



US00D886273S

(12) **United States Design Patent** (10) **Patent No.:** **US D886,273 S**  
**Huberty et al.** (45) **Date of Patent:** **\*\* Jun. 2, 2020**

(54) **FILTER ELEMENT HAVING A PATTERN**

2,320,770 A 12/1940 Cover  
2,227,959 A 1/1941 Cover  
2,235,624 A 3/1941 Schwartz

(71) Applicant: **3M INNOVATIVE PROPERTIES COMPANY**, St. Paul, MN (US)

(Continued)

(72) Inventors: **John S. Huberty**, St. Paul, MN (US);  
**Michael J. Svendsen**, Blaine, MN (US); **Michael J. Thuyente**, St. Anthony Village, MN (US)

**FOREIGN PATENT DOCUMENTS**

CA 1069331 1/1980  
CA 2209246 7/1996

(Continued)

(73) Assignee: **3M Innovative Properties Company**, St. Paul, MN (US)

**OTHER PUBLICATIONS**

(\*\*) Term: **15 Years**

MSA Flexi-Filter® Pads for Advantage® Respirators, obtained from internet on May 18, 2015, <http://us.msasafety.com/Air-Purifying-Respirators-%28APR%29/Filters-%26-Cartridges/Advantage%26reg%3B-Flexi-Filters%26reg%3B/p/000100001000001241>.

(21) Appl. No.: **29/607,684**

(22) Filed: **Jun. 15, 2017**

*Primary Examiner* — Sandra S Snapp

**Related U.S. Application Data**

(63) Continuation of application No. 29/518,825, filed on Feb. 27, 2015, now Pat. No. Des. 792,959.

(57) **CLAIM**

The ornamental design for a filter element having a pattern, as shown and described.

(51) **LOC (12) Cl.** ..... **23-04**

(52) **U.S. Cl.**  
USPC ..... **D23/365**

(58) **Field of Classification Search**  
USPC ..... D23/355–365, 386–388, 314, 325, D23/333–336; 55/478, 482, 483, 490, 55/497, 498, 520, 521, 529; D24/110.1  
CPC .... B01D 46/00; B01D 46/0004; B01D 27/04; B01D 27/06; B01D 39/00  
See application file for complete search history.

**DESCRIPTION**

FIG. 1 is a perspective view showing the new design for a filter element having a pattern;  
FIG. 2 is an enlarged portion of FIG. 1, which is representative of the remainder of the pattern illustrated in FIG. 1;  
FIG. 3 is a front view of FIG. 1;  
FIG. 4 is an enlarged portion of FIG. 3, which is representative of the remainder of the pattern illustrated in FIG. 3;  
FIG. 5 is a rear view of FIG. 1;  
FIG. 6 is a right side view thereof  
FIG. 7 is a left side view thereof; and,  
FIG. 8 is a top view thereof, the bottom being a mirror image thereof.

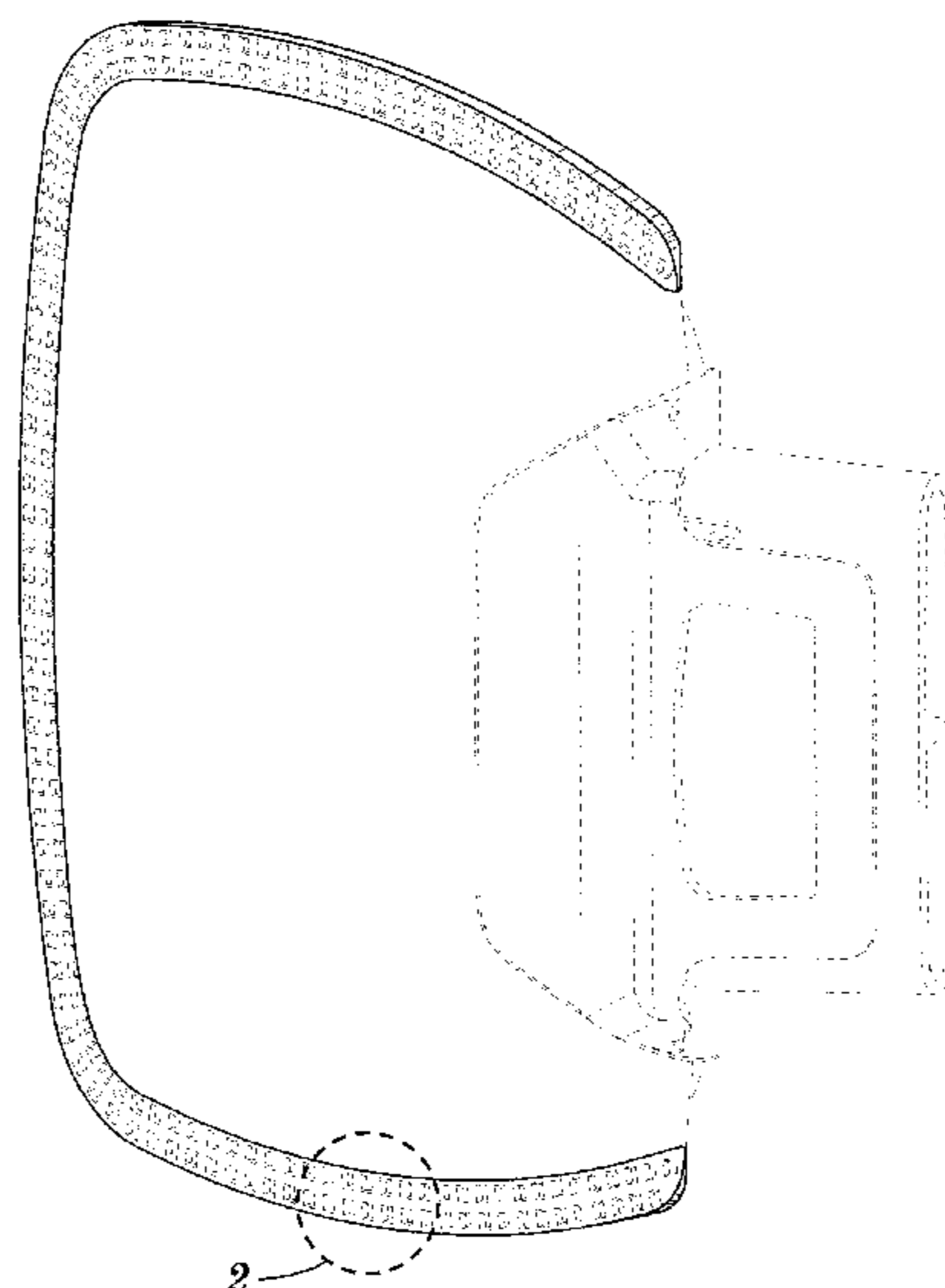
(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,206,061 A 11/1936 Splaine  
2,142,064 A 5/1937 Whipple  
2,205,368 A \* 6/1940 Whipple ..... A62B 23/02  
128/206.16  
2,220,374 A 11/1940 Lewis

The evenly spaced broken lines shown in the drawings depict portions of the filter element having a pattern and form no part of the claimed design. The dot-dot-dash broken lines represent boundaries of the claimed design.

**1 Claim, 6 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

2,295,119 A \* 9/1942 Malcom ..... A62B 18/00  
128/206.17  
D172,224 S 5/1954 Daugett  
2,840,184 A 12/1954 Stampe  
2,845,927 A 8/1958 Hill  
3,316,904 A 5/1967 Wall  
3,750,665 A \* 8/1973 Stranicky ..... A41D 13/11  
128/206.12  
4,179,274 A \* 12/1979 Moon ..... A62B 23/02  
128/206.17  
4,299,605 A \* 11/1981 Aiyama ..... B01D 46/02  
383/67  
4,382,440 A 5/1983 Kapp  
4,714,486 A 12/1987 Silverthorn  
4,886,058 A \* 12/1989 Brostrom ..... A62B 18/08  
128/206.12  
4,961,765 A 10/1990 Guhne  
4,981,134 A 1/1991 Courtney  
5,035,236 A 7/1991 Kanegaonkar  
5,074,997 A 12/1991 Riley  
5,140,980 A 8/1992 Haughey  
5,222,488 A 6/1993 Forsgren  
5,240,479 A 8/1993 Bachinski  
D339,658 S 9/1993 Lahteenmaki  
5,322,061 A 6/1994 Brunson  
5,636,627 A 6/1997 Rochester  
5,647,356 A \* 7/1997 Osendorf ..... A62B 27/00  
128/202.27  
5,666,949 A 9/1997 Debe  
5,720,789 A 2/1998 Pinson  
5,732,695 A 3/1998 Metzger  
5,992,414 A 11/1999 Tayebi  
6,044,842 A 4/2000 Pereira  
6,117,515 A 9/2000 Brunson  
D437,094 S 1/2001 Ward  
6,279,570 B1 8/2001 Mittelstadt  
6,298,849 B1 10/2001 Scholey  
6,345,620 B2 2/2002 Salapow  
6,408,845 B1 6/2002 Pereira  
6,467,481 B1 10/2002 Eswarappa  
D465,568 S 11/2002 Petherbridge  
D484,584 S 12/2003 Anderson  
6,761,169 B2 7/2004 Eswarappa  
6,783,566 B2 8/2004 Estkowski  
6,793,702 B2 9/2004 Eswarappa  
D518,571 S 4/2006 Martin  
7,334,579 B2 2/2008 Tayebi  
8,021,455 B2 9/2011 Adamek  
D652,506 S 1/2012 Huberty  
D652,910 S 1/2012 Duffy  
8,101,003 B2 1/2012 Krisko  
8,230,860 B2 7/2012 Dankert  
D677,780 S 3/2013 Choi  
D677,781 S 3/2013 Choi  
D678,508 S 3/2013 Choi  
8,388,714 B2 3/2013 Kearsley  
8,460,423 B2 6/2013 Legare  
8,721,402 B2 5/2014 Woo  
8,757,151 B2 6/2014 Johnstone  
8,839,788 B2 9/2014 Betz  
9,034,181 B1 5/2015 Robinson  
D732,670 S 6/2015 Dwyer  
D735,962 S 8/2015 Cruz  
D745,962 S 12/2015 Dwyer  
D746,438 S 12/2015 Dwyer  
D757,247 S \* 5/2016 Dwyer ..... D24/110.1  
D757,928 S \* 5/2016 Blomberg ..... D24/110.1  
9,510,626 B2 \* 12/2016 Blomberg ..... A62B 9/04  
9,517,367 B2 \* 12/2016 Dwyer ..... A62B 18/10  
D778,430 S \* 2/2017 Blomberg ..... D24/110.1  
D779,674 S \* 2/2017 Blomberg ..... D24/162  
D786,443 S \* 5/2017 Blomberg ..... D24/162  
D792,959 S 7/2017 Huberty

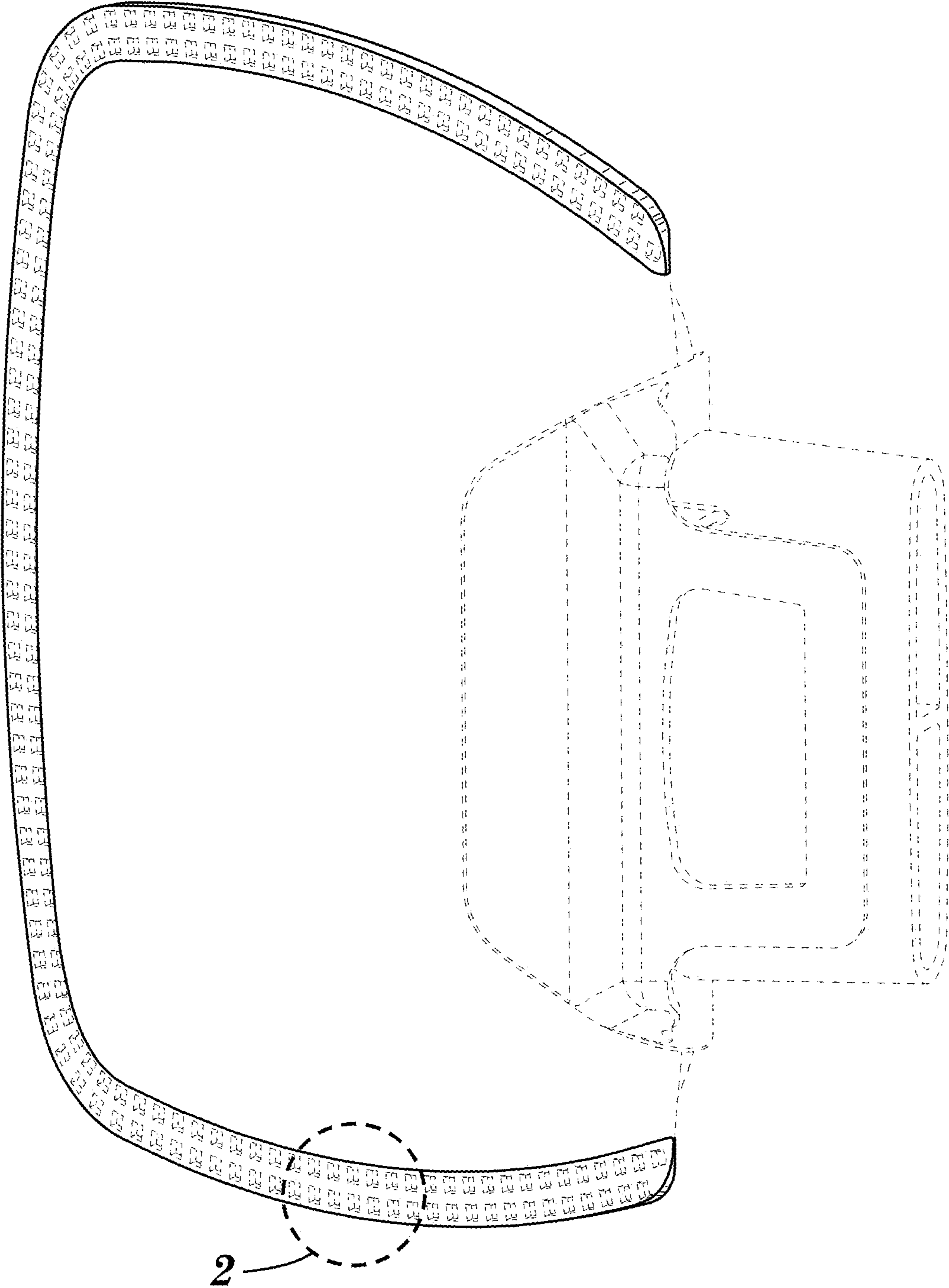
D795,415 S \* 8/2017 Blomberg ..... D24/110.1  
9,950,202 B2 \* 4/2018 Mittelstadt ..... A62B 18/10  
10,391,338 B2 \* 8/2019 Blomberg ..... A62B 23/025  
2003/0089089 A1 \* 5/2003 Fecteau ..... A62B 23/02  
55/497  
2004/0031489 A1 2/2004 Tayebi  
2004/0055604 A1 3/2004 Viner  
2005/0081497 A1 4/2005 Connor  
2006/0081249 A1 \* 4/2006 Duxbury ..... A62B 23/06  
128/205.27  
2006/0090754 A1 5/2006 Mittelstadt  
2006/0196157 A1 \* 9/2006 Greer ..... A62B 23/02  
55/500  
2007/0144123 A1 6/2007 Angadjivand  
2009/0065006 A1 3/2009 Patterson  
2009/0263546 A1 10/2009 Rea  
2010/0154369 A1 6/2010 Berisha  
2011/0283505 A1 11/2011 Billingsley  
2011/0284006 A1 11/2011 Legare  
2013/0139818 A1 6/2013 Billingsley  
2014/0216473 A1 8/2014 Dwyer  
2014/0251327 A1 9/2014 Mittelstadt

FOREIGN PATENT DOCUMENTS

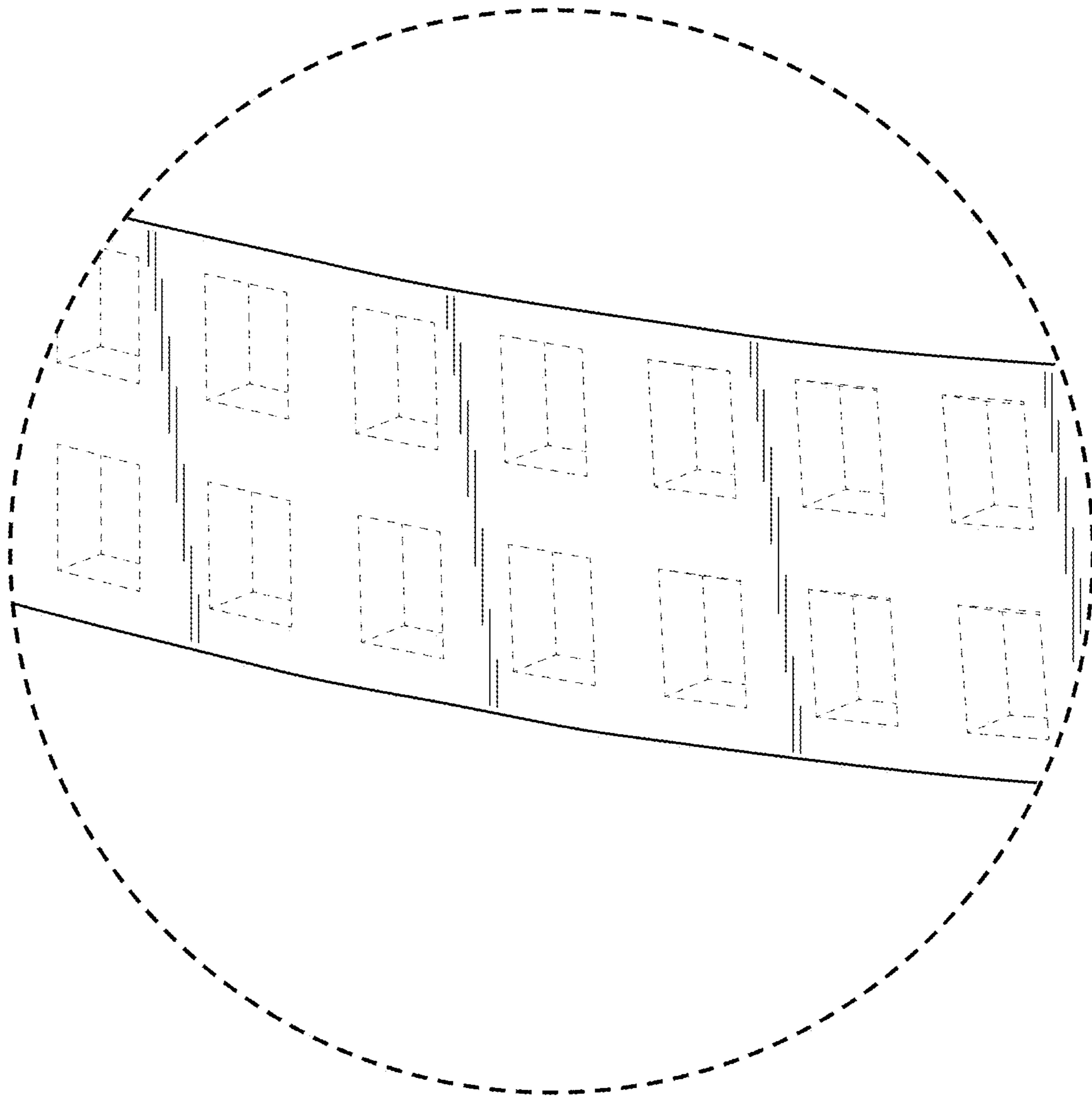
CA 2209857 7/1996  
CA 2295170 11/1999  
CA 2405510 10/2001  
CA 2567266 5/2007  
CN 201098482 8/2008  
CN 201190125 2/2009  
CN 101554942 10/2009  
CN 201342303 U 11/2009  
CN 101628649 1/2010  
CN 101703828 5/2010  
CN 201603485 U 10/2010  
CN 202983422 6/2013  
CN 203540246 U 4/2014  
DE 2041931 3/1972  
DE 3719419 12/1988  
DE 10213654 9/2003  
DE 10328002 1/2005  
DE 202011100327 7/2011  
DK 9200731 6/1992  
EP 44721 1/1982  
EP 0234277 9/1987  
EP 0310970 4/1989  
EP 1016599 7/2000  
EP 1110610 6/2001  
EP 1800729 6/2007  
FR 814797 6/1937  
FR 2511605 2/1983  
FR 2544218 10/1984  
GB 470850 8/1937  
JP 02108844 4/1990  
JP 06062349 U 9/1994  
JP 09192246 7/1997  
JP 2000140587 5/2000  
JP 2000288105 10/2000  
JP 2002346326 12/2002  
KR 20060121699 11/2006  
KR 100900755 6/2009  
KR 20090010452 U 10/2009  
KR 100943196 2/2010  
KR 100959146 5/2010  
KR 100961411 6/2010  
KR 100978602 8/2010  
KR 20110000792 U 1/2011  
KR 20110037710 4/2011  
KR 20110005024 U 5/2011  
KR 101051109 7/2011  
PL 172113 8/1997  
RU 2008126072 1/2010  
SE 8403209 6/1984  
TW 262201 4/2005

\* cited by examiner

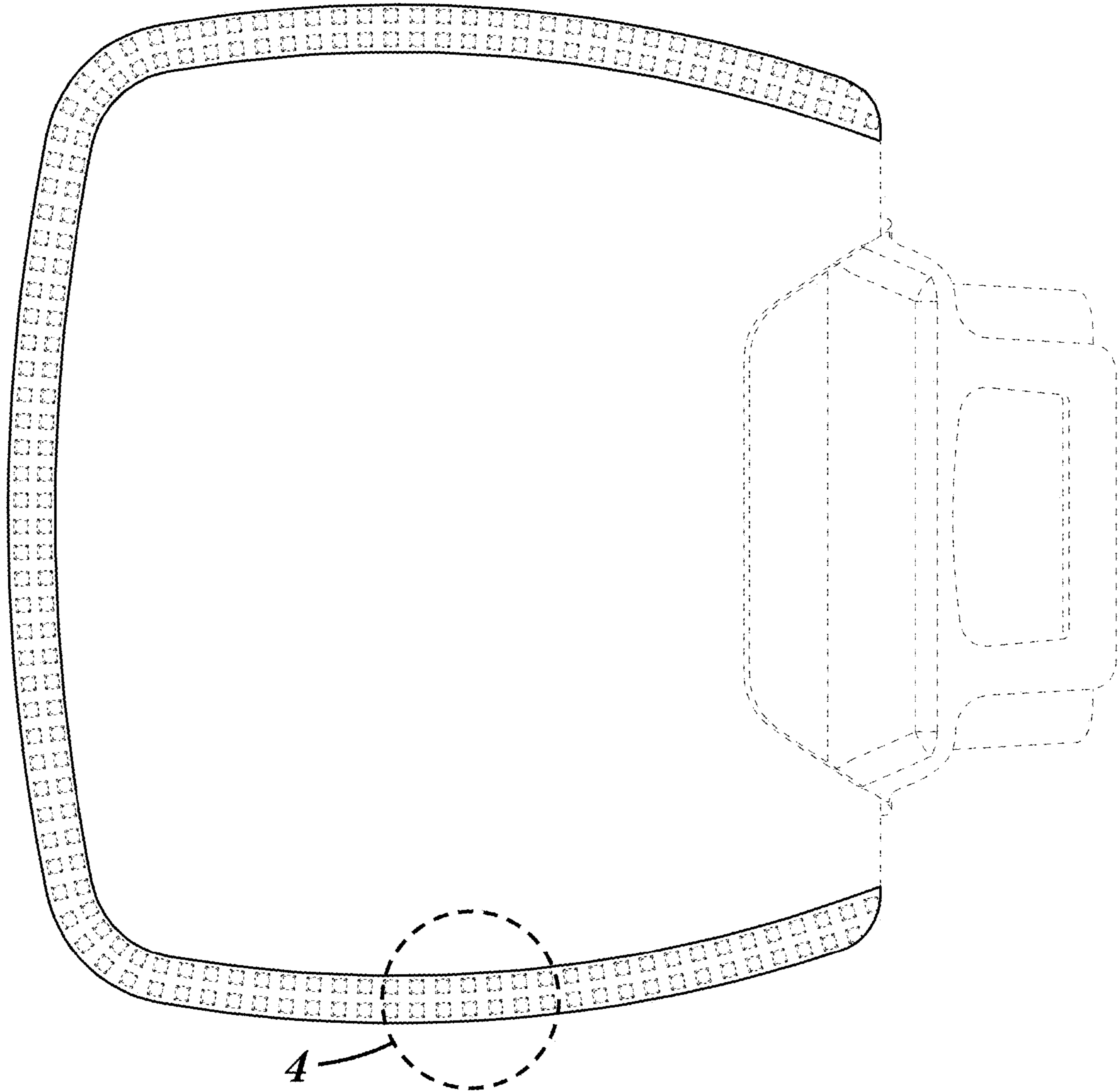




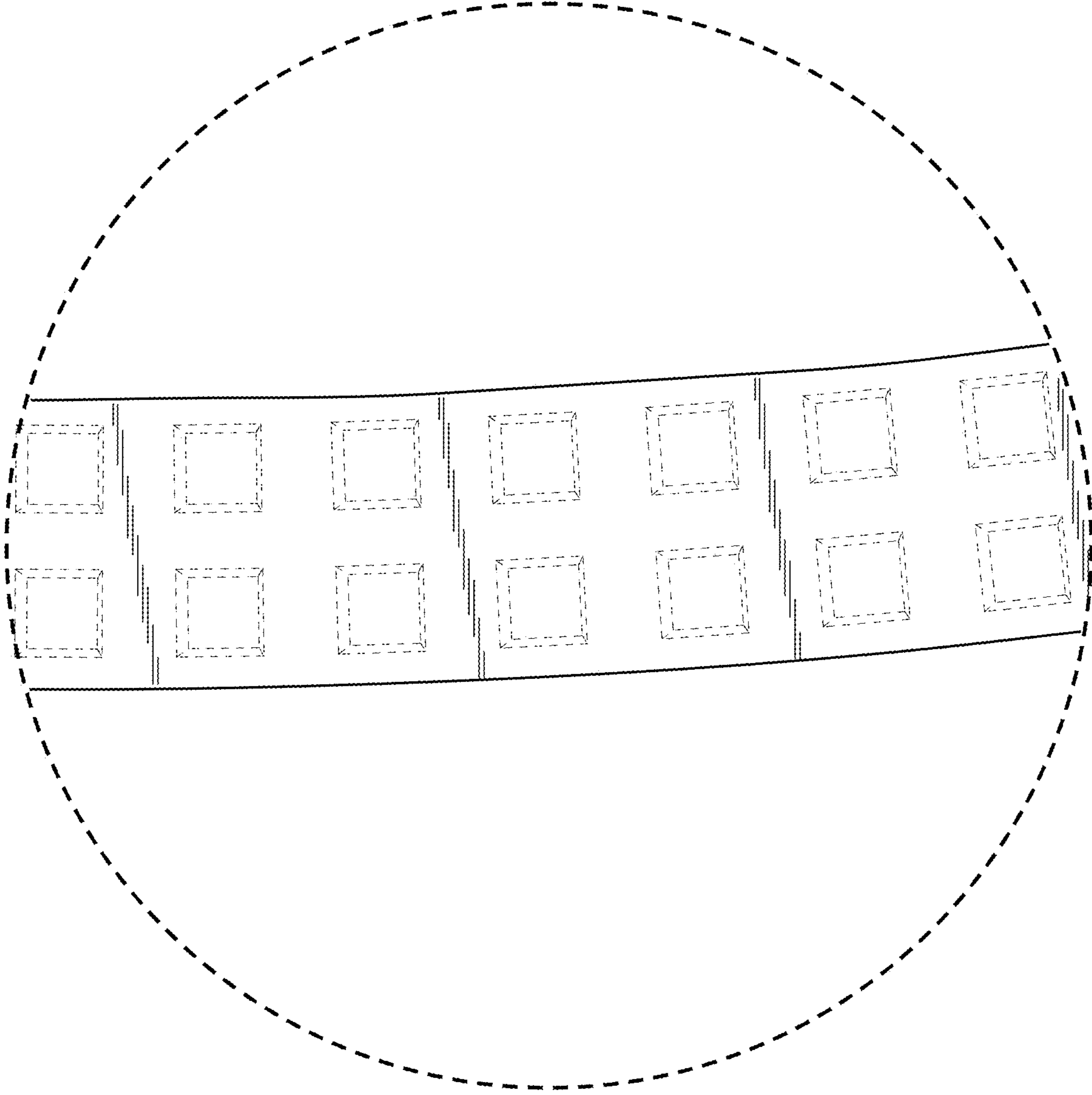
*Fig. 1*



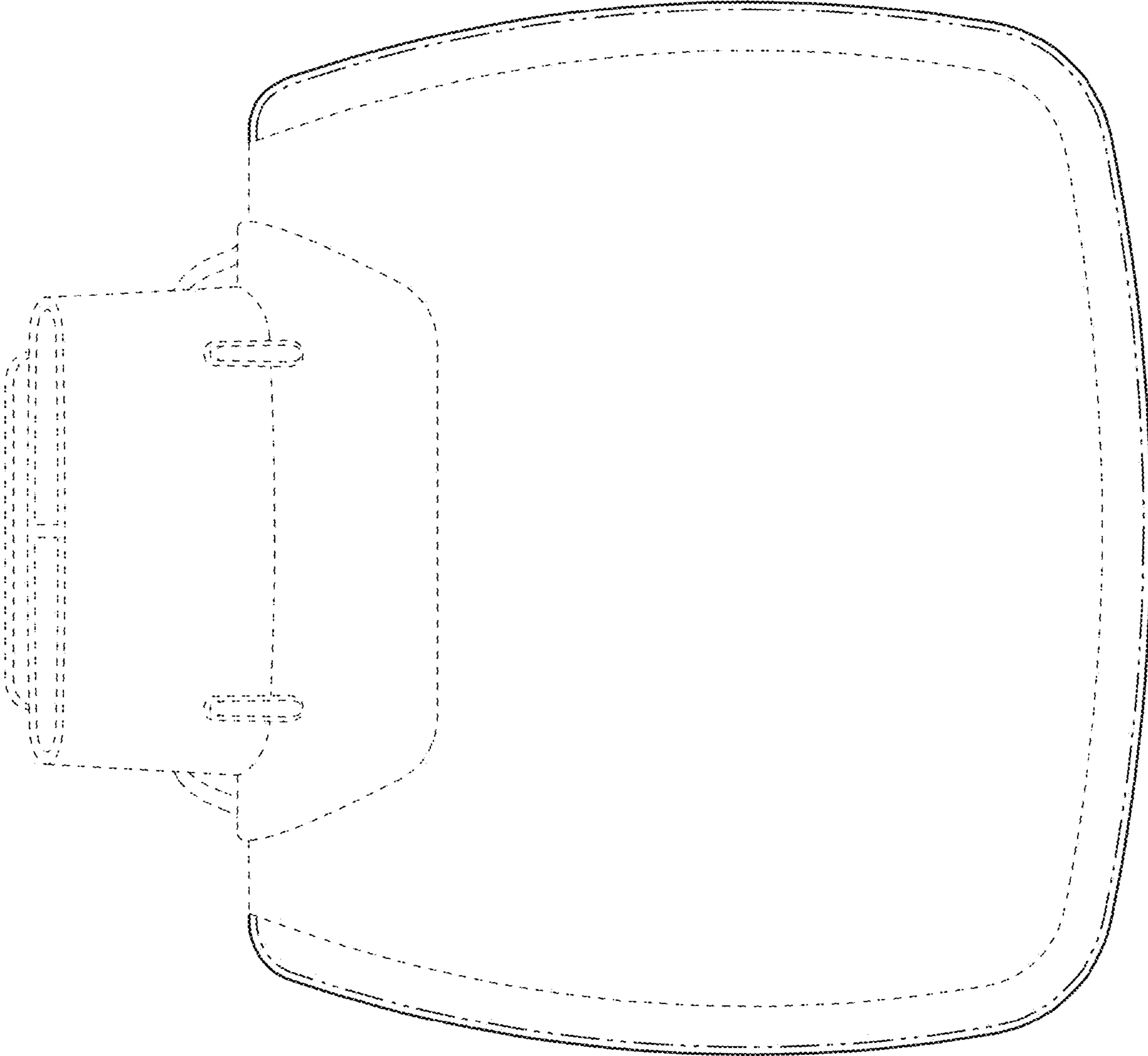
*Fig. 2*



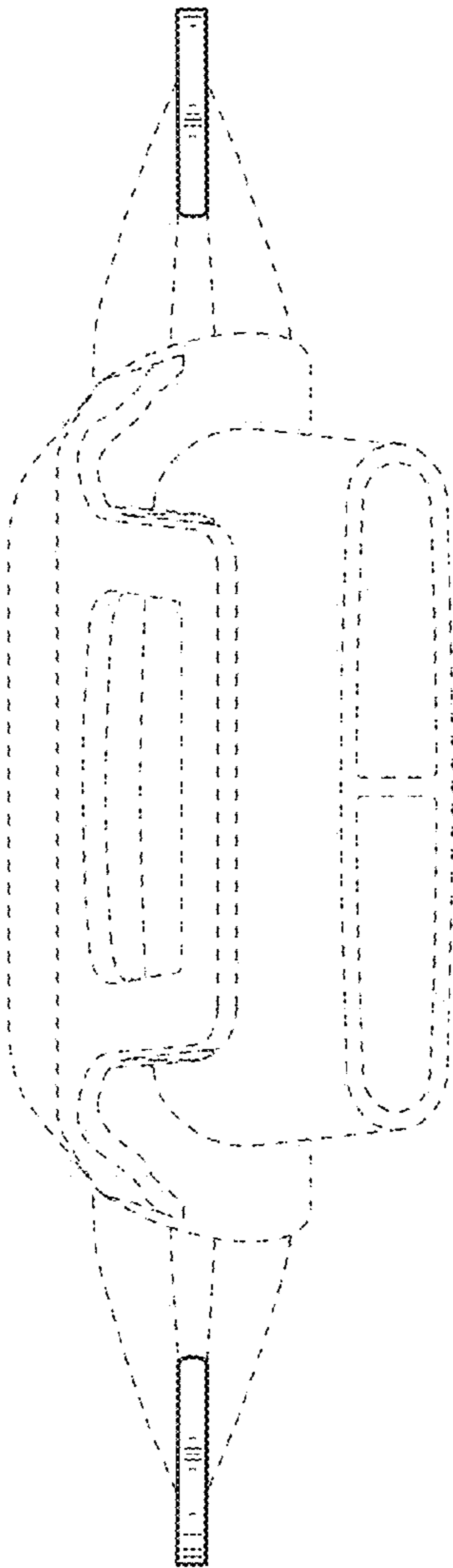
*Fig. 3*



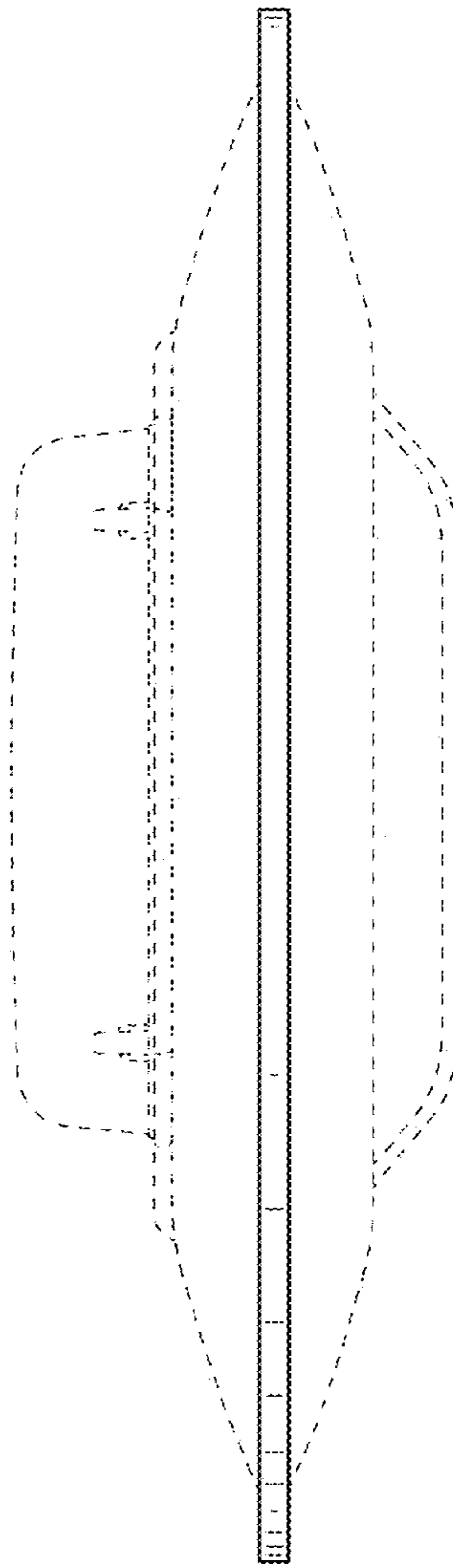
*Fig. 4*



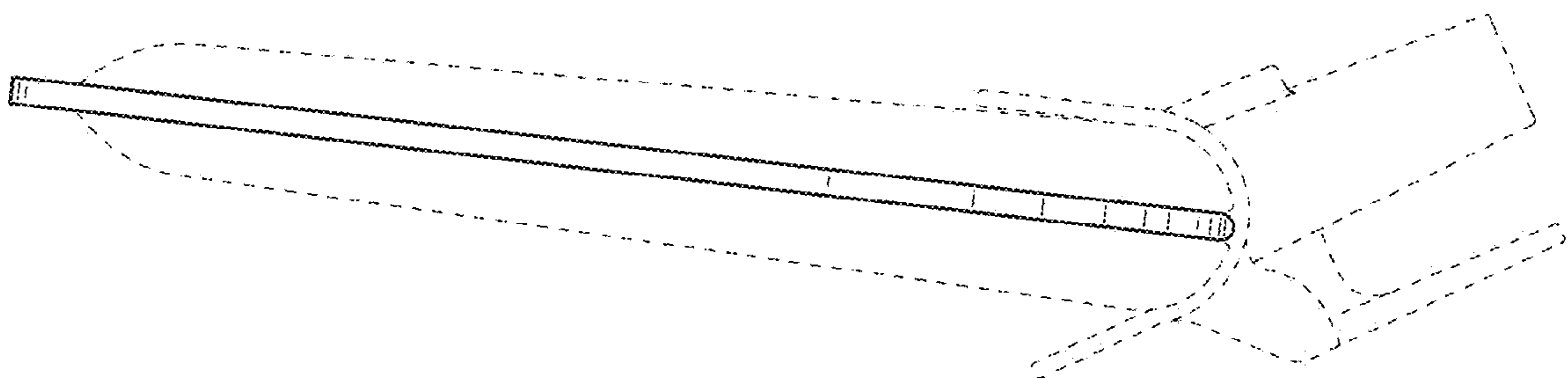
*Fig. 5*



*Fig. 6*



*Fig. 7*



*Fig. 8*