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Mayfield et al.

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(54) **SYSTEM COMPRISING A PORTABLE SWITCHING DEVICE FOR USE WITH A PORTABLE ELECTRONIC DEVICE**

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Related U.S. Application Data

(63) Continuation of application No. 16/502,935, filed on Jul. 3, 2019, now Pat. No. 10,493,496, which is a continuation of application No. 16/460,770, filed on Jul. 2, 2019, which is a continuation of application No. 16/388,691, filed on Apr. 18, 2019, now abandoned, which is a continuation of application No.

(Continued)

- (51) **Int. Cl.**
- G06F 1/16** (2006.01)
 - H05K 5/00** (2006.01)
 - H05K 7/00** (2006.01)
 - B08B 1/00** (2006.01)
 - A45C 11/00** (2006.01)
 - G06F 1/32** (2019.01)
 - B08B 11/04** (2006.01)
 - H04M 1/21** (2006.01)
 - H04M 1/02** (2006.01)
 - H04B 1/3816** (2015.01)

(52) **U.S. Cl.**
CPC **B08B 1/006** (2013.01); **A45C 11/00** (2013.01); **B08B 1/002** (2013.01); **B08B 11/04** (2013.01); **G06F 1/32** (2013.01); **H04M 1/21** (2013.01); **H04B 1/3816** (2013.01); **H04M 1/0266** (2013.01)

(58) **Field of Classification Search**
CPC . G06F 1/32; G06F 1/16; G06F 1/1601; G06F 1/1603; G06F 1/1605; G06F 1/1607; G06F 1/1609; G06F 1/1611; B08B 1/002; B08B 1/006
USPC 361/679.01, 679.02, 679.21-679.3
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 2005/0107131 A1* 5/2005 Abramov H04M 1/0258 455/569.1
- 2005/0284904 A1* 12/2005 Knapp A45F 5/02 224/269

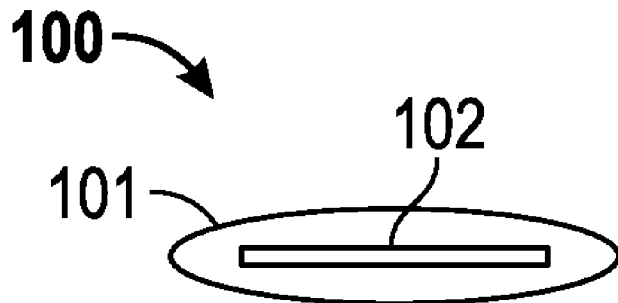
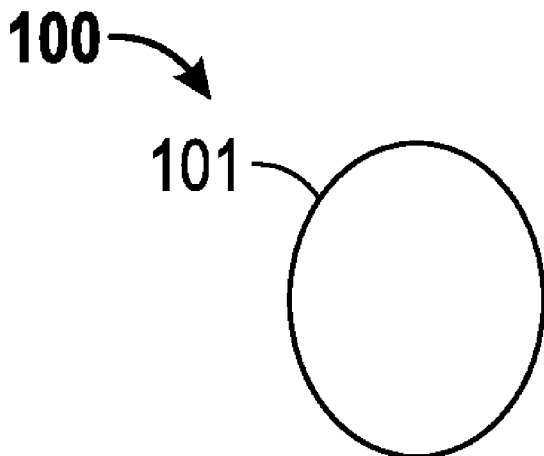
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Primary Examiner — Anthony M Haughton
(74) *Attorney, Agent, or Firm* — Mossman, Kumar & Tyler, PC

(57) **ABSTRACT**

A lens and/or a view screen of an electronic device having at least one case can be cleaned by wiping the view screen with a cleaning component wherein the cleaning component is configured to selectively couple to the at least one case or some other substrate using a magnetic attractive force. The cleaning devices may have secondary applications such as securing fly fishing lures, activating or deactivating a device having a magnetic switch, or preventing sunglasses from sinking. They may also be manufactured without a cleaning component for use with the secondary applications.

13 Claims, 13 Drawing Sheets



Related U.S. Application Data

16/041,594, filed on Jul. 20, 2018, now Pat. No. 10,272,474, which is a continuation of application No. 15/852,000, filed on Dec. 22, 2017, now Pat. No. 10,259,021, which is a continuation of application No. 15/597,005, filed on May 16, 2017, now abandoned, which is a continuation of application No. 14/343,665, filed as application No. PCT/US2012/049562 on Aug. 3, 2012, now abandoned.

- (60) Provisional application No. 61/661,090, filed on Jun. 18, 2012, provisional application No. 61/619,229, filed on Apr. 2, 2012, provisional application No. 61/592,344, filed on Jan. 30, 2012, provisional application No. 61/576,834, filed on Dec. 16, 2011, provisional application No. 61/569,093, filed on Dec. 9, 2011, provisional application No. 61/568,031, filed on Dec. 7, 2011, provisional application No. 61/561,087, filed on Nov. 17, 2011, provisional

application No. 61/555,310, filed on Nov. 3, 2011, provisional application No. 61/515,752, filed on Aug. 5, 2011.

(56)

References Cited

U.S. PATENT DOCUMENTS

2006/0238281	A1 *	10/2006	Steinberg	H01H 36/0013 335/207
2008/0103637	A1 *	5/2008	Bliven	F16B 2/20 701/1
2008/0244847	A1 *	10/2008	Richter	A47L 25/00 15/105
2009/0078478	A1 *	3/2009	Newman	G06F 3/03545 178/19.01
2010/0011524	A1 *	1/2010	Roebach	B08B 1/00 15/105
2011/0192857	A1 *	8/2011	Rothbaum	B25F 1/00 220/694

* cited by examiner

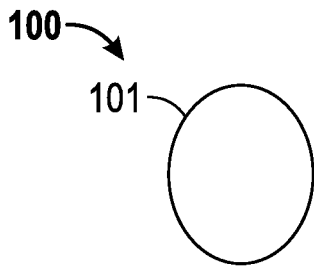


FIG. 1A

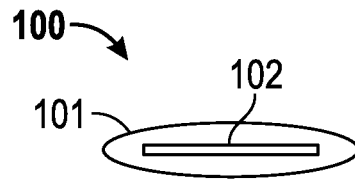


FIG. 1B

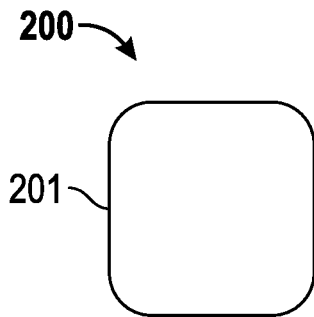


FIG. 2A

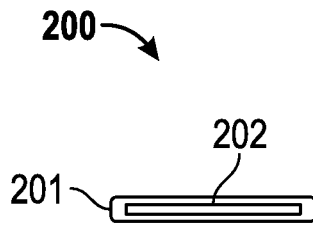


FIG. 2B

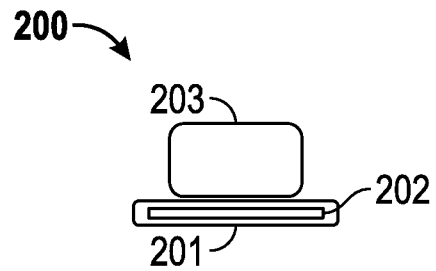


FIG. 2C

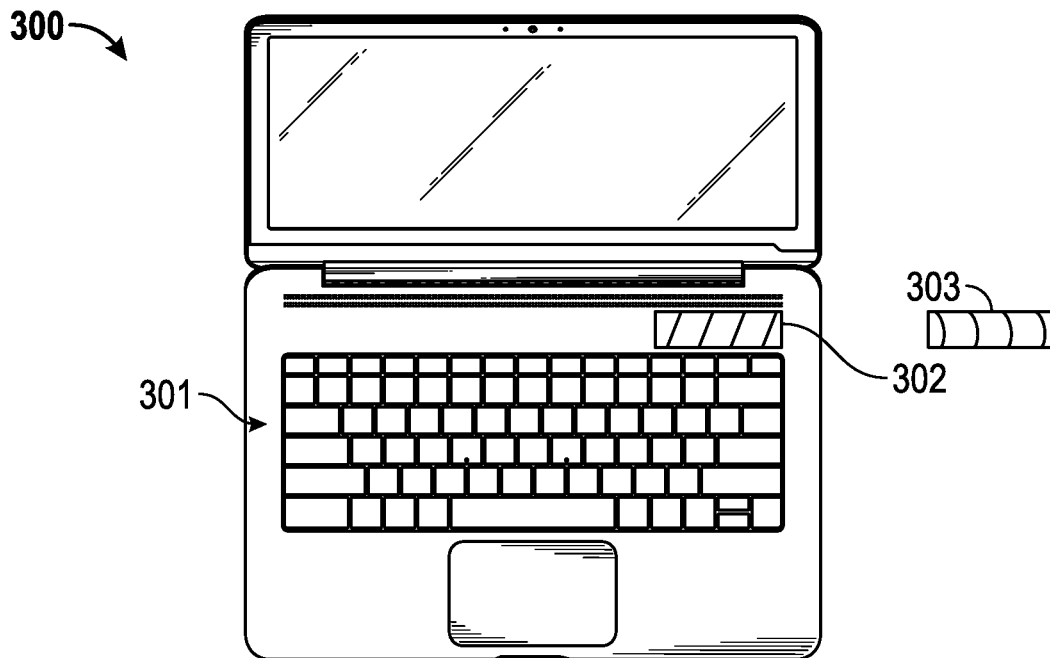


FIG. 3

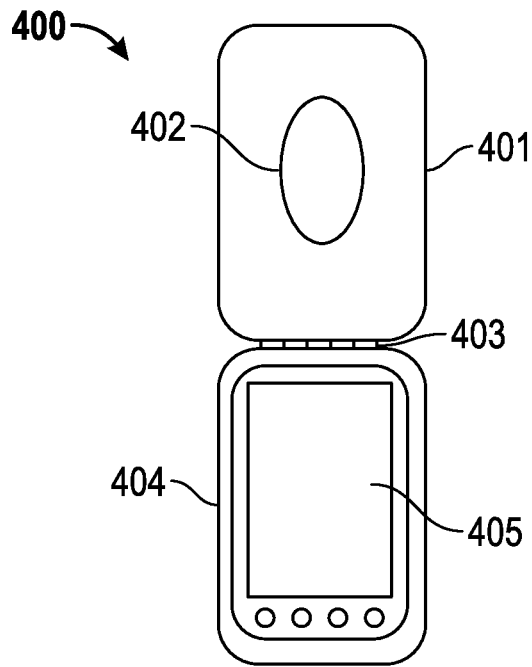


FIG. 4

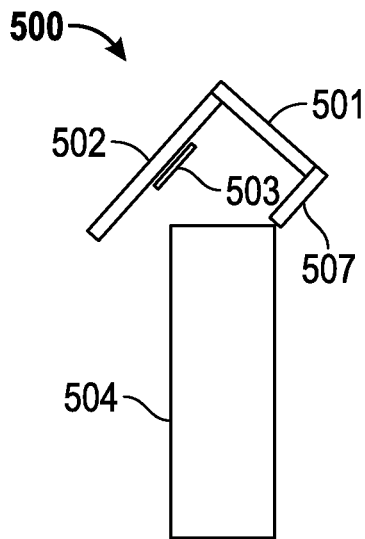


FIG. 5A

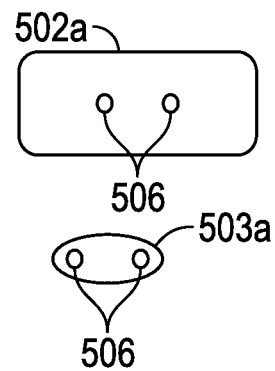


FIG. 5B

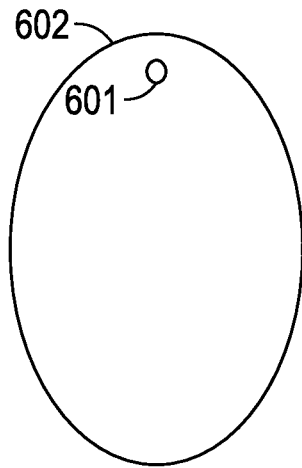


FIG. 6

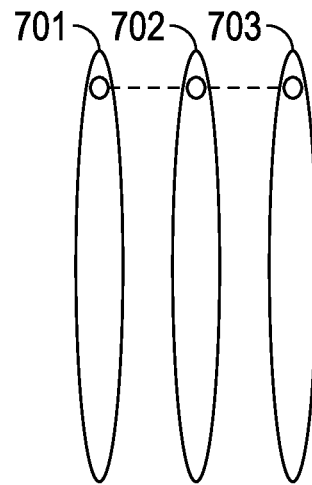


FIG. 7

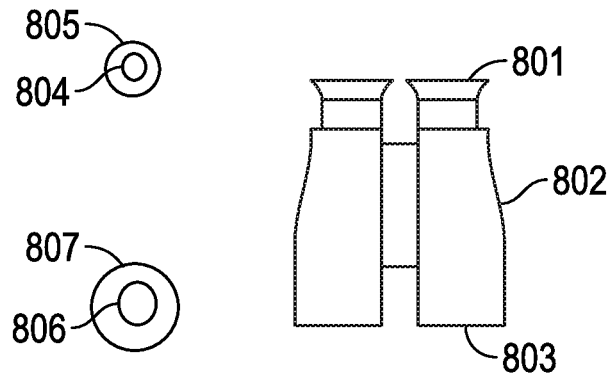


FIG. 8

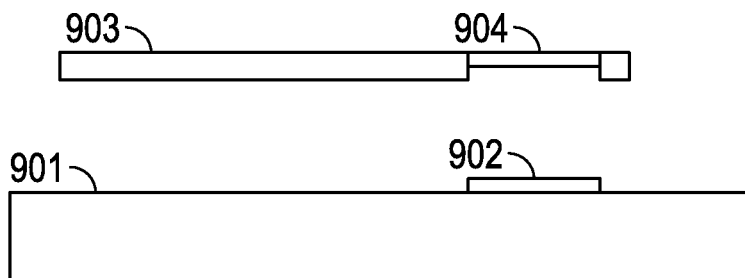


FIG. 9

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