



US00D849235S

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

(10) **Patent No.:** **US D849,235 S**  
(45) **Date of Patent:** **\*\* May 21, 2019**

- (54) **SEAL FOR A PATIENT INTERFACE**
- (71) Applicant: **Fisher & Paykel Healthcare Limited**,  
Auckland (NZ)
- (72) Inventors: **Silas Sao Jin Siew**, Auckland (NZ);  
**Wen Dong Huang**, Auckland (NZ);  
**Craig Robert Prentice**, Auckland (NZ);  
**Andrew Paul Maxwell Salmon**,  
Auckland (NZ)
- (73) Assignee: **Fisher & Paykel Healthcare Limited**,  
Auckland (NZ)

- D335,367 S 5/1993 Mieskoski
  - 5,671,732 A 9/1997 Bowen
  - 5,782,236 A 7/1998 Ess
  - D399,950 S 10/1998 Shepard
  - 6,374,826 B1 4/2002 Gunaratnam et al.
  - D476,732 S 7/2003 Smart
  - D479,876 S 9/2003 Gradon et al.
  - D485,905 S 1/2004 Moore et al.
  - D486,226 S 2/2004 Guney
  - D496,726 S 9/2004 Amarasinghe
  - D532,511 S 11/2006 Amarasinghe
  - D532,512 S 11/2006 Amarasinghe
  - D536,092 S 1/2007 Amarasinghe
  - D540,940 S 4/2007 Amarasinghe
- (Continued)

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

(21) Appl. No.: **29/572,577**

(22) Filed: **Jul. 28, 2016**

**Related U.S. Application Data**

(60) Division of application No. 29/469,114, filed on Oct. 7, 2013, now Pat. No. Des. 762,844, which is a continuation of application No. 29/401,231, filed on Sep. 8, 2011, now Pat. No. Des. 692,554.

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

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

(58) **Field of Classification Search**  
USPC ..... D24/110.1–110.5, 127  
CPC ..... A61M 16/0622; A61M 16/0616; A61M 16/0816; A61M 16/08; A61M 16/0633; A61M 16/06; A61M 16/0666; A61M 2210/0618; A61M 16/0683  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 4,449,527 A 5/1984 Hinton
- 5,010,884 A 4/1991 Van Derdoes

**FOREIGN PATENT DOCUMENTS**

- WO WO 2001/097892 12/2001
- WO WO 2007/022562 3/2007

(Continued)

*Primary Examiner* — Lilyana Bekic

(74) *Attorney, Agent, or Firm* — Knobbe Martens Olson & Bear LLP

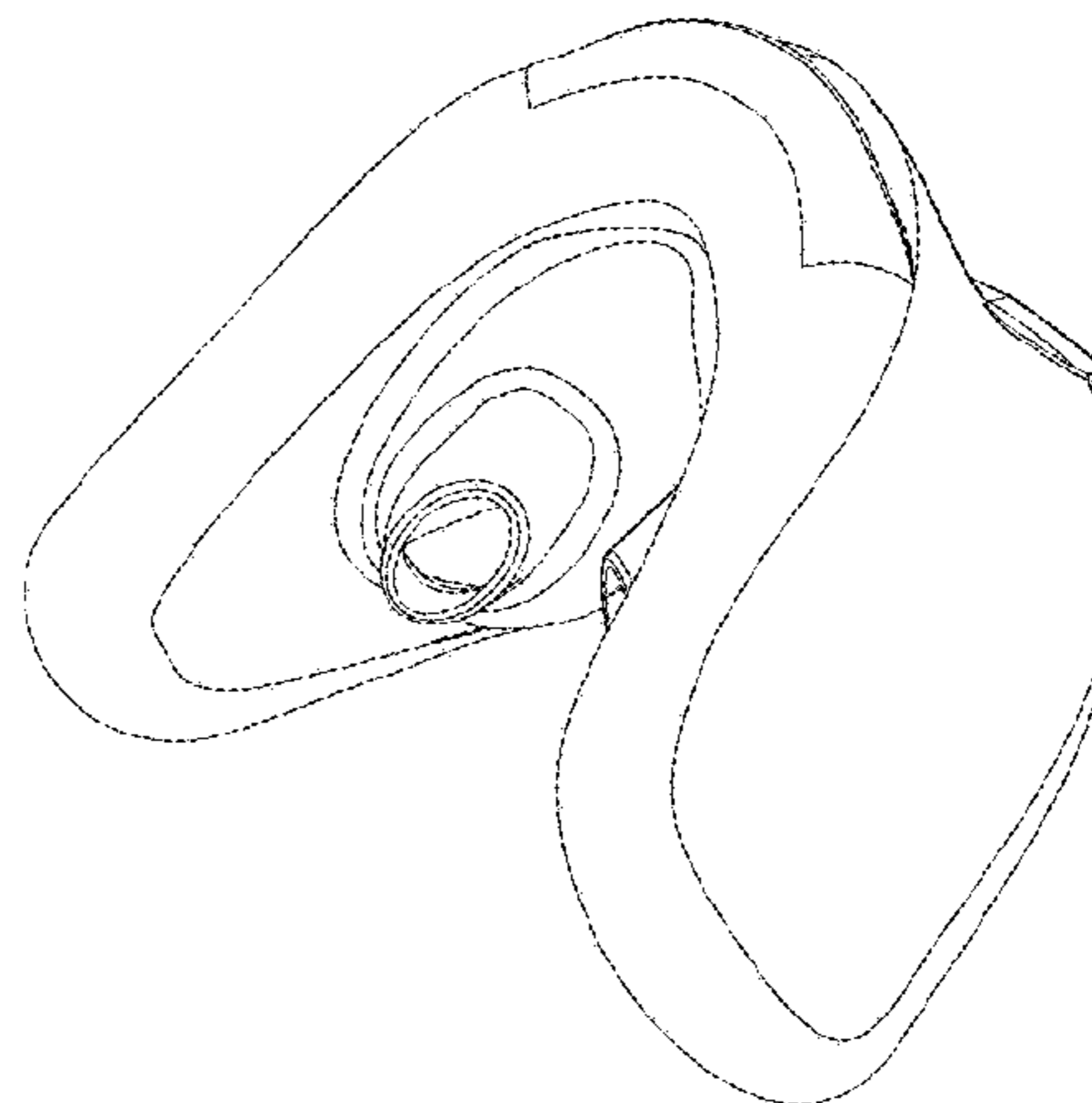
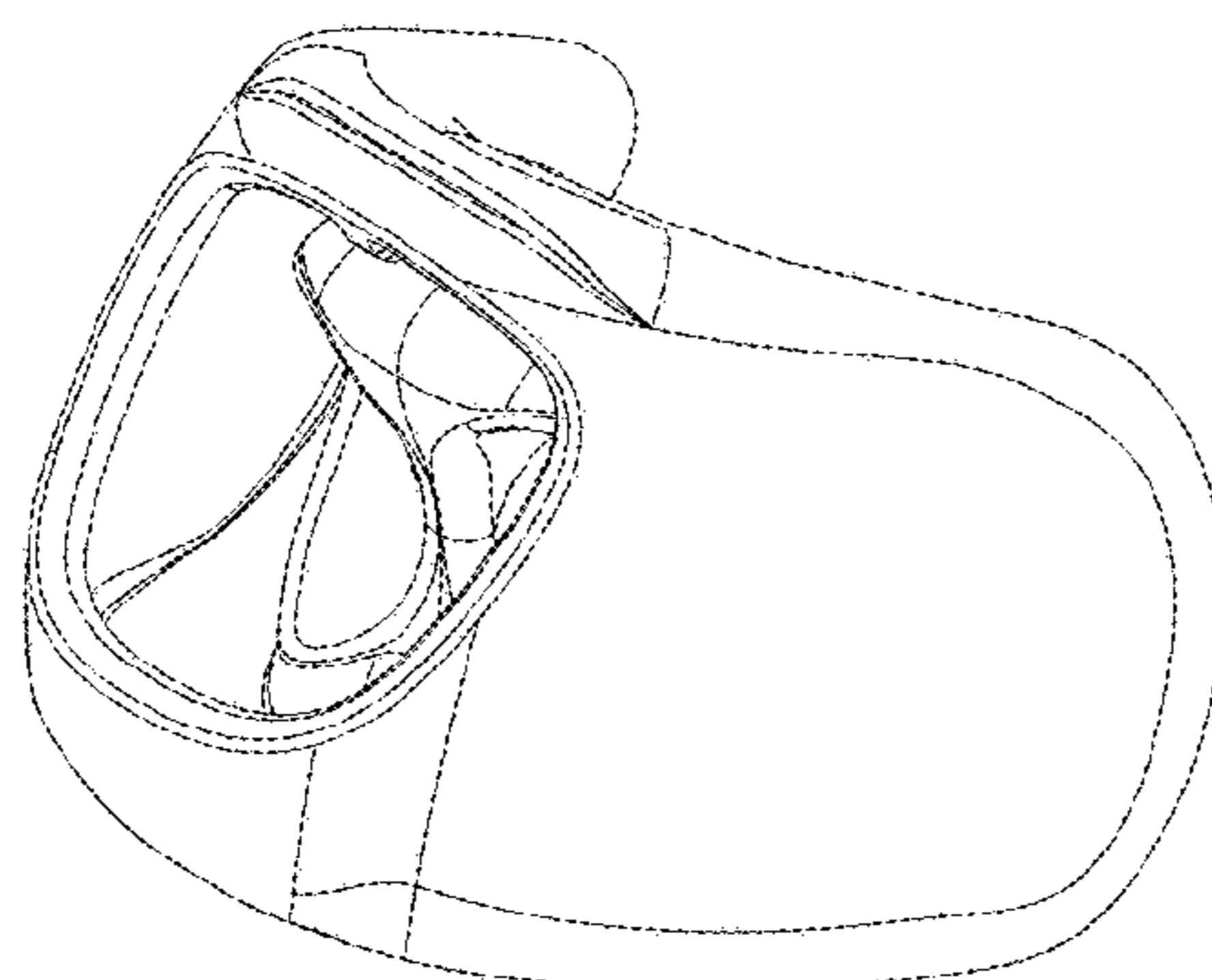
(57) **CLAIM**

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

**DESCRIPTION**

FIG. 1 is a front perspective view of a seal for a patient interface;  
FIG. 2 is a rear perspective view thereof;  
FIG. 3 is a front elevational view thereof;  
FIG. 4 is a rear elevational view thereof;  
FIG. 5 is a left side elevational view thereof, the right side elevational view being a mirror image of the view of FIG. 5;  
FIG. 6 is a bottom elevational view thereof; and,  
FIG. 7 is a top elevational view thereof.

**1 Claim, 4 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

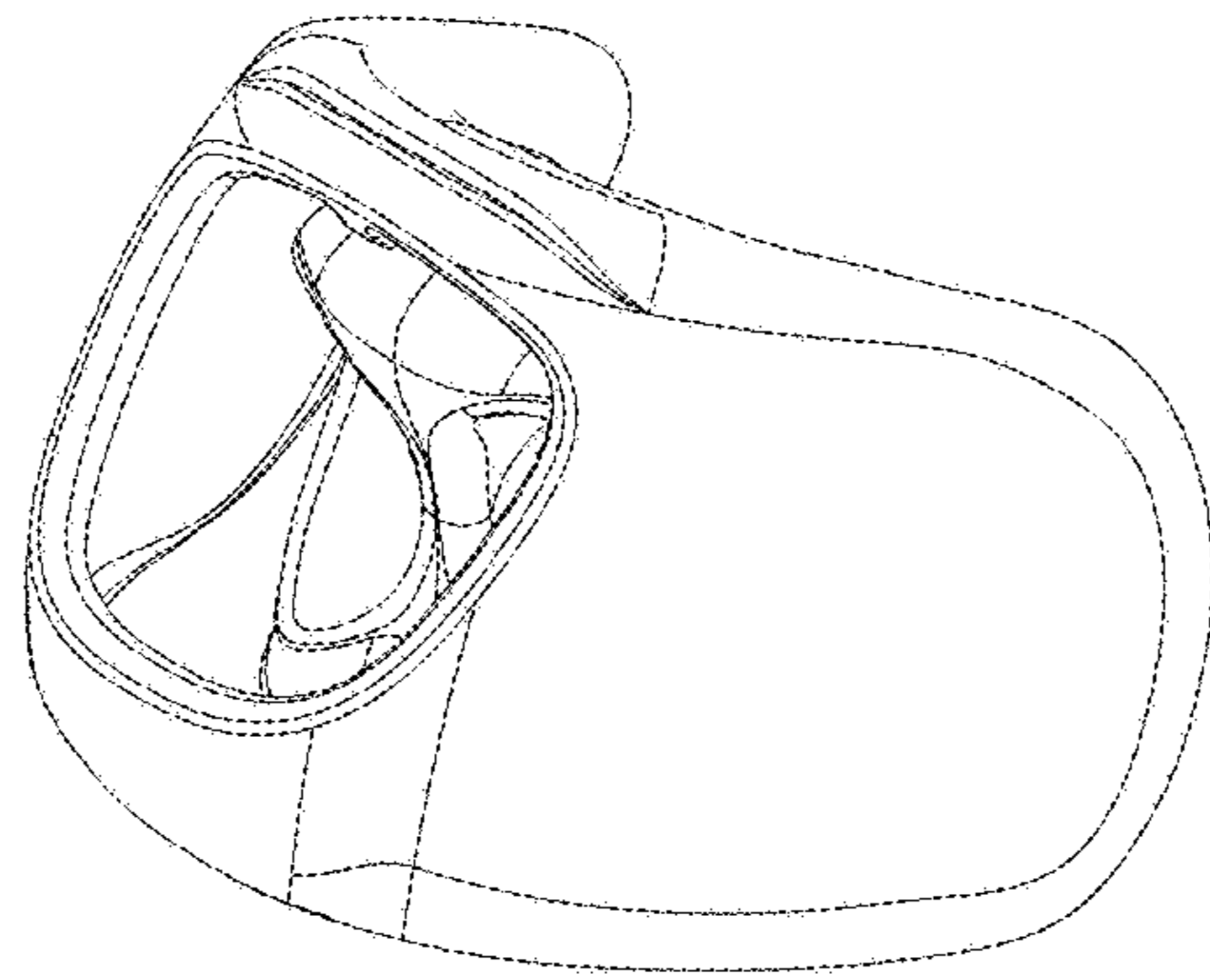
D542,912 S 5/2007 Gunaratnam et al.  
 D545,961 S 7/2007 Hitchcock  
 D546,441 S 7/2007 Hitchcock  
 D549,322 S 8/2007 Stallard et al.  
 D549,323 S 8/2007 Kwok et al.  
 D550,352 S 9/2007 Chandran et al.  
 D550,836 S 9/2007 Chandran et al.  
 D555,785 S 11/2007 McAuley et al.  
 D557,411 S 12/2007 Smart et al.  
 D557,802 S 12/2007 Miceli et al.  
 D558,334 S 12/2007 Stallard et al.  
 D561,332 S 2/2008 Amarasinghe  
 D561,893 S 2/2008 Gunaratnam  
 D562,976 S 2/2008 Guney et al.  
 D564,089 S 3/2008 Chandran et al.  
 D568,985 S 5/2008 Chandran et al.  
 D582,546 S 12/2008 Fujiura et al.  
 D583,047 S 12/2008 Chandran et al.  
 D583,049 S 12/2008 Chandran et al.  
 D583,930 S 12/2008 McAuley et al.  
 D586,458 S 2/2009 Kooij et al.  
 D586,906 S 2/2009 Stallard  
 D586,907 S 2/2009 Judson et al.  
 D588,258 S 3/2009 Judson et al.  
 D589,139 S 3/2009 Guney et al.  
 D589,140 S 3/2009 Guney et al.  
 D591,854 S 5/2009 Brookshire  
 D595,841 S 7/2009 McAuley et al.  
 D597,199 S 7/2009 Smart et al.  
 D597,661 S 8/2009 Reid et al.  
 D612,483 S 3/2010 Chang  
 D612,932 S 3/2010 Davidson et al.  
 D612,933 S 3/2010 Prentice  
 D614,288 S 4/2010 Judson et al.  
 D614,289 S 4/2010 Veliss et al.  
 D614,763 S 4/2010 Maurer et al.  
 D615,187 S 5/2010 Bowden  
 D618,399 S 6/2010 Manzo  
 7,743,767 B2 6/2010 Ging  
 D624,642 S 9/2010 Collazo et al.  
 7,861,718 B2 1/2011 Janbakhsh et al.  
 D637,279 S 5/2011 Scheiner  
 D639,419 S 6/2011 Eves et al.  
 D639,932 S 6/2011 D'Souza et al.  
 D645,138 S 9/2011 Leckie  
 D645,955 S 9/2011 Kooij et al.  
 D650,064 S 12/2011 Gunaratnam et al.  
 D651,303 S 12/2011 Gunaratnam  
 D652,505 S 1/2012 Pidcock  
 D653,328 S 1/2012 Eves et al.  
 D656,231 S 3/2012 Henry et al.  
 D656,607 S 3/2012 Gunaratnam et al.  
 D659,237 S 5/2012 Lubke et al.  
 D665,494 S 8/2012 Stallard et al.  
 D669,576 S 10/2012 Smart et al.  
 D674,480 S 1/2013 Prentice et al.  
 D683,446 S 5/2013 Eves  
 D687,539 S 8/2013 Matulal et al.  
 D691,257 S 10/2013 Siew et al.  
 D691,712 S 10/2013 Judson et al.  
 D692,554 S 10/2013 Siew  
 D696,396 S 12/2013 Eves

D696,767 S 12/2013 Scheiner  
 D704,329 S 5/2014 Collazo et al.  
 D706,413 S 6/2014 Veliss  
 D708,736 S 7/2014 Judson et al.  
 D709,181 S 7/2014 Henry et al.  
 D729,381 S 5/2015 Himes  
 D735,317 S 7/2015 Collazo  
 D737,953 S 9/2015 Wells  
 D740,409 S 10/2015 Siew et al.  
 D746,436 S \* 12/2015 Guney ..... D24/110.1  
 D747,460 S \* 1/2016 Hogeia ..... D24/110.1  
 D762,844 S 8/2016 Siew et al.  
 D770,036 S \* 10/2016 Walls ..... D24/110.4  
 D787,661 S \* 5/2017 Edwards ..... D24/110.4  
 D797,921 S \* 9/2017 Huang ..... D24/110.4  
 2005/0188993 A1 9/2005 Steeves  
 2005/0241644 A1 11/2005 Gunaratnam et al.  
 2006/0124131 A1 6/2006 Chandran et al.  
 2006/0174887 A1 8/2006 Chandran et al.  
 2007/0235033 A1 10/2007 Reier  
 2008/0092906 A1 4/2008 Gunaratnam et al.  
 2009/0044808 A1 2/2009 Guney  
 2009/0151729 A1 6/2009 Judson et al.  
 2009/0178680 A1 7/2009 Chang  
 2009/0320851 A1 12/2009 Selvarajan et al.  
 2010/0000534 A1 1/2010 Kooij et al.  
 2010/0122701 A1 5/2010 Gunaratnam et al.  
 2010/0258136 A1 10/2010 Doherty  
 2010/0313891 A1 12/2010 Veliss et al.  
 2011/0041855 A1 2/2011 Gunaratnam et al.  
 2011/0146685 A1 6/2011 Allan et al.  
 2011/0155140 A1 6/2011 Ho et al.  
 2011/0232649 A1 9/2011 Collazo et al.  
 2011/0259335 A1 10/2011 Sullivan  
 2012/0012114 A1 1/2012 Chandran et al.  
 2012/0090622 A1 4/2012 Chang  
 2012/0204880 A1 8/2012 Smith et al.  
 2013/0042871 A1 2/2013 Chang  
 2013/0186403 A1 7/2013 Chang  
 2013/0199537 A1 8/2013 Formica  
 2014/0000614 A1 1/2014 Chang  
 2014/0026890 A1 1/2014 Haskard  
 2014/0261433 A1 9/2014 Guney  
 2014/0326248 A1 11/2014 Haibach et al.  
 2015/0209541 A1 7/2015 Harwood  
 2015/0224274 A1 8/2015 Siew  
 2015/0283349 A1 10/2015 McLaren  
 2016/0051784 A1 \* 2/2016 Eury ..... A61M 16/0666  
 128/207.18  
 2016/0082217 A1 3/2016 McLaren  
 2016/0151596 A1 \* 6/2016 Slight ..... A61M 16/0622  
 128/207.18  
 2016/0166792 A1 \* 6/2016 Allan ..... A61M 16/06  
 128/205.25  
 2016/0166793 A1 \* 6/2016 McLaren ..... A61M 16/06  
 128/207.11  
 2018/0078725 A1 \* 3/2018 Richardson ..... A61M 16/0666

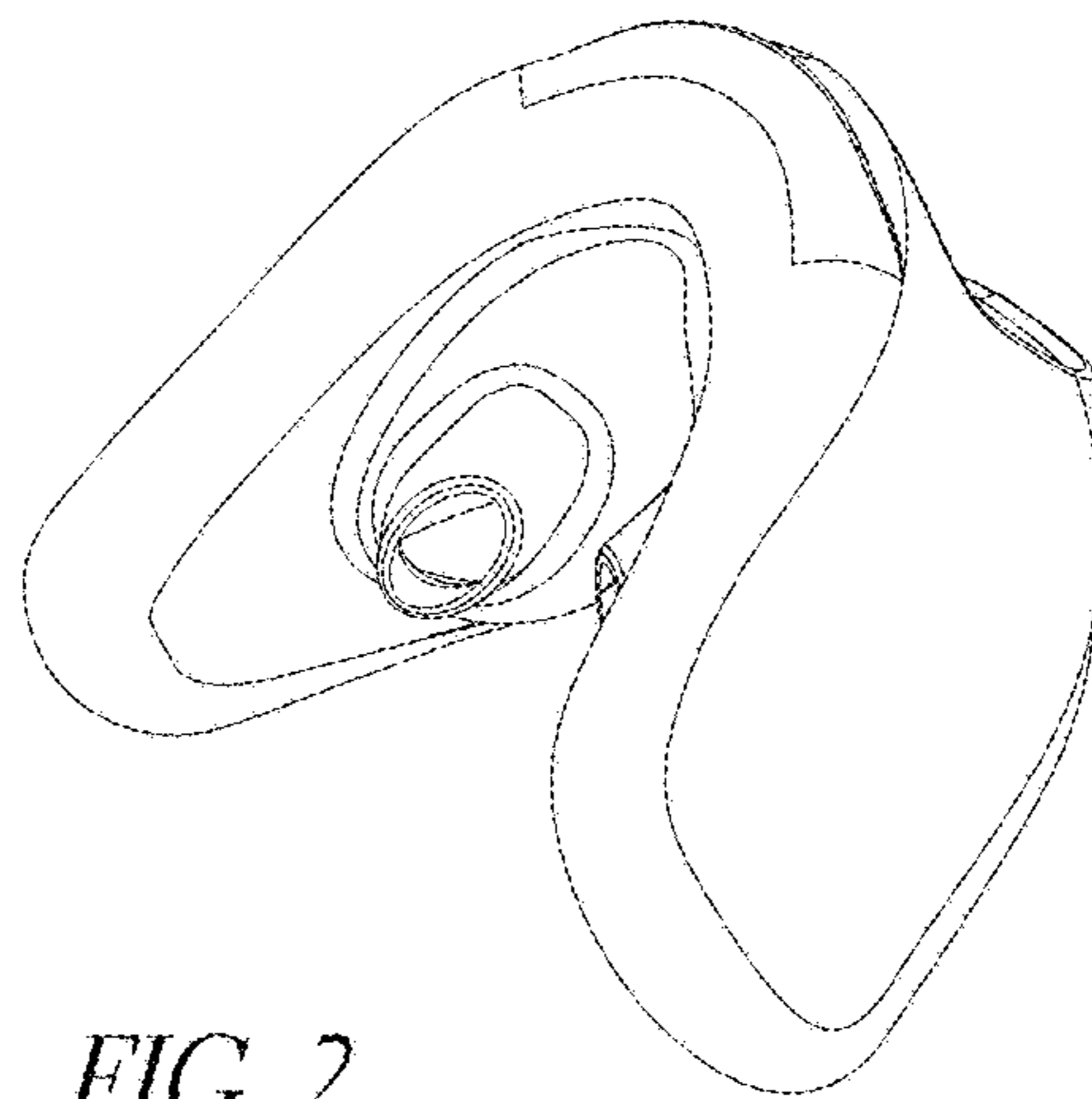
FOREIGN PATENT DOCUMENTS

WO WO 2009/139647 11/2009  
 WO WO 2010/131189 11/2010  
 WO WO 2011/059346 5/2011

\* cited by examiner



*FIG. 1*



*FIG. 2*

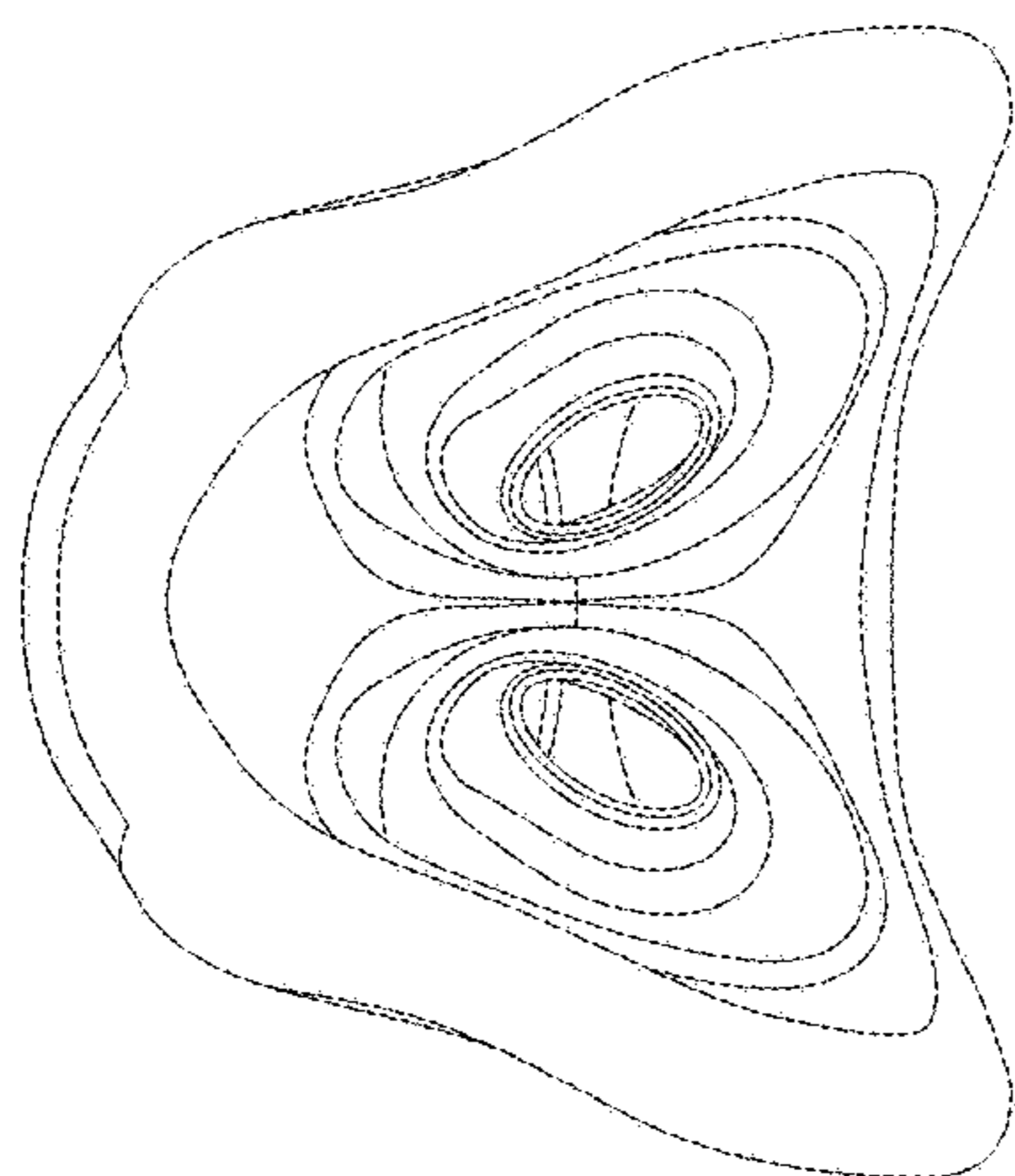


FIG. 4

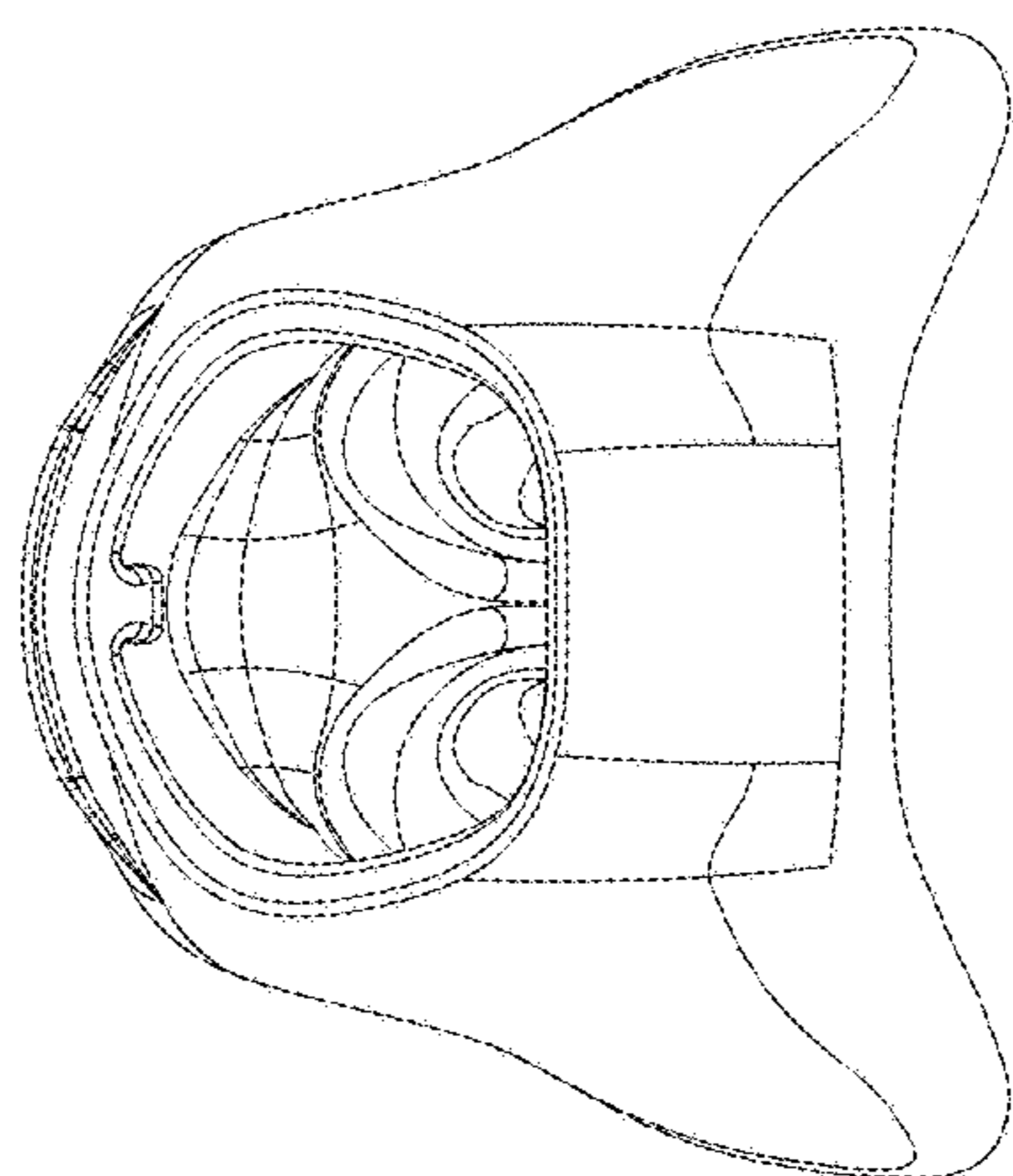
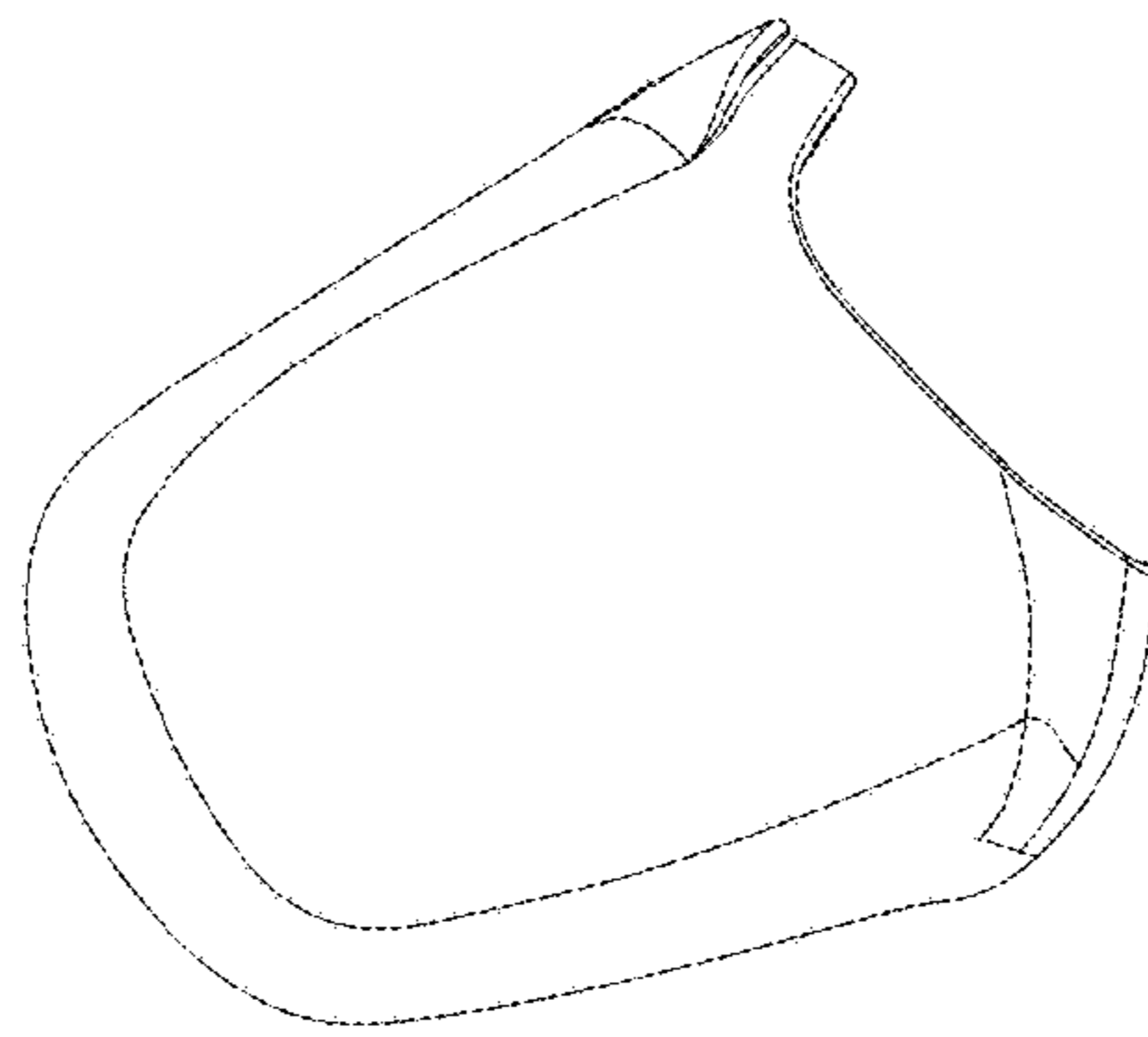
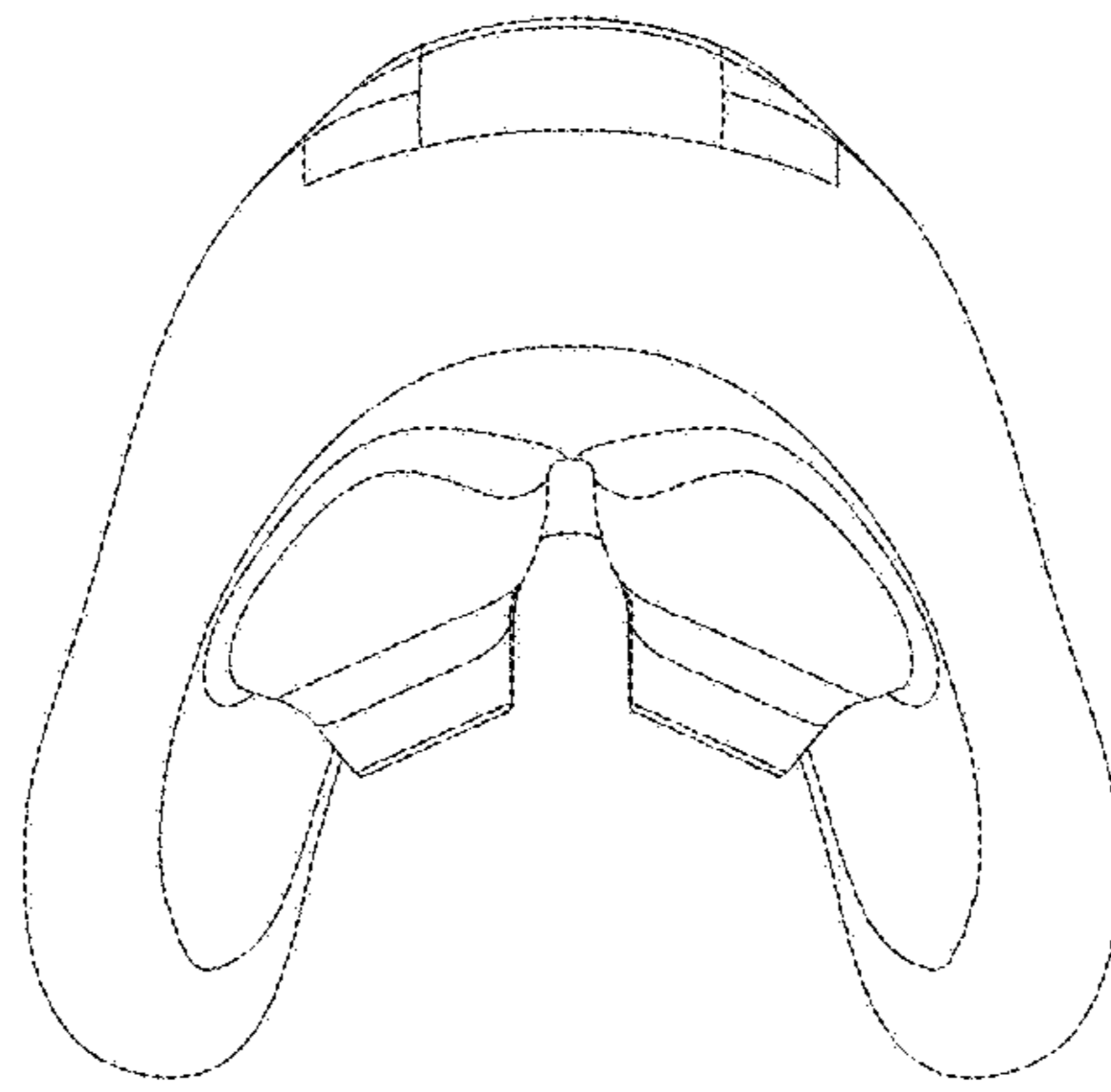


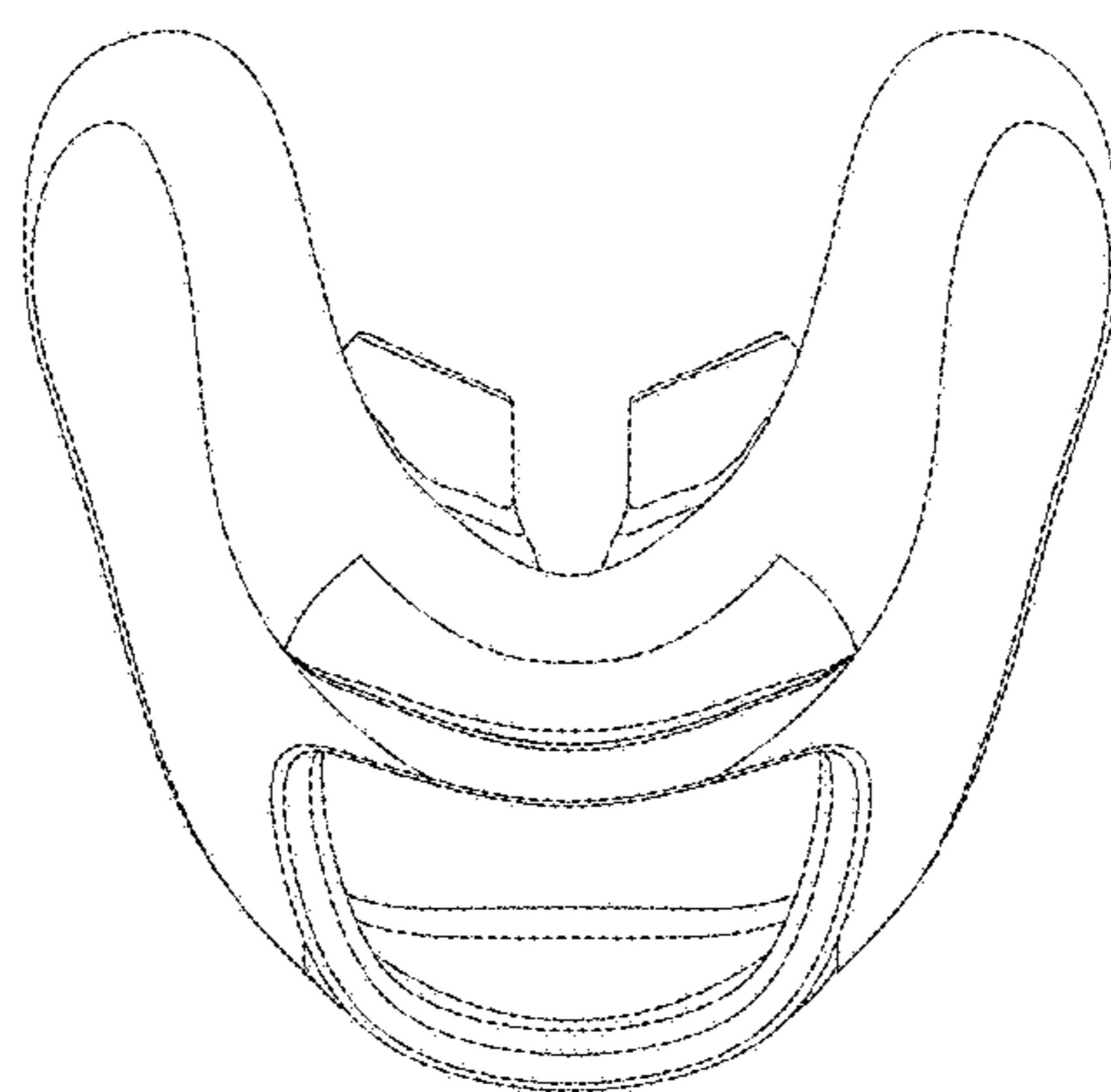
FIG. 3



*FIG. 5*



*FIG. 6*



*FIG. 7*