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Ko et al.

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(54) **CURVING BATTERY**

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(52) **U.S. Cl.**
USPC **D13/103**

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Y02E 60/50; H01M 2/02; H01M 2/022;
H01M 2/0202; H01M 2/0207; H01M 2/0212;
H01M 2/1061; H01M 2/1022; H01M 2/1055;
H01M 2/1066; H01M 2/105; H01M 2/204;
H01M 10/4257; H01M 10/0436; H01M 10/48
USPC D13/102–106, 110, 118–119, 184, 199;
429/96–100, 156, 163, 176, 122
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,481,458 A * 11/1984 Lane 320/112
4,664,994 A * 5/1987 Koike et al. 429/163

D334,559 S * 4/1993 Okahisa et al. D13/103
5,683,831 A * 11/1997 Baril et al. 429/96
6,020,086 A * 2/2000 Van Lerberghe 429/163
D434,723 S * 12/2000 Fushimi D13/110
6,280,874 B1 * 8/2001 Hensley et al. 429/98
6,396,242 B2 * 5/2002 Choi et al. 320/113
6,399,241 B1 * 6/2002 Hara et al. 429/163
D478,866 S * 8/2003 Nakai D13/103
D479,192 S * 9/2003 Fujihara et al. D13/103
D479,193 S * 9/2003 Fujihara et al. D13/103
D481,994 S * 11/2003 Fujihara et al. D13/103
D483,013 S * 12/2003 Tsukamoto et al. D13/103
6,743,546 B1 * 6/2004 Kaneda et al. 429/127
7,074,520 B2 * 7/2006 Probst et al. 429/176
7,157,179 B2 * 1/2007 Akahira 429/94
8,323,824 B2 * 12/2012 Shinyashiki et al. 429/162
2001/0051298 A1 * 12/2001 Hanafusa et al. 429/162
2007/0231682 A1 * 10/2007 Aoyama et al. 429/160
2009/0023057 A1 * 1/2009 Kim 429/120
2013/0034763 A1 * 2/2013 Byun 429/96
2013/0078493 A1 * 3/2013 Chen 429/96
2013/0108906 A1 * 5/2013 Bhardwaj et al. 429/94
2013/0171508 A1 * 7/2013 Kim 429/163
2013/0216896 A1 * 8/2013 Kim 429/163

(Continued)

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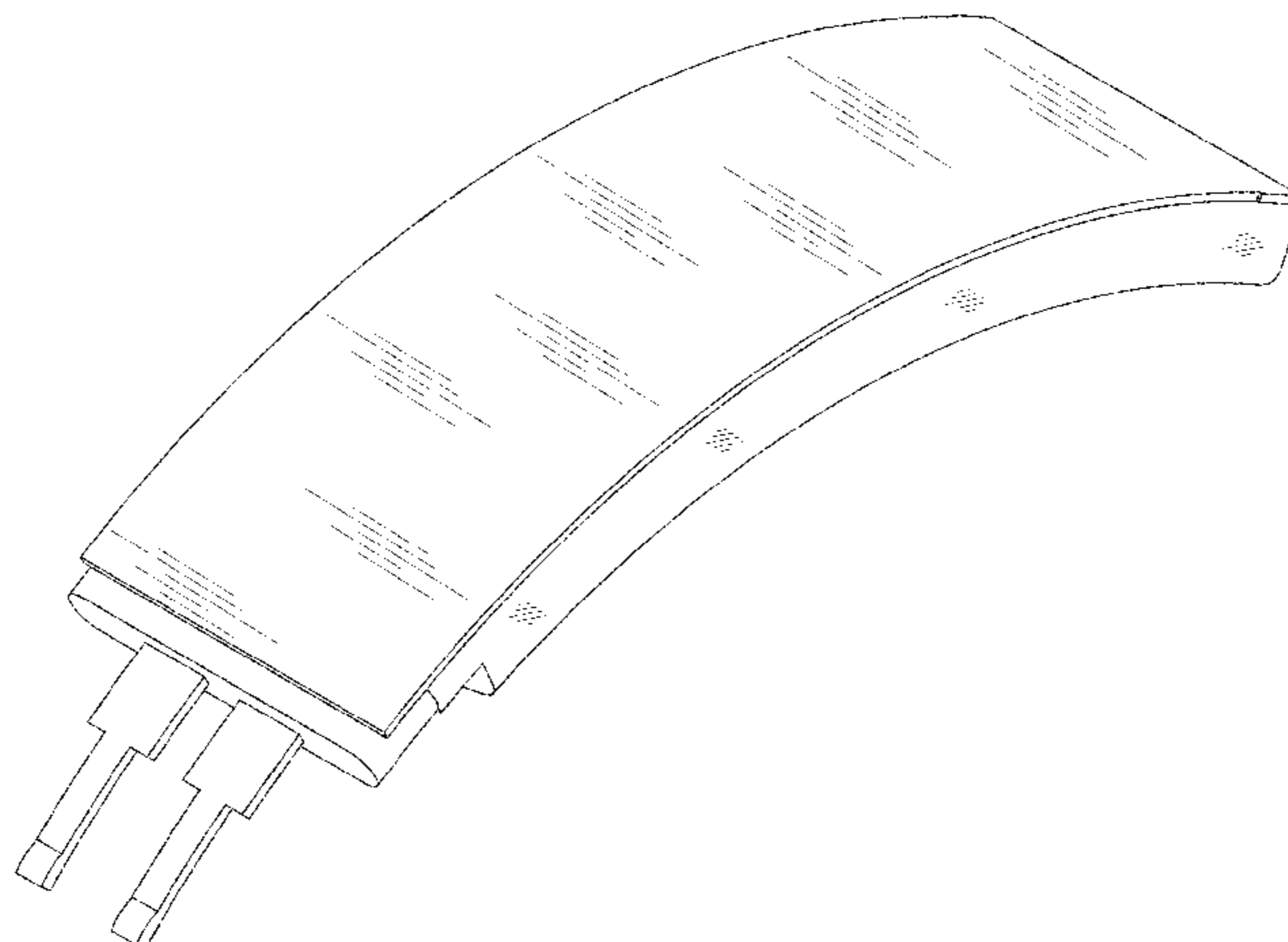
(57) **CLAIM**

The ornamental design for a curving battery, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a curving battery showing my design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a left side elevational view thereof;
FIG. 5 is a right side elevational view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.

1 Claim, 4 Drawing Sheets



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(56)

References Cited

2014/0011070 A1* 1/2014 Kim et al. 429/152
2014/0045045 A1* 2/2014 Iyori et al. 429/163

U.S. PATENT DOCUMENTS

2013/0252043 A1* 9/2013 Allison 429/72 * cited by examiner

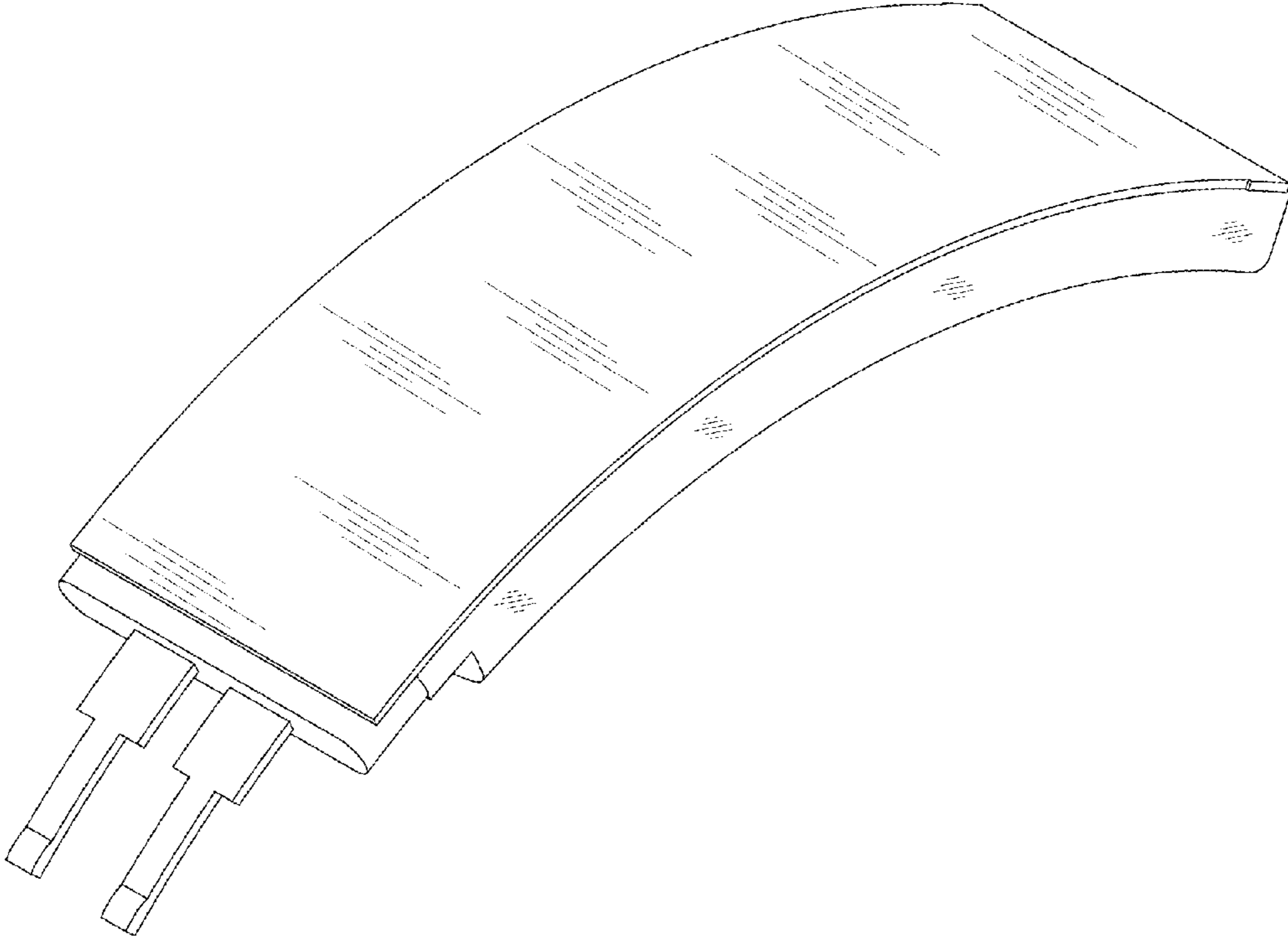


FIG. 1



FIG. 2



FIG. 3

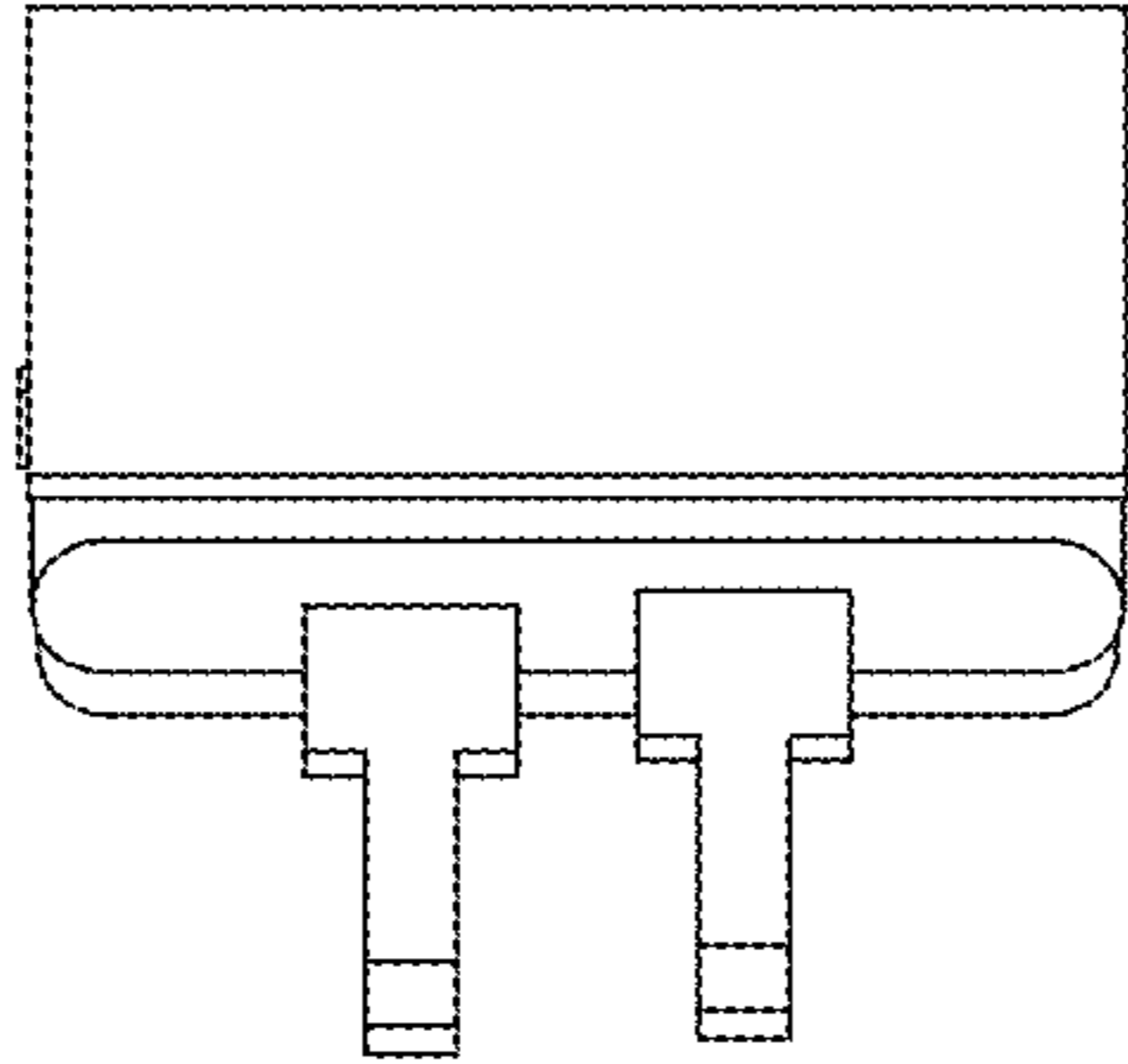


FIG. 4

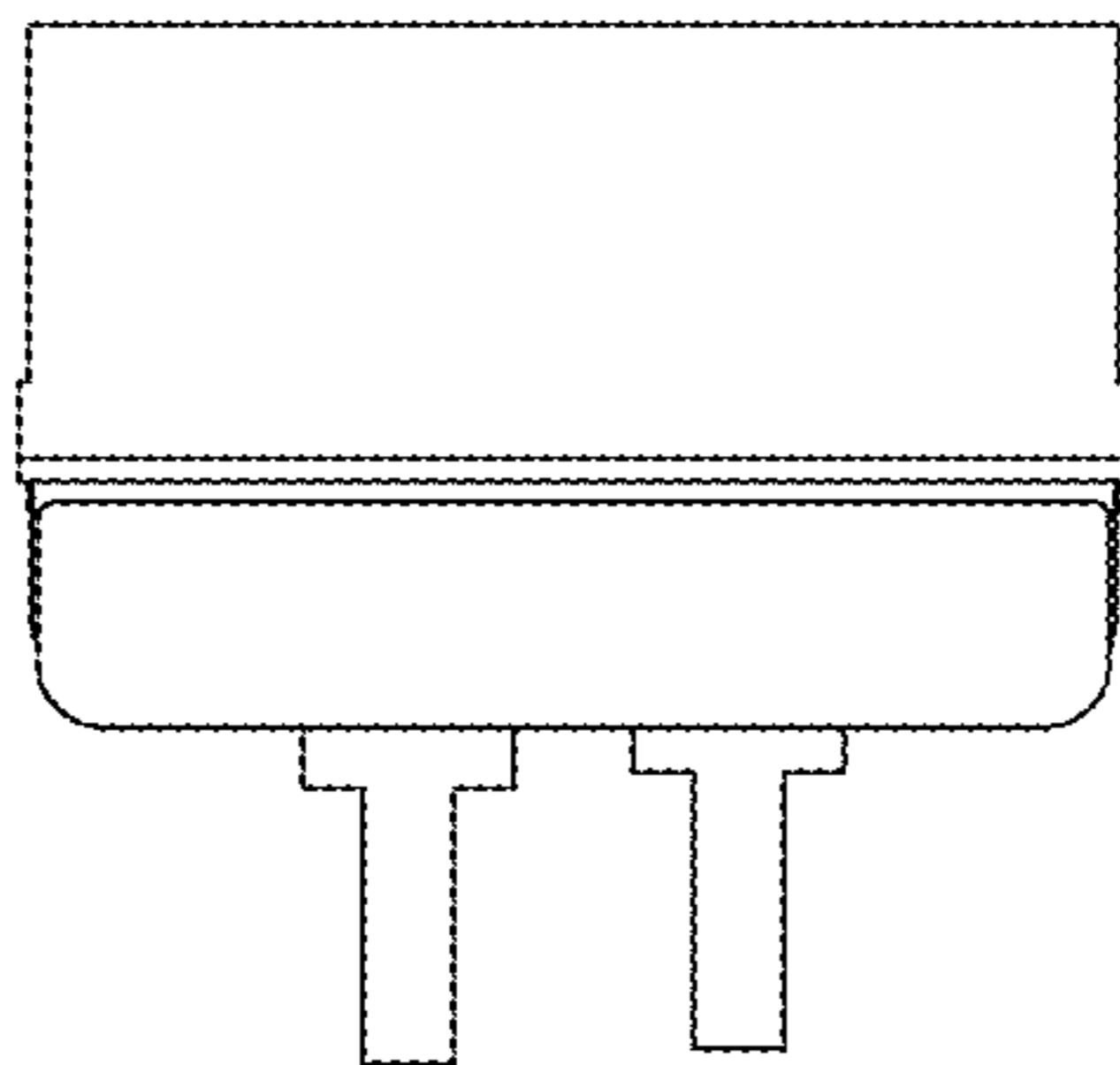


FIG. 5



FIG. 6

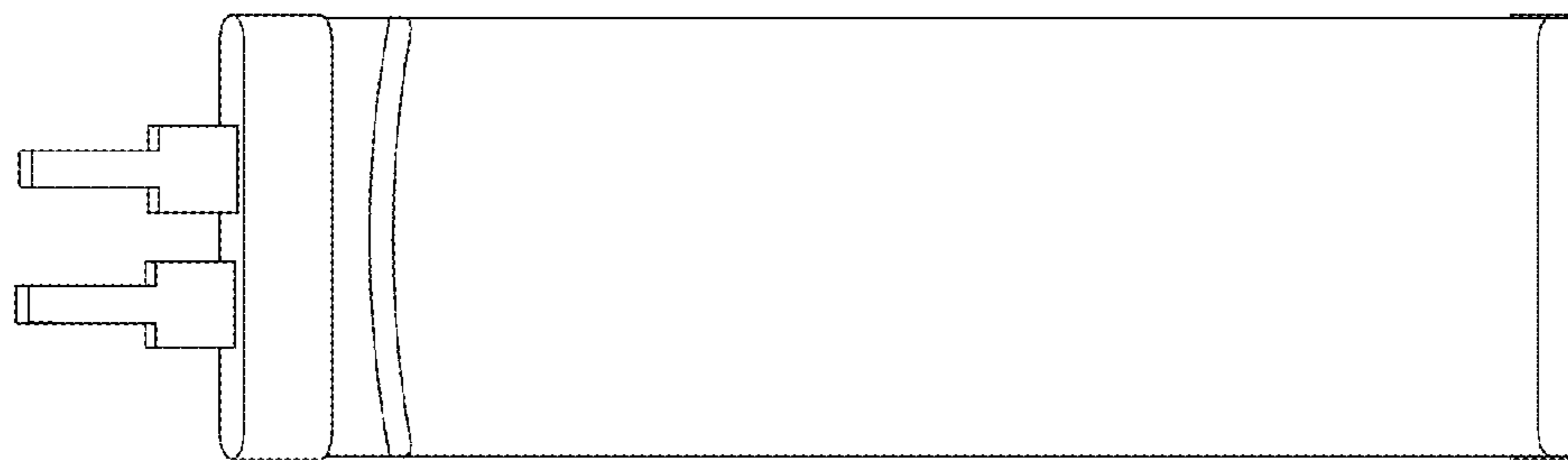


FIG. 7