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(12) **United States Design Patent**
Liu

(10) **Patent No.:** **US D932,459 S**
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- (54) **WIRELESS HEAD BAND**
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- (**) Term: **15 Years**
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- (51) **LOC (13) Cl.** **14-03**
- (52) **U.S. Cl.**
USPC **D14/192; D14/205**
- (58) **Field of Classification Search**
USPC D14/192, 188, 205, 344, 172; D2/875, D2/894; D29/112, 120.1, 122, 121.1; 2/209.13, 209, 181, 174, 253, 202, 203, 2/200, 2, DIG. 11; D24/128, 190, 173; 381/380, 381, 376, 333, 388; 455/90.3, 455/575.1, 569.1; 132/54; 383/96, 66, 383/901; 607/111
CPC . H04R 1/02; H04R 1/028; H04R 1/10; H04R 9/06; H04R 25/00; H04R 1/105; H04R 5/02; H04R 1/1075; H04R 5/033; H04R 5/0335; H04R 3/12; H04R 1/1008; A42B 1/245; A61F 13/00
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 1,129,186 A * 2/1915 Fellroth A41D 27/20
2/253
- 1,927,751 A * 9/1933 Mensi A61F 7/08
383/66
- 2,211,184 A * 8/1940 Varell A42B 1/041
2/174

- 2,431,287 A * 11/1947 Washington A41D 13/065
2/239
- 2,615,168 A * 10/1952 Springer A42B 1/241
2/195.2
- 2,769,308 A * 11/1956 Krasno A42C 5/02
2/171.2
- D192,070 S * 1/1962 Wall D29/112
- 3,131,400 A * 5/1964 Blanchard A42B 1/12
2/68
- D235,788 S * 7/1975 Eberhardt D21/662
- 4,055,188 A * 10/1977 Pelton A61F 7/02
607/112

(Continued)

FOREIGN PATENT DOCUMENTS

- EM 001602947-0008 * 8/2009
- EM 002475954-0001 * 6/2014

(Continued)

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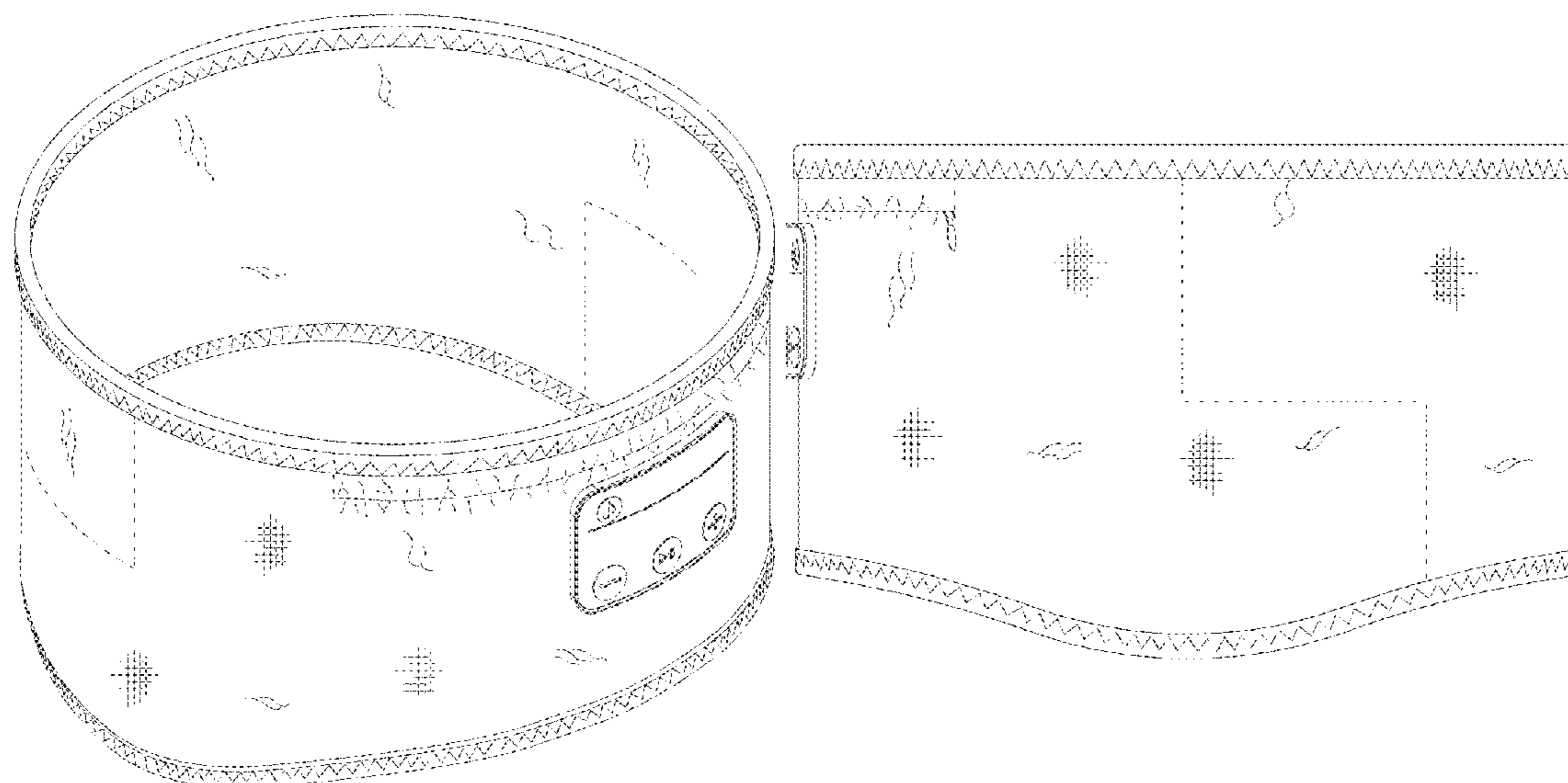
(57) **CLAIM**

The ornamental design for a wireless head band, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a wireless head band showing my new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof;
FIG. 8 is a perspective view thereof in a use state; and,
FIG. 9 is a perspective view thereof in another use state.
The dashed or broken lines represent fabric stitching that forms part of the claimed design.

1 Claim, 9 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,204,543 A * 5/1980 Henderson A41D 13/0055
607/112
D262,455 S * 12/1981 Bulmash D14/192
4,503,560 A * 3/1985 Bourne A61F 7/103
383/66
D284,080 S * 6/1986 Swezey D14/192
4,641,655 A * 2/1987 Abt A61F 7/10
383/901
4,656,671 A * 4/1987 Manges A45D 44/12
2/174
4,727,599 A * 2/1988 Rappaport A42B 1/245
2/DIG. 11
D294,710 S * 3/1988 Witzel D16/339
4,802,245 A * 2/1989 Miano A61F 11/06
2/209
4,832,010 A * 5/1989 Lerman A61F 2/7812
602/63
4,864,619 A * 9/1989 Spates H04R 1/10
381/309
D315,812 S * 3/1991 Cionni D16/339
5,088,549 A * 2/1992 Schneider A61F 7/02
165/46
D347,897 S * 6/1994 Kudrow D24/206
5,395,400 A * 3/1995 Stafford A42B 1/008
2/209
5,438,698 A * 8/1995 Burton H01Q 1/276
2/209.13
D384,790 S * 10/1997 Juergens D14/192
D397,838 S * 9/1998 Waggoner D14/192
5,806,535 A * 9/1998 Becker A41G 3/0016
132/53
D404,897 S * 2/1999 Marshall D2/951
5,881,390 A * 3/1999 Young A41D 20/00
2/209.13
5,920,909 A * 7/1999 Ellsworth A41D 23/00
2/171
5,946,734 A * 9/1999 Vogan A63B 71/081
2/412
D424,743 S * 5/2000 Winter D2/894
6,115,843 A * 9/2000 Travalgia A41D 20/00
2/171
6,227,011 B1 * 5/2001 Cortinovis A41D 20/00
2/171

D457,515 S * 5/2002 Masamitsu D14/192
D468,013 S * 12/2002 Mason D24/128
6,592,539 B1 * 7/2003 Einarsson A61F 5/0109
602/26
D511,036 S * 11/2005 Moses D2/894
D547,500 S * 7/2007 Karrman A61F 11/14
D29/112
D615,068 S * 5/2010 Yuasa D14/216
8,111,859 B2 * 2/2012 Phillips H04R 5/0335
381/376
8,213,670 B2 * 7/2012 Lai H04R 5/0335
381/388
D672,938 S * 12/2012 Von Euler D2/875
D717,489 S 11/2014 Haas
D723,245 S * 3/2015 Womack D2/600
D728,158 S 4/2015 Beaugureau
D736,394 S * 8/2015 Owoc D24/190
D747,696 S * 1/2016 Hardi D14/205
D779,120 S * 2/2017 Cull D28/41
D780,376 S 2/2017 Johnson et al.
D784,546 S * 4/2017 Gordon D24/190
9,636,066 B2 * 5/2017 IDrees A63B 24/0062
D832,558 S * 11/2018 Hawes D2/875
D861,885 S * 10/2019 McEwen D24/190
D870,062 S * 12/2019 Peng D14/192
D905,859 S * 12/2020 Inzer D24/190
D913,984 S * 3/2021 Li D14/192
2008/0144872 A1 * 6/2008 Phillips H04R 5/0335
381/333
2014/0321661 A1 * 10/2014 Alao H04R 5/0335
381/74
2017/0251741 A1 * 9/2017 Wang H04R 5/0335
2018/0035189 A1 * 2/2018 Givens H04R 1/028
2019/0037314 A1 * 1/2019 Hanson H04R 5/023
2019/0132663 A1 * 5/2019 Lu H04R 1/1008

FOREIGN PATENT DOCUMENTS

EM 003533207-0002 * 12/2016
EM 006286621-0001 * 3/2019
EM 008319461-0002 * 12/2020
EM 008468870-0001 * 3/2021
EM 008591267-0001 * 6/2021
GB 40395095 * 4/2014

* cited by examiner

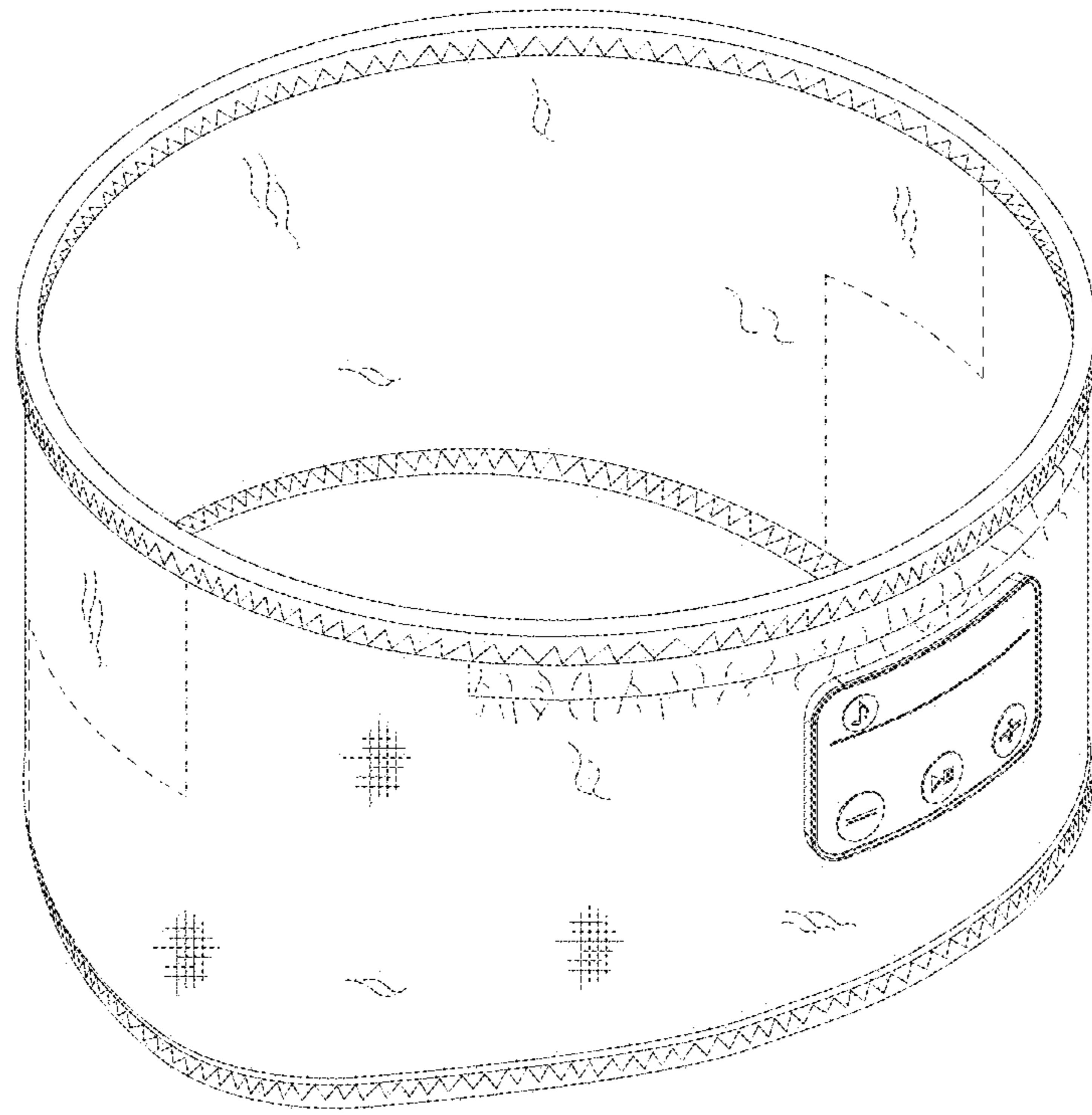


FIG. 1

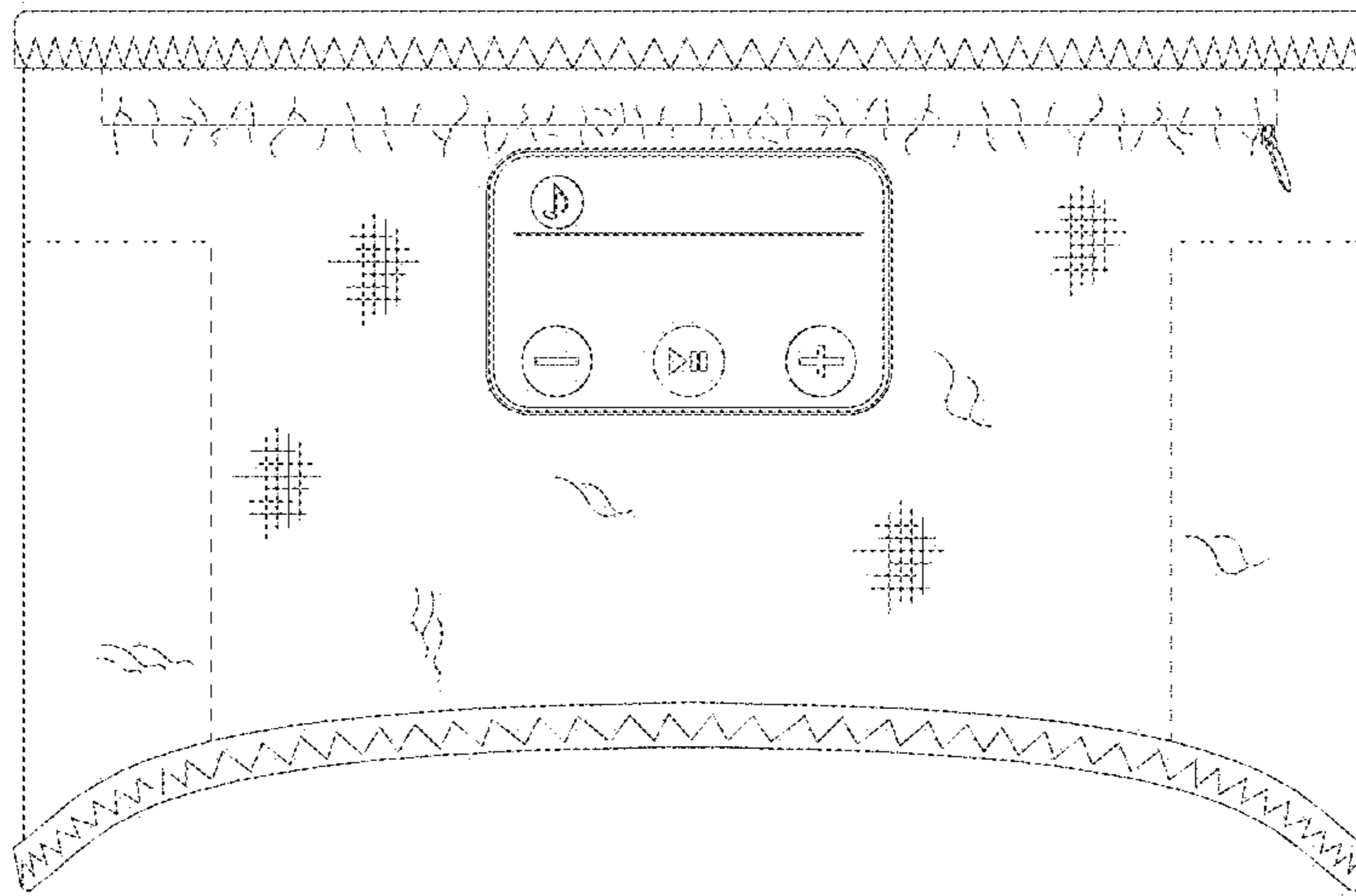


FIG. 2

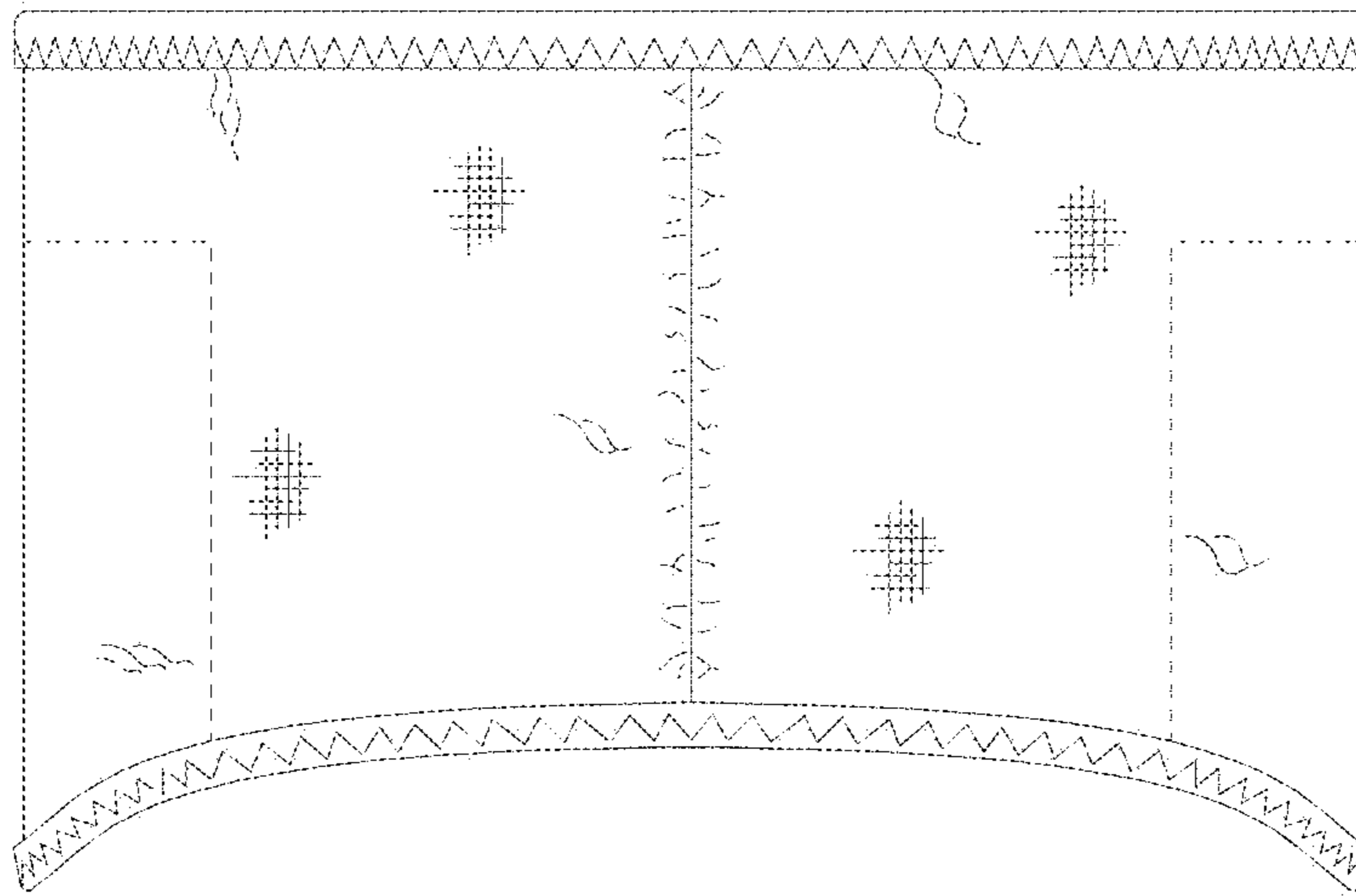


FIG. 3

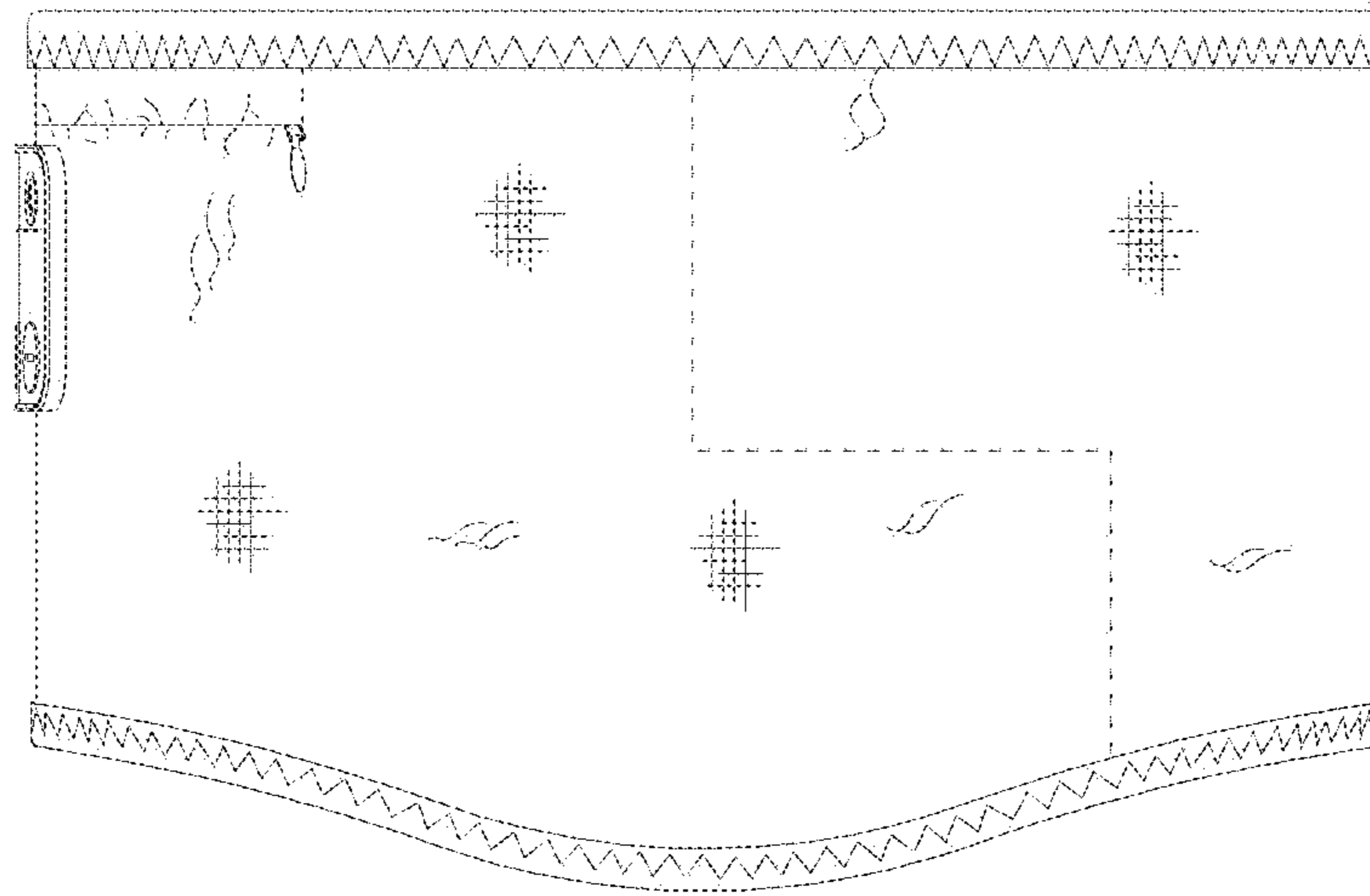


FIG. 4

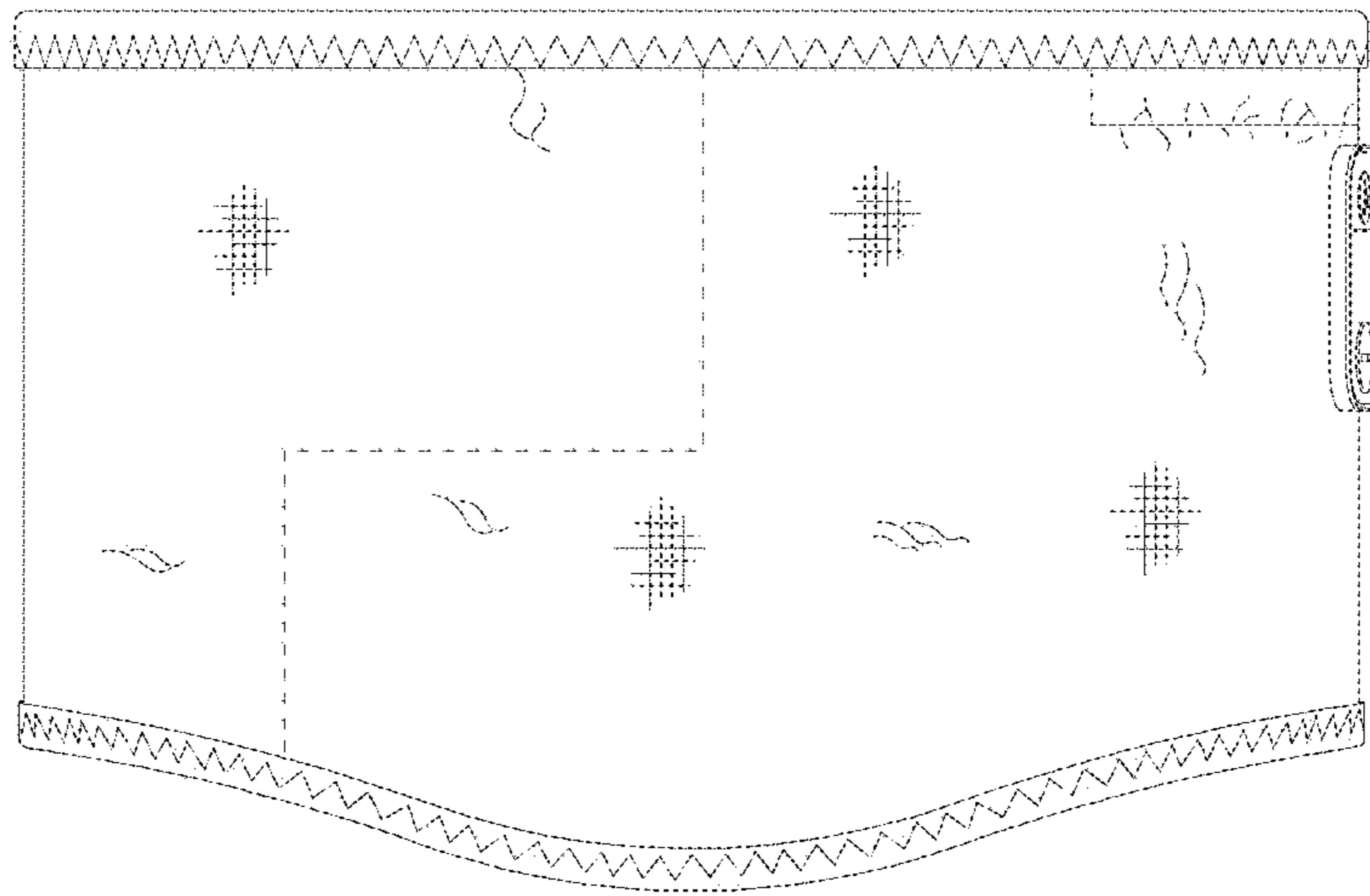


FIG. 5

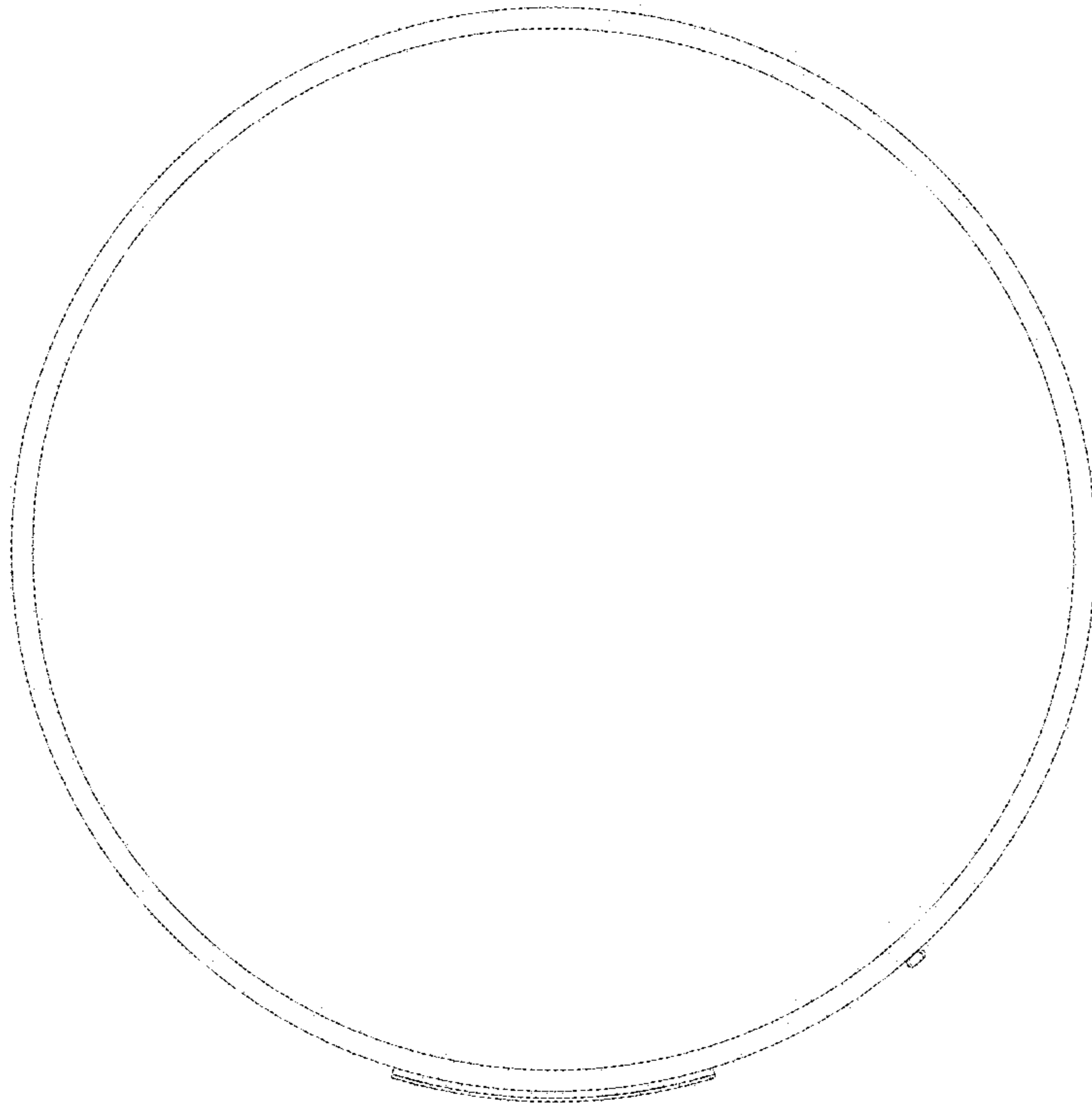


FIG. 6

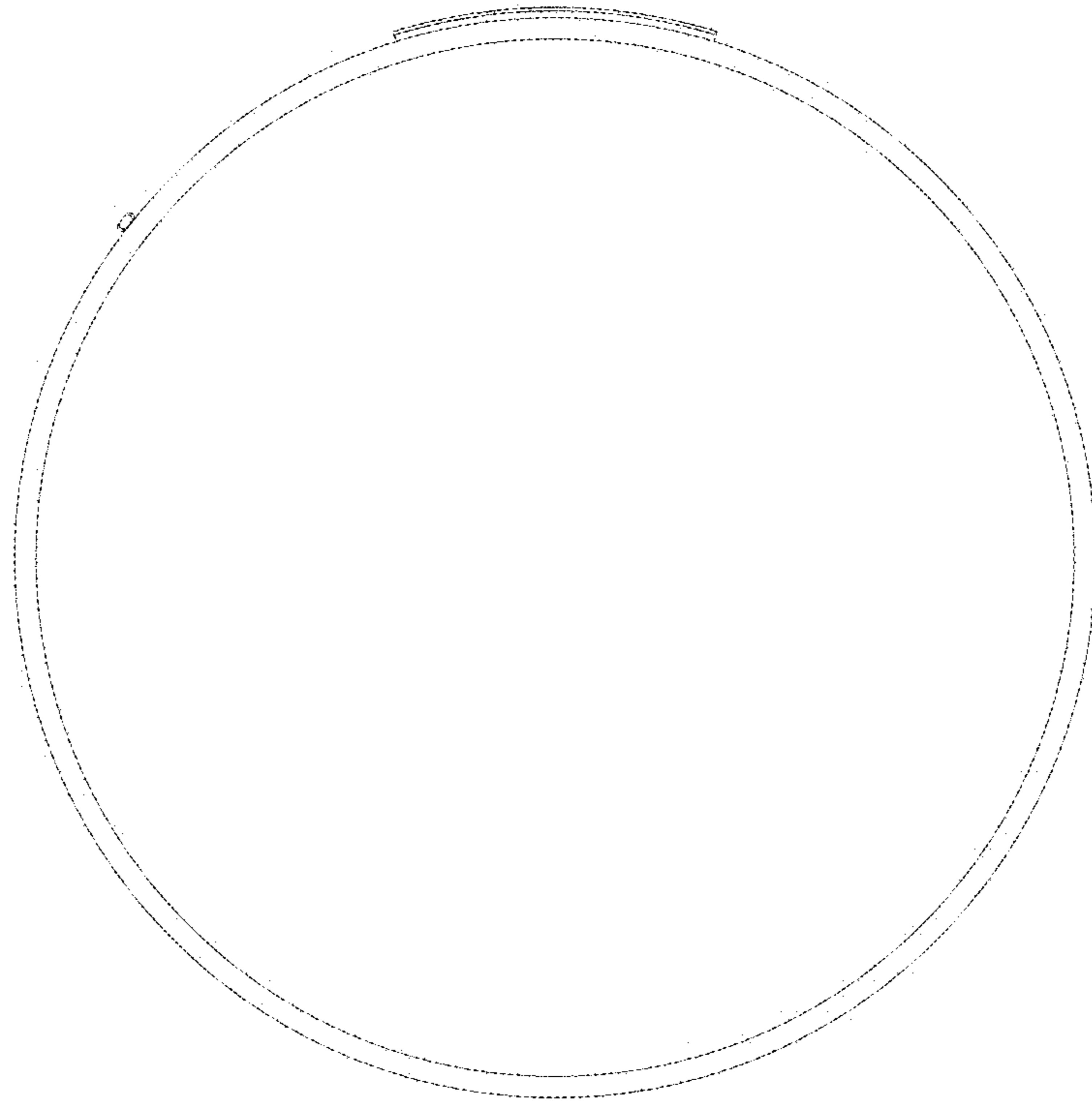


FIG. 7

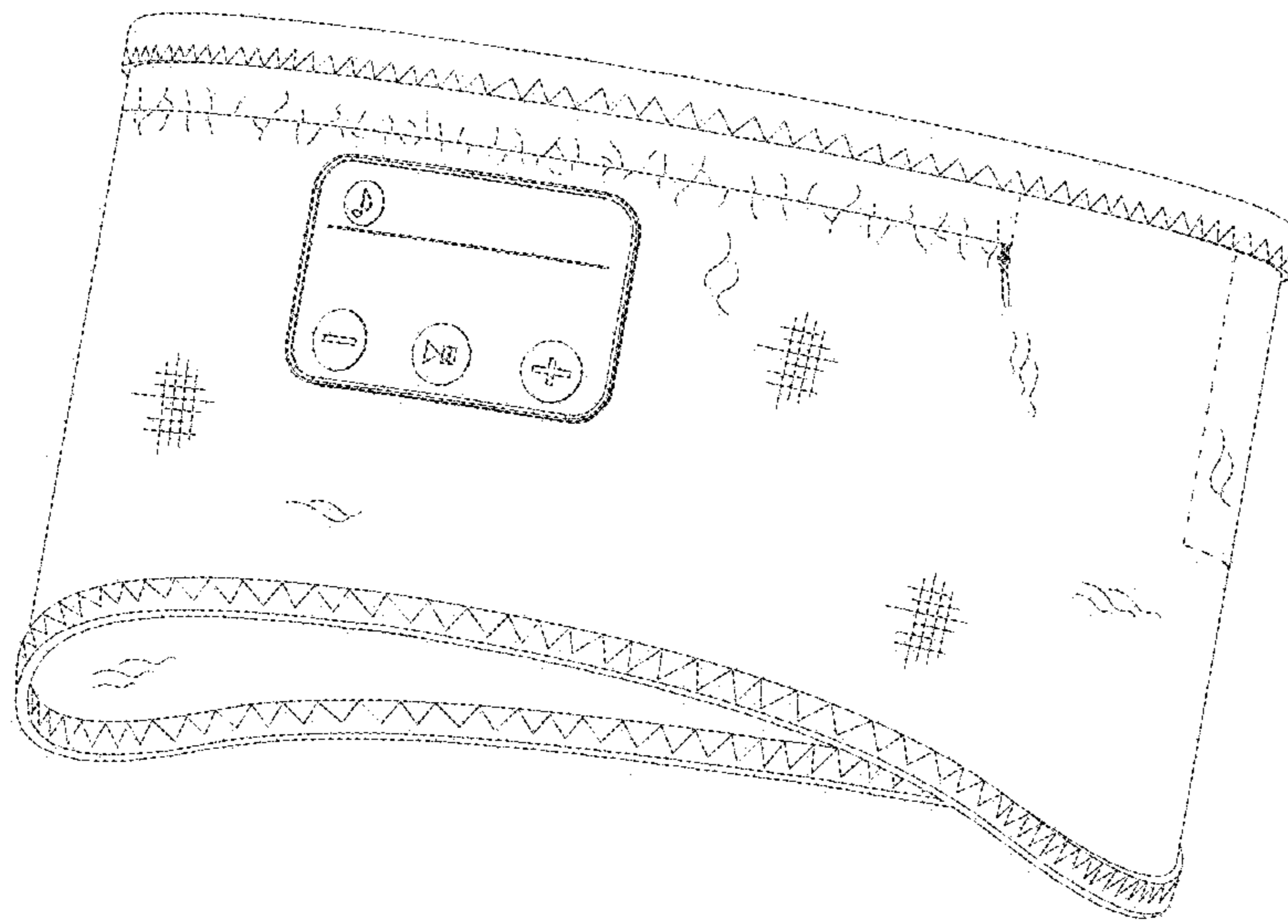


FIG. 8

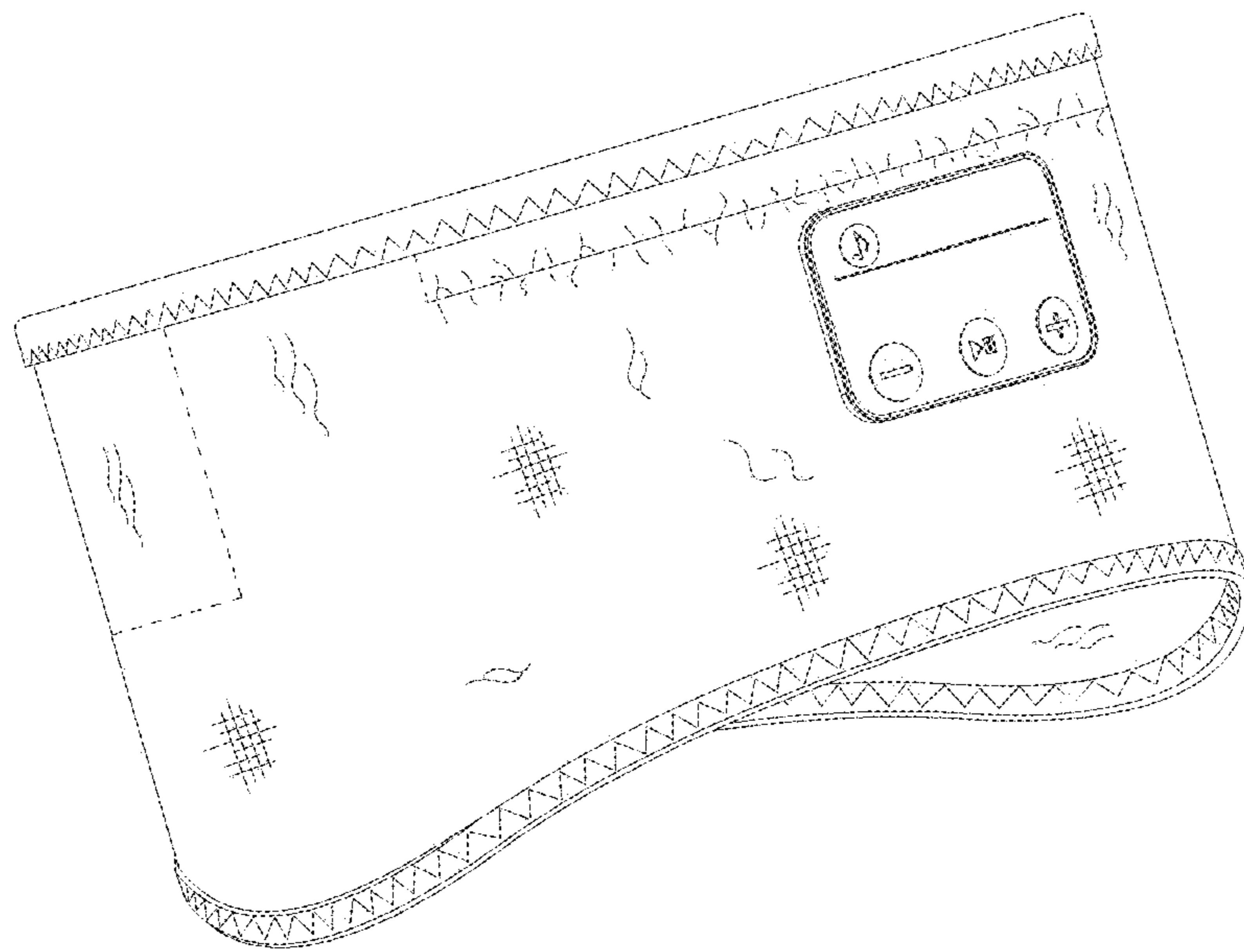


FIG. 9