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**Guarraia et al.**

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(54) **NON-INVASIVE NEUROSTIMULATION DEVICE**

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

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(52) **U.S. Cl.**  
USPC ..... **D24/200**

(58) **Field of Classification Search**  
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D14/206, 223; 379/430; 381/376, 381;  
607/134, 139, 148; 600/301, 544;  
D2/875  
CPC ..... A61N 1/0548; A61N 1/0476; A61N  
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A61B 5/6814; A61F 9/08

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,055,540	A	9/1936	Karnofsky
3,851,651	A	12/1974	Icenbice, Jr.
4,865,048	A	9/1989	Eckerson
4,924,880	A	5/1990	O'Neill et al.
4,995,404	A	2/1991	Nemir
5,265,624	A	11/1993	Bowman
5,269,303	A	12/1993	Wernicke et al.
5,299,569	A	4/1994	Wernicke et al.
5,540,734	A	7/1996	Zabara

5,792,067	A	8/1998	Karell
5,794,621	A	8/1998	Hogan et al.
5,878,154	A	3/1999	Schimmelpfennig
D409,307	S	5/1999	Phleps
6,066,163	A	5/2000	John
6,161,044	A	12/2000	Silverstone
D437,058	S	1/2001	Gozani
6,169,781	B1	1/2001	Doebert
6,267,733	B1	7/2001	Peterson et al.
D449,376	S	10/2001	McDonald
D449,883	S	10/2001	McDonald

(Continued)

**OTHER PUBLICATIONS**

Interchange PoNS Unit. Helius Medical Technologies, Inc. Listing Statement. Jun. 20, 2014 [retrieved on Nov. 16, 2015] Retrieved from the Internet: <[http://www.cnsx.ca/cmsAssets/docs/Filings/2014/2014\\_06\\_20\\_20\\_39\\_31\\_HSM\\_Helius\\_Form\\_2A\\_Listing\\_Statement.pdf](http://www.cnsx.ca/cmsAssets/docs/Filings/2014/2014_06_20_20_39_31_HSM_Helius_Form_2A_Listing_Statement.pdf)>.\*

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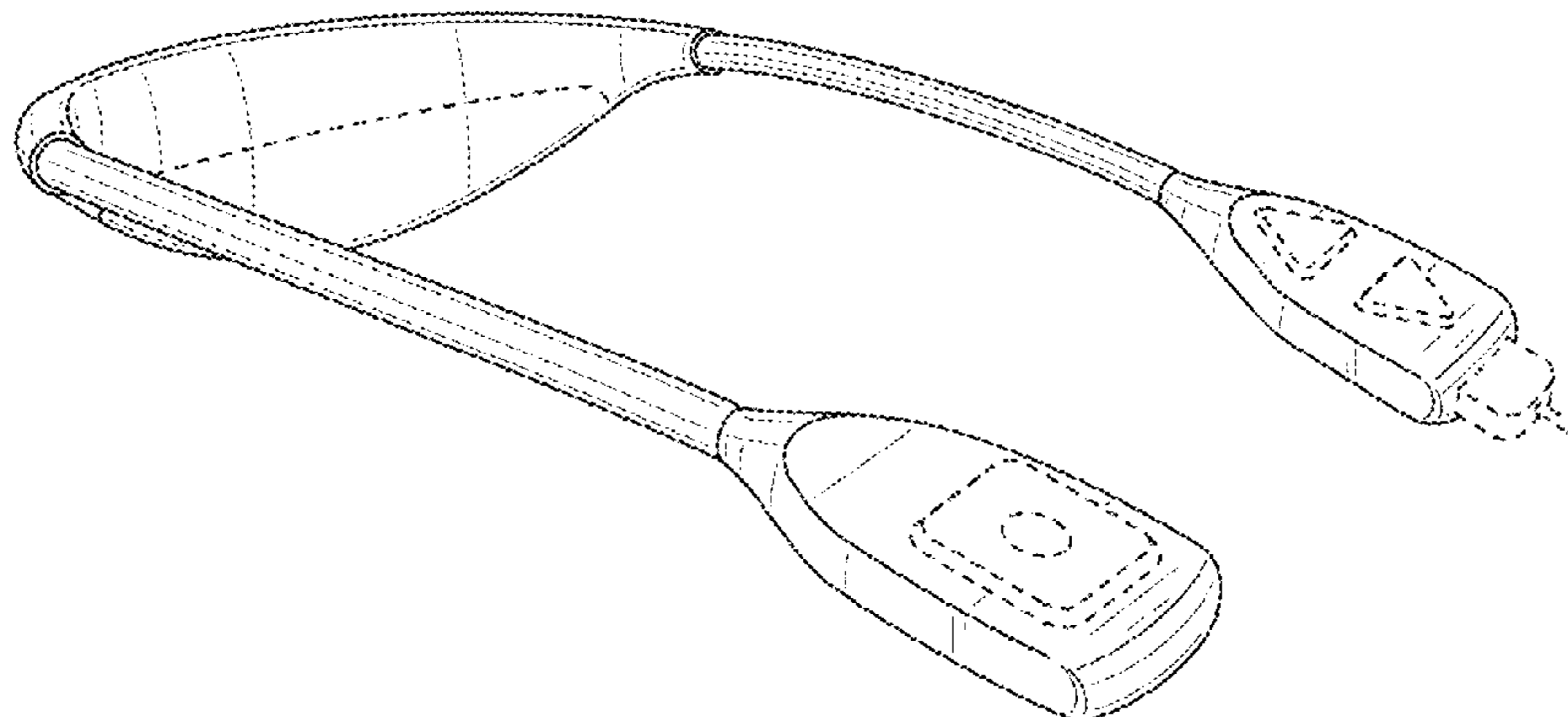
(57) **CLAIM**

The ornamental design for a non-invasive neurostimulation device, substantially as shown.

**DESCRIPTION**

FIG. 1 is a perspective view of a non-invasive neurostimulation device incorporating the design; FIG. 2 is a front view thereof; FIG. 3 is a back view thereof; FIG. 4 is a left-side view thereof; FIG. 5 is a right-side view thereof; FIG. 6 is a top view thereof; and, FIG. 7 is a bottom view thereof. The broken lines shown in the drawings illustrate portions of the non-invasive neurostimulation device that form no part of the claimed design.

**1 Claim, 5 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D451,598 S 12/2001 McDonald  
 6,326,901 B1 12/2001 Gonzales  
 6,339,725 B1 1/2002 Naritoku et al.  
 6,366,813 B1 4/2002 DiLorenzo  
 6,366,814 B1 4/2002 Boveja et al.  
 6,405,079 B1 6/2002 Ansarinia  
 6,430,450 B1 \* 8/2002 Bach-y-Rita ..... A61F 9/08  
 379/52  
 D462,357 S 9/2002 Jenkins  
 6,463,328 B1 10/2002 John  
 6,526,318 B1 2/2003 Ansarinia  
 6,546,291 B2 4/2003 Merfeld et al.  
 6,556,868 B2 4/2003 Naritoku et al.  
 6,954,668 B1 10/2005 Cuzzo  
 D515,697 S 2/2006 Nakamura  
 D531,314 S 10/2006 Atkinson  
 D542,408 S 5/2007 Oldenburg  
 7,228,178 B2 6/2007 Carroll et al.  
 7,236,830 B2 6/2007 Gliner  
 D555,252 S 11/2007 Kitayama  
 D557,685 S \* 12/2007 Lee ..... D14/205  
 7,333,020 B2 2/2008 Cohen  
 D565,184 S 3/2008 Royzen  
 D575,268 S \* 8/2008 Christopher ..... D14/205  
 D578,222 S \* 10/2008 Sakurai ..... D24/187  
 D579,552 S 10/2008 Oldenburg  
 7,483,747 B2 1/2009 Gliner et al.  
 D593,067 S \* 5/2009 Millora ..... D14/205  
 7,563,929 B2 7/2009 Hobbs et al.  
 7,640,062 B2 12/2009 Shalev  
 7,672,730 B2 3/2010 Firlík et al.  
 7,725,192 B2 5/2010 Eskandar et al.  
 D617,308 S \* 6/2010 Nousiainen ..... D14/205  
 7,747,325 B2 6/2010 Dilorenzo  
 D624,189 S 9/2010 Rutt  
 D663,714 S 7/2012 Kang et al.  
 D669,881 S 10/2012 Clements et al.  
 8,290,582 B2 10/2012 Lin et al.  
 D687,018 S \* 7/2013 Afshar ..... D14/204  
 D706,745 S \* 6/2014 Nakagawa ..... D14/205  
 D707,199 S 6/2014 Cepress et al.  
 D709,673 S \* 7/2014 Aimone ..... D2/875  
 D710,718 S 8/2014 Ichihashi  
 8,805,548 B2 \* 8/2014 Mignolet ..... A61N 1/0456  
 607/139  
 D713,531 S 9/2014 Way  
 8,849,407 B1 9/2014 Danilov et al.  
 D716,759 S \* 11/2014 Ha ..... D14/205  
 D721,673 S \* 1/2015 Park ..... D14/205  
 D723,510 S \* 3/2015 Ishikura ..... D14/205  
 D724,197 S 3/2015 Hughes  
 D725,262 S 3/2015 Chowdhury

D728,109 S \* 4/2015 Ko ..... D24/186  
 D730,867 S \* 6/2015 Park ..... D14/205  
 D731,999 S \* 6/2015 Cepress ..... D14/205  
 D739,122 S \* 9/2015 Aimone ..... D2/875  
 D744,658 S 12/2015 Hilkey-Boyatt  
 2004/0073270 A1 4/2004 Firlík et al.  
 2005/0089829 A1 4/2005 Wasowicz  
 2005/0240253 A1 10/2005 Tyler et al.  
 2006/0161218 A1 7/2006 Danilov  
 2006/0241718 A1 10/2006 Tyler et al.  
 2007/0250119 A1 10/2007 Tyler et al.  
 2007/0293917 A1 12/2007 Thompson  
 2008/0009772 A1 1/2008 Tyler et al.  
 2008/0027510 A1 1/2008 McClure et al.  
 2008/0082131 A1 4/2008 Llanos  
 2008/0208287 A1 8/2008 Palermo et al.  
 2008/0222670 A1 \* 9/2008 Lee ..... G09B 7/02  
 725/10  
 2008/0228239 A1 9/2008 Tyler et al.  
 2008/0233541 A1 9/2008 De Vreese et al.  
 2009/0048647 A1 2/2009 Tingey  
 2009/0082831 A1 \* 3/2009 Paul ..... A61N 1/0456  
 607/59  
 2009/0082839 A1 3/2009 Lindquist et al.  
 2009/0312808 A1 12/2009 Tyler et al.  
 2009/0312817 A1 12/2009 Hogle et al.  
 2009/0326604 A1 12/2009 Tyler et al.  
 2011/0093036 A1 4/2011 Mashlach  
 2011/0125184 A1 5/2011 Allen  
 2011/0201944 A1 8/2011 Higgins et al.  
 2012/0010672 A1 1/2012 Crespi  
 2012/0165862 A1 6/2012 Allen  
 2013/0096641 A1 4/2013 Strother  
 2013/0273490 A1 10/2013 Way  
 2014/0135868 A1 5/2014 Bashyam  
 2014/0172041 A1 6/2014 Draghici  
 2014/0194946 A1 7/2014 Thomas

OTHER PUBLICATIONS

Interchange PoNS Unit. Helius Medical technologies, Inc. Listing Statement. Jun. 20, 2014 [retrieved on Nov. 16, 2015] Retrieved from the Internet: [http://www.cnsx.ca/cmsAssets/docs/Filings/2014/2014\\_06\\_20\\_20\\_39\\_31\\_HSM\\_Helius\\_Form\\_2A\\_Listing\\_Statement.pdf](http://www.cnsx.ca/cmsAssets/docs/Filings/2014/2014_06_20_20_39_31_HSM_Helius_Form_2A_Listing_Statement.pdf).  
 The PoNS Device, Helius Medical Technologies, Inc. 2015 [retrieved on Dec. 2, 2015]. Retrieved from the Internet URL: <http://www.heliusmedical.com/divisions/neurohabilitation/pons-device>.  
 US Army. "Mouth Device in Clinical Trials as Possible Treatment for TBI," Feb. 14, 2013 [retrieved on Dec. 2, 2015]. Retrieved from the Internet URL: [http://www.army.mil/article/96521/Mouth\\_device\\_in\\_clinical\\_trials\\_as\\_possible\\_treatment\\_for\\_TBI](http://www.army.mil/article/96521/Mouth_device_in_clinical_trials_as_possible_treatment_for_TBI).

\* cited by examiner

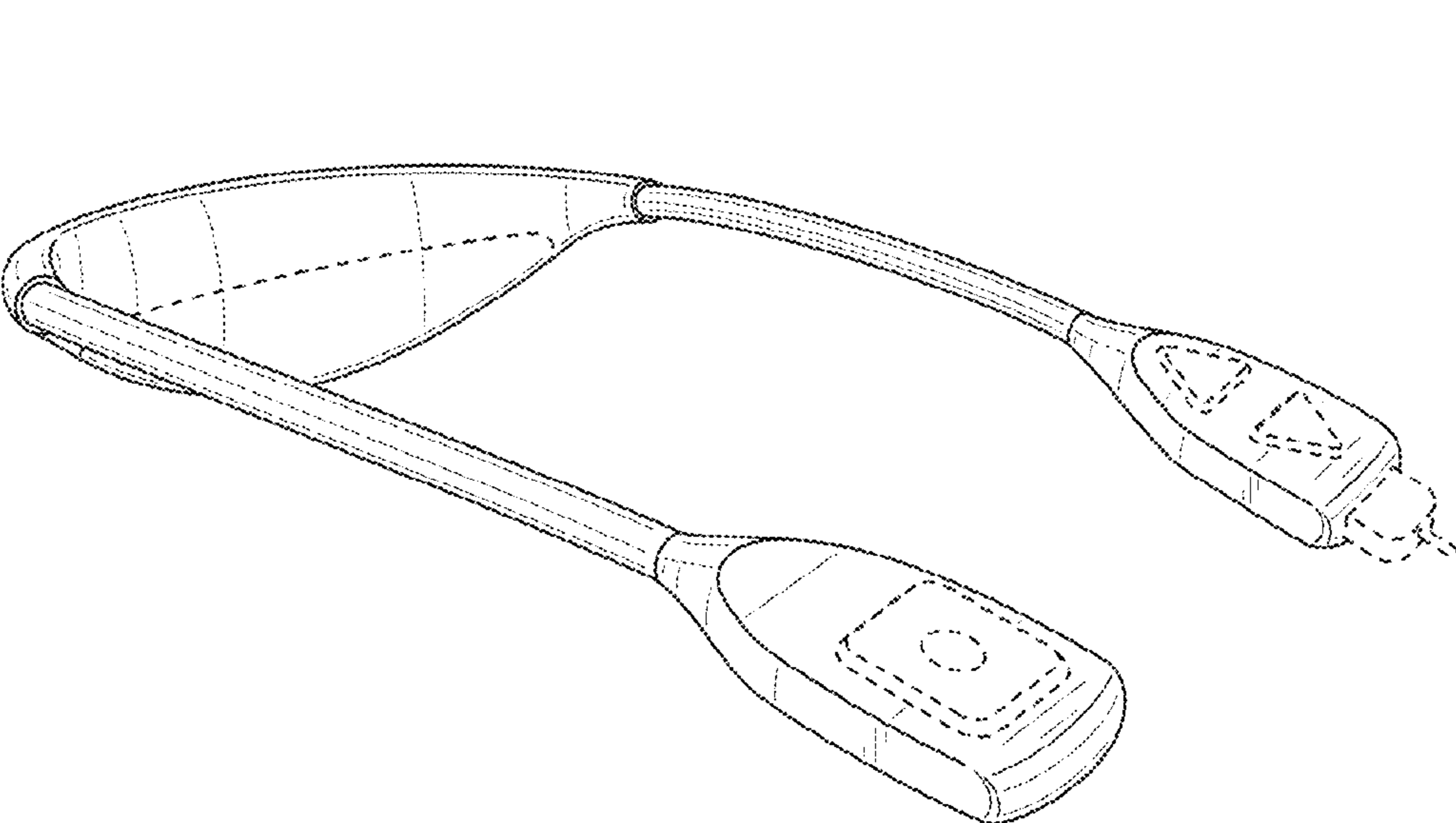


FIG. 1



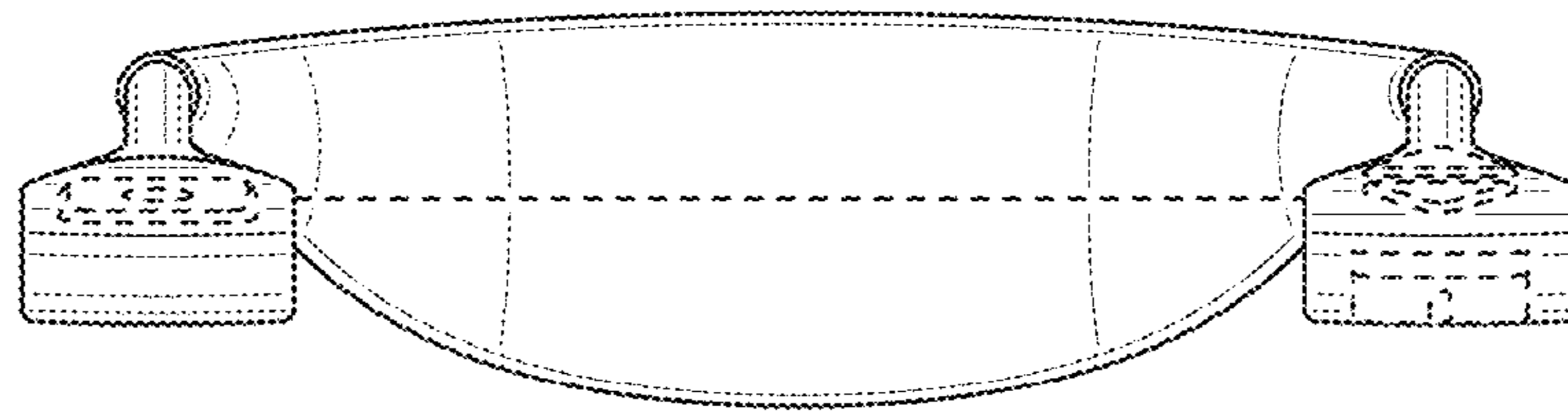


FIG. 2

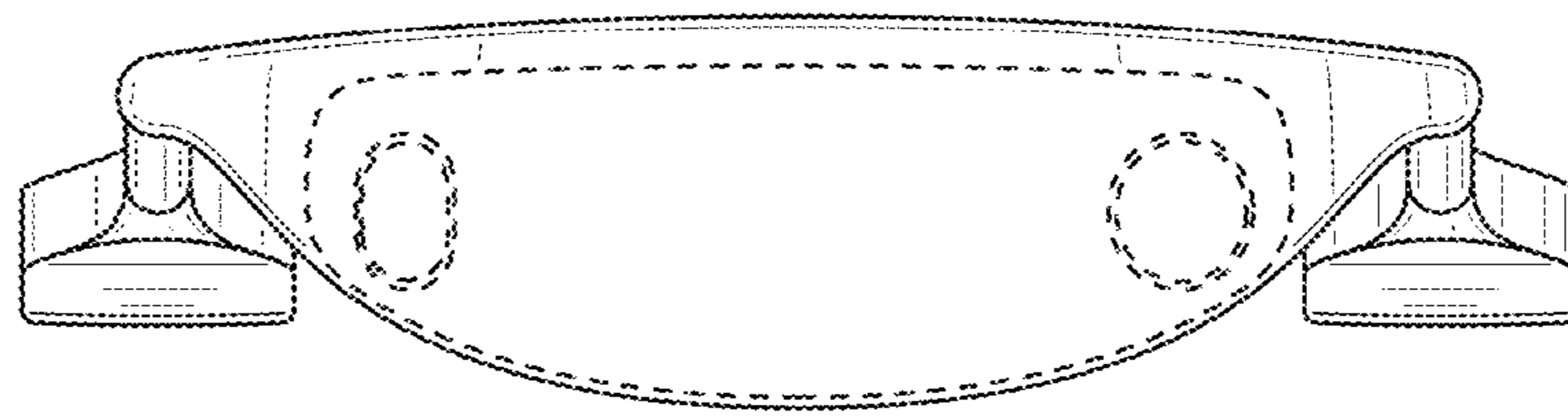


FIG. 3

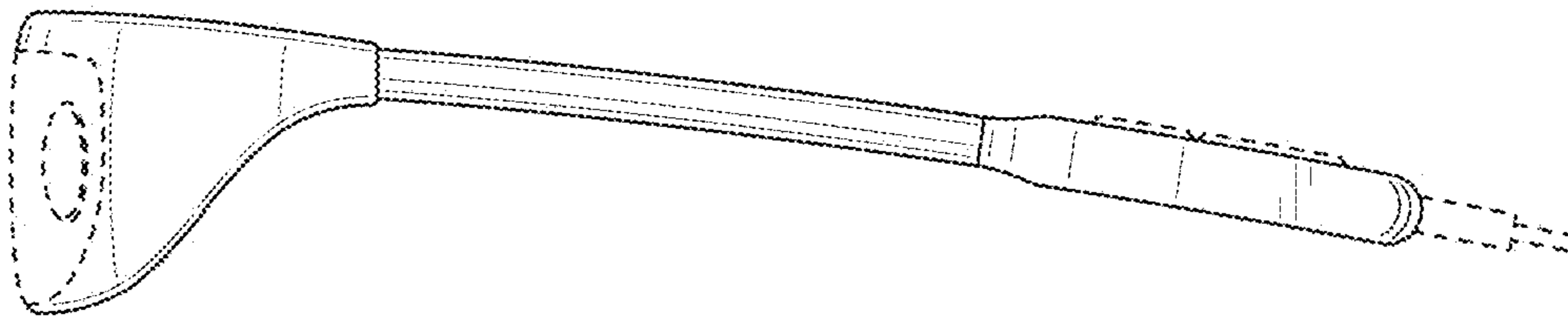


FIG. 4

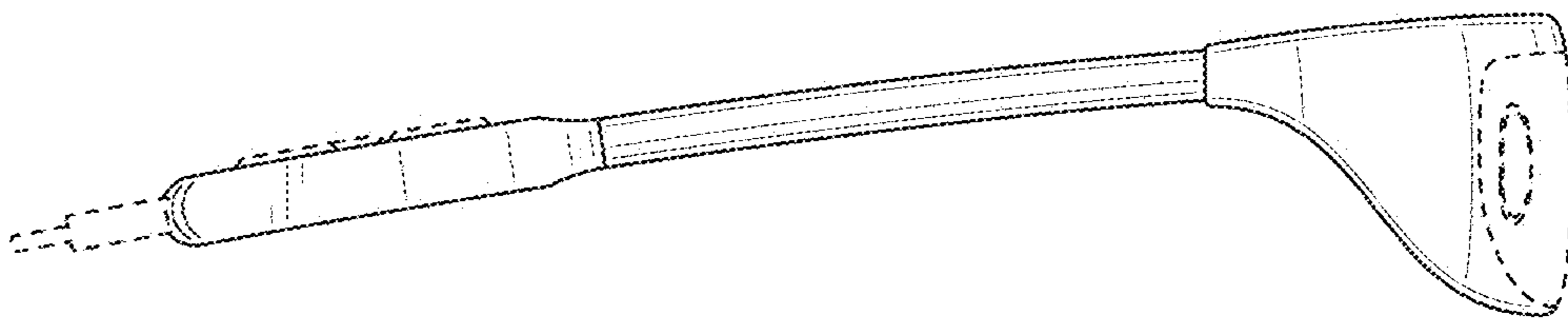


FIG. 5

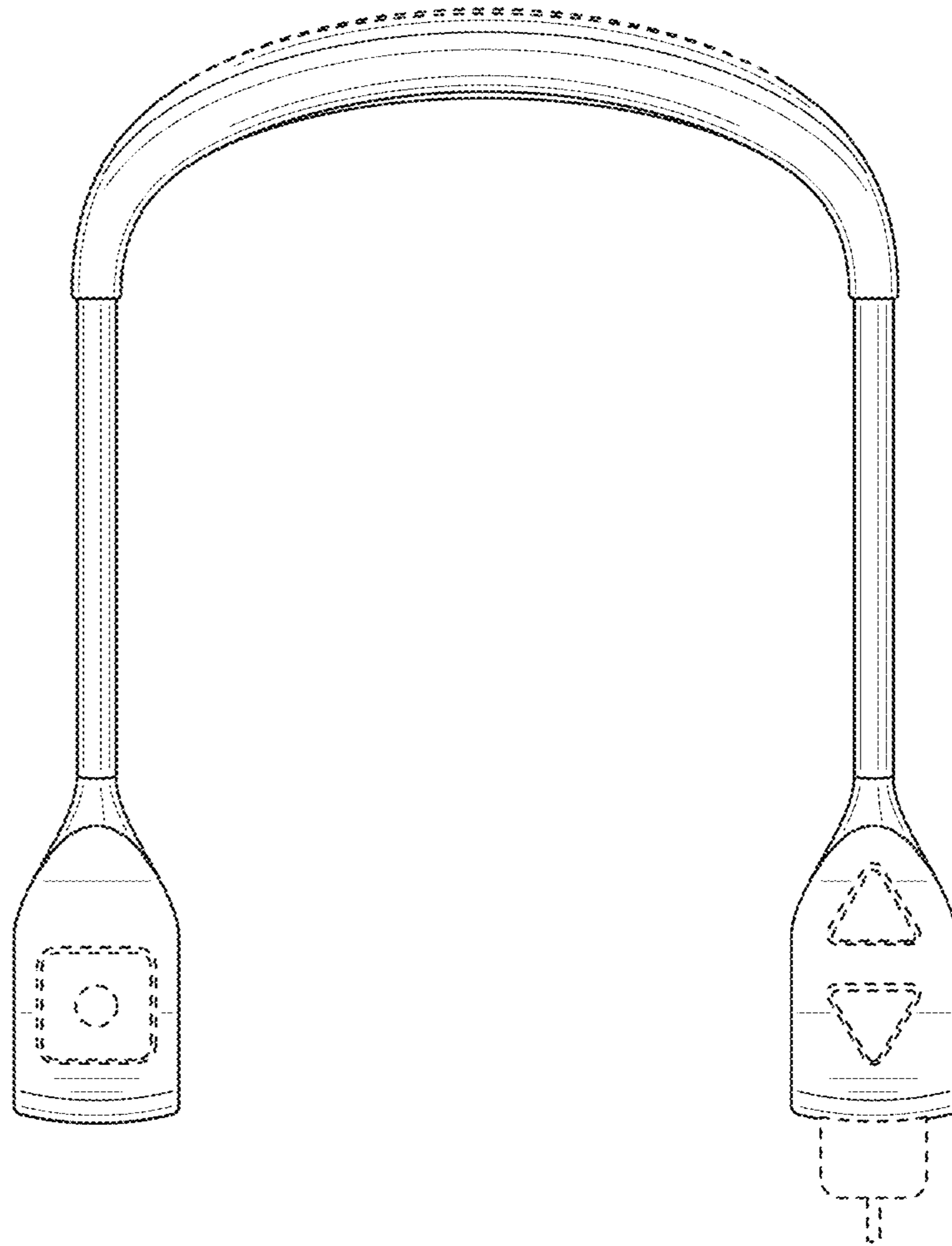


FIG. 6

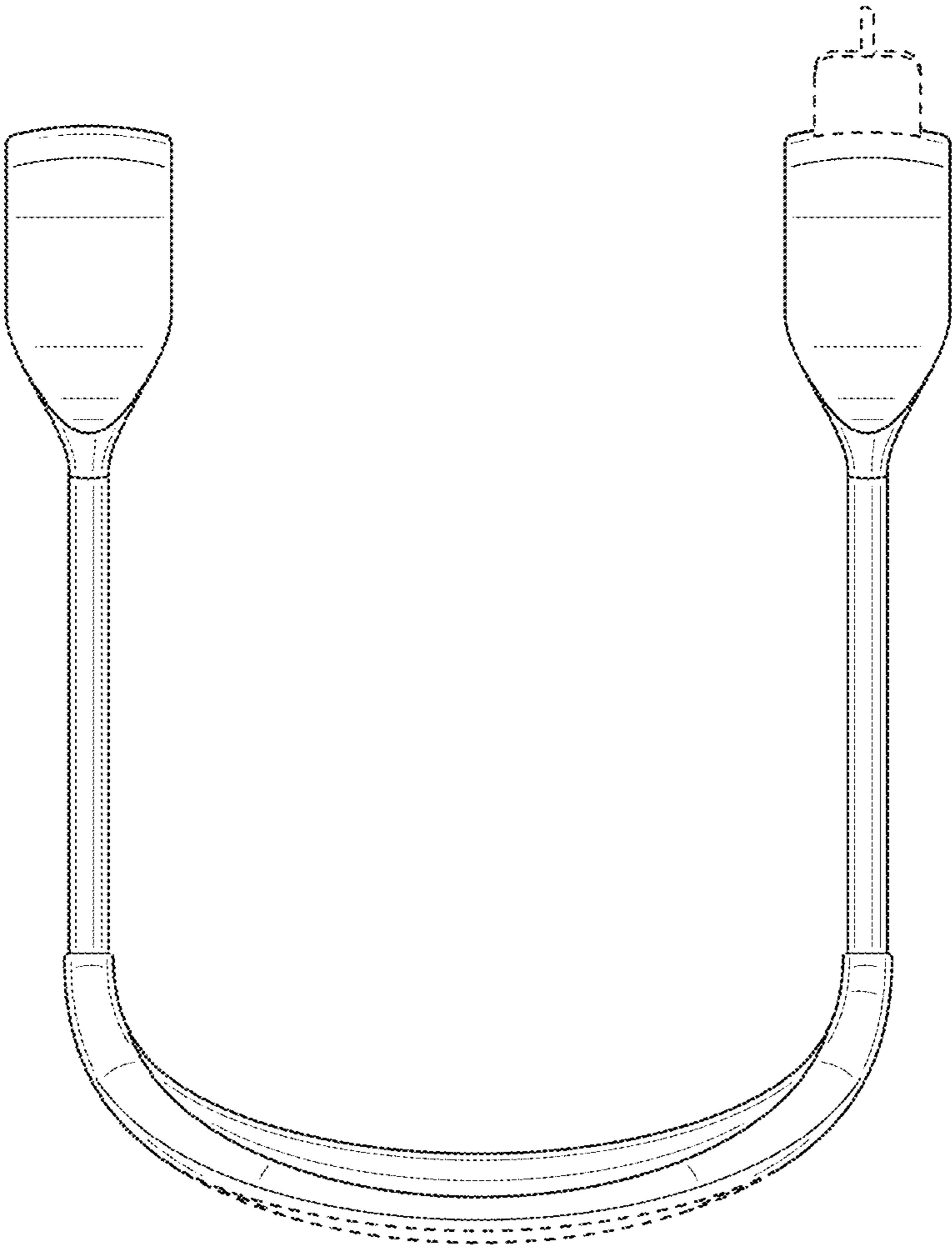


FIG. 7