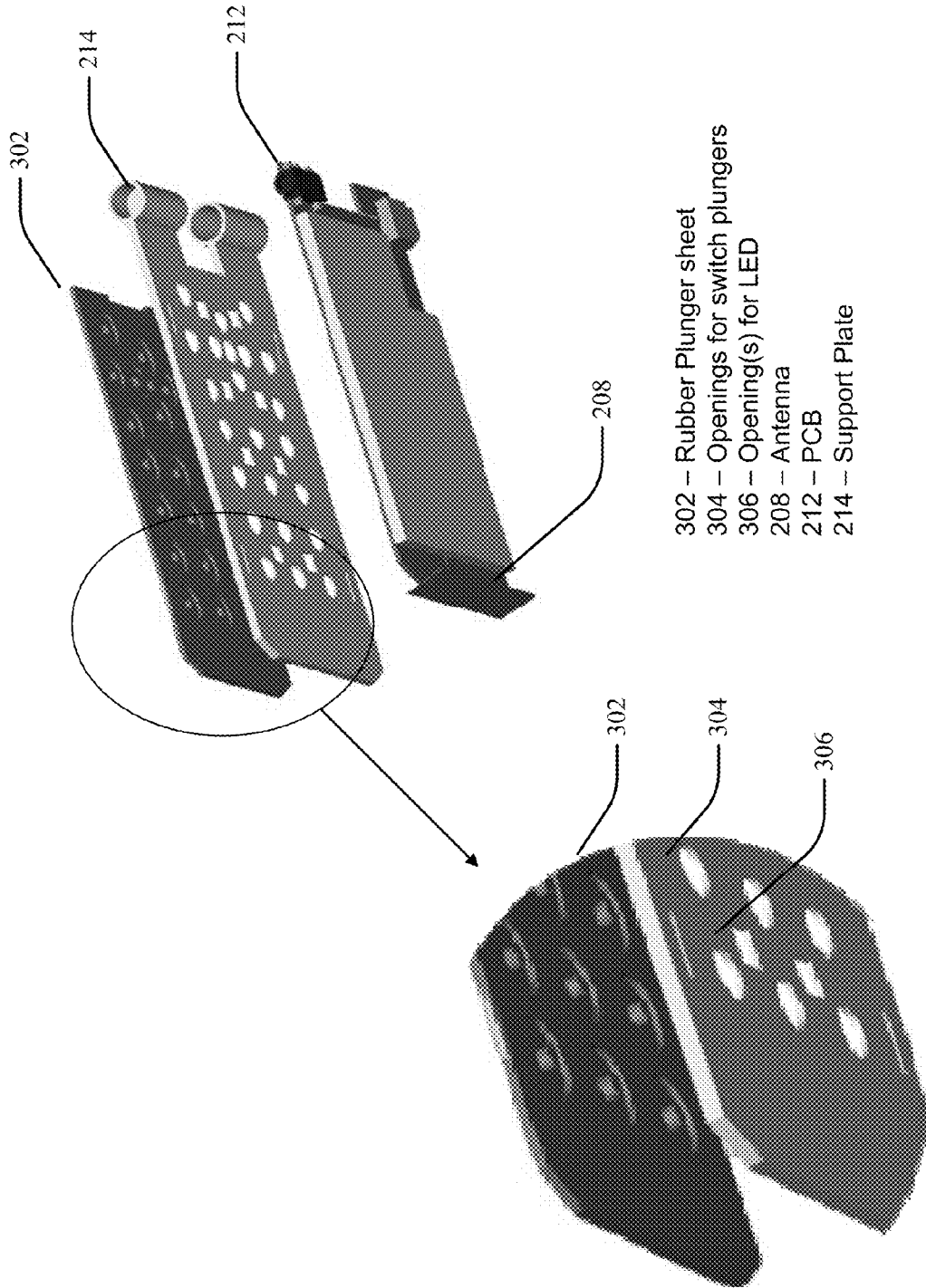


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