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(12) **United States Design Patent** (10) **Patent No.:** **US D870,899 S**  
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(54) **CERVICAL COLLAR**

FOREIGN PATENT DOCUMENTS

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CN 1646071 A 7/2005  
CN 2933343 Y 8/2007  
(Continued)

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OTHER PUBLICATIONS

Partial International Search Report from PCT Application No. PCT/US2017/050206, dated Dec. 5, 2017.  
(Continued)

(\*\*) Term: **15 Years**

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(57) **CLAIM**

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The ornamental design for a cervical collar, as shown and described.

(51) **LOC (12) Cl.** ..... **24-04**

(52) **U.S. Cl.**  
USPC ..... **D24/191**

(58) **Field of Classification Search**  
USPC ..... D24/190, 191, 200, 206; D29/100,  
D29/101.2, 101.3  
CPC ..... A61F 5/055  
See application file for complete search history.

**DESCRIPTION**

FIG. 1 is a perspective view of a posterior component for a cervical collar.  
FIG. 2 is a front elevational view of the posterior component according to FIG. 1.  
FIG. 3 is a rear elevational view of the posterior component according to FIG. 1.  
FIG. 4 is a top plan view of the posterior component according to FIG. 1.  
FIG. 5 is a bottom plan view of the posterior component according to FIG. 1.  
FIG. 6 is a first side elevational view of the posterior component according to FIG. 1; and,  
FIG. 7 is a second side elevational view of the posterior component according to FIG. 1.  
The evenly dashed broken lines depict portions of the cervical collar and form no part of the claim. The dash dot lines depict a claim boundary and form no part of the claim.

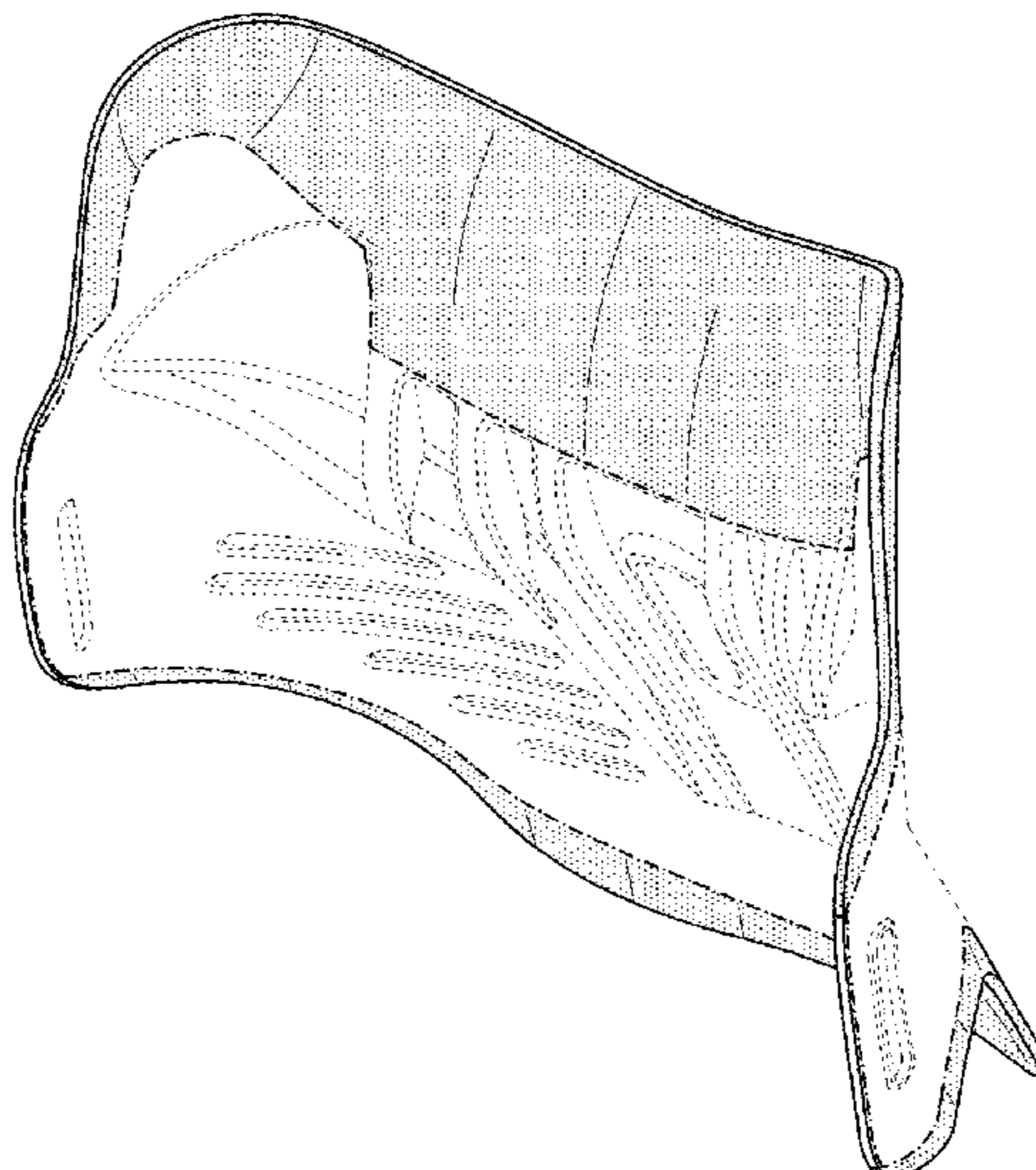
(56) **References Cited**

U.S. PATENT DOCUMENTS

2,088,207 A 7/1937 Kaiser  
2,102,069 A 12/1937 Hanicke  
2,735,424 A 2/1953 Benjamin  
2,791,999 A 5/1954 Bustamante  
2,801,630 A 8/1957 Moore  
2,806,471 A 11/1957 Breese  
2,818,063 A 12/1957 Smith et al.  
2,820,455 A 1/1958 Hall  
2,911,970 A 11/1959 Bartels  
D188,302 S 6/1960 Monfardini  
3,024,784 A 3/1962 Monfardini  
3,027,894 A 4/1962 Moore  
3,042,027 A 7/1962 Monfardini

(Continued)

**1 Claim, 7 Drawing Sheets**





(56)

References Cited

U.S. PATENT DOCUMENTS

7,981,068 B2 7/2011 Thorgilsdottir et al.  
 D643,978 S \* 8/2011 Abajo Alonso ..... D29/101.2  
 D644,331 S \* 8/2011 Sandhu ..... D24/191  
 D644,332 S \* 8/2011 Sandhu ..... D24/191  
 7,992,261 B2 8/2011 Hammerslag et al.  
 D647,623 S 10/2011 Thorgilsdottir et al.  
 D647,624 S \* 10/2011 Thorgilsdottir ..... D24/191  
 8,038,635 B2 10/2011 Dellanno  
 8,038,636 B2 10/2011 Thorgilsdottir et al.  
 D659,842 S \* 5/2012 Donaldson ..... D24/191  
 D662,597 S \* 6/2012 Chang ..... D24/191  
 8,216,167 B2 7/2012 Garth et al.  
 D666,302 S 8/2012 Joseph  
 8,257,292 B2 9/2012 Linares  
 8,545,423 B2 8/2013 Patron  
 D692,568 S \* 10/2013 Chiang ..... D24/191  
 D693,014 S \* 11/2013 Chiang ..... D24/191  
 8,679,044 B2 3/2014 Thorgilsdottir et al.  
 8,932,243 B2 1/2015 Calabrese  
 9,132,027 B2 9/2015 Calco  
 D767,825 S \* 9/2016 Georgeson ..... D29/101.2  
 9,713,546 B2 7/2017 Thorsteinsdottir et al.  
 2002/0138028 A1 9/2002 Rudy, Jr. et al.  
 2002/0156408 A1 10/2002 Cheatham  
 2002/0156409 A1 10/2002 Lee et al.  
 2002/0169401 A1 11/2002 Walpin  
 2002/0173737 A1 11/2002 Miyaji et al.  
 2003/0055367 A1 3/2003 Dominguez  
 2003/0060744 A1 3/2003 Caille et al.  
 2003/0181838 A1 9/2003 Garth  
 2004/0039318 A1 2/2004 Santelli, Jr.  
 2005/0101896 A1 5/2005 Calabrese  
 2007/0027418 A1 2/2007 Calco et al.  
 2007/0073203 A1 3/2007 Moenning et al.  
 2007/0270728 A1 11/2007 Chao  
 2009/0247918 A1 10/2009 Patron  
 2010/0137768 A1 6/2010 Thorgilsdottir et al.  
 2010/0268139 A1 10/2010 Garth  
 2010/0298748 A1 11/2010 Rosenfeld et al.  
 2011/0066094 A1 3/2011 Thorgilsdottir et al.  
 2011/0224591 A1 9/2011 Thorgilsdottir et al.  
 2012/0053499 A1 3/2012 Donaldson et al.  
 2012/0130295 A1 5/2012 Haider  
 2012/0165712 A1 6/2012 Calabrese  
 2013/0060179 A1 3/2013 Modglin  
 2013/0281899 A1 10/2013 Suarez et al.  
 2013/0281900 A1 10/2013 Suarez et al.  
 2013/0310722 A1 11/2013 Thorsteinsdottir et al.  
 2014/0012172 A1 1/2014 Calco  
 2014/0107551 A1 4/2014 Modglin  
 2014/0323938 A1 10/2014 Suarez et al.  
 2015/0216708 A1 8/2015 Garth et al.  
 2016/0287424 A1 10/2016 Webster et al.  
 2017/0246022 A1 8/2017 Calco et al.  
 2018/0078400 A1 3/2018 Hsu et al.  
 2018/0078401 A1 3/2018 Hsu et al.

FOREIGN PATENT DOCUMENTS

CN 201150587 Y 11/2008  
 CN 201602923 U 10/2010  
 CN 102227196 A 10/2011  
 CN 202015274 U 10/2011  
 DE 19547115 A1 6/1997

DE 19849302 A1 4/2000  
 DE 10057286 A1 5/2002  
 EP 1738724 A1 1/2007  
 EP 2653139 A1 10/2013  
 EP 2886088 A1 6/2015  
 FR 2814362 A1 3/2002  
 GB 2165157 A 4/1986  
 GB 2453996 A 4/2009  
 JP 2007-330808 A 12/2007  
 WO 94/09728 A1 5/1994  
 WO 95/22304 A1 8/1995  
 WO 96/40018 A1 12/1996  
 WO 9843568 A1 10/1998  
 WO 2014102340 A1 7/2014

OTHER PUBLICATIONS

Levangie et al., "Joint Structure and Function: A Comprehensive Analysis", Fourth Edition, Chapter 4: The Vertebral Column, 2005 F.A. Davis Company, Philadelphia, PA, pp. 161-164.  
 Hsu et al., AAOS Atlas of Orthoses and Assistive Devices, Mosby, Elsevier Fourth Edition, 2008, Philadelphia, PA, p. 117-122.  
 Product Information Sheet, Philadelphia Tracheotomy Collar, obtained from www.ossur.com, prior to Aug. 6, 2010, 1 page.  
 Product Information Sheet, Platazote Sheets, WBC Industries, obtained from www.wbcindustries.com prior to Aug. 6, 2010, 2 pages.  
 "Range-of-Motion Restriction and Craniofacial Tissue-Interface Pressure From Four Cervical Collars", The Journal of Trauma Injury, Infection, and Critical Care, vol. 63, No. 5, Nov. 2007, pp. 1120-1126.  
 "Ossur Is Immobilization", www.ossur.com, 2008, pp. 1-16.  
 "Miami J Patient Care Handbook", www.ossur.com, 2010, pp. 1-16.  
 Jacobson et al. "Improving Practice Efforts to Reduce Occipital Pressure Ulcers", Journal of Nursing Care Quality, vol. 23, No. 3, 2008, pp. 283-288.  
 Bell et al. "Assessing Range of Motion to Evaluate the Adverse Effects of Ill-Fitting Cervical Orthoses", The Spine Journal, vol. 9, 2009, pp. 225-231.  
 Karason et al. "Evaluation of Clinical Efficacy and Safety of Cervical Trauma Collars: Differences in Immobilization, Effect on Jugular Venous Pressure and Patient Comfort", Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine, 2014, pp. 1-7.  
 Product Brochure, "Capital Collar Enhanced", DeRoyal, 2014, 2 Pages.  
 Product Brochure, "Miami J Advanced by OSSUR", www.ossur.com, 2012, 4 Pages.  
 Product Brochure, "Miami J Cervical Collar", www.ossur.com, 1 Page.  
 Product Brochure, "Proglide Cervical Collar", OPTEC, www.optecusa.com, 1 Page.  
 Product Brochure, "Vista Upper Spine", Aspen Medical Products, 2015, 6 Pages.  
 Product Brochure, "Instructions for Use Eclipse Cervical Collar", VQ OrthoCare, 2015, 2 Pages.

\* cited by examiner

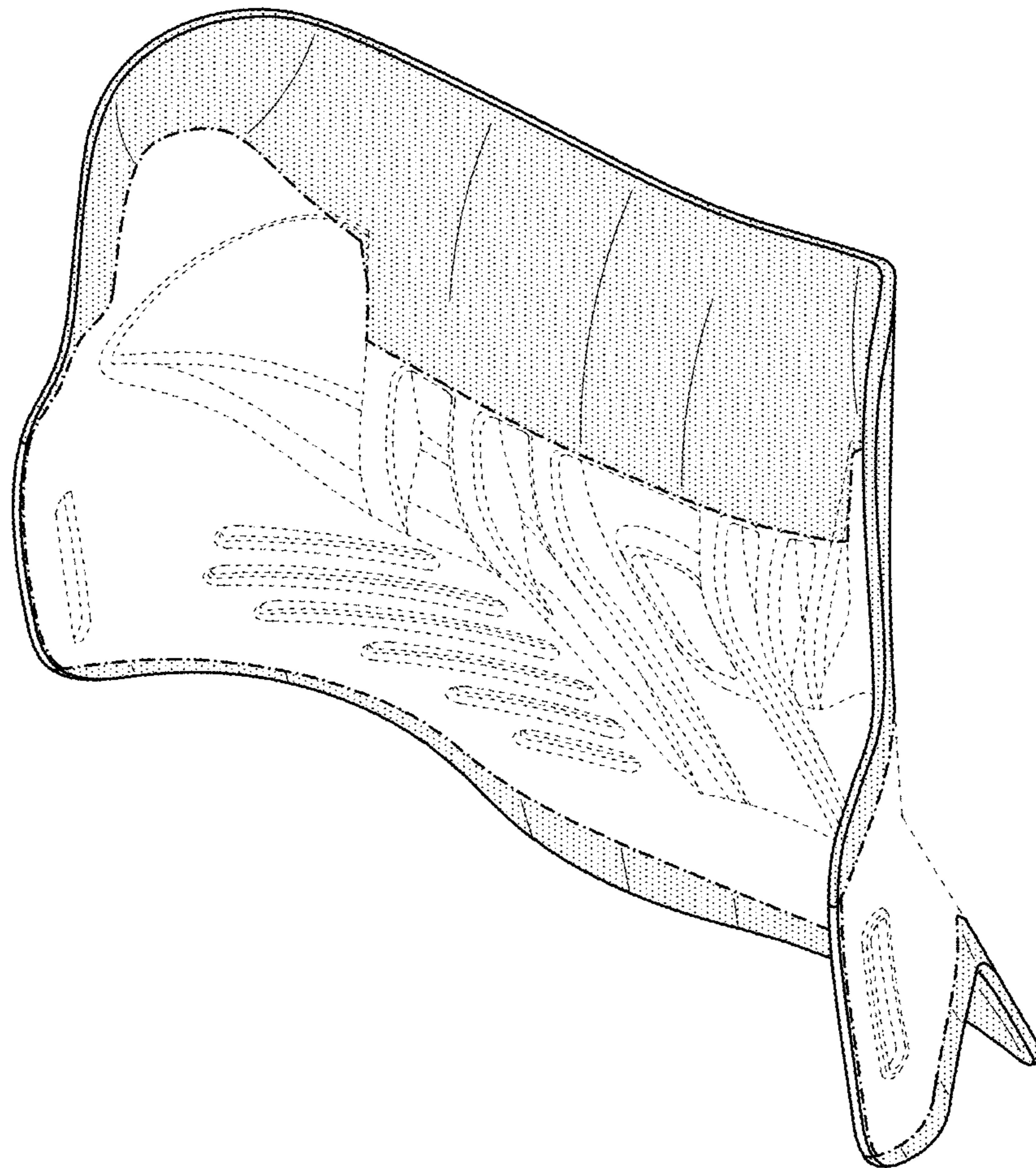


FIG. 1

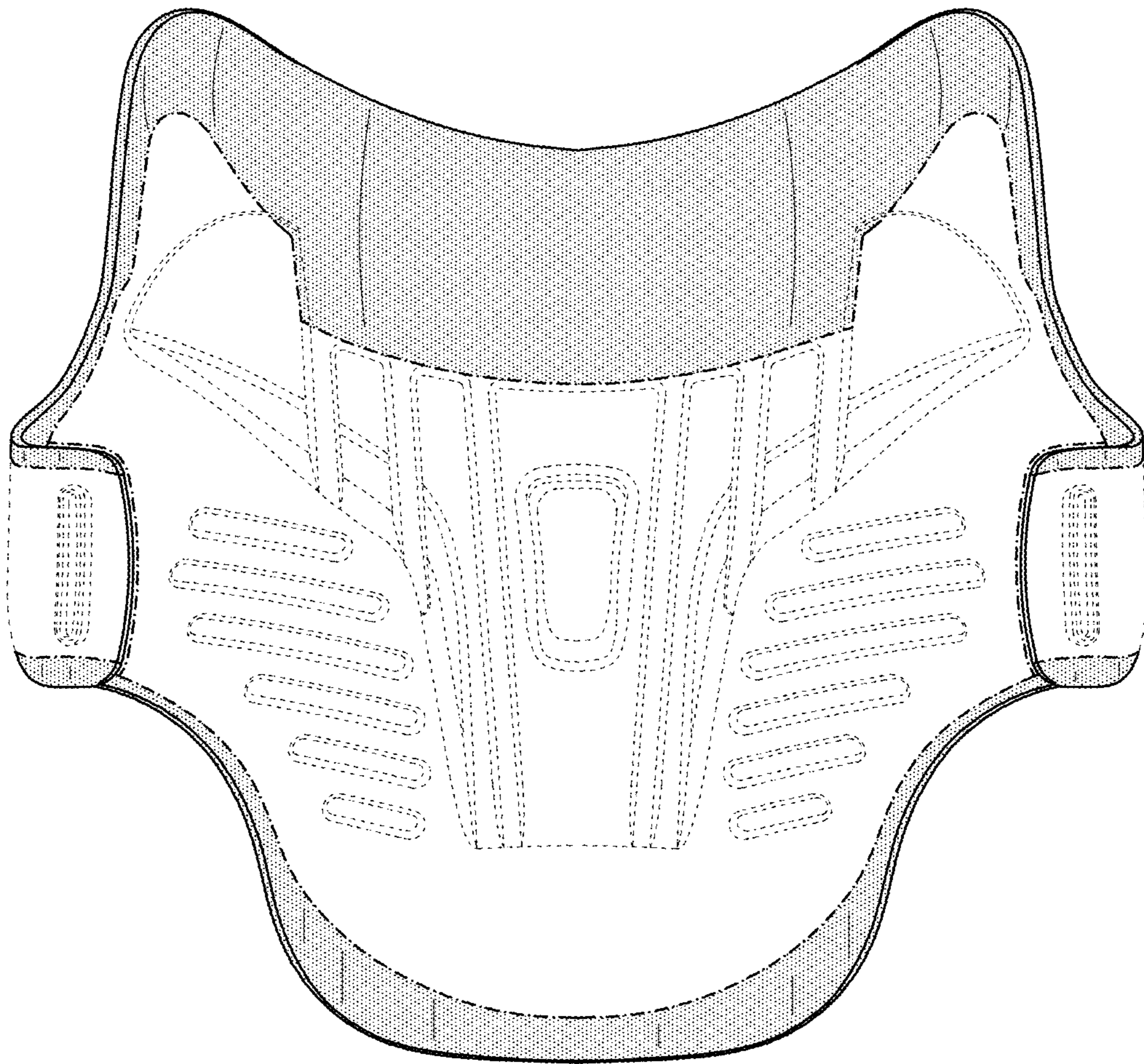


FIG. 2

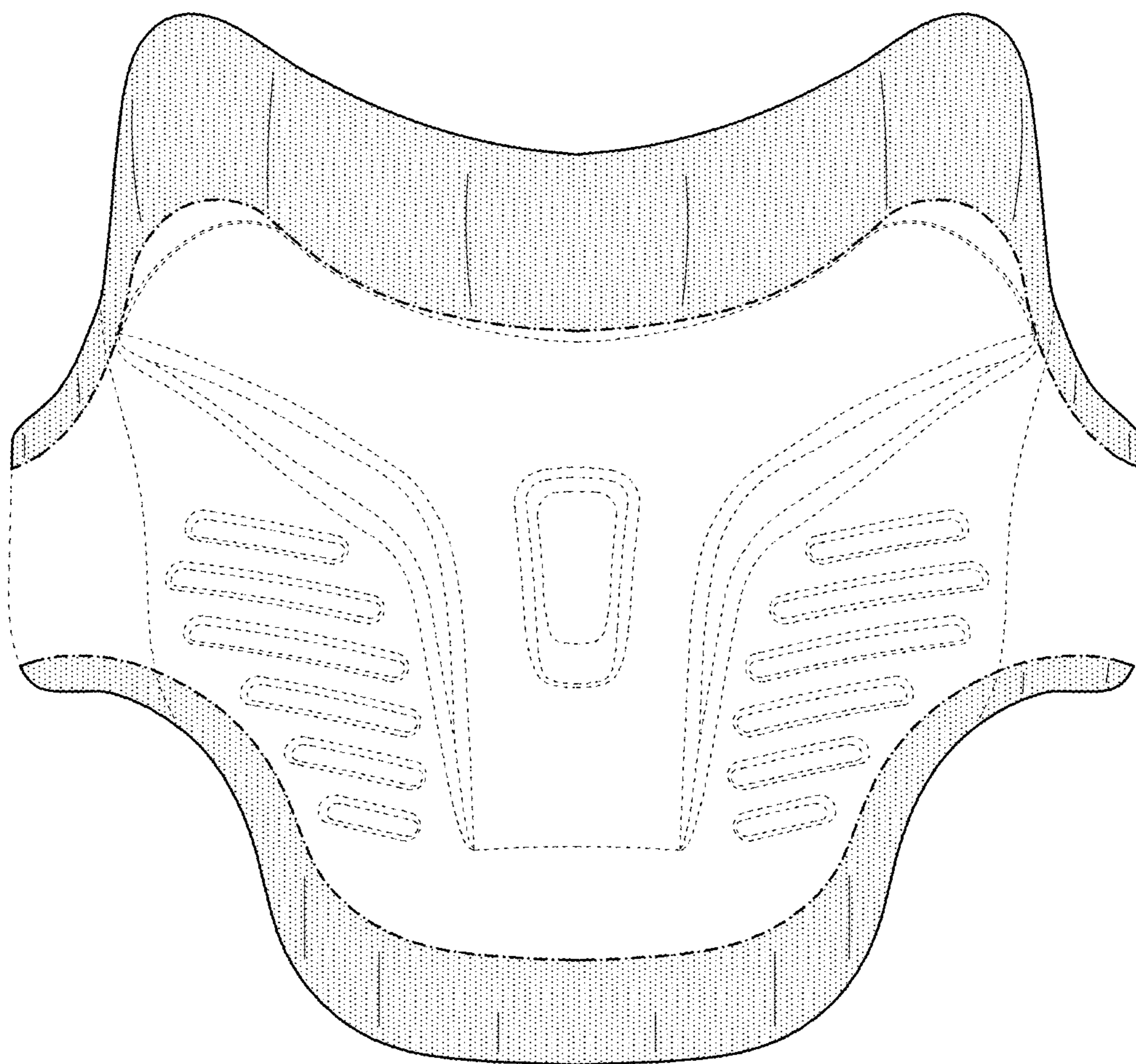


FIG. 3

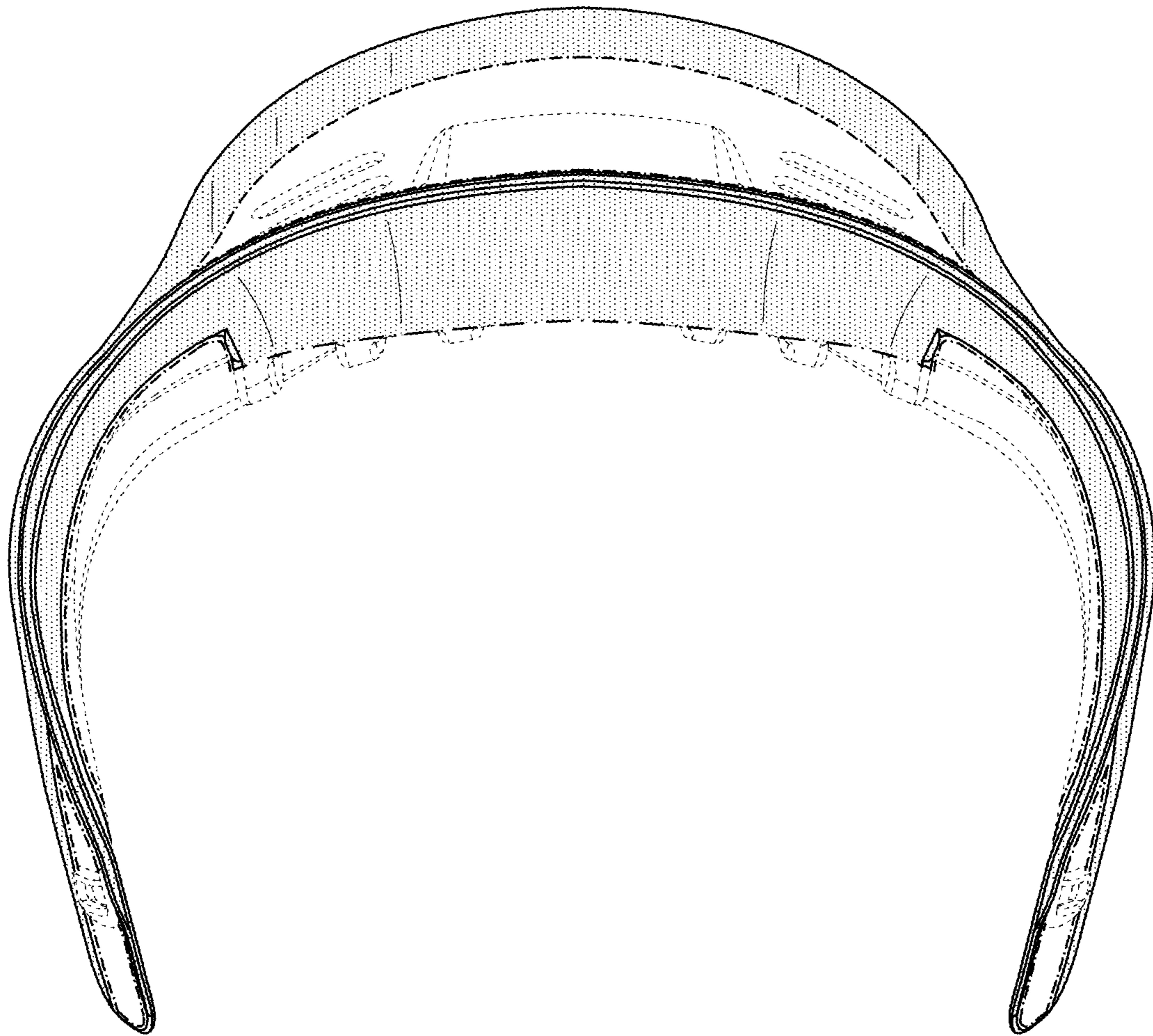


FIG. 4

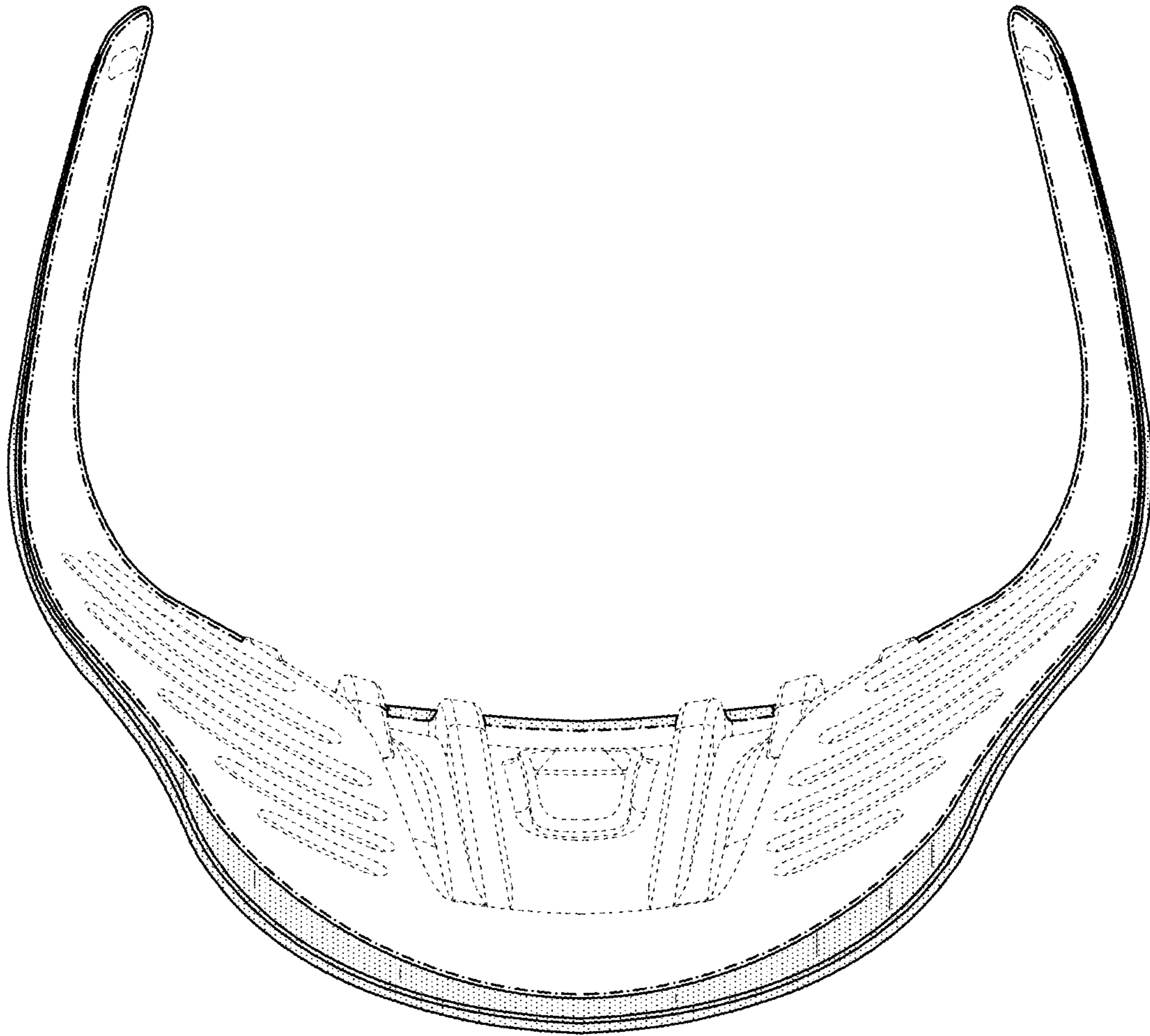


FIG. 5



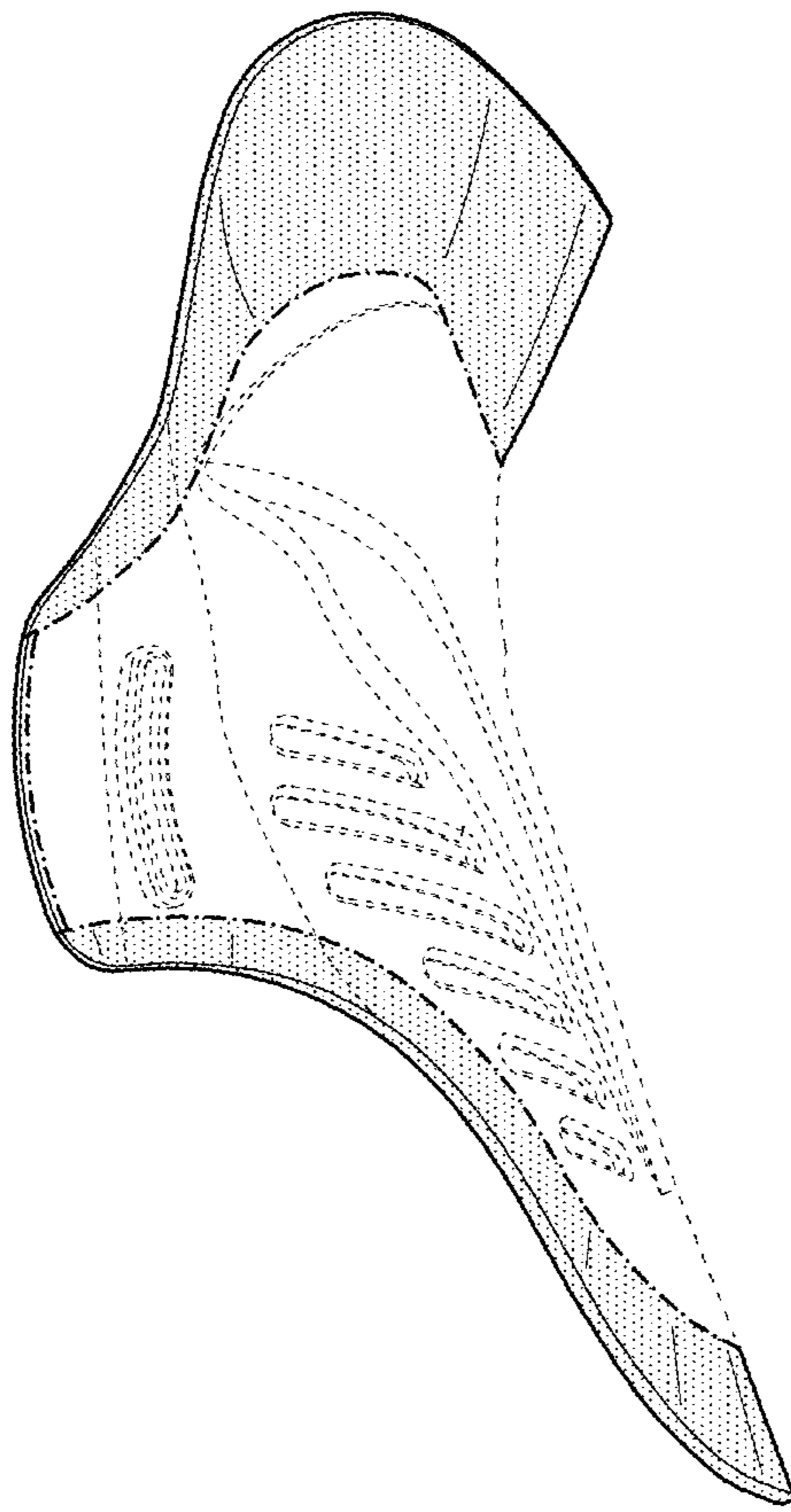


FIG. 6

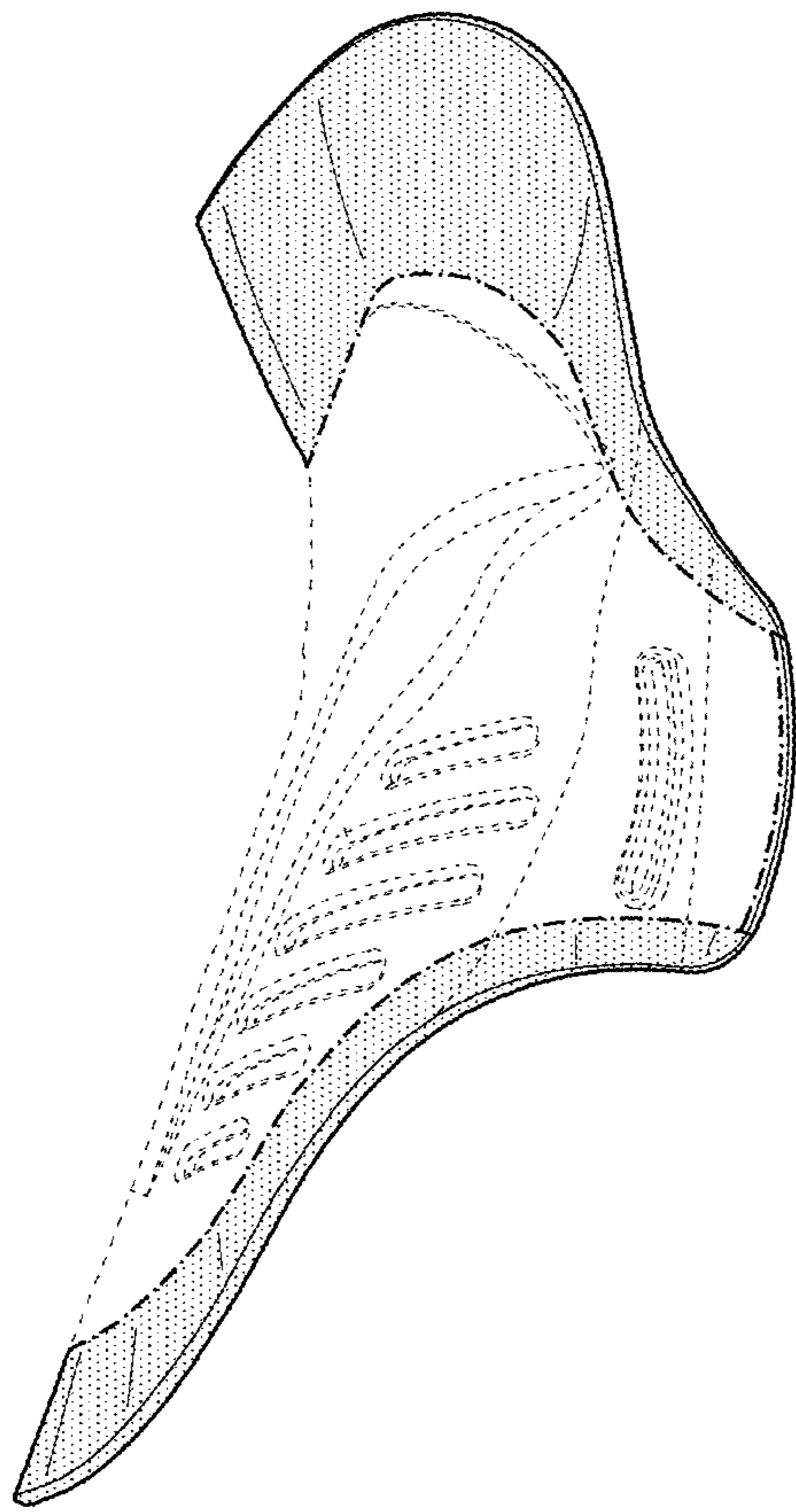


FIG. 7