



US00D983027S

(12) **United States Design Patent** (10) **Patent No.:** **US D983,027 S**  
**Hancock** (45) **Date of Patent:** **\*\* Apr. 11, 2023**

- (54) **PIN ASSIST DEVICE**
- (71) Applicant: **Truck Shields, LLC**, Salt Lake City, UT (US)
- (72) Inventor: **Dennis H. Hancock**, Evanston, WY (US)
- (73) Assignee: **Truck Shields, LLC**, Salt Lake City, UT (US)

2,588,731 A 3/1952 Kabanuck  
 2,593,935 A 4/1952 Sweat  
 3,151,512 A 10/1964 Charczenko  
 (Continued)

**FOREIGN PATENT DOCUMENTS**

CN 302787205 4/2014  
 DE 2710842 A1 9/1978  
 (Continued)

- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/797,187**
- (22) Filed: **Jun. 29, 2021**

**OTHER PUBLICATIONS**

Pin Whiz, Rhino Hitch website 2022, site visited Jul. 2, 2022, [https://rhinohitch.com/products/pin-wiz?variant=36191009570977&currency=USD&utm\\_medium=product](https://rhinohitch.com/products/pin-wiz?variant=36191009570977&currency=USD&utm_medium=product) . . . \*  
 (Continued)

**Related U.S. Application Data**

- (63) Continuation-in-part of application No. 29/592,247, filed on Jan. 27, 2017, now Pat. No. Des. 931,719.
- (51) **LOC (14) Cl.** ..... **08-08**
- (52) **U.S. Cl.**  
USPC ..... **D8/395**
- (58) **Field of Classification Search**  
USPC ..... D8/394-395  
CPC .. B25B 27/08; B60D 1/02; B60D 1/58; B60D  
1/36  
See application file for complete search history.

*Primary Examiner* — John R Yeh  
 (74) *Attorney, Agent, or Firm* — Dorsey & Whitney LLP

(57) **CLAIM**

The ornamental design for a pin assist device, as shown and described.

**DESCRIPTION**

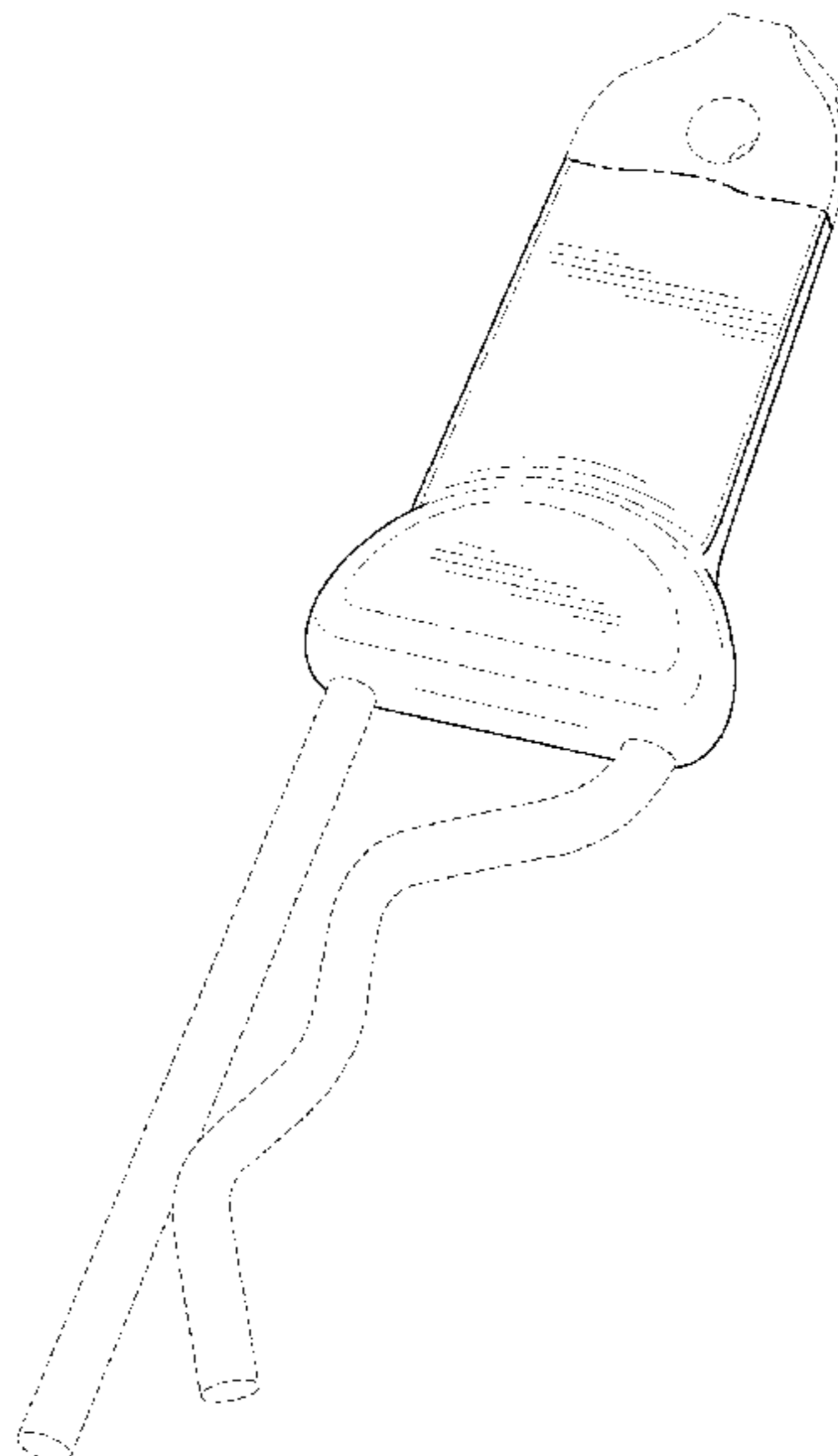
FIG. 1 is a side perspective view of the pin assist device showing my new design;  
 FIG. 2 is another side perspective view thereof;  
 FIG. 3 is a left elevation view thereof;  
 FIG. 4 is a right elevation view thereof;  
 FIG. 5 is another side view thereof;  
 FIG. 6 is a top view thereof;  
 FIG. 7 is an end view thereof; and,  
 FIG. 8 is another end view thereof.  
 The broken lines with evenly spaced dashes in the figures illustrate environment of the pin assist device and form no part of the claimed design.  
 The broken lines including long dashes separated by short dashes in the figures illustrate boundaries and form no part of the claimed design.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

767,156 A	8/1904	Lemos
872,180 A	11/1907	Hite
1,280,756 A	10/1918	Kelecom
1,429,353 A	9/1922	Karsky
1,562,521 A	11/1925	Schlegel
1,849,605 A	3/1932	Whitlock
2,166,614 A	7/1939	Strid
D118,329 S	12/1939	Crowley
2,400,960 A	5/1946	Strid

**1 Claim, 5 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

3,256,579 A 6/1966 Eugene  
 3,728,775 A 4/1973 Hosbach  
 3,937,442 A 2/1976 Martin et al.  
 D241,806 S 10/1976 Johnson  
 4,037,513 A 7/1977 Hobson  
 4,087,112 A 5/1978 Lee, Jr.  
 4,172,523 A 10/1979 Weglage  
 D255,983 S 7/1980 Armstrong et al.  
 4,298,212 A 11/1981 Jamison  
 D263,788 S \* 4/1982 McKinnon ..... D8/394  
 D270,517 S \* 9/1983 Raskin ..... 24/130  
 4,412,464 A 11/1983 Cook  
 D276,787 S 12/1984 Burns  
 D278,203 S 4/1985 Braukmann  
 D278,436 S 4/1985 Storlie  
 4,526,396 A 7/1985 Mayer  
 4,541,311 A 9/1985 Trammell, Jr.  
 D281,389 S 11/1985 Summers  
 4,553,737 A 11/1985 Yi  
 4,555,125 A 11/1985 Goodlove  
 4,624,619 A 11/1986 Uher  
 4,671,528 A 6/1987 Thompson  
 D294,330 S \* 2/1988 Keck ..... D8/395  
 4,765,037 A 8/1988 Perry  
 4,773,805 A \* 9/1988 Krahling ..... F16B 21/12  
 24/453  
 4,840,528 A 6/1989 Doom  
 4,890,854 A 1/1990 Hoover  
 D306,144 S 2/1990 Haggstrom  
 D308,620 S 6/1990 Baca  
 D318,406 S 7/1991 Gabriele  
 D320,542 S 10/1991 McCord, Jr.  
 5,090,277 A 2/1992 Spiller  
 5,150,504 A 9/1992 Cohen  
 5,205,144 A 4/1993 Montano  
 5,267,494 A 12/1993 Waluda  
 D352,647 S 11/1994 Stevens  
 D356,763 S 3/1995 Douglas  
 5,509,380 A 4/1996 Tipp  
 5,524,511 A 6/1996 Taka  
 5,557,832 A 9/1996 Vanden Brook  
 5,662,446 A 9/1997 Haan  
 D386,056 S 11/1997 Streeter  
 D389,624 S 1/1998 Drimmie et al.  
 5,784,760 A 7/1998 Leitzke et al.  
 D396,885 S 8/1998 Shyu  
 D401,969 S 12/1998 Ho  
 D405,019 S 2/1999 Neuman  
 5,979,015 A 11/1999 Tamaribuchi  
 6,145,866 A 11/2000 Peter  
 D480,283 S 10/2003 Brown  
 D497,576 S 10/2004 Wang  
 D515,411 S 2/2006 Karl  
 D519,024 S 4/2006 Knight et al.  
 7,131,657 B1 11/2006 Witt  
 D535,181 S 1/2007 Roychowdhury  
 7,306,275 B2 12/2007 Kalous  
 D560,565 S 1/2008 Kalous  
 D570,257 S 6/2008 Vanderburgh et al.  
 7,644,485 B2 1/2010 Muller et al.  
 D620,785 S 8/2010 St Germaine  
 D641,615 S 7/2011 Lin  
 8,240,695 B1 8/2012 Liu  
 8,267,420 B2 9/2012 Merten et al.  
 8,388,366 B2 3/2013 Yang

D681,439 S \* 5/2013 Chen ..... D8/394  
 D693,660 S 11/2013 Hackett et al.  
 8,677,574 B1 3/2014 Thiessen et al.  
 D713,709 S 9/2014 Goldman et al.  
 D714,631 S 10/2014 Frydlewski et al.  
 D716,138 S 10/2014 Szymanski  
 8,873,921 B2 10/2014 Lee et al.  
 D719,822 S \* 12/2014 Van Es ..... D8/394  
 D724,914 S 3/2015 Tipp  
 9,090,136 B2 7/2015 Breeden et al.  
 9,151,907 B2 10/2015 Jiang et al.  
 D749,994 S 2/2016 Verboeket  
 D771,483 S 11/2016 Bonno et al.  
 9,669,276 B1 6/2017 Maloy  
 D797,009 S 9/2017 Verboeket  
 D810,517 S 2/2018 Singer  
 D883,379 S 5/2020 Lorenzo  
 10,906,368 B2 \* 2/2021 Hancock ..... B25B 27/08  
 D931,719 S \* 9/2021 Hancock ..... B25B 27/08  
 D8/395  
 2004/0164516 A1 8/2004 Baginski  
 2005/0262677 A1 12/2005 Tanaka et al.  
 2006/0078374 A1 4/2006 Wrase et al.  
 2006/0147297 A1 7/2006 Wrase et al.  
 2007/0007782 A1 1/2007 Kalous  
 2007/0062006 A1 3/2007 Wright, Jr.  
 2007/0087920 A1 4/2007 Dachraoui et al.  
 2007/0251059 A1 11/2007 You  
 2009/0044847 A1 2/2009 Barangan  
 2009/0115166 A1 5/2009 Goettker  
 2009/0278334 A1 11/2009 Carr et al.  
 2010/0200333 A1 8/2010 Maurice et al.  
 2013/0171864 A1 7/2013 Farris-Gilbert et al.  
 2013/0205557 A1 8/2013 MacArthur et al.  
 2014/0331464 A1 11/2014 Jiang et al.  
 2017/0348838 A1 \* 12/2017 Hancock ..... B25B 27/08  
 2018/0015797 A1 1/2018 Hancock  
 2018/0147715 A1 5/2018 Promo et al.

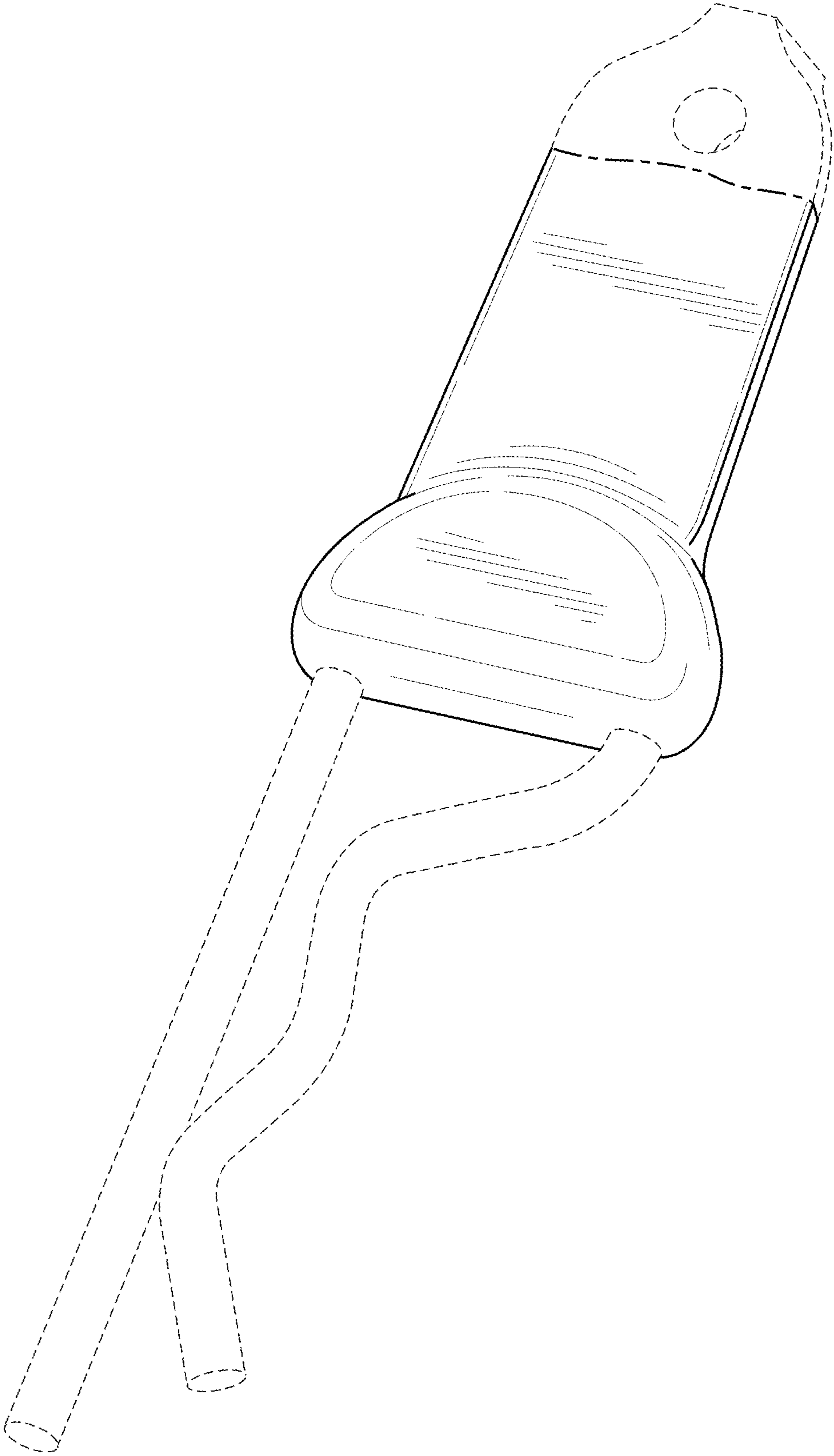
FOREIGN PATENT DOCUMENTS

EM 007877162-0001 \* 5/2020  
 JP 4546949 B2 9/2010  
 JP 5220149 B2 6/2013  
 WO 2006138371 A2 12/2006

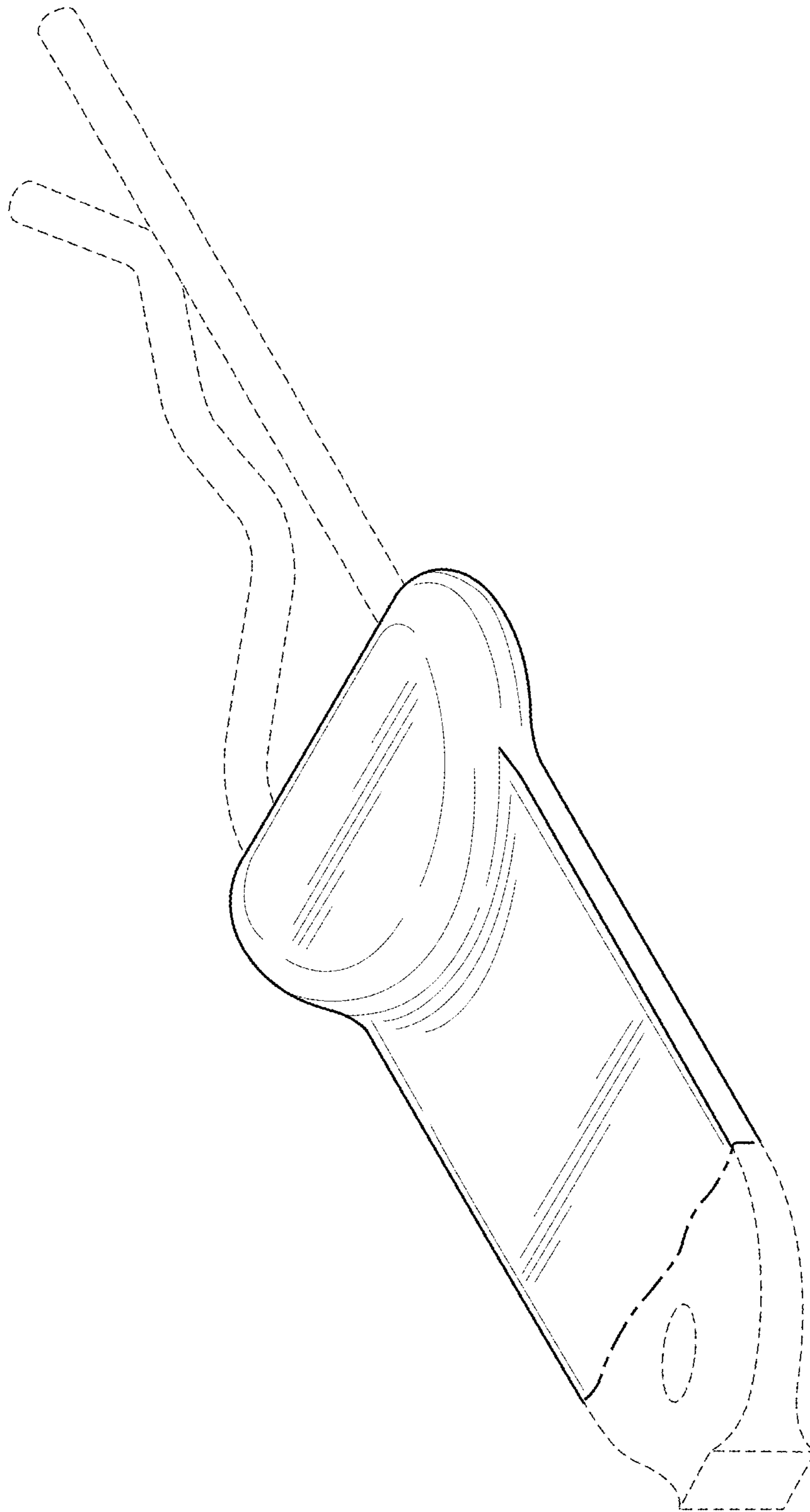
OTHER PUBLICATIONS

Cotter hair pin Details—175-2106—USA-Clean, website 2018, site visited Aug. 17, 2018, [https://usafix.usaclean.com/...m=adwords&gclid=CjOKCGjw5NnbBRDaARIsAJP-YR\\_UW77sZTGUF2JSm9PxxkOaDakw9H-ZPFomLCCZULNJK-G3rR91UaAsZxEALw\\_wcB](https://usafix.usaclean.com/...m=adwords&gclid=CjOKCGjw5NnbBRDaARIsAJP-YR_UW77sZTGUF2JSm9PxxkOaDakw9H-ZPFomLCCZULNJK-G3rR91UaAsZxEALw_wcB) (Year: 2018); 7 pages.  
 Durometer Shore Hardness Scale for Rubbers.  
 Suregrip (Trademark) L-Handle Hitch Pin Lock Found at: [https://www.reese-hitches.com/products/Suregrip\\_tradeChrome](https://www.reese-hitches.com/products/Suregrip_tradeChrome), 3015-049 (Year: 2019).  
 Thomas, Sabu Maria, Hanna J. Joy, Jithin Chan, Chin Han Pothen, Laly A.. (2014), Natural Rubber materials, vol. 2—Composites and Nanocomposites—15.4.2.1 Hardness Type Shore A. Royal Society of Chemistry.  
 Hand Moldable Plastic Molding a Handle published on May 9, 2011 at <https://www.youtube.com/watch?v=RGSKSDdWIKw> (Year:2011).  
 Nordel EPDM Product Selection Guide; The Dow Chemical Company, Apr. 2014.

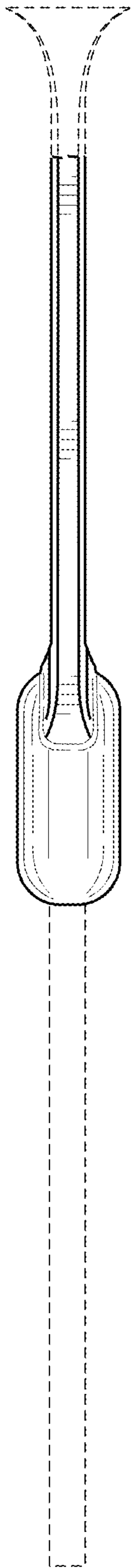
\* cited by examiner



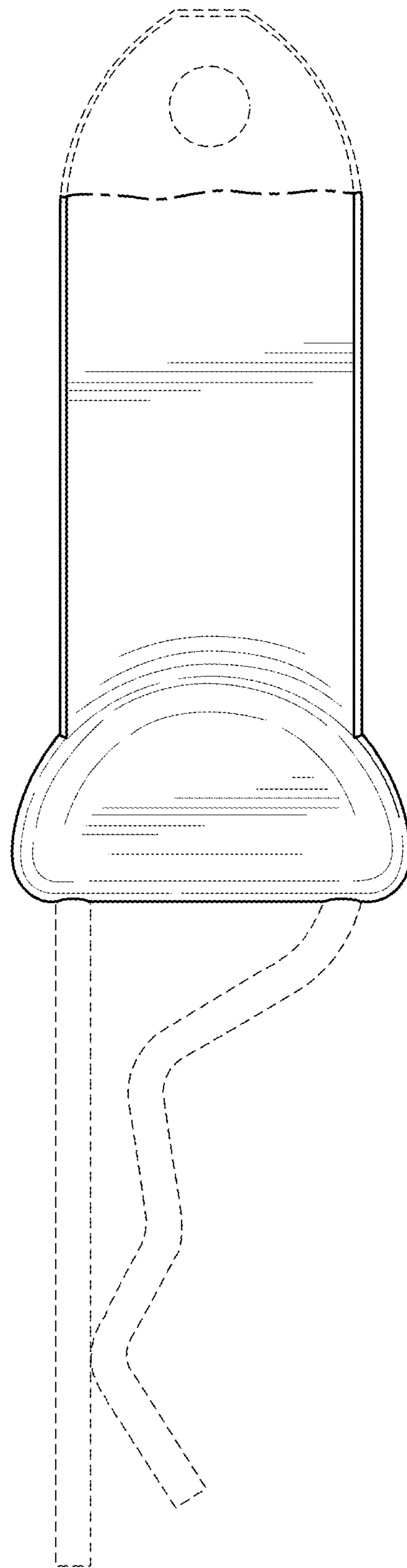
**FIG. 1**



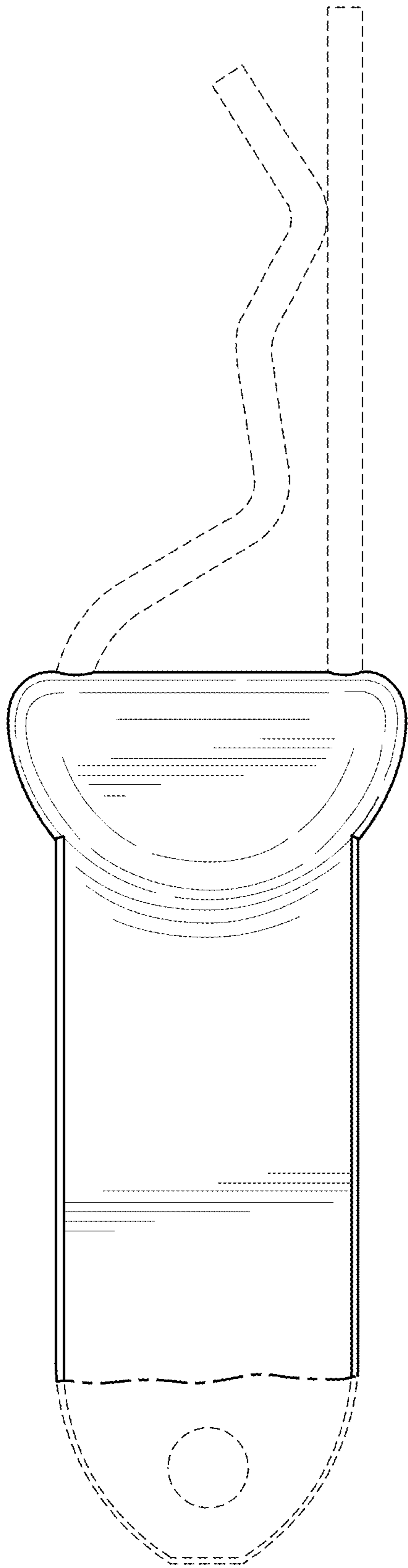
**FIG. 2**



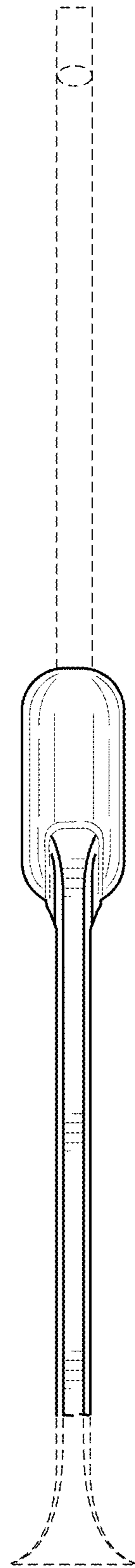
**FIG. 3**



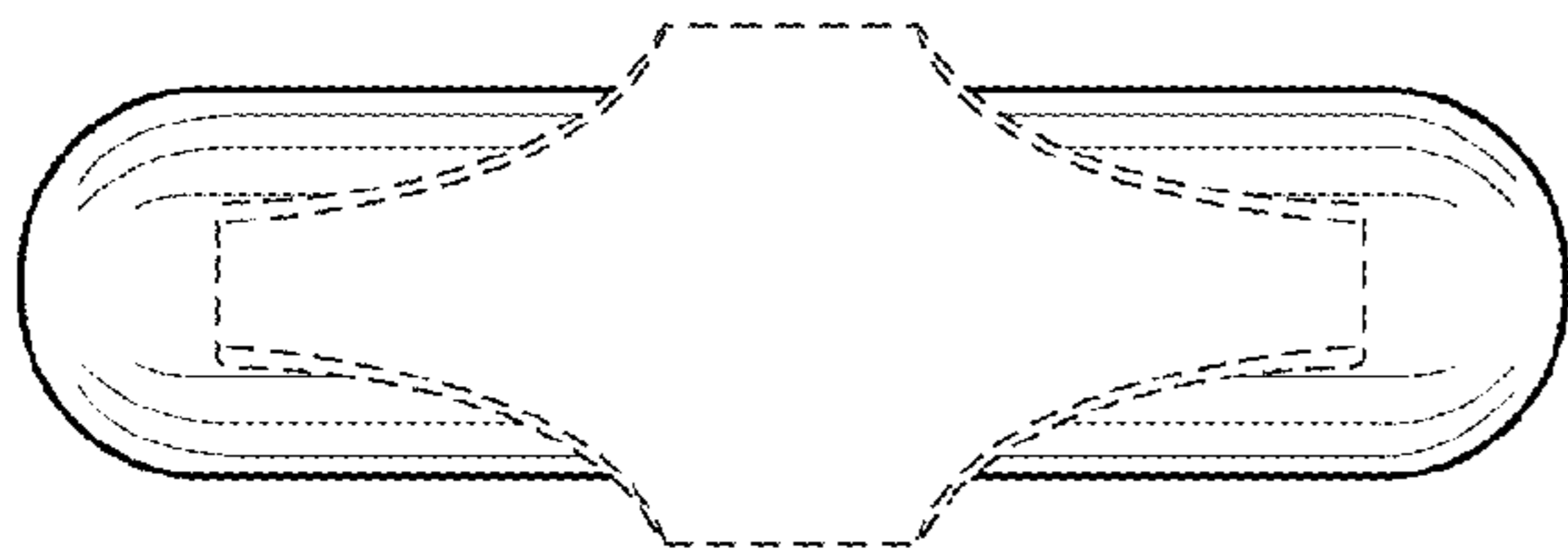
**FIG. 4**



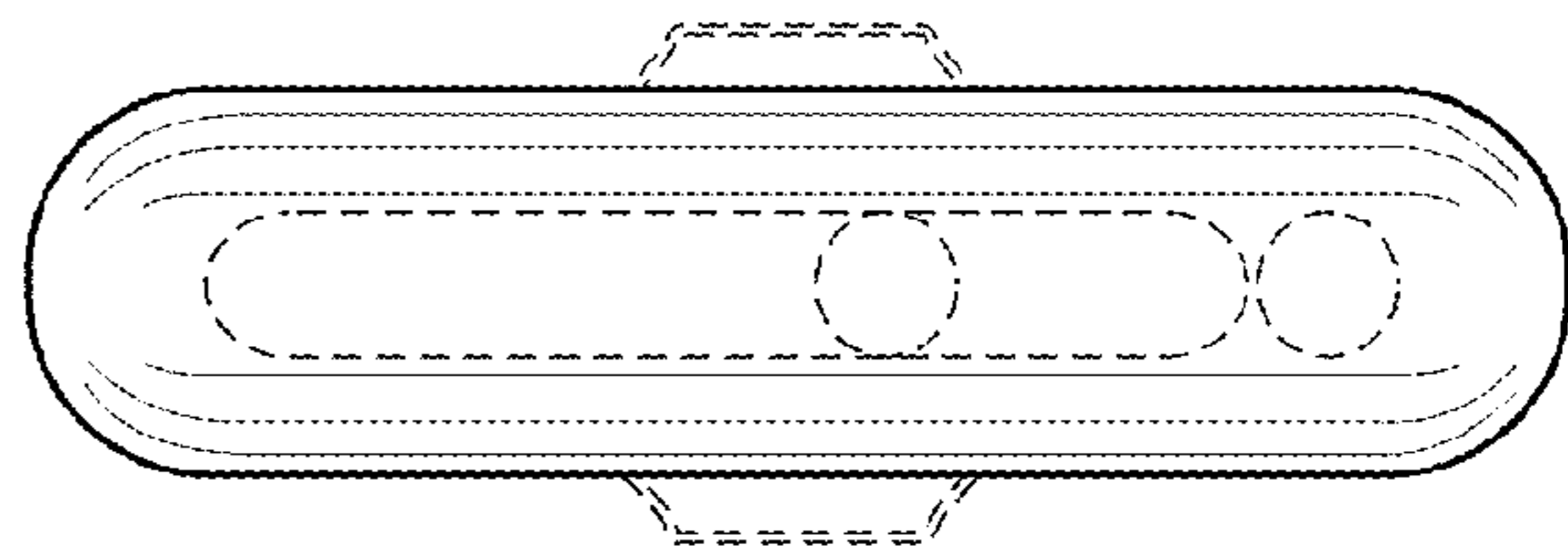
**FIG. 5**



**FIG. 6**



**FIG. 7**



**FIG. 8**