



US00D792959S

(12) **United States Design Patent** (10) **Patent No.:** **US D792,959 S**  
**Huberty et al.** (45) **Date of Patent:** **\*\* Jul. 25, 2017**

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

FOREIGN PATENT DOCUMENTS

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

CA 1069331 1/1980  
CA 2209246 7/1996

(Continued)

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

OTHER PUBLICATIONS

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>.

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

(\*\*) Term: **14 Years**

Primary Examiner — Sandra Snapp

(21) Appl. No.: **29/518,825**

(22) Filed: **Feb. 27, 2015**

(57) **CLAIM**

(51) **LOC (10) Cl.** ..... **28-99**

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

(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 shown in the encircled area labeled 2 in 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 shown in the encircled area labeled 4 in 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.

The broken lines showing portions of the filter element having a pattern form no part of the claimed design. The interstitial surface immediately adjacent the solid lines of the claimed pattern forms no part of the claimed design.

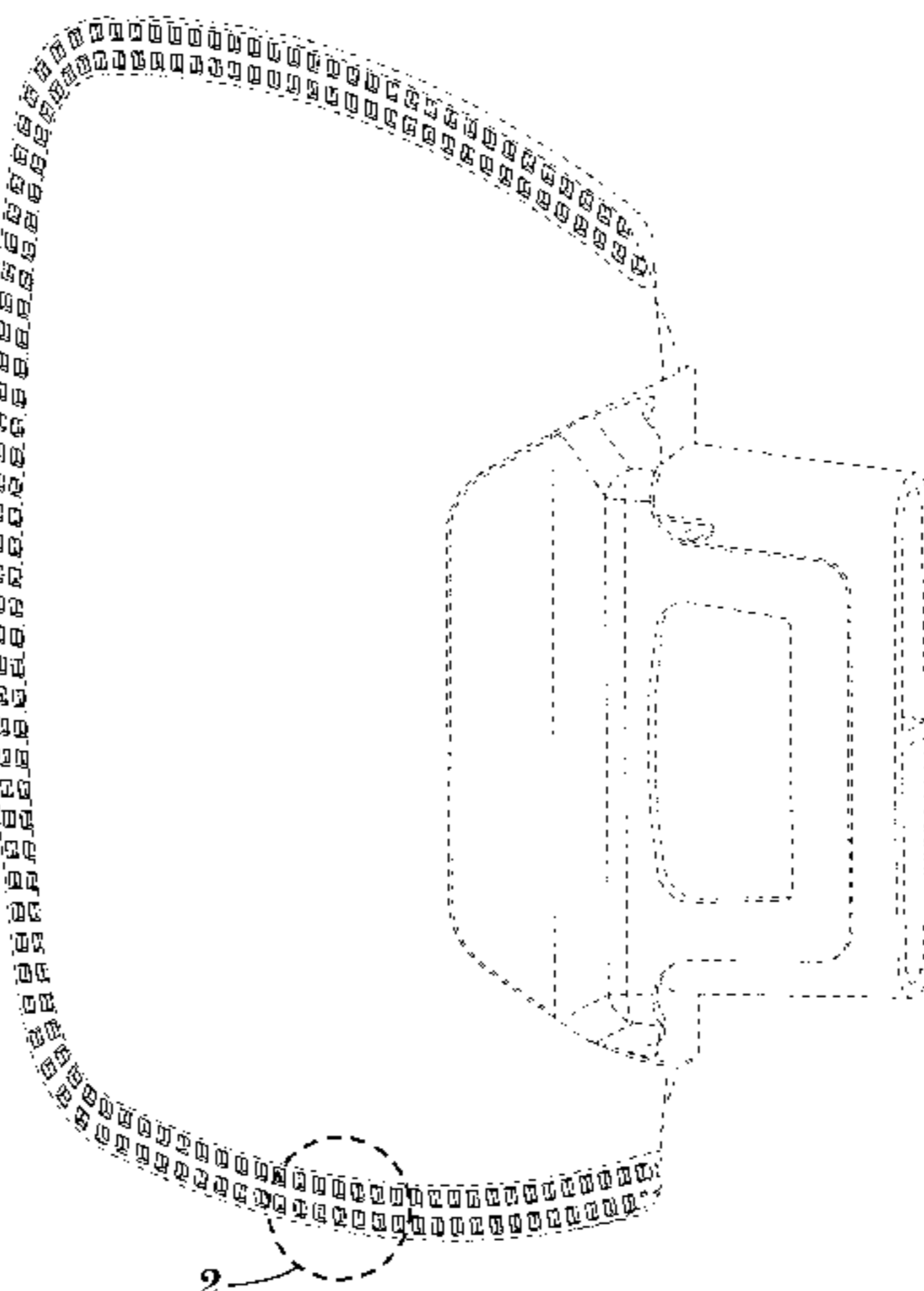
(56) **References Cited**

U.S. PATENT DOCUMENTS

2,206,061 A 11/1936 Splaine  
2,142,064 A 5/1937 Whipple  
2,205,368 A 11/1937 Whipple  
2,220,374 A 11/1940 Lewis  
2,320,770 A 12/1940 Cover  
2,227,959 A 1/1941 Cover  
2,235,624 A \* 3/1941 Schwartz ..... A62B 23/02  
128/206.17  
2,295,119 A \* 9/1942 Malcom ..... A62B 18/00  
128/206.17  
D172,224 S \* 5/1954 Daugett ..... D23/210  
2,840,184 A 12/1954 Stampe  
2,845,927 A 8/1958 Hill

(Continued)

**1 Claim, 6 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

3,316,904 A 5/1967 Wall  
 3,750,665 A 8/1973 Stranicky  
 4,299,605 A 11/1981 Aiyama  
 4,382,440 A 5/1983 Kapp  
 4,714,486 A 12/1987 Silverthorn  
 4,886,058 A 12/1989 Brostrom  
 4,961,765 A 10/1990 Guhne  
 4,981,134 A \* 1/1991 Courtney ..... A62B 18/025  
 128/206.15  
 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 ..... A41D 13/1115  
 128/206.13  
 5,636,627 A 6/1997 Rochester  
 5,647,356 A 7/1997 Osendorf  
 5,666,949 A \* 9/1997 Debe ..... A62B 18/088  
 116/206  
 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 ..... A41D 13/1115  
 428/122  
 D437,094 S \* 1/2001 Ward ..... D23/210  
 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 ..... D23/365  
 6,761,169 B2 7/2004 Eswarappa  
 6,783,566 B2 \* 8/2004 Estkowski ..... A62B 23/02  
 128/201.25  
 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 ..... B01D 45/16  
 55/385.3  
 8,230,860 B2 7/2012 Dankert  
 D677,780 S \* 3/2013 Choi ..... D24/110.1  
 D677,781 S \* 3/2013 Choi ..... D24/110.1  
 D678,508 S \* 3/2013 Choi ..... D24/110.1  
 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 ..... E04H 4/16  
 210/167.1  
 D732,670 S \* 6/2015 Dwyer ..... D24/162  
 D735,962 S \* 8/2015 Cruz ..... D34/38  
 D745,962 S \* 12/2015 Dwyer ..... D24/110.1  
 D746,438 S \* 12/2015 Dwyer ..... D24/110.1  
 2003/0089089 A1 5/2003 Fecteau  
 2004/0031489 A1 2/2004 Tayebi  
 2004/0055604 A1 3/2004 Viner

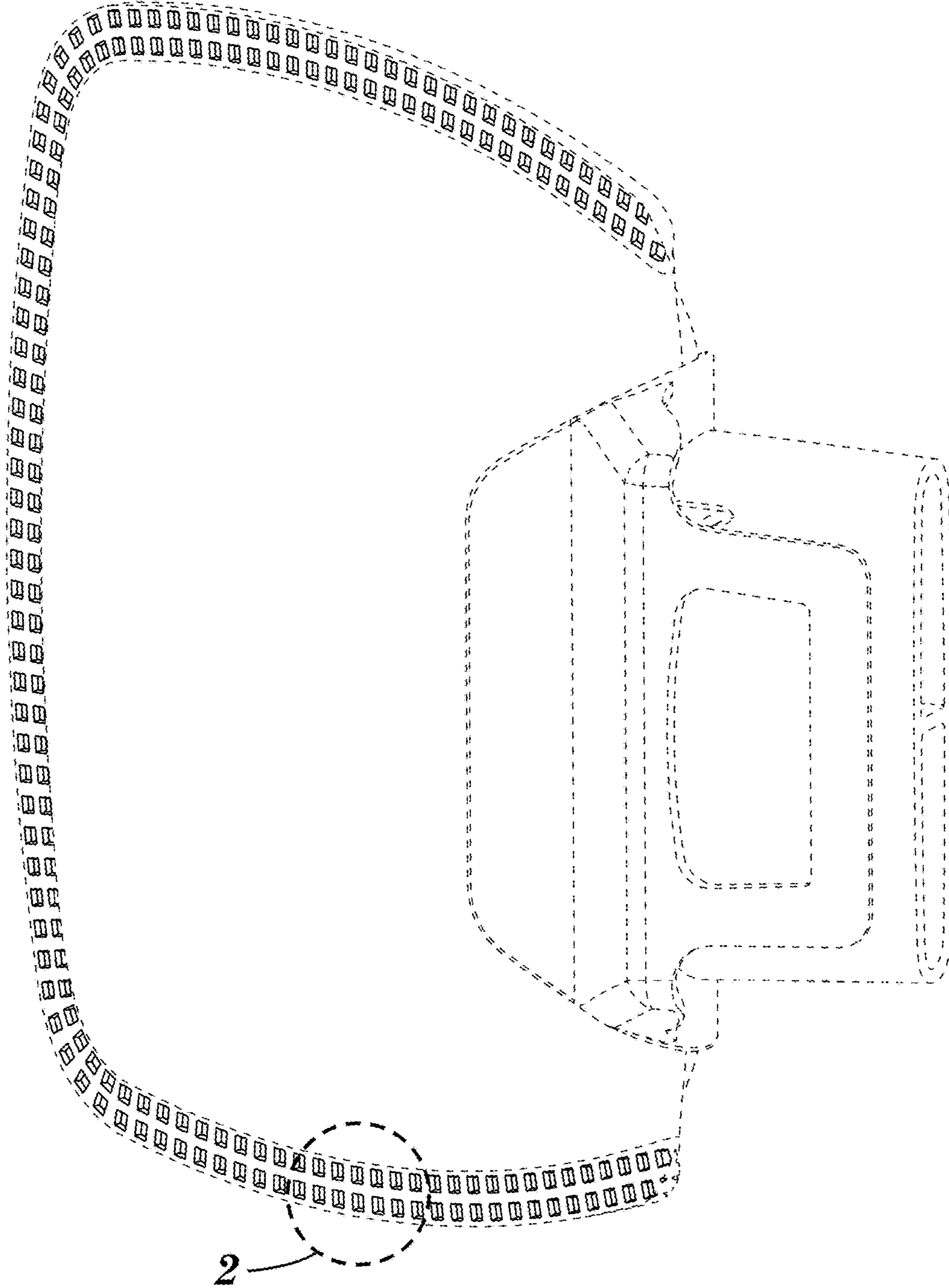
2005/0081497 A1 4/2005 Connor  
 2006/0081249 A1 4/2006 Duxbury  
 2006/0090754 A1 5/2006 Mittelstadt  
 2006/0196157 A1 9/2006 Greer  
 2007/0144123 A1 6/2007 Angadjivand  
 2009/0065006 A1 3/2009 Patterson  
 2009/0263546 A1 10/2009 Rea  
 2010/0154369 A1 6/2010 Berisha  
 2011/0283505 A1 11/2011 Billingsley  
 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

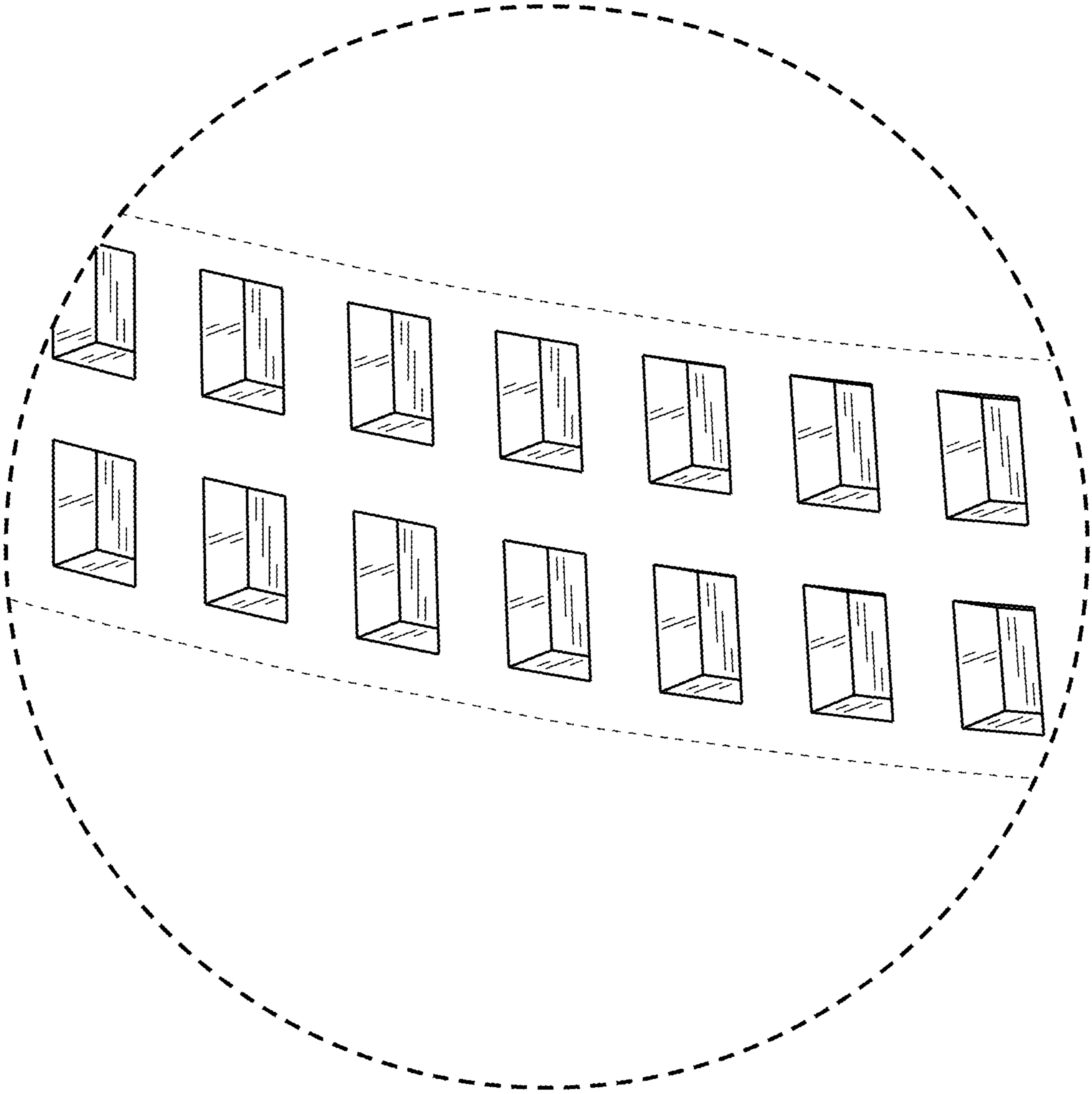
CA 2209857 7/1996  
 CA 2295170 11/1999  
 CA 2405510 10/2001  
 CA 2567266 5/2007  
 CN 201098482 8/2008  
 CN 201190125 2/2009  
 CN 101554942 10/2009  
 CN 201342303 U 11/2009  
 CN 101628649 1/2010  
 CN 101703828 5/2010  
 CN 201603485 U 10/2010  
 CN 202983422 6/2013  
 CN 203540246 U 4/2014  
 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

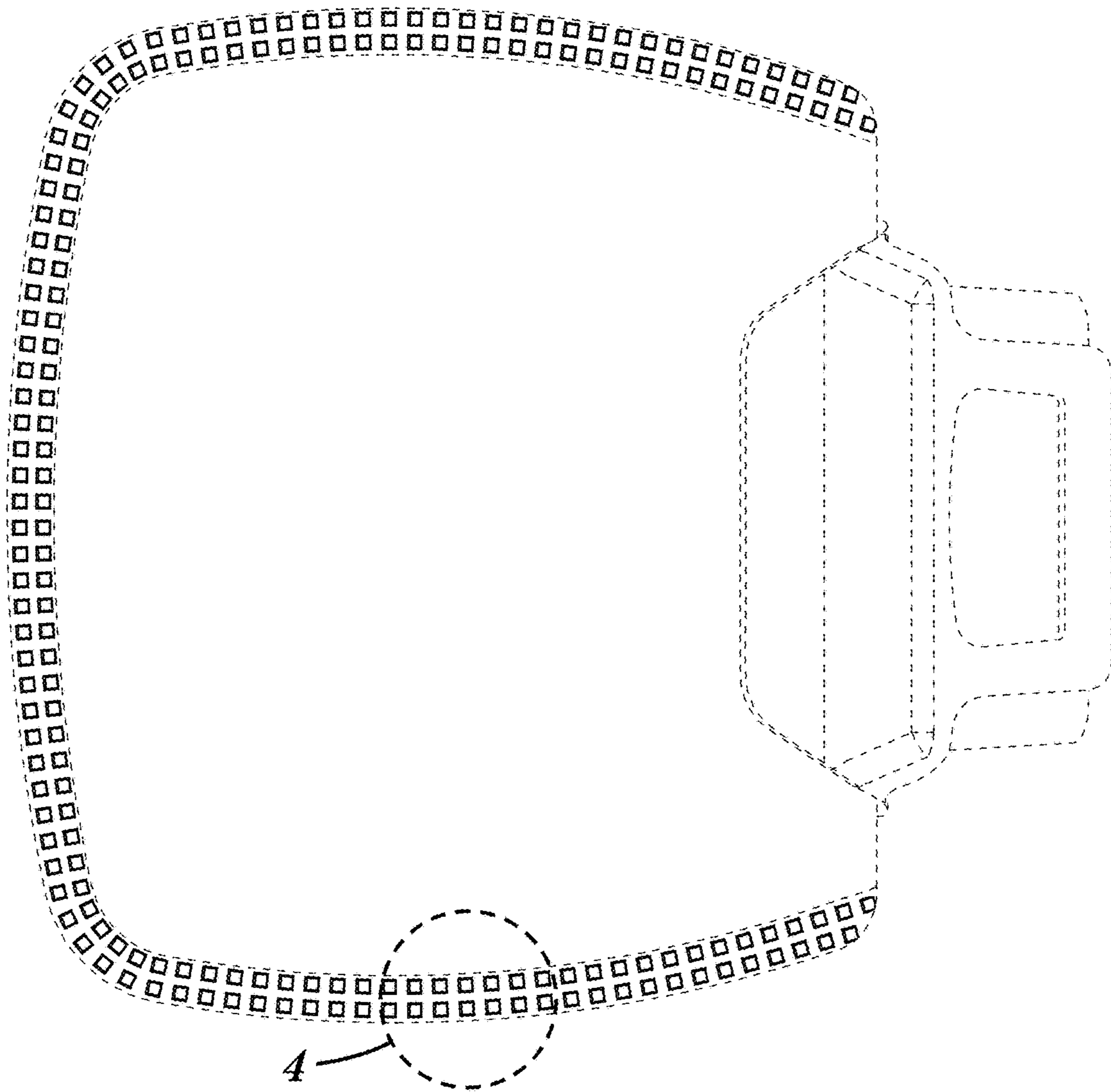




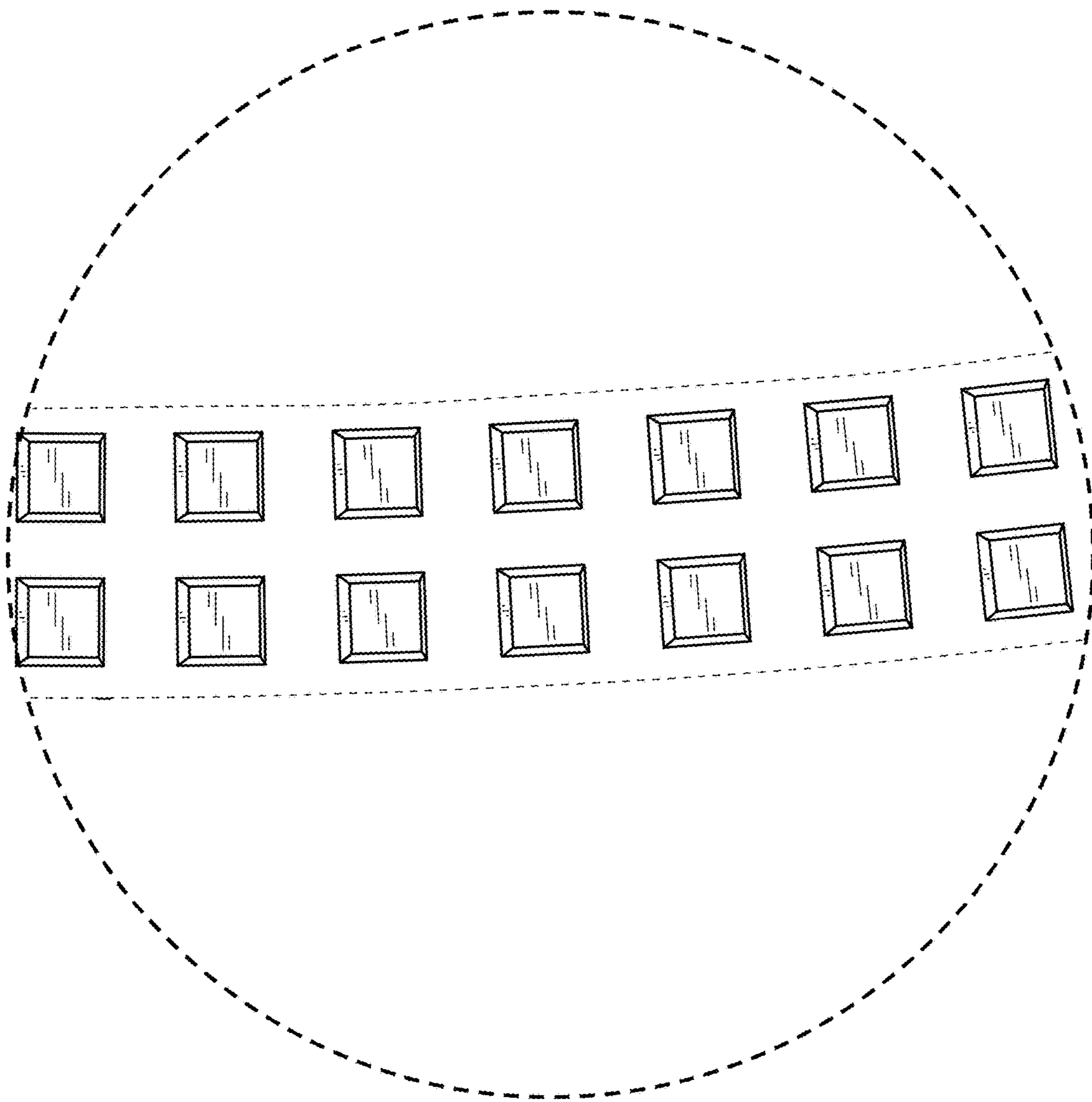
*Fig. 1*



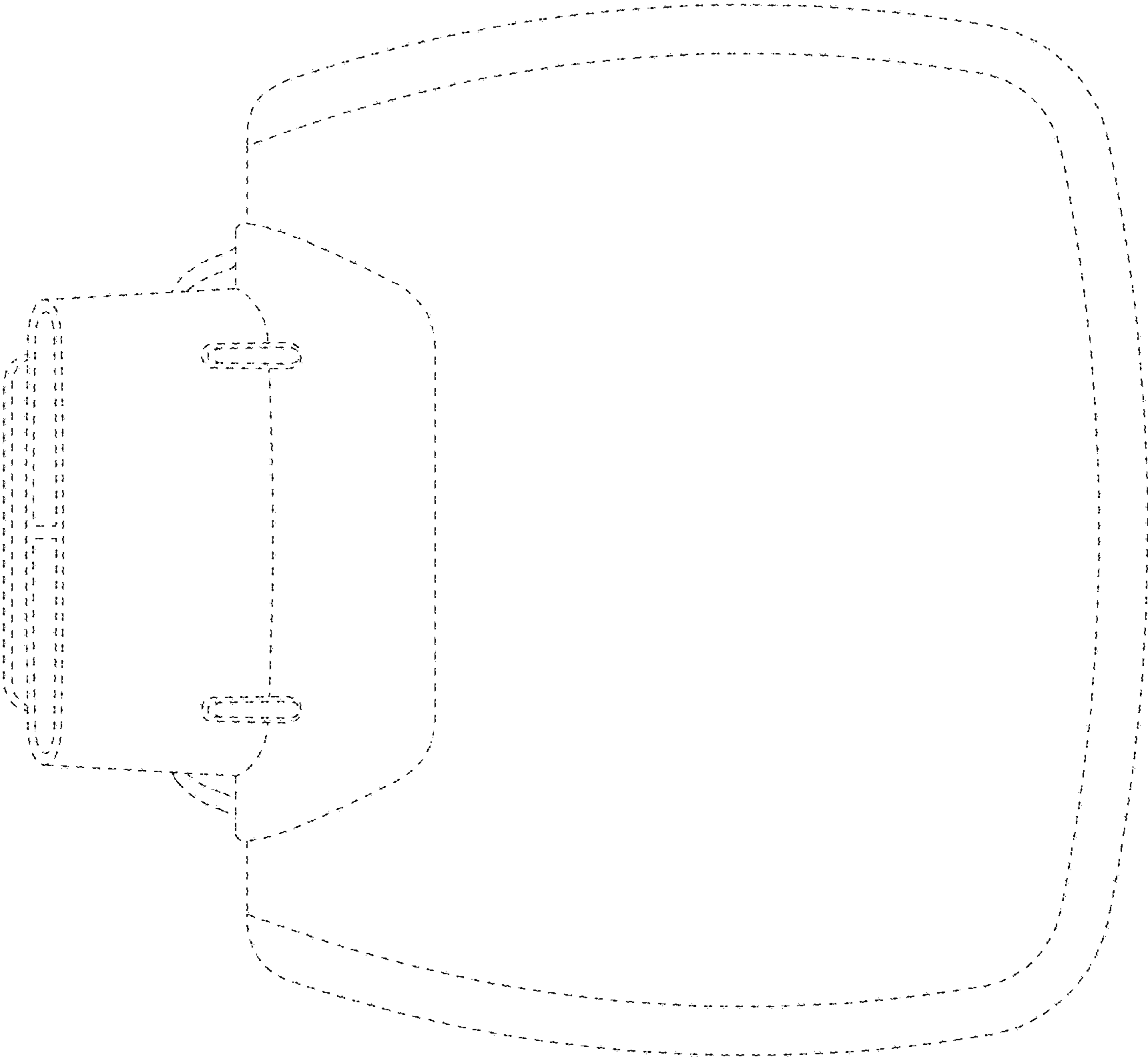
*Fig. 2*



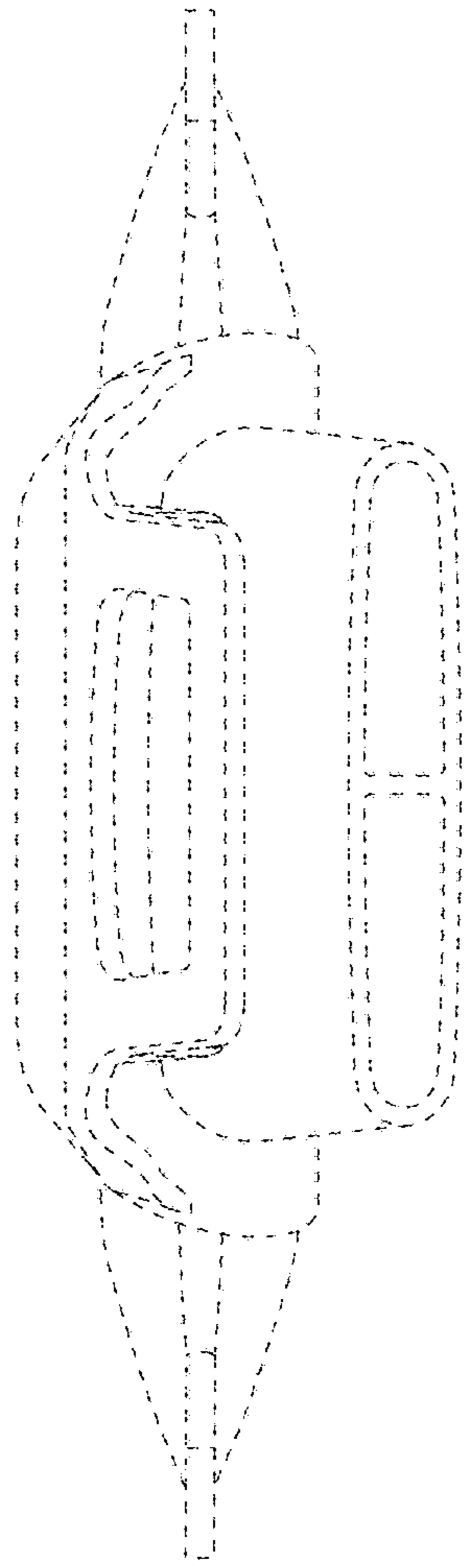
*Fig. 3*



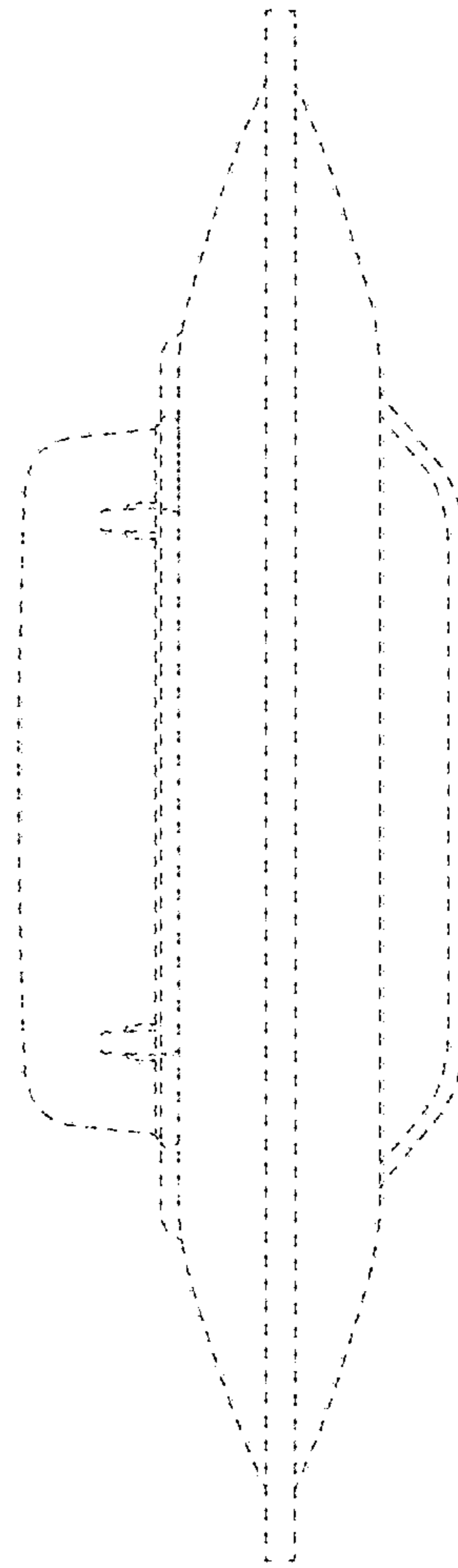
*Fig. 4*



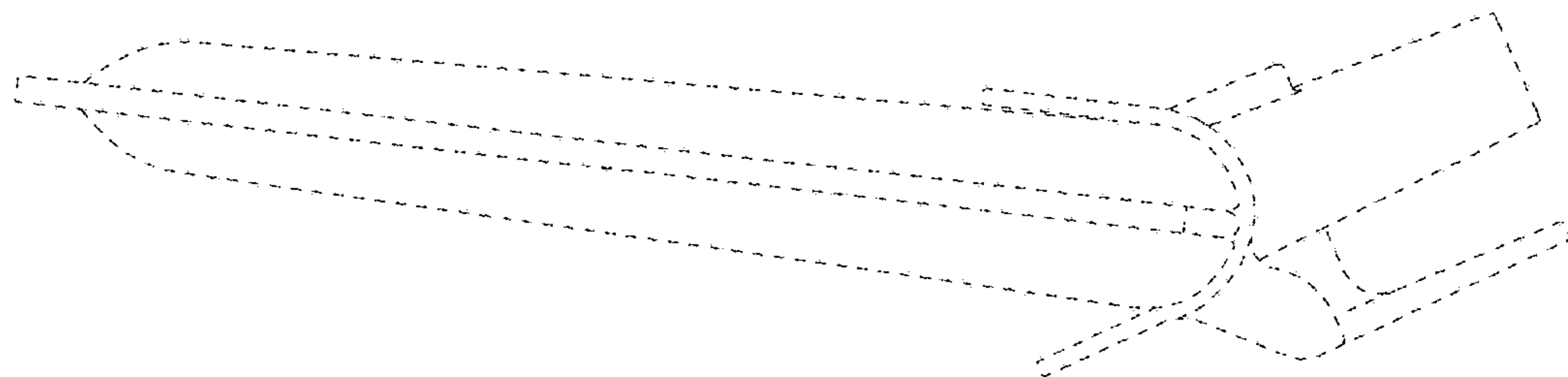
*Fig. 5*



*Fig. 6*



*Fig. 7*



*Fig. 8*