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(12) **United States Design Patent** (10) **Patent No.:** **US D834,179 S**
Smith et al. (45) **Date of Patent:** **** Nov. 20, 2018**

(54) **HEADGEAR CONNECTOR FOR PATIENT INTERFACE**

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(57) **CLAIM**

The ornamental design for a headgear connector for patient interface, as shown and described.

(73) Assignee: **ResMed Limited**, Bella Vista (AU)

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

DESCRIPTION

(21) Appl. No.: **29/612,579**

(22) Filed: **Aug. 2, 2017**

Related U.S. Application Data

(60) Continuation of application No. 29/593,197, filed on Feb. 7, 2017, now Pat. No. Des. 797,277, which is a (Continued)

(51) **LOC (11) Cl.** **29-02**

(52) **U.S. Cl.**
USPC **D24/110.1**

(58) **Field of Classification Search**
USPC D24/110–110.5, 127–129; D29/108, 122
CPC A61M 16/0622; A61M 16/0616; A61M 16/0633; A61M 16/06; A61M 16/0683; A61M 16/0605; A61M 16/0644
See application file for complete search history.

FIG. 1 is a perspective view of a headgear connector for patient interface showing the first embodiment in a position of use, according to our new design;
FIG. 2 is an enlarged perspective view thereof in isolation;
FIG. 3 is a front view thereof;
FIG. 4 is a rear view thereof;
FIG. 5 is a top view thereof;
FIG. 6 is a bottom view thereof;
FIG. 7 is a right side view thereof;
FIG. 8 is a left side view thereof;
FIG. 9 is a perspective view of a headgear connector for patient interface showing the second embodiment in a position of use according to our new design;
FIG. 10 is an enlarged perspective view thereof in isolation;
FIG. 11 is a front view thereof;
FIG. 12 is a rear view thereof;
FIG. 13 is a top view thereof;
FIG. 14 is a bottom view thereof;
FIG. 15 is a right side view thereof; and,
FIG. 16 is a left side view thereof.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,394,568 A 3/1995 Brostrom
D383,204 S 9/1997 Lomas
(Continued)

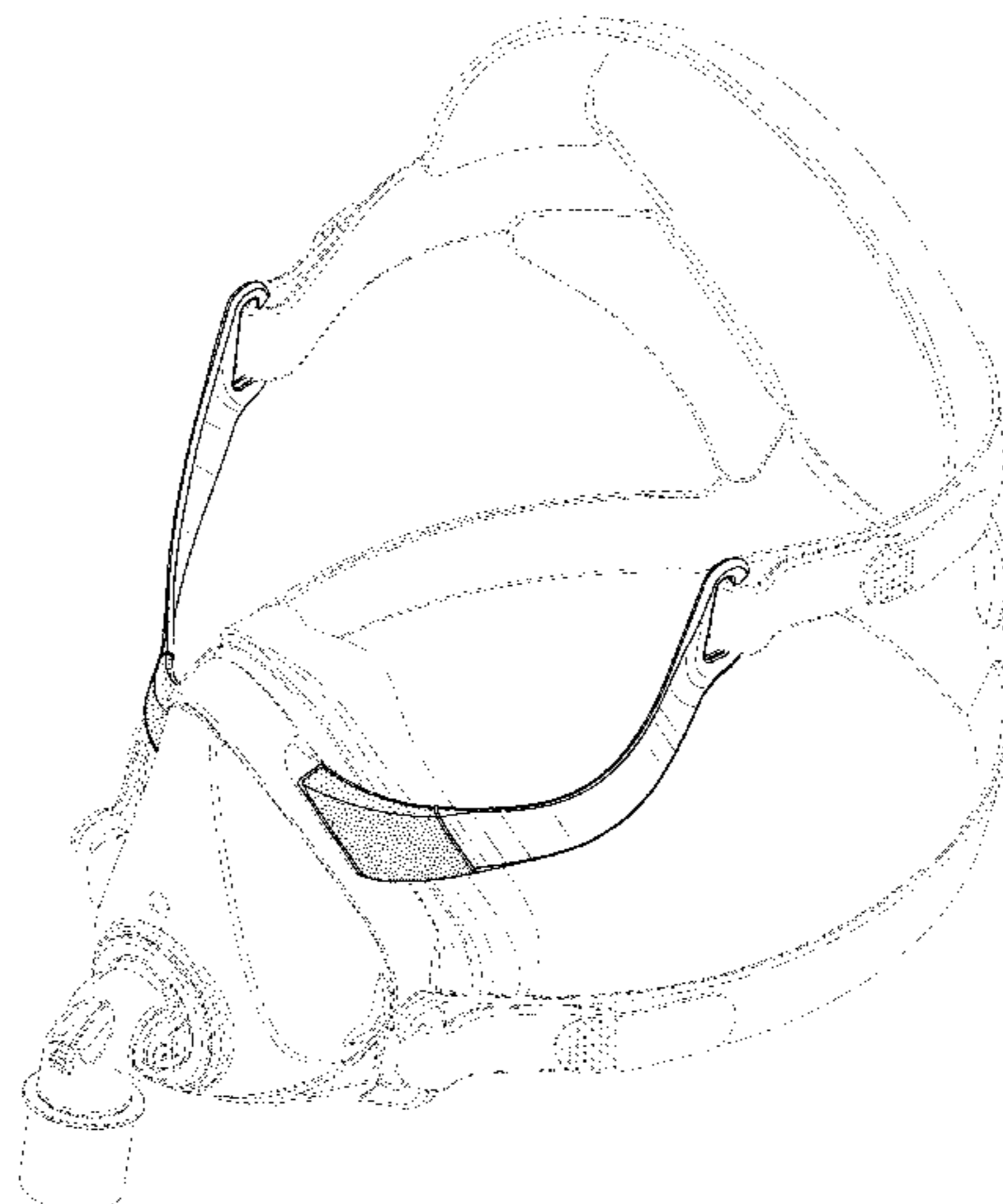
The broken line showing of the patient interface in FIGS. 1 and 9 depicts the environment of the claimed design and forms no part thereof. All other broken lines depict portions of the headgear connector that form no part of the claimed design.

OTHER PUBLICATIONS

Line shading and stippling have been used in the drawings to indicate a contrast in appearance.

Blanch et al., U.S. Appl. No. 29/593,197, filed Feb. 7, 2017, entitled "Headgear for Patient Interface," (parent application).

1 Claim, 14 Drawing Sheets



Related U.S. Application Data

continuation of application No. 29/565,104, filed on May 18, 2016, now Pat. No. Des. 782,655, which is a division of application No. 29/480,985, filed on Jan. 31, 2014, now Pat. No. Des. 760,379.

(56)

References Cited

U.S. PATENT DOCUMENTS

6,422,238 B1 7/2002 Lithgow
 6,679,261 B2 1/2004 Lithgow
 D496,726 S 9/2004 Amarasinghe
 D532,511 S 11/2006 Amarasinghe
 D532,512 S 11/2006 Amarasinghe
 7,188,620 B2 3/2007 Amarasinghe
 D540,940 S 4/2007 Amarasinghe
 D559,976 S 1/2008 Amarasinghe
 D561,332 S 2/2008 Amarasinghe
 D561,892 S 2/2008 Amarasinghe
 D623,288 S * 9/2010 Lubke D24/110.1
 7,802,573 B2 9/2010 Amarasinghe
 D635,247 S * 3/2011 Scheiner D24/110.1
 D639,420 S * 6/2011 D'Souza D24/110.1
 D652,504 S 1/2012 Amarasinghe
 D652,912 S 1/2012 Amarasinghe
 D652,914 S * 1/2012 D'Souza D24/110.1
 D663,413 S 7/2012 Amarasinghe
 8,336,547 B1 12/2012 Ritchie
 D679,799 S 4/2013 D'Souza
 D681,192 S * 4/2013 D'Souza D24/110.1
 8,517,023 B2 8/2013 Henry
 D693,459 S 11/2013 Prentice
 D694,875 S 12/2013 D'Souza
 D695,887 S 12/2013 Ozolins
 D703,312 S * 4/2014 Lubke D24/110.1
 D704,826 S 5/2014 Amarasinghe
 D707,349 S 6/2014 D'Souza
 D716,440 S * 10/2014 D'Souza D24/110.1
 8,856,975 B2 10/2014 Lang
 D717,942 S * 11/2014 Neff D24/110.1
 D740,934 S 10/2015 Formica
 D740,935 S * 10/2015 Cullen D24/110.1
 D747,794 S * 1/2016 Greenberg D24/110.1
 D751,188 S 3/2016 Skipper et al.
 D760,379 S 6/2016 Smith et al.
 D764,049 S 8/2016 Cullen
 D767,755 S * 9/2016 D'Souza D24/110.4

D769,440 S 10/2016 Amarasinghe
 D770,036 S * 10/2016 Walls D24/110.4
 D782,030 S 3/2017 Prentice
 D782,655 S 3/2017 Blanch
 9,597,474 B2 * 3/2017 Jablonski A61M 16/06
 D784,515 S 4/2017 Prentice
 D794,772 S * 8/2017 Cullen D24/110.4
 D797,277 S * 9/2017 Blanch D24/110
 D797,921 S * 9/2017 Huang D24/110.4
 9,764,106 B2 * 9/2017 Chodkowski A61M 16/0622
 9,775,961 B2 * 10/2017 Zeijlstra A61M 16/0644
 2002/0108613 A1 8/2002 Gunaratnam
 2004/0065328 A1 4/2004 Amarasinghe
 2004/0112377 A1 6/2004 Amarasinghe
 2007/0235033 A1 10/2007 Reier
 2008/0110466 A1 5/2008 Armitstead
 2009/0178680 A1 7/2009 Chang
 2009/0250065 A1 10/2009 Omura
 2010/0319700 A1 12/2010 Ng
 2011/0197341 A1 8/2011 Formica
 2012/0138063 A1 6/2012 Eves
 2012/0204881 A1 8/2012 Davidson
 2013/0008449 A1 * 1/2013 Busch A61M 16/0683
 128/206.21
 2013/0186403 A1 * 7/2013 Chang A61M 16/0666
 128/205.25
 2014/0166018 A1 * 6/2014 Dravitzki A61M 16/06
 128/207.13
 2014/0190486 A1 7/2014 Dunn
 2014/0261422 A1 9/2014 Lang
 2015/0000671 A1 1/2015 Frerichs et al.
 2015/0128945 A1 5/2015 Nickol
 2015/0151069 A1 * 6/2015 Zeijlstra A61M 16/06
 128/205.25
 2015/0174356 A1 * 6/2015 Zeijlstra A61M 16/06
 128/205.25
 2016/0051784 A1 * 2/2016 Eury A61M 16/0666
 128/207.18
 2016/0144144 A1 5/2016 Smith et al.
 2016/0175552 A1 6/2016 Harrington et al.
 2016/0220781 A1 8/2016 Arrowsmith
 2016/0250434 A1 9/2016 Asvadi
 2016/0256660 A1 9/2016 Austin
 2016/0325067 A1 11/2016 Harwood
 2016/0354572 A1 12/2016 Lim
 2017/0065786 A1 3/2017 Stephenson
 2017/0087322 A1 3/2017 Lang
 2017/0368285 A1 * 12/2017 Wood A61M 16/0605

* cited by examiner

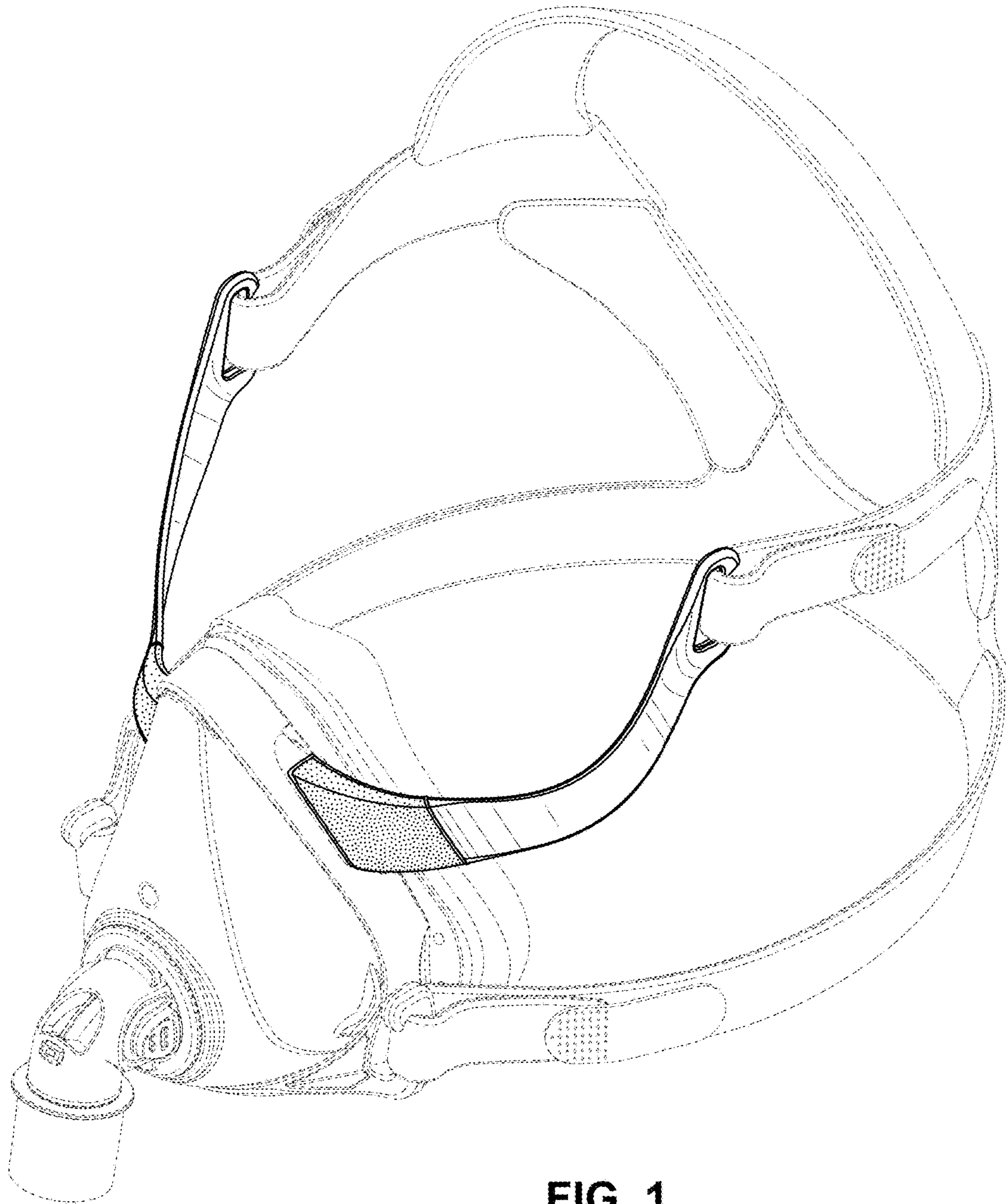


FIG. 1

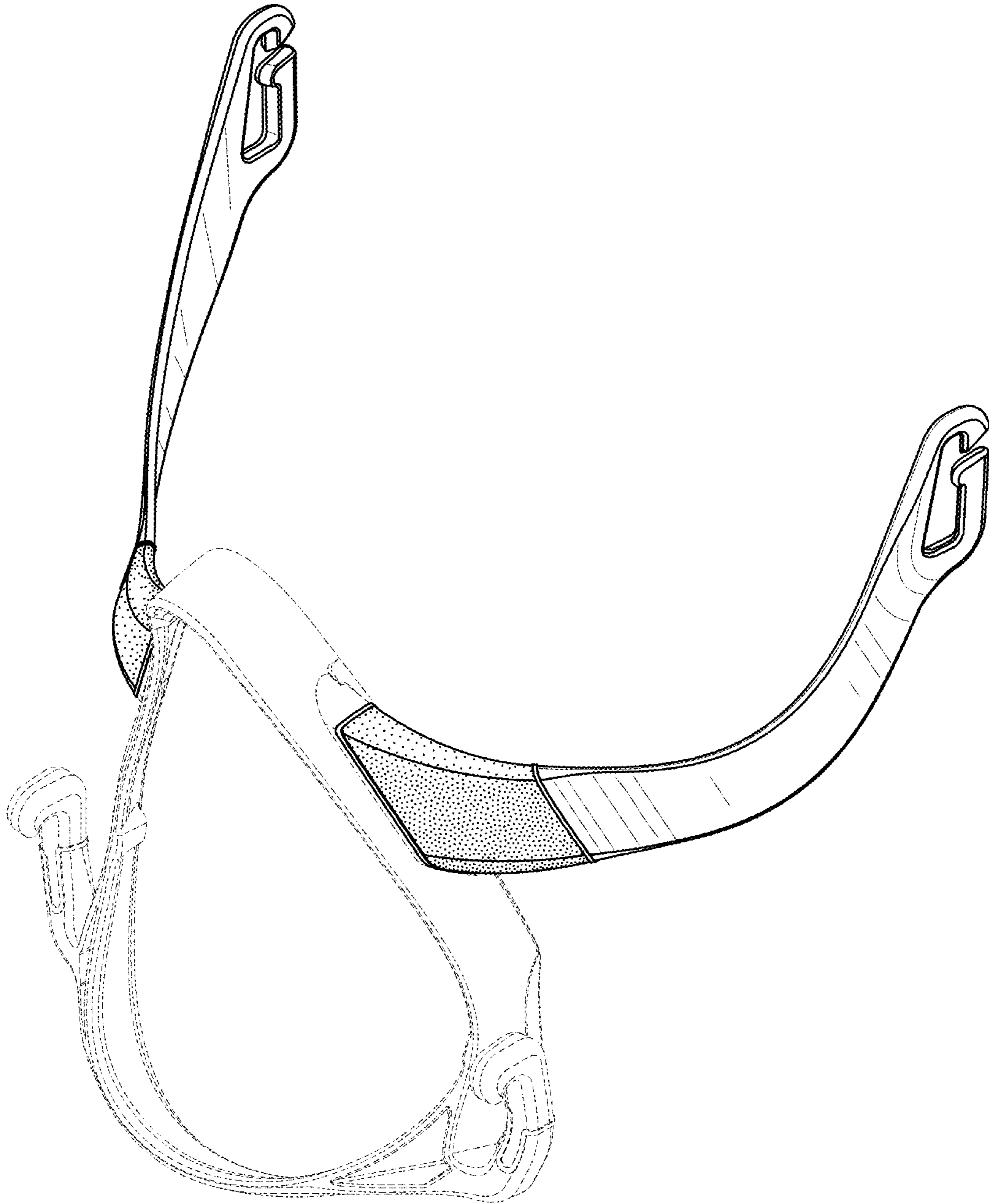


FIG. 2

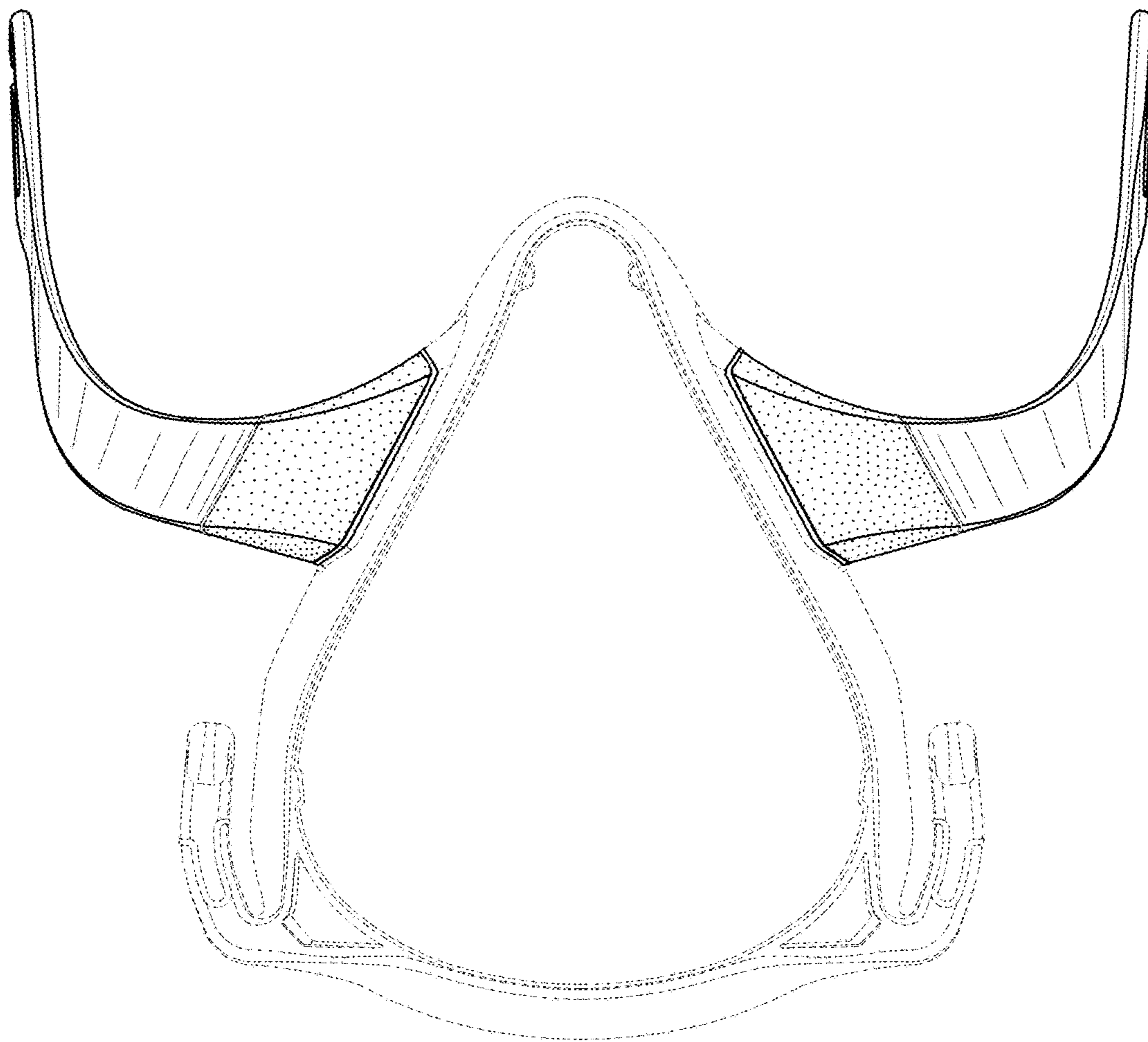


FIG. 3

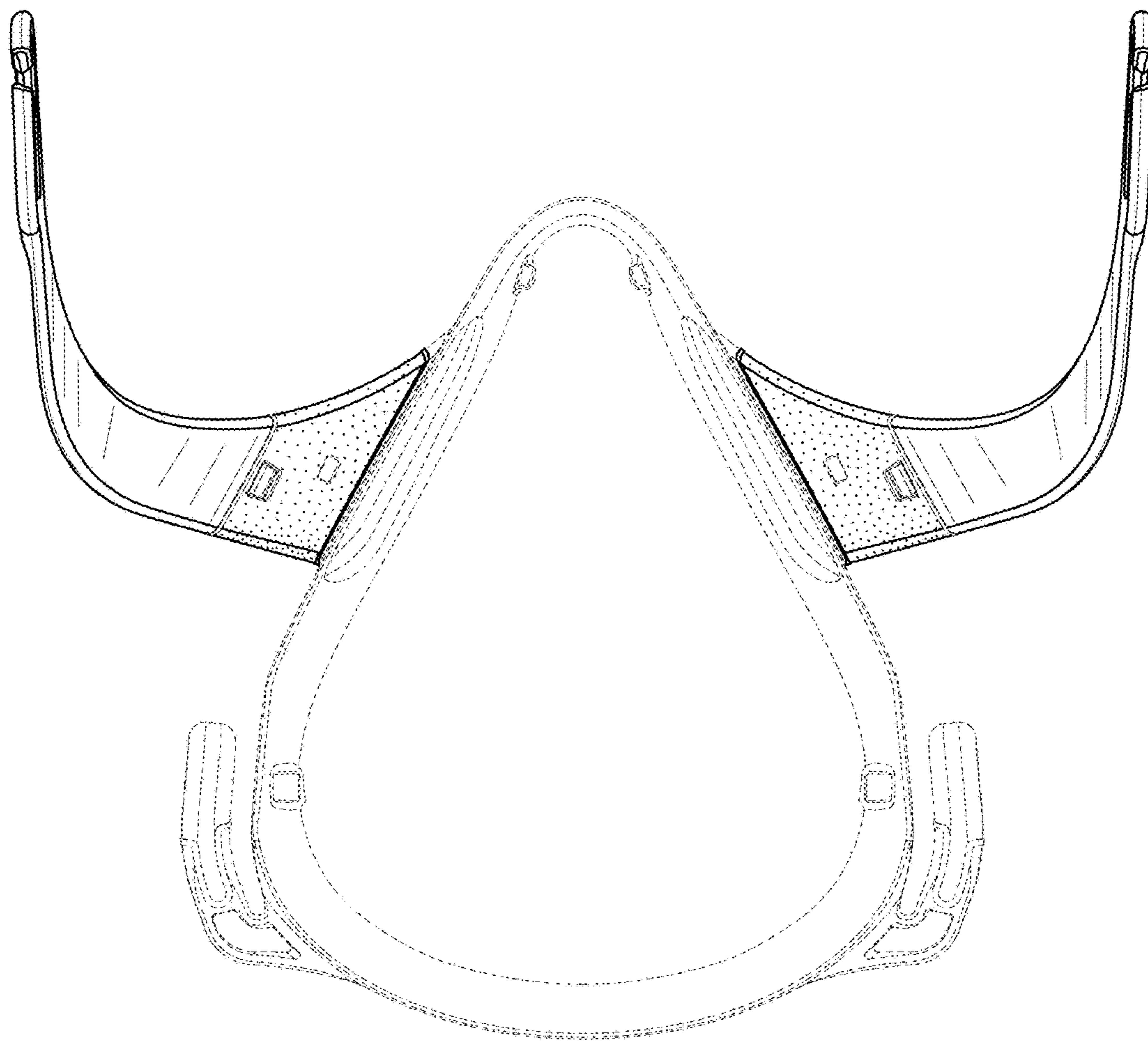


FIG. 4

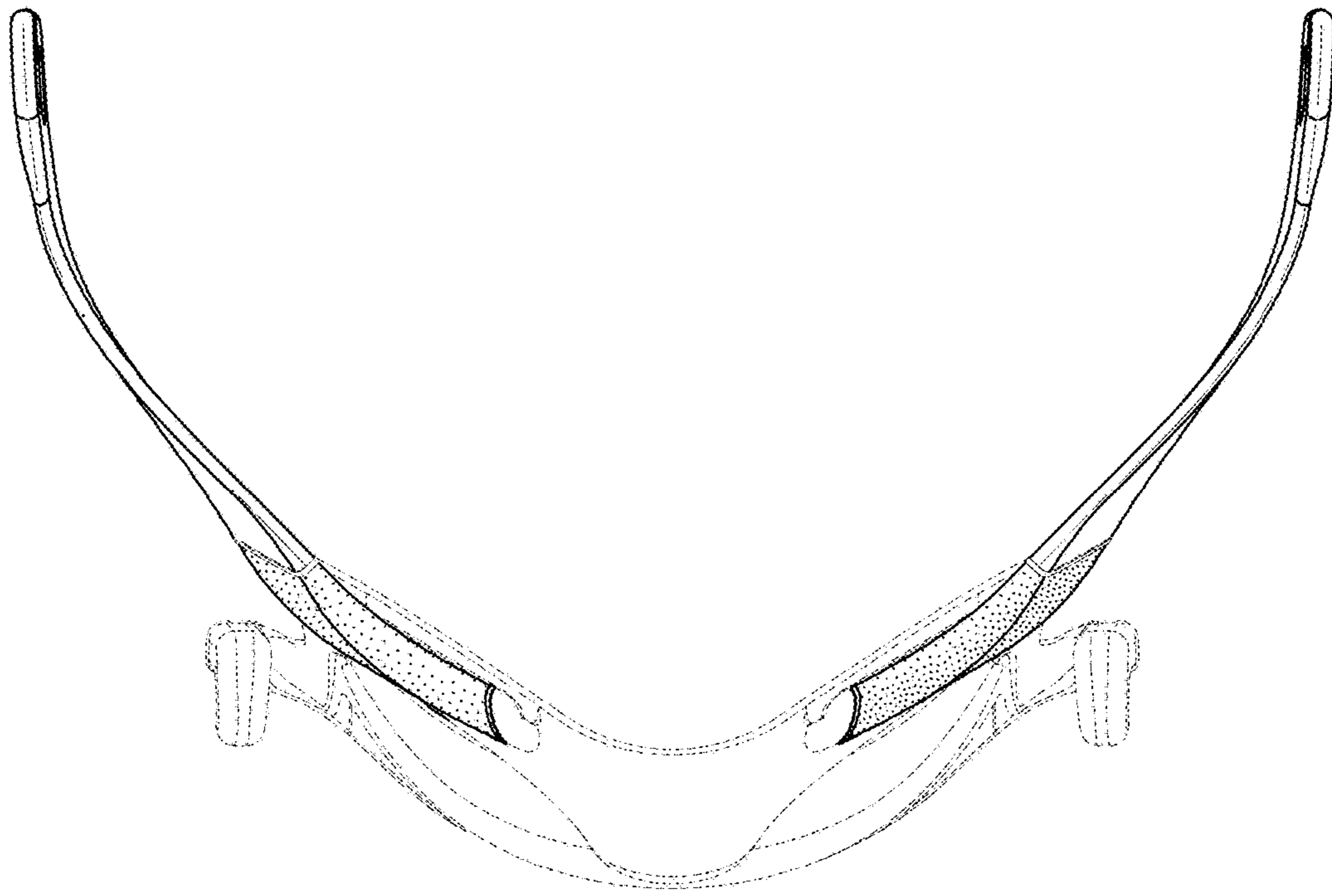


FIG. 5

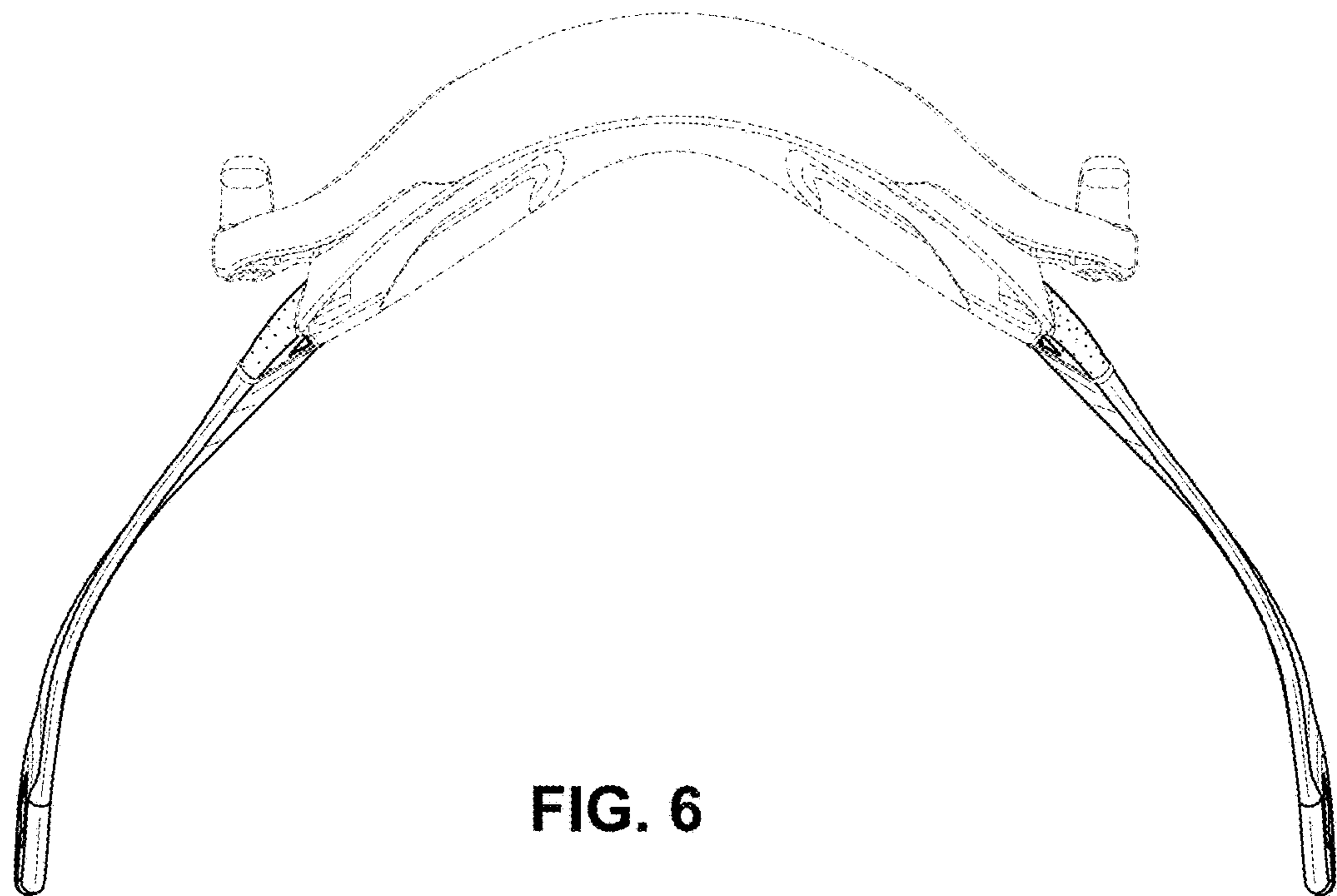


FIG. 6

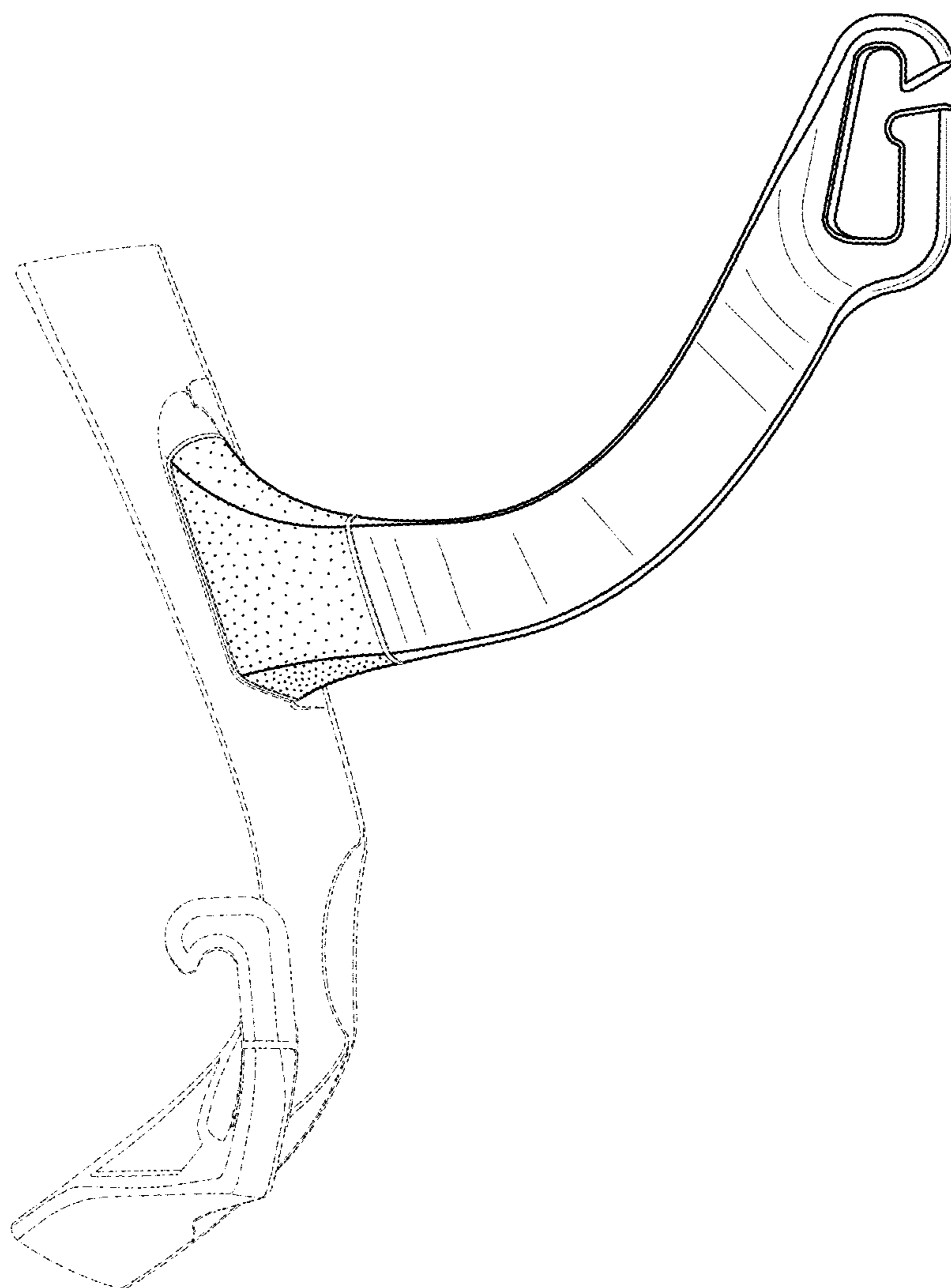


FIG. 7

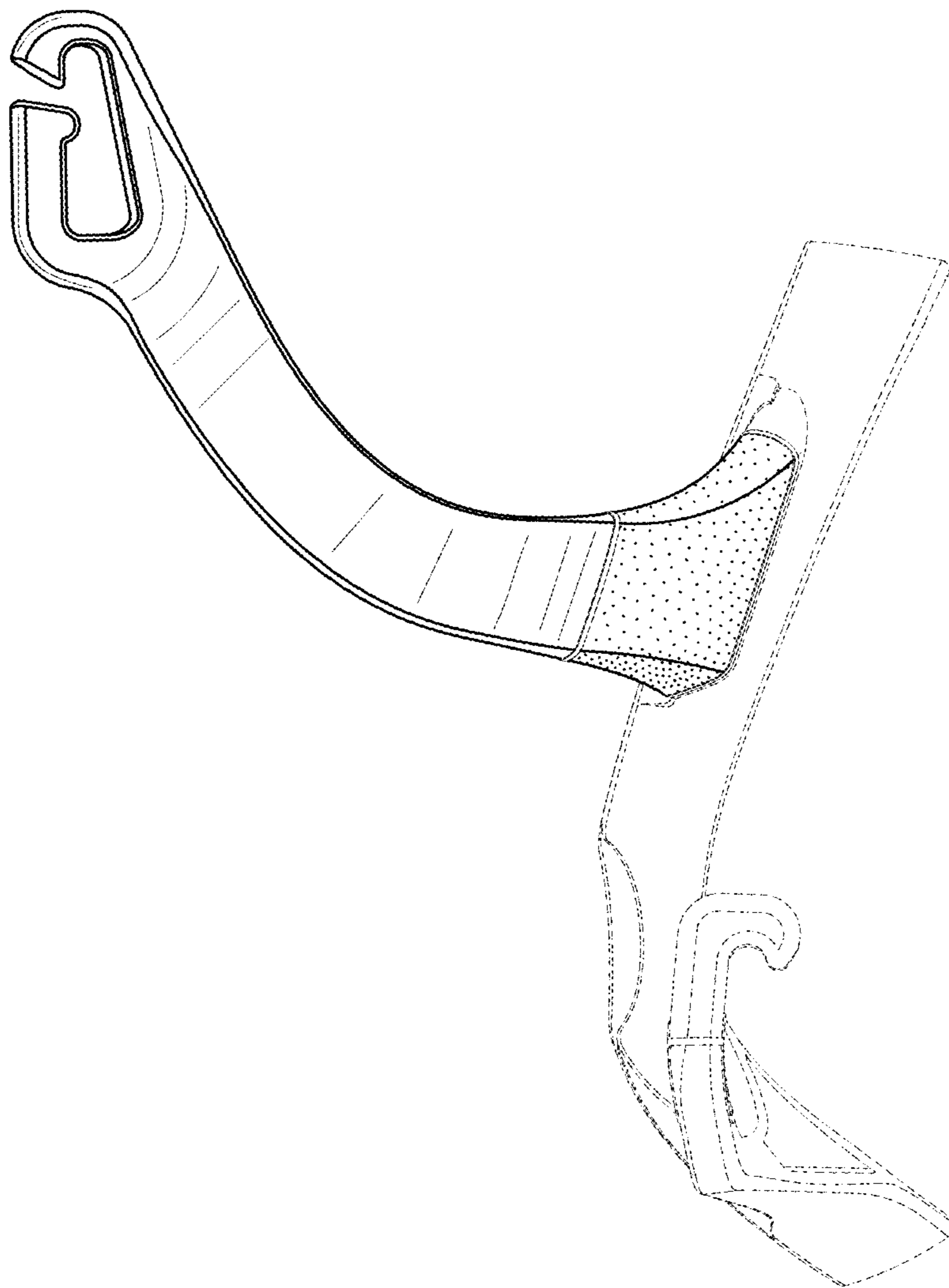


FIG. 8

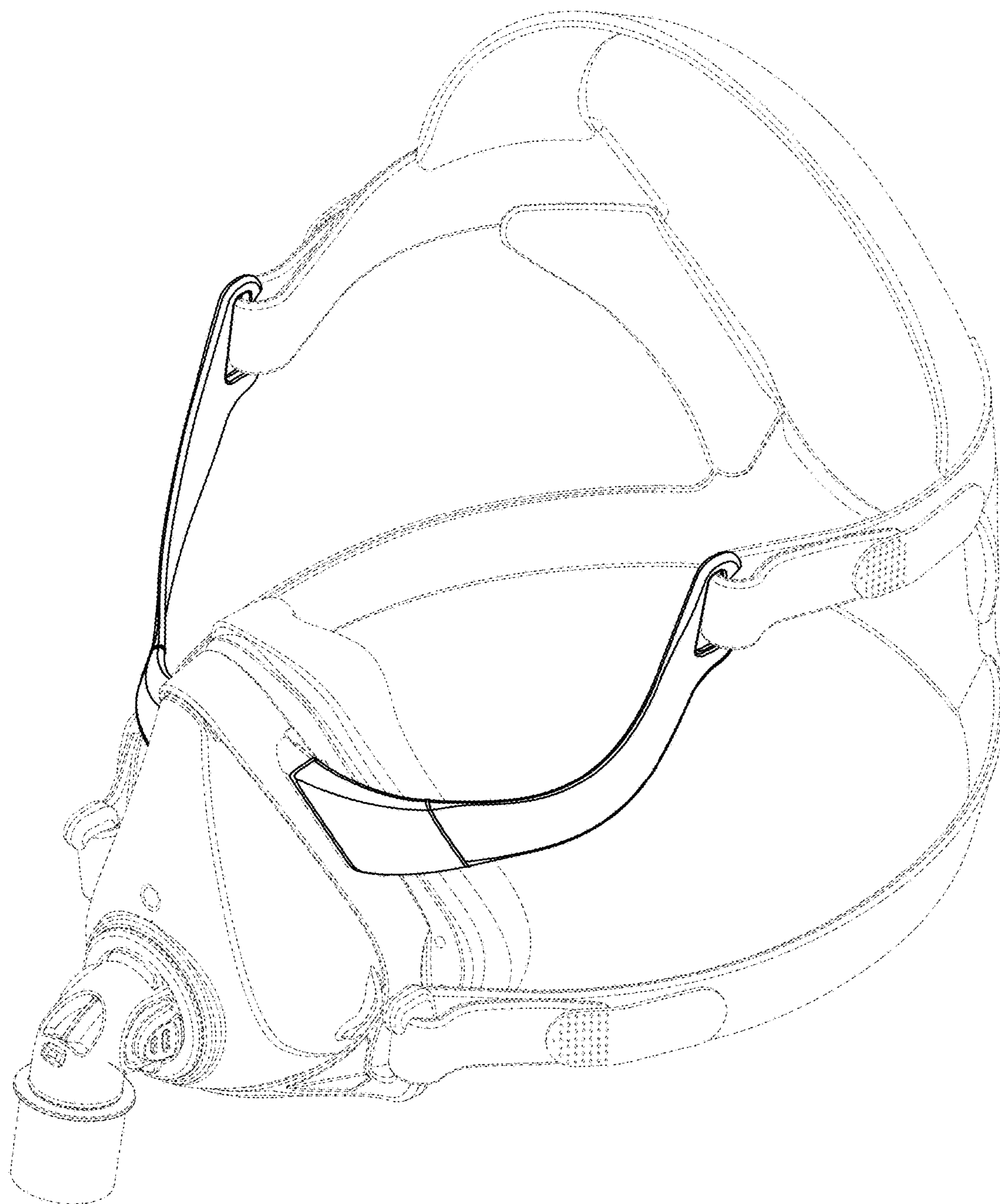


FIG. 9

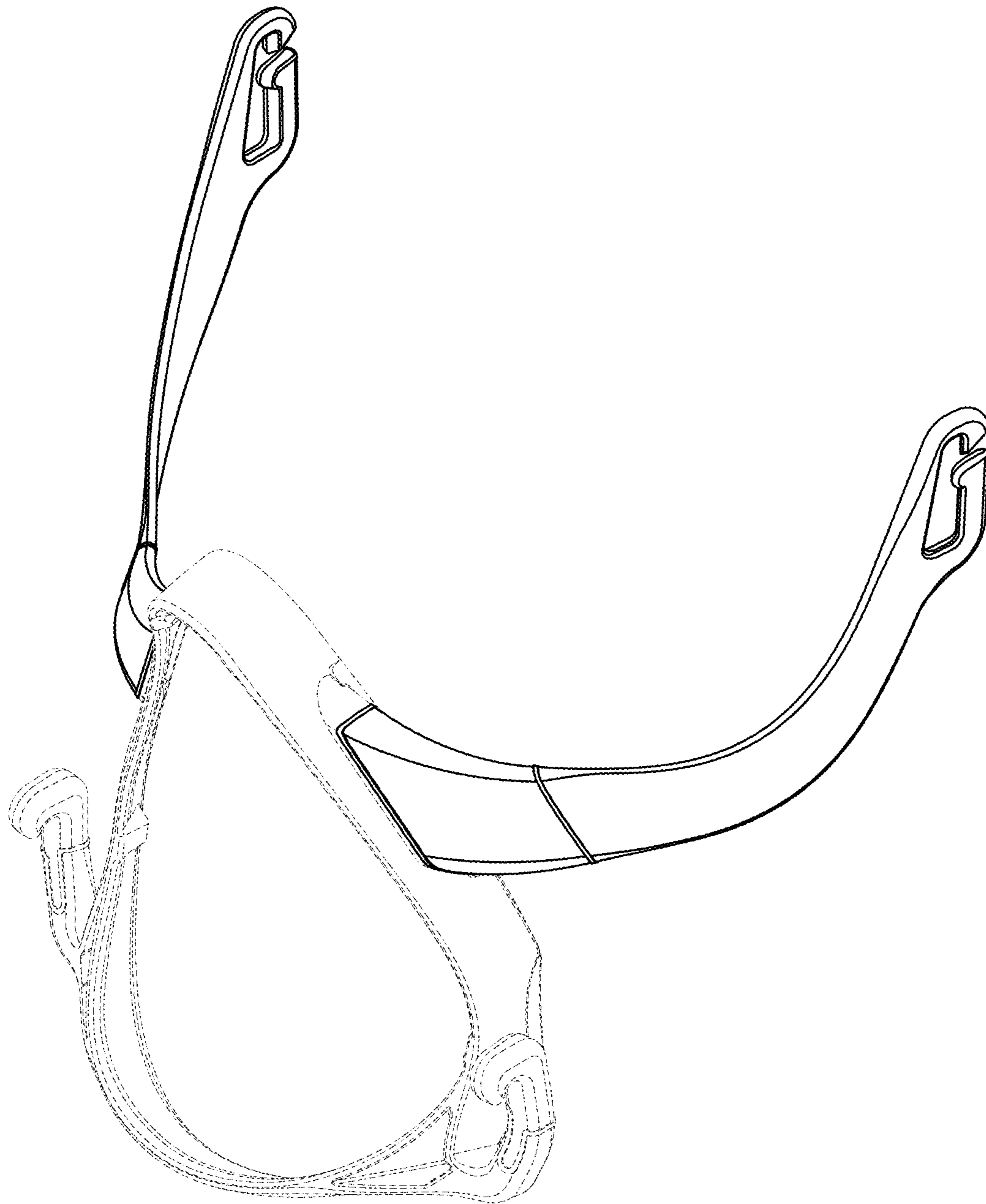


FIG. 10

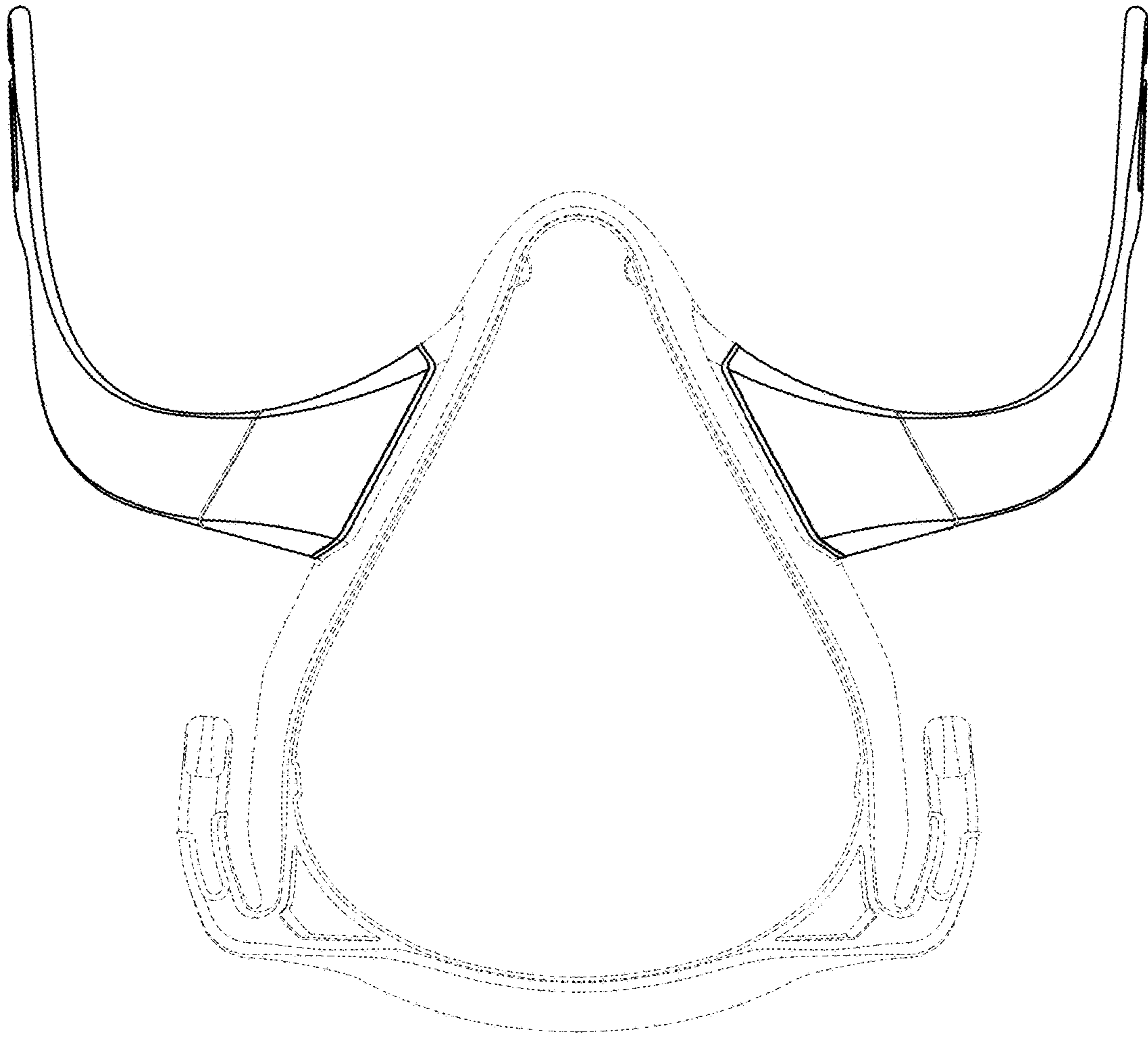


FIG. 11

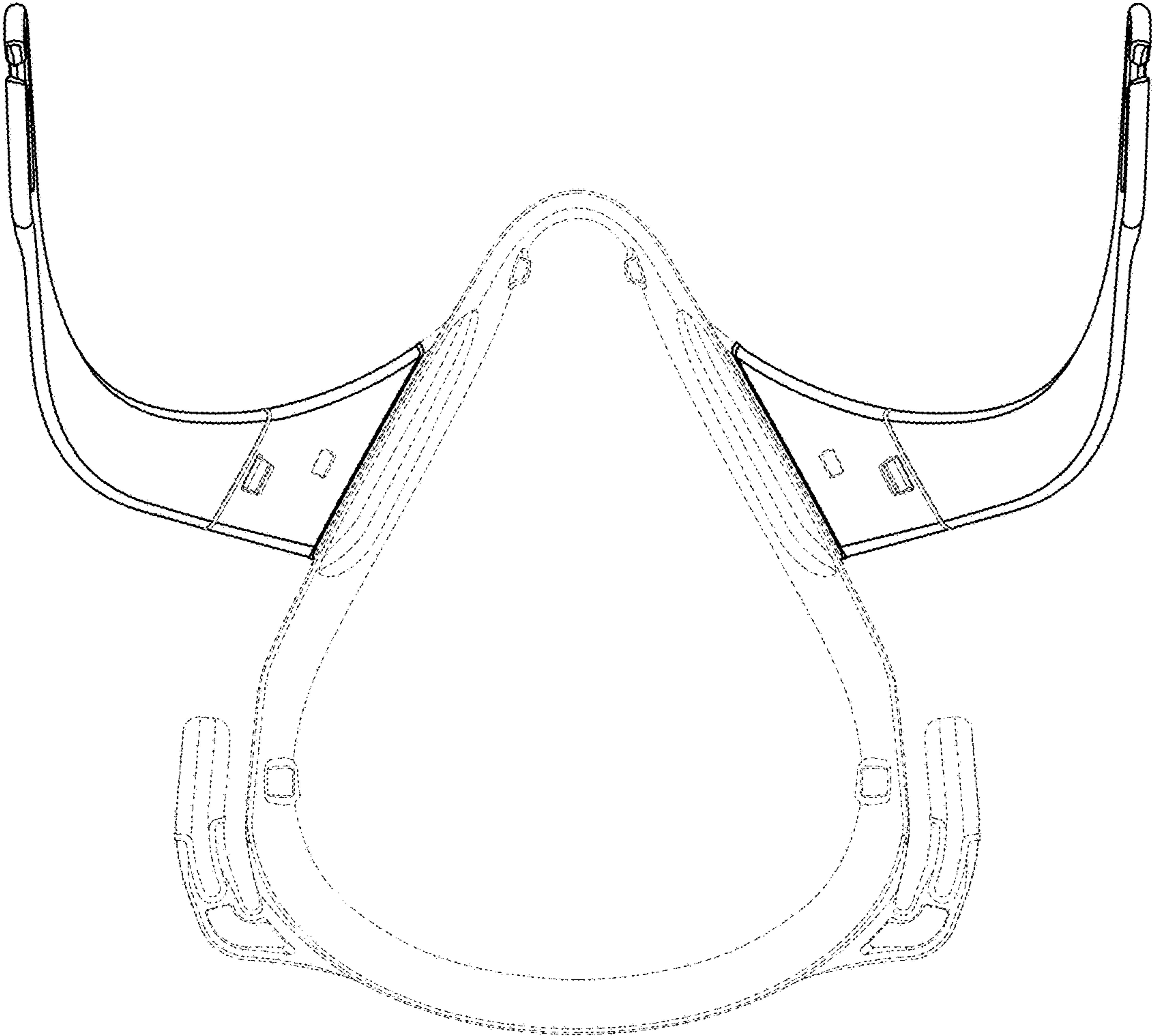


FIG. 12

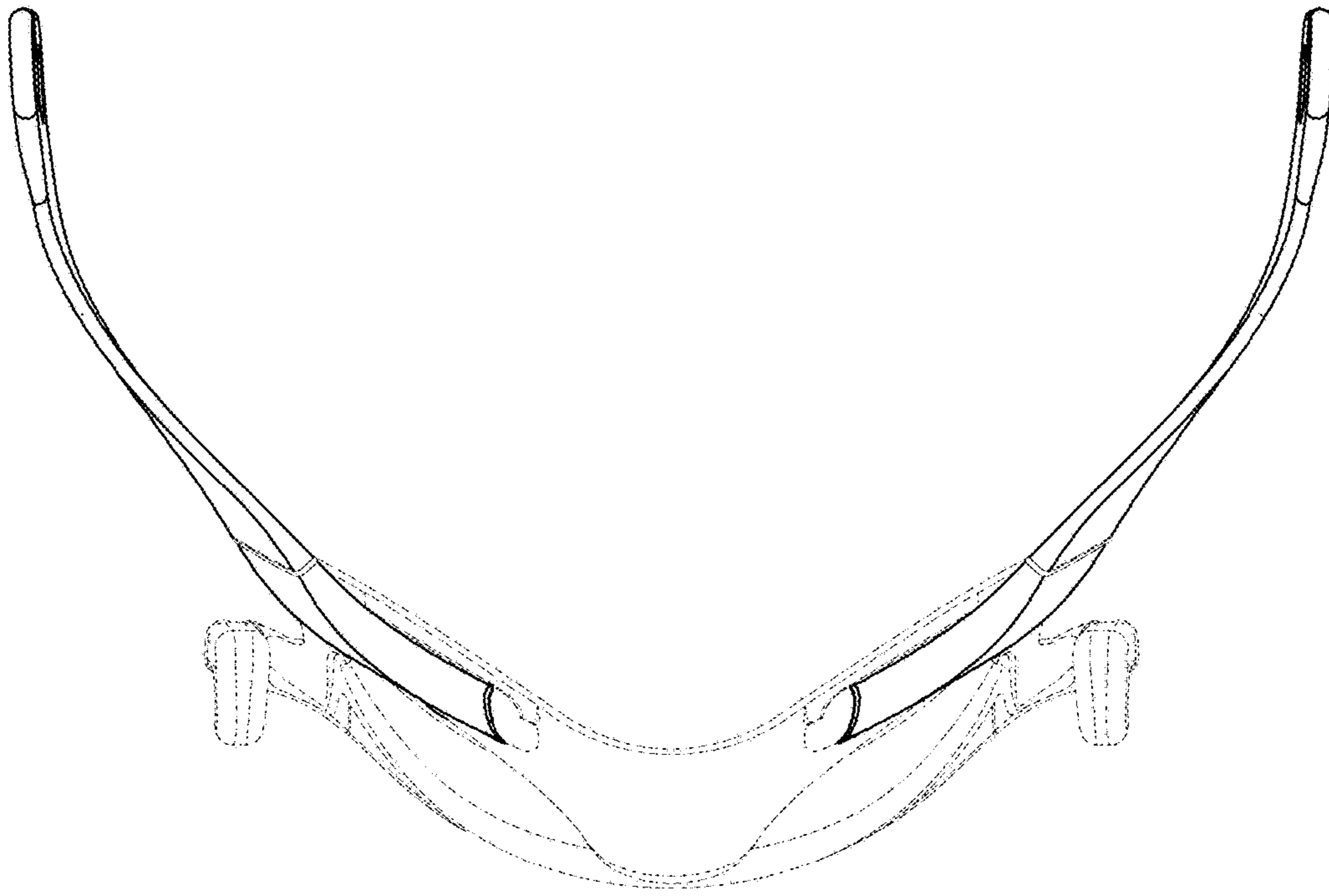


FIG. 13

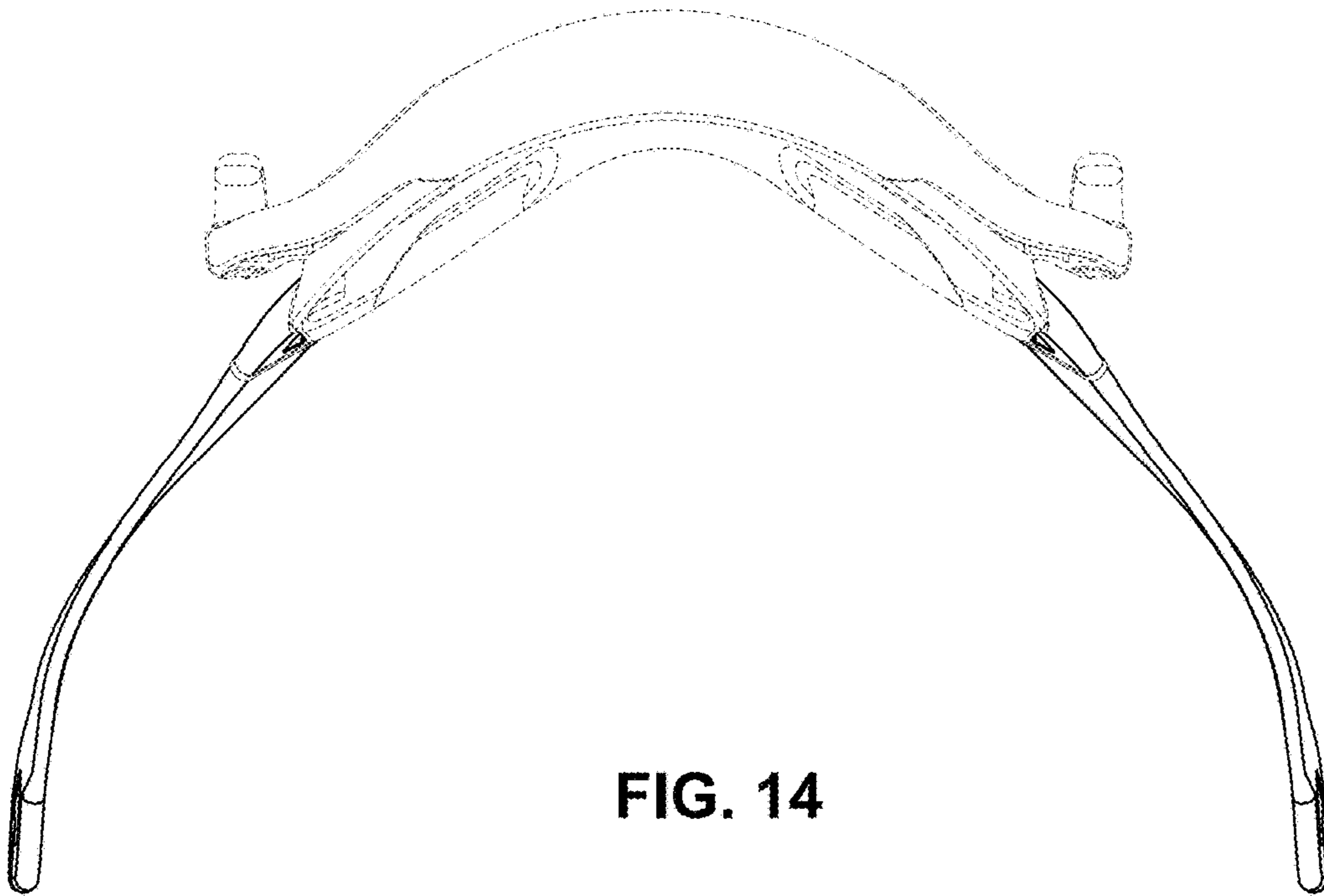


FIG. 14

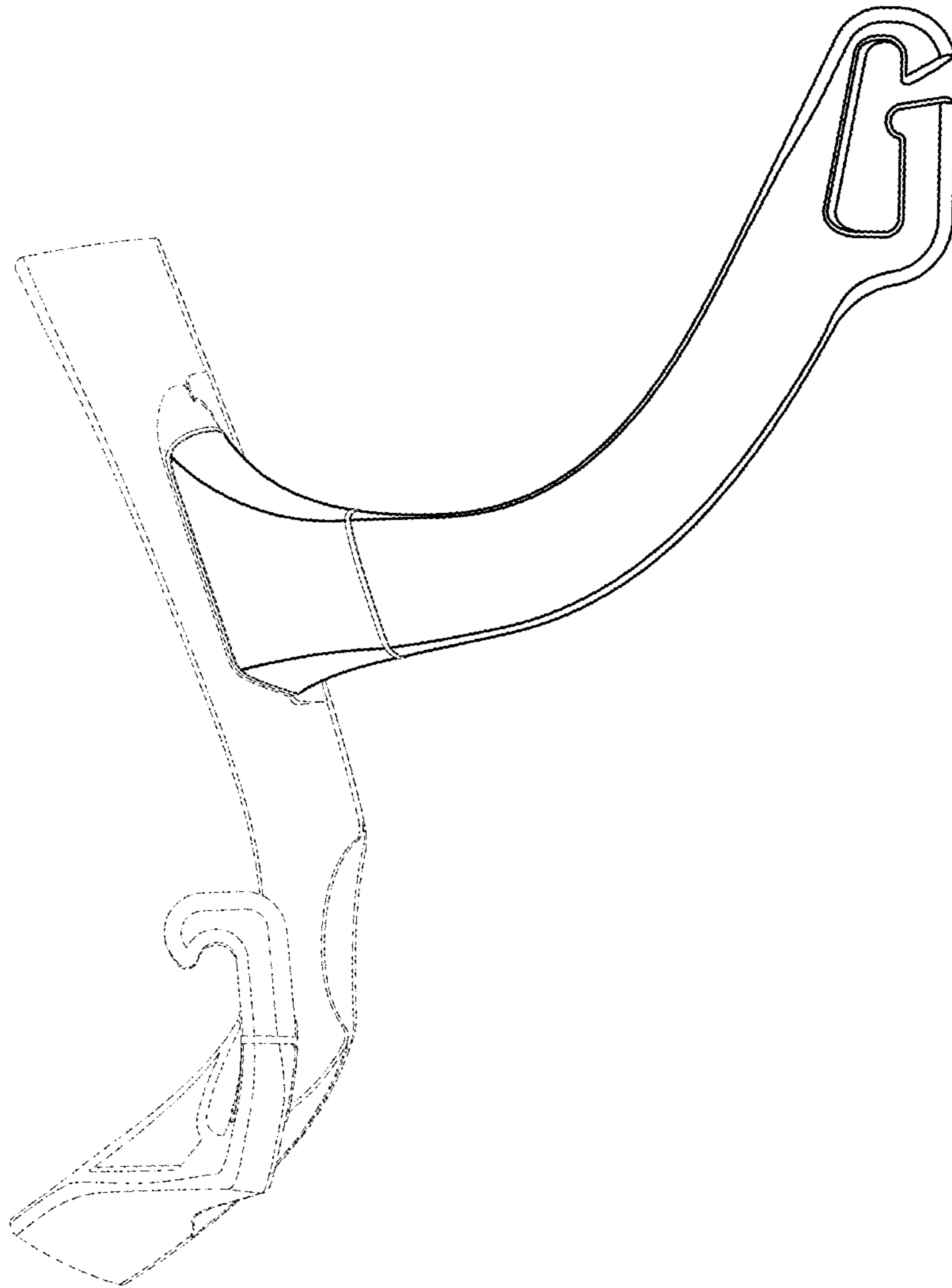


FIG. 15

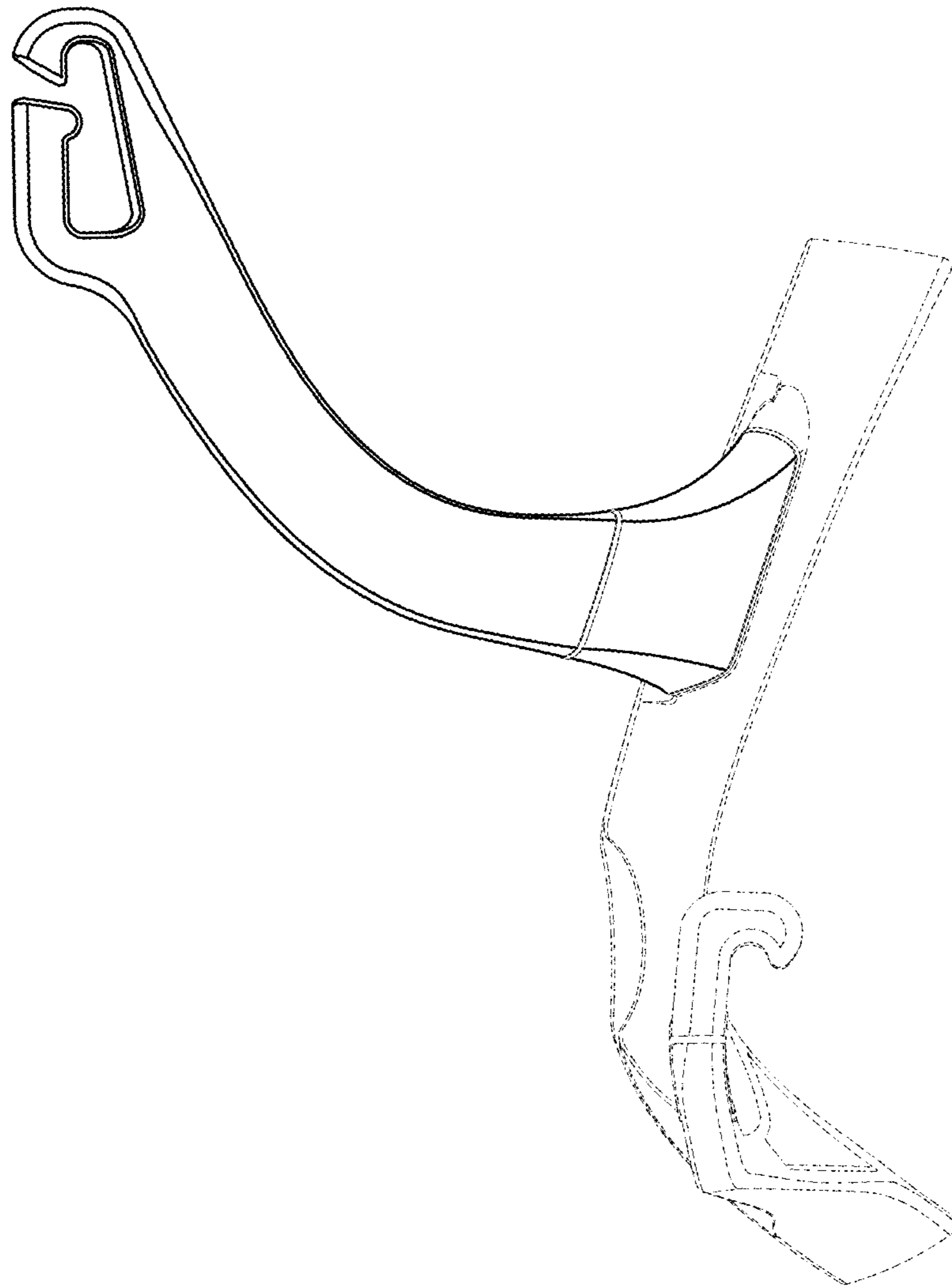


FIG. 16