



US00D752236S

(12) **United States Design Patent**
Guarraia et al.

(10) **Patent No.:** **US D752,236 S**
(45) **Date of Patent:** **** Mar. 22, 2016**

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

- (71) Applicant: **Neurohabilitation Corporation**,
Newtown, PA (US)
- (72) Inventors: **Mark Guarraia**, Cranston, RI (US);
Justin Fisk, Providence, RI (US);
Jeffrey Wallace, Saundertown, RI (US);
Aidan Petrie, Jamestown, RI (US)
- (73) Assignee: **Neurohabilitation Corporation**,
Newtown, PA (US)

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

(21) Appl. No.: **29/510,743**

(22) Filed: **Dec. 3, 2014**

(51) **LOC (10) Cl.** **24-02**

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

(58) **Field of Classification Search**
USPC D24/187, 200, 206, 209, 214, 186, 110,
D24/110.4, 110.5; 607/1, 2, 45-47, 115,
607/116, 134, 148; 433/6-7, 37; 128/848,
128/866; 606/32, 33, 41, 204
CPC . A61N 1/0548; A61N 1/0553; A61N 1/0529;
A61N 1/36103; A61N 1/36075; A61N 1/20;
A61N 1/32; A61N 1/36067; A61N 1/36082;
A61N 1/36121; A61N 2001/36039; A61N
1/36014; A61N 1/0456; A61N 1/40; A61N
1/05; A61N 1/0551; A61N 1/375; A61N
1/3756; A61N 1/3758; A61N 1/3787; A61B
2562/0209; A61B 5/682; A61B 5/686; A61B
5/0031; A61B 5/0215; A61B 5/6803; A61B
5/6814; G06F 3/015; A61F 5/566; A61M
2210/0643

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

(Continued)

OTHER PUBLICATIONS

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>>.*

(Continued)

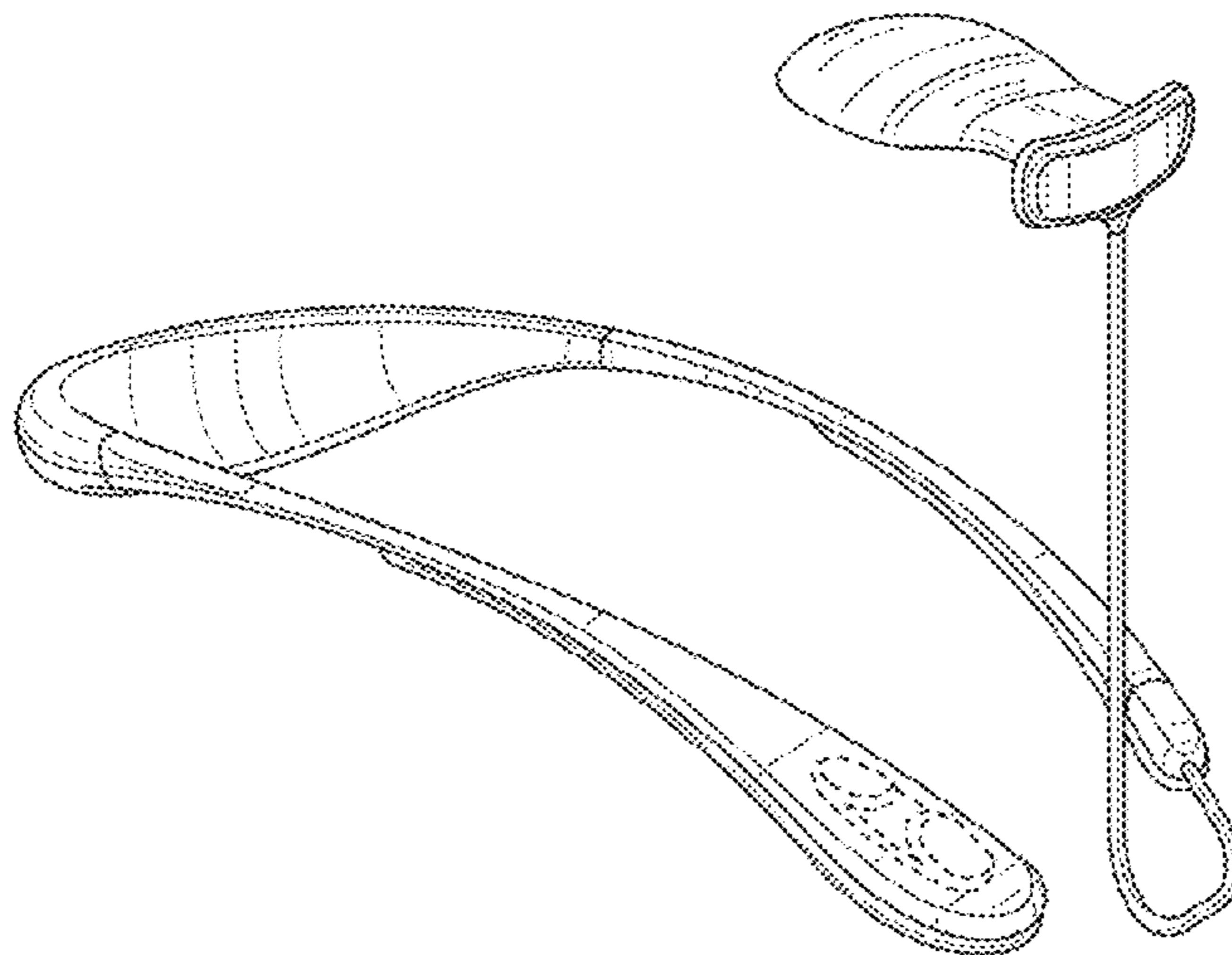
Primary Examiner — Catheri Oliver-Garcia
Assistant Examiner — Rebekah Caruso
 (74) *Attorney, Agent, or Firm* — Proskauer Rose LLP

(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, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

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 D14/206
 D449,883 S * 10/2001 McDonald D14/206
 D451,598 S * 12/2001 McDonald D14/206
 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 et al.
 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 D14/206
 D531,314 S 10/2006 Atkinson
 D542,408 S * 5/2007 Oldenburg D24/110.5
 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
 7,333,020 B2 * 2/2008 Cohen A61B 5/038
 340/573.1
 D565,184 S 3/2008 Royzen
 D575,268 S 8/2008 Christopher et al.
 D578,222 S 10/2008 Sakurai et al.
 D579,552 S 10/2008 Oldenburg
 7,483,747 B2 1/2009 Gliner et al.
 D593,067 S 5/2009 Millora et al.
 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 et al.
 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 et al.
 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 et al.
 D713,531 S 9/2014 Way
 8,849,407 B1 9/2014 Danilov et al.
 D716,759 S 11/2014 Ha et al.
 D721,673 S * 1/2015 Park D14/205

D723,510 S 3/2015 Ishikura
 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 et al.
 D739,122 S 9/2015 Aimone et al.
 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 et al.
 2008/0228239 A1 9/2008 Tyler et al.
 2008/0233541 A1 9/2008 DeVreese et al.
 2009/0048647 A1 2/2009 Tingey
 2009/0082831 A1 3/2009 Paul et al.
 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 A61H 39/04
 606/204
 2013/0096641 A1 4/2013 Strother
 2013/0273490 A1 * 10/2013 Way A61C 7/008
 433/6
 2014/0135868 A1 5/2014 Bashyam
 2014/0172041 A1 6/2014 Draghici
 2014/0194946 A1 7/2014 Thomas

OTHER PUBLICATIONS

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>.
 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.
 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.

* cited by examiner

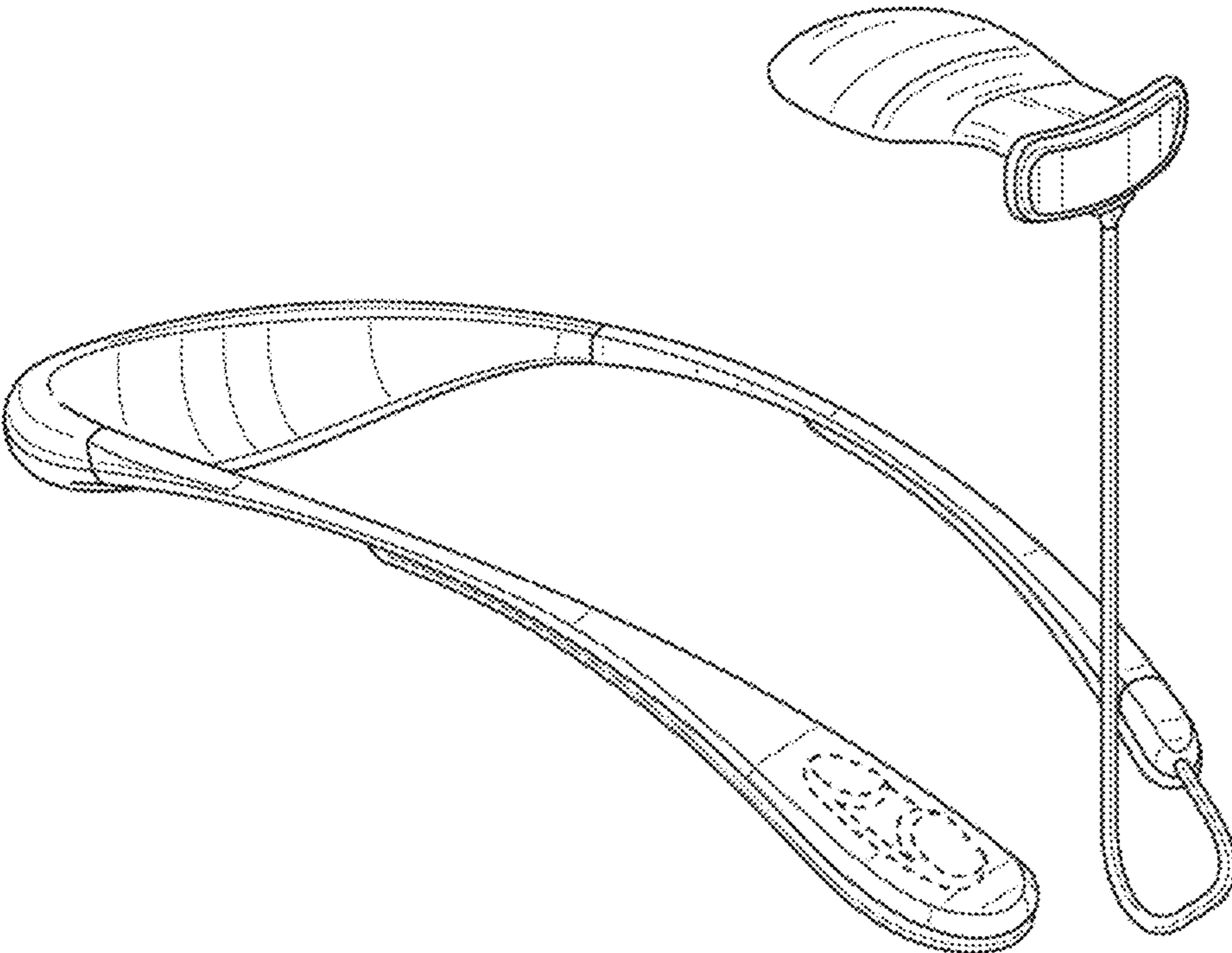


FIG. 1

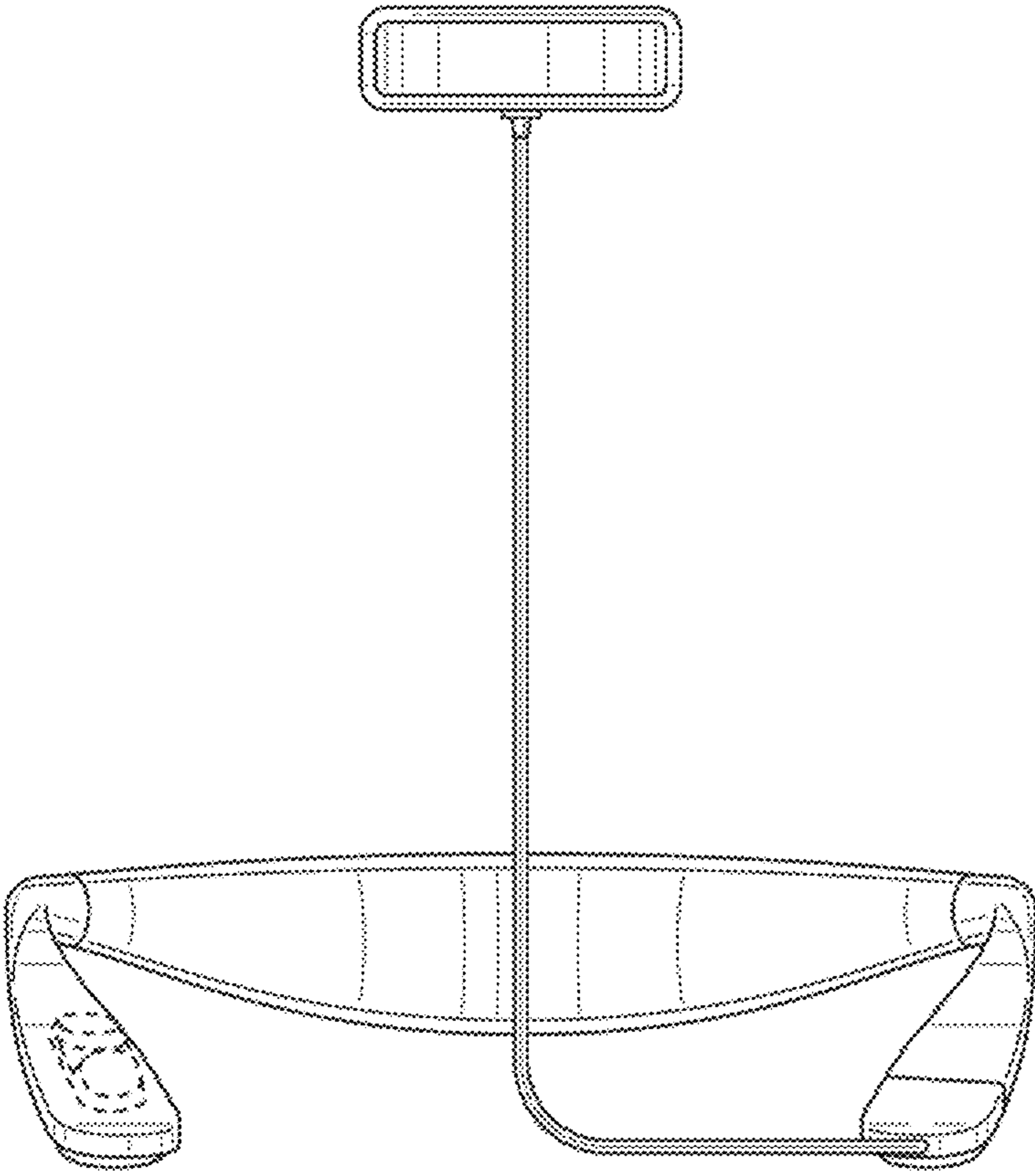


FIG. 2

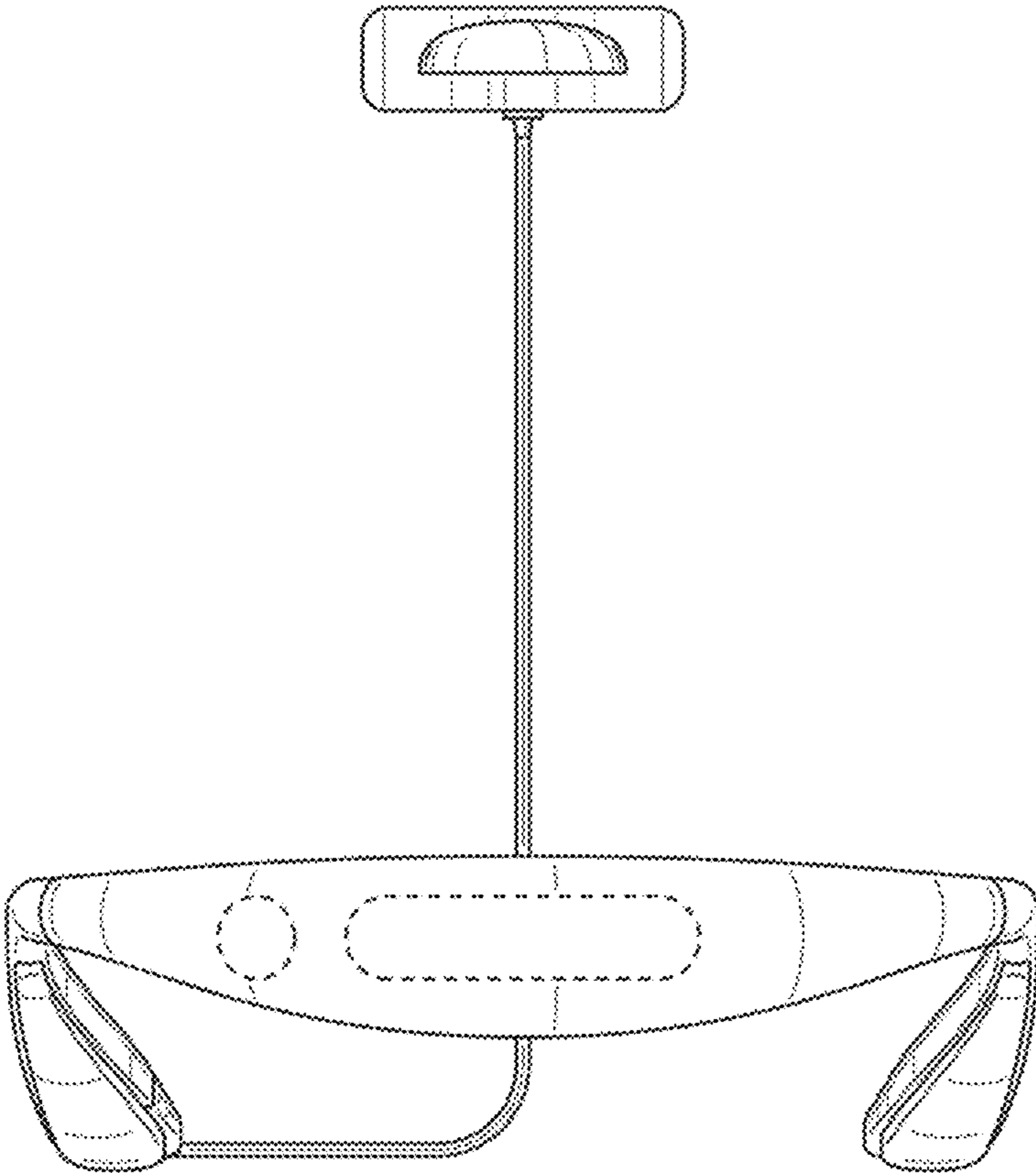


FIG. 3

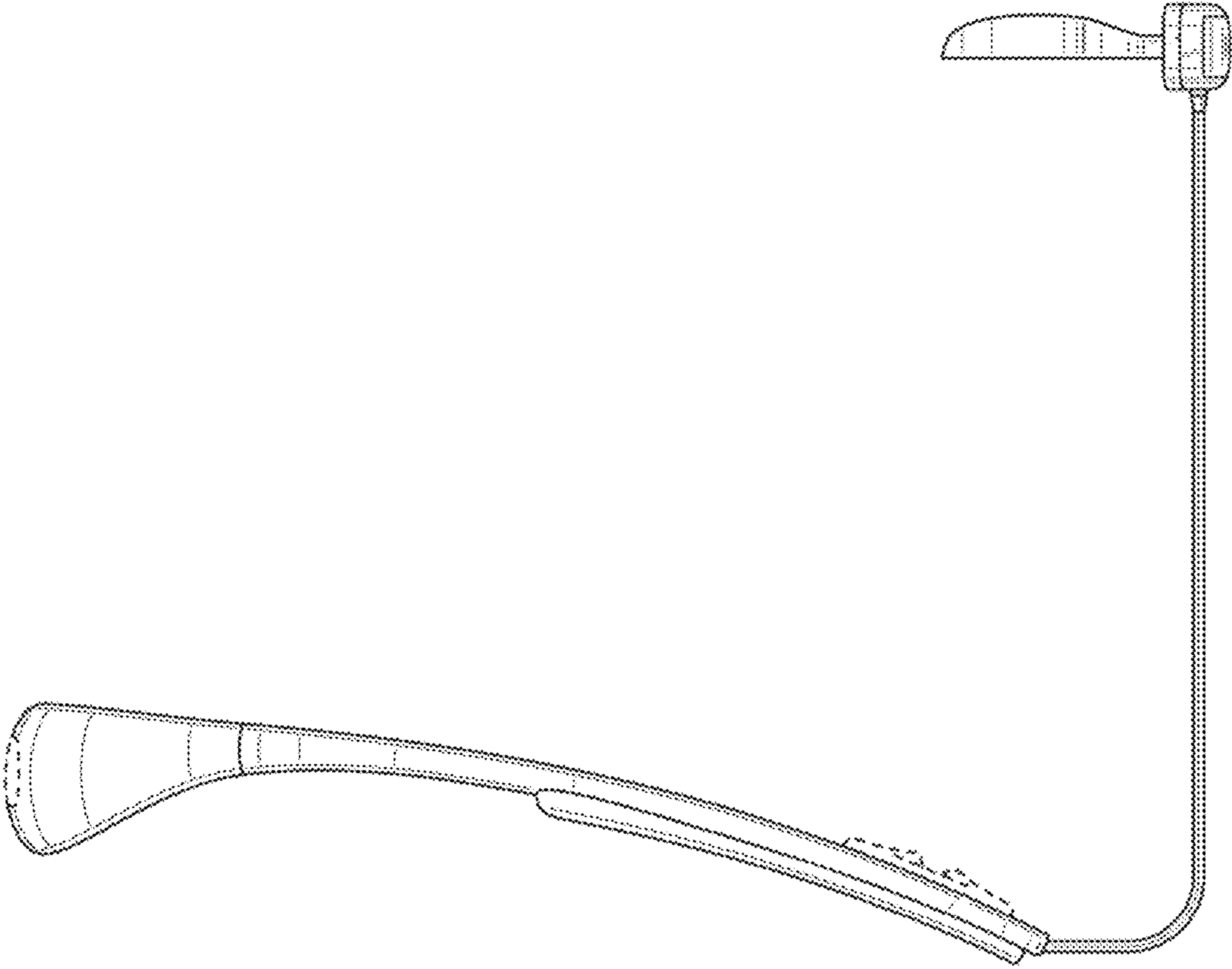


FIG. 4

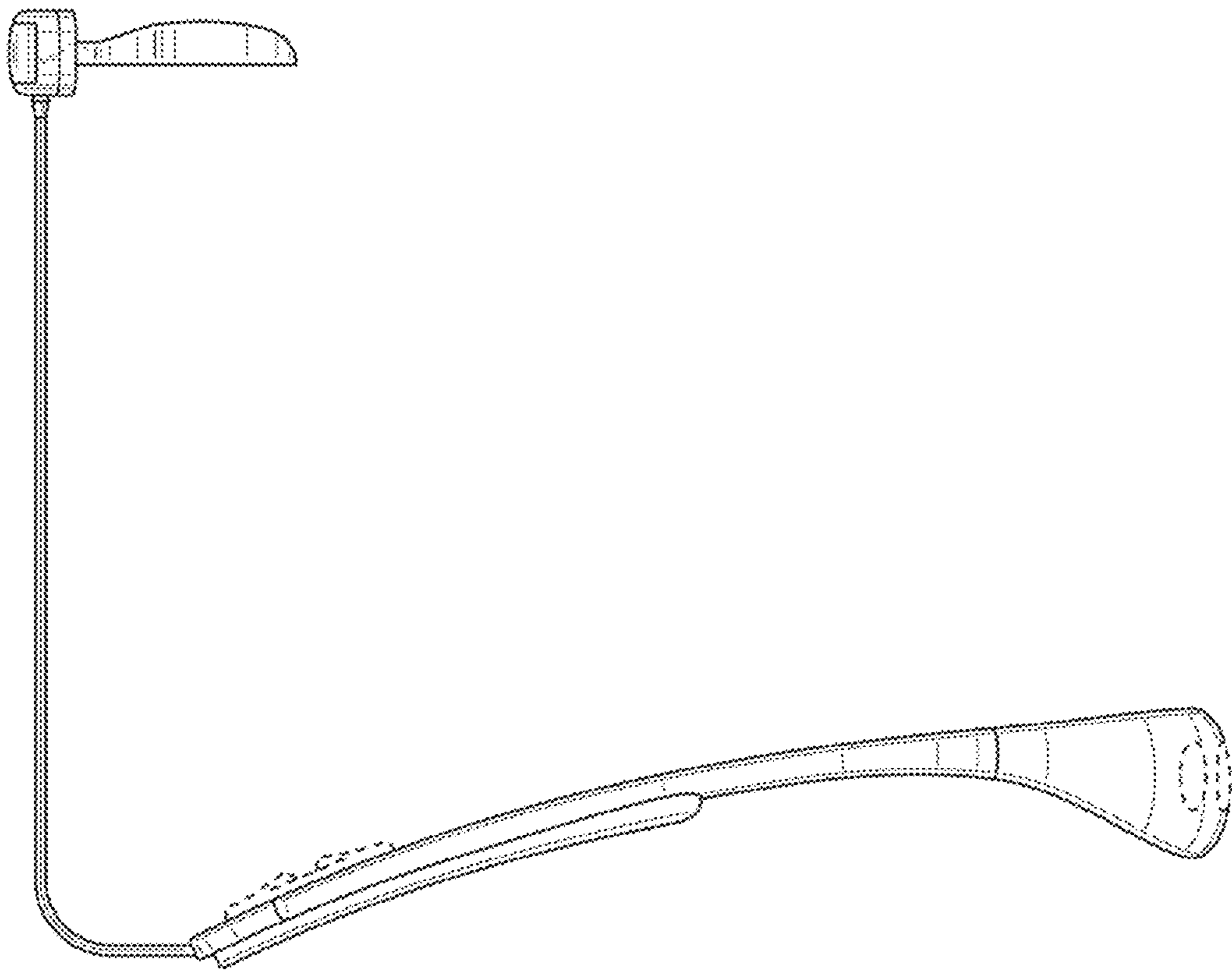


FIG. 5

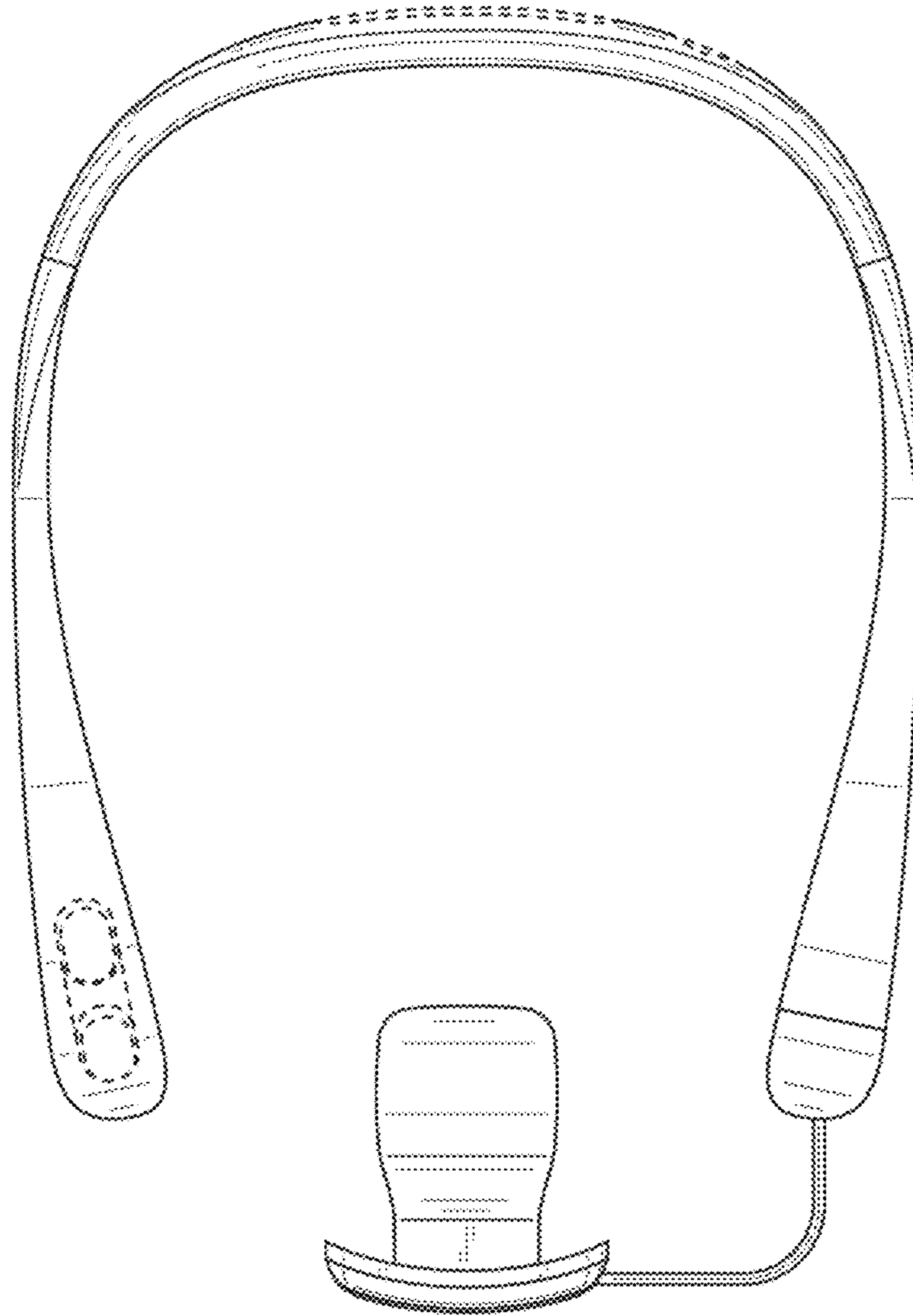


FIG. 6

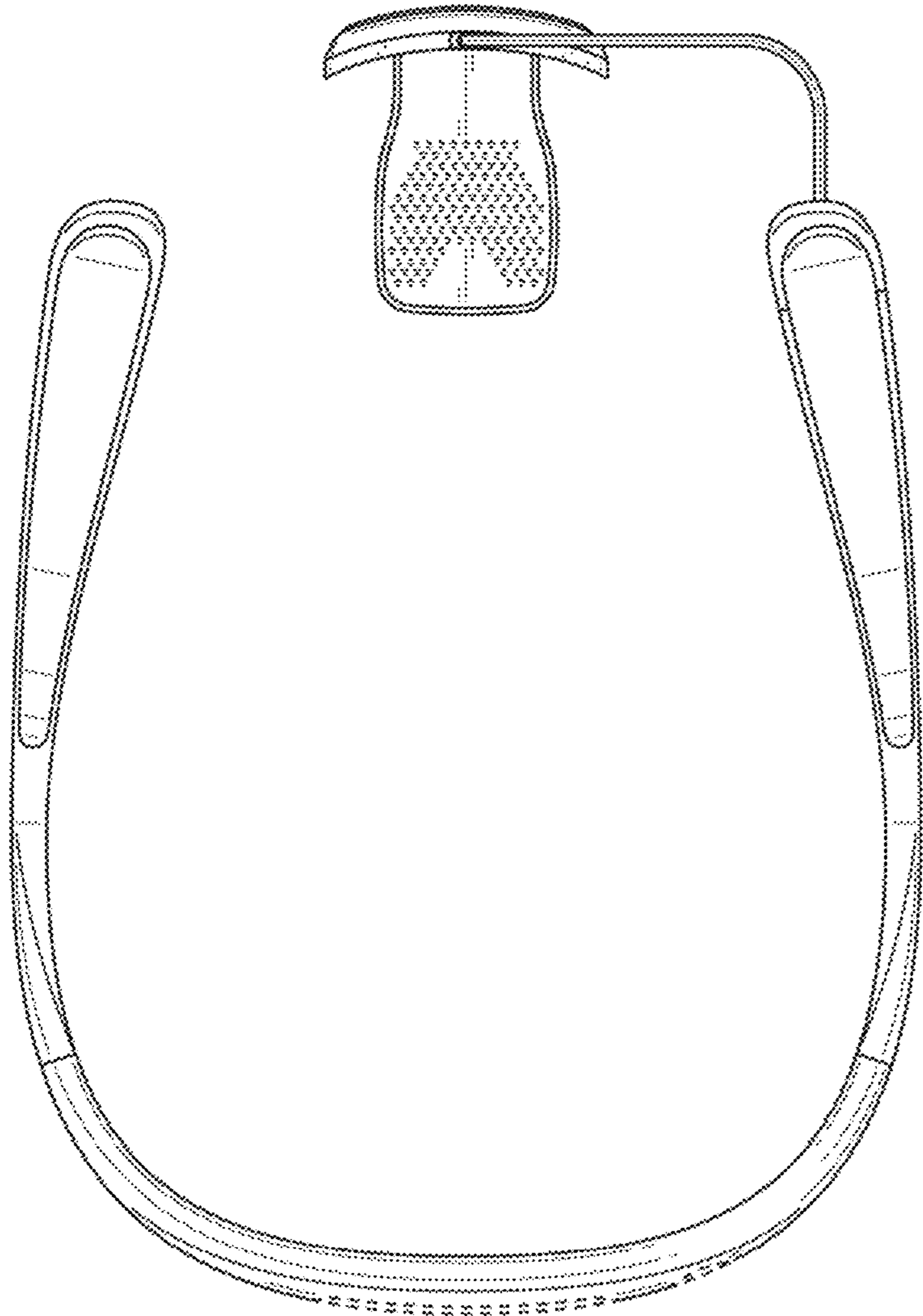


FIG. 7