US00D747795S

(12) United States Design Patent

Blomberg et al.

(10) Patent No.: US D747,795 S
(45) Date of Patent: ** Jan. 19, 2016

(54) **RESPIRATOR MASK BODY**

(71) Applicant: **3M INNOVATIVE PROPERTIES COMPANY**, St. Paul, MN (US)

(72) Inventors: **David M. Blomberg**, Lino Lakes, MN (US); **Michael J. Cowell**, Woodbury, MN (US); **Carl W. Raines, III**, Woodbury, MN (US); **Mark W. Schulz**, Minneapolis, MN (US); **Charlie Wood**, Minneapolis, MN (US)

(73) Assignee: **3M Innovative Properties Company**, St. Paul, MN (US)

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

(21) Appl. No.: **29/518,808**

(22) Filed: **Feb. 27, 2015**

(51) **LOC (10) Cl.** **29-02**

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

(58) **Field of Classification Search**
USPC D24/110.1–110.4, 110.6
CPC A62B 18/00; A62B 18/02; A62B 18/025; A61M 16/0622; A61M 16/06; A61M 16/0616
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,055,853	A	9/1936	Schwartz
2,062,834	A	12/1936	Schwartz
2,235,624	A	3/1941	Schwartz
2,787,333	A	4/1957	Boone
2,858,828	A	11/1958	Matheson
2,874,693	A	2/1959	Matheson
4,562,837	A	1/1986	Schlobohm
D286,213	S	10/1986	Maryyanek
4,921,512	A	5/1990	Maryyanek
4,932,399	A	6/1990	Cappa
5,062,421	A	11/1991	Burns
5,086,768	A	2/1992	Niemeyer
5,148,803	A	9/1992	Schlobohm
D339,658	S	9/1993	Lahteenmaki
RE35,062	E	10/1995	Brostrom
5,515,846	A	5/1996	Drews

(Continued)

FOREIGN PATENT DOCUMENTS

AU	359131	12/2014
AU	359132	12/2014

(Continued)

OTHER PUBLICATIONS

3M™ Cool Flow™ Valve information obtained from the internet on Mar. 18, 2014: http://solutions.3m.com/wps/portal/3M/en_EU/PPE_SafetySolutions_EU/Safety/FeaturedProducts/CoolFlowValve/.

(Continued)

Primary Examiner — Deanna L Pratt
Assistant Examiner — Lilyana Bekic
(74) *Attorney, Agent, or Firm* — Peter L. Olson

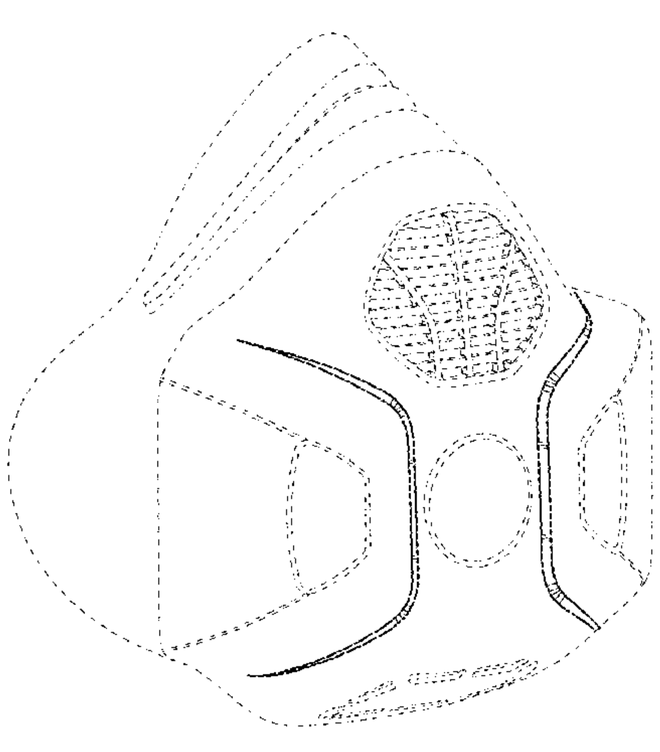
(57) **CLAIM**

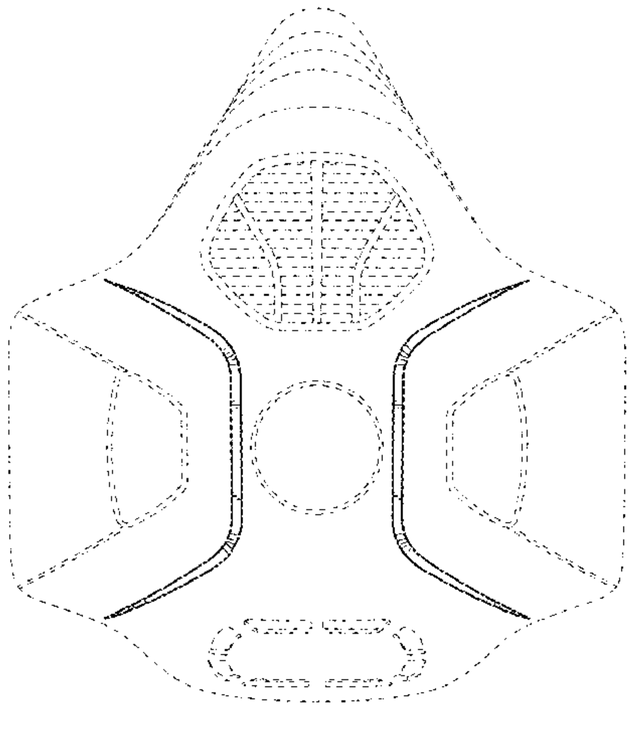
The ornamental design for a respirator mask body, as shown and described.

DESCRIPTION

FIG. **1** is a perspective view showing the new design for a respirator mask body;
FIG. **2** is a front view thereof;
FIG. **3** is a rear view thereof;
FIG. **4** is a right side view thereof, the left side being a mirror image thereof;
FIG. **5** is a top view thereof; and,
FIG. **6** is a bottom view thereof.
The broken lines in the drawings illustrate portions of the respirator mask body which form no part of the claimed design.

1 Claim, 3 Drawing Sheets





(56) **References Cited**

U.S. PATENT DOCUMENTS

5,579,761	A	12/1996	Yuschak	
5,611,925	A	3/1997	Yasue	
5,647,356	A	7/1997	Osendorf	
5,666,949	A	9/1997	Debe	
5,669,375	A	9/1997	Dahrendorf	
6,216,693	B1	4/2001	Rekow	
6,298,849	B1	10/2001	Scholey	
6,550,479	B1	4/2003	Duxbury	
6,575,165	B1	6/2003	Cook	
6,761,169	B2	7/2004	Eswarappa	
6,793,702	B2	9/2004	Eswarappa	
D518,571	S	4/2006	Martin	
7,121,279	B2	10/2006	Dennis	
7,171,966	B2	2/2007	Schrader	
D568,986	S *	5/2008	Holmquist-Brown et al.	D24/110.1
D569,969	S *	5/2008	Lin	D24/110.1
D570,474	S *	6/2008	Lin	D24/110.1
7,419,526	B2	9/2008	Greer	
7,827,990	B1	11/2010	Melidis	
D639,932	S *	6/2011	D'Souza et al.	D24/110.1
8,118,026	B2	2/2012	Gebrewold	
8,342,180	B2	1/2013	Martin	
D678,508	S	3/2013	Choi	
D683,446	S	5/2013	Eves	
D703,806	S *	4/2014	Hu et al.	D24/110
2001/0013347	A1	8/2001	Rekow	
2002/0195109	A1	12/2002	Mittelstadt	
2003/0217752	A1	11/2003	Muller	
2004/0003810	A1	1/2004	Templeton	
2005/0126572	A1	6/2005	Gosweiler	
2007/0272169	A1	11/2007	Barney	
2009/0078261	A1 *	3/2009	Martin et al.	128/206.12
2009/0078262	A1 *	3/2009	Gebrewold et al.	128/206.12
2009/0078264	A1	3/2009	Martin	
2009/0078265	A1 *	3/2009	Gebrewold et al.	128/206.19
2009/0139526	A1	6/2009	Melidis	
2009/0193628	A1 *	8/2009	Gebrewold et al.	24/200
2009/0235934	A1 *	9/2009	Martin	128/206.15
2012/0000465	A1	1/2012	Cavaliere	
2012/0024289	A1	2/2012	Johnstone	
2012/0042878	A1 *	2/2012	Woo	128/206.15
2012/0125341	A1 *	5/2012	Gebrewold et al.	128/206.12
2012/0125342	A1 *	5/2012	Gebrewold et al.	128/206.12
2012/0174922	A1	7/2012	Virr	
2012/0218265	A1	8/2012	Wakayama	
2012/0260920	A1 *	10/2012	Choi et al.	128/206.12
2013/0133664	A1	5/2013	Startare	
2014/0216473	A1 *	8/2014	Dwyer et al.	128/863
2014/0216474	A1 *	8/2014	Mittelstadt et al.	128/863
2014/0251327	A1 *	9/2014	Mittelstadt et al.	128/202.22
2015/0136141	A1 *	5/2015	Mittelstadt	128/206.15
2015/0136142	A1 *	5/2015	Blomberg	128/206.17

FOREIGN PATENT DOCUMENTS

AU	359133	12/2014
AU	359134	12/2014
AU	359135	12/2014
AU	359136	12/2014
AU	359137	12/2014
CA	82141	10/1997
CA	106801	12/2005
CN	3342471	12/2003
CN	3457902	6/2005
CN	3674586	7/2007
CN	300757753	3/2008
CN	300801845	7/2008
CN	301345091	9/2010
CN	301787238	1/2012
CN	301841897	2/2012
CN	301863214	3/2012
CN	302193139	11/2012
CN	302193145	11/2012
CN	302386273	4/2013
CN	302571626	9/2013
CN	302675143	12/2013
CN	302754689	3/2014
DE	M9107635-0001	6/1992
DE	29700093	3/1997
EM	000096961-0001	2/2004
EM	000455506-0001	12/2005
EM	001233373-0002	10/2010
EM	001233373-0003	10/2010
EM	001862939-0001	5/2011
EM	001871401-0001	8/2011
EM	001871401-0003	8/2011
EM	001871401-0004	8/2011
EM	001871401-0005	8/2011
EM	001352645-0001	12/2012
EM	001352645-0002	12/2012
EM	001355259-0001	1/2013
EM	001355259-0002	1/2013
EM	001378673-0001	8/2013
EM	001401335-0001	1/2014
EM	001401335-0002	1/2014
EM	001401335-0003	1/2014
EM	001401335-0004	1/2014
EM	001401335-0005	1/2014
EM	001401335-0006	1/2014
EM	001405609-0001	3/2014
EM	001405609-0002	3/2014
EM	001405609-0003	3/2014
EM	001405609-0004	3/2014
EP	1582231	10/2005
FR	916655-001	12/1991
FR	972590-001	9/1997
GB	2078022	2/1999
GB	2490507	11/2012
JP	D1253605	10/2005
JP	D1334600	6/2008
JP	D1423131	9/2011
JP	1424448	10/2011
JP	1433068	2/2012
JP	1489843	2/2014
KR	300365183	10/2004
KR	300387985	7/2005
KR	300402015	12/2005
KR	10-0773460	11/2007
KR	300484303	3/2008
KR	300497704	7/2008
KR	300505691	9/2008
KR	300514863	12/2008
KR	300516185	1/2009
KR	300526158	4/2009
KR	300542031	10/2009
KR	300563142	6/2010
KR	300649412	6/2012
KR	300649413	6/2012
KR	300662871	10/2012
KR	300683043	3/2013
KR	300683052	3/2013
KR	300683069	3/2013
KR	300684091	3/2013
KR	300726258	1/2014
KR	300726303	1/2014
RU	63184	6/2007
WO	03/090873	11/2003
WO	2004/071565	8/2004
WO	2008/082415	7/2008
WO	2009/038857	3/2009
WO	2012/140514	10/2012

OTHER PUBLICATIONS

3M™ FF400 Respirator information obtained from the internet on Mar. 17, 2014: http://solutions.3m.com/wps/portal/3M/en_US/3M-PPE-Safety-Solutions/Personal-Protective-Equipment/safety-products/Ultimate-FX/.

3M™ Maintenance Free Half Mask Respirators 4000 Series information obtained from the internet on Mar. 18, 2014: http://solutions.3m.com/wps/portal/3M/en_EU/PPE_SafetySolutions_EU/Safety/

(56) **References Cited**

OTHER PUBLICATIONS

Product_Catalogue/?N=5548558+3294361848+3294857473 &rt=rud.
3M™ 6000 Respirator information obtained from the internet on Mar. 18, 2014: http://solutions.3m.com/wps/portal/3M/en_US/GlobalMining/Home/Products/WorkerSafety/?PC_Z7_RJH9U5230GM530IQDGUM0E3O51000000_nid=2TX60V5VQPbeKXCTK5DQ71gl.
3M™ Half Facepiece 7500 Series Ultimate Reusable Respirator information obtained from the internet on Mar. 18, 2014: http://solutions.3m.com/wps/portal/3M/en_US/ElectricalUtility/Home/Products/Catalog/~?N=5551730&rt=c3.
3M™ Full Facepiece Reusable Respirator 6800 information obtained from the internet on Mar. 18, 2014: http://solutions.3m.com/wps/portal/3M/en_US/3M-PPE-Safety-Solutions/Personal-Protective-Equipment/Products/Product-Catalog/?N=4294930437+5011378&Nr=AND(hrcy_id%3AGST29W6QVWgs_TC2BMJQKFQ_N2RL3FHWVK_GPDOK8BC31gv)&rt=d.
Ekastu Safety Half Mask Polimask GAMMA/Silicon information obtained from internet on Mar. 25, 2014: http://www.ekastu.de/product_info.php/language/en/info/p18_Halbmaske-Polimask-GAMMA-Silikone.html/XTCsid/4b51b4a707af63184be8a64ba03b9117.
Koken Model 1091D Respirator information obtained from the internet on Mar. 17, 2014: http://www.koken-ltd.co.jp/english/particulaterespirators.htm.
Koken Particulate Respirators webpage, http://www.koken-ltd.co.jp/english/particulaterespirators.htm, obtained from internet on Jun. 3, 2013.
MSA Ultra Elite® Full-Facepiece Respirator information obtained from the internet on Mar. 18, 2014: http://us.msasafety.com/Air-Purifying-Respirators-(APR)/Full-Face-Masks/Ultra-Elite%26reg%3B-Full-Facepiece-Respirators/p/000050000500001084.
MSA Advantage® 420 Half-Mask Respirator information obtained from the internet on Mar. 18, 2014: http://us.msasafety.com/Air-Purifying-Respirators-(APR)/Half-Masks/Advantage%26reg%3B-420-Half-Mask-Respirator/p/000100000200001150.
North® by Honeywell 7700 Series Silicone Half Mask Respirator information obtained from the internet on Mar. 18, 2014: http://www.northernsafety.com/Product/7700/North-by-Honeywell-7700-Series-Silicone-Half-Mask-Respirator.
Scott AV-3000 Facepiece information obtained from the internet on Mar. 18, 2014: https://www.scottsafety.com/en/us/pages/ProductDetail.aspx?ProductDetail=AV-3000%20Facepiece.
Scott Excel™ Half-Facepiece information obtained from the internet on Mar. 18, 2014: https://www.scottsafety.com/en/us/DocumentandMedia1/xcelbro_6301_0201.pdf.
Shigematsu Gas Respirators information, pp. 11-16, obtained from Shigematsu's website on Mar. 17, 2014: http://www.sts-japan.com/english/product_catalog.html.
Survivair Blue 1 respirator information obtained from the internet on Mar. 17, 2014, http://www.honeywellsafety.com/Products/Respiratory_Protection/Survivair_Blue_1_(NIOSH).aspx?site=/usa.
Survivair/Willson Premier Plus Respirator information obtained from the internet on Mar. 18, 2014: http://store.parkersafetyinc.com/servlet/Detail?no=75.
U.S. Appl. No. 29/491,539 to Blomberg et al., filed May 22, 2014, entitled Respirator Mask Having A Circular Button.
U.S. Appl. No. 29/491,540 to Blomberg et al., filed May 22, 2014, entitled Respirator Communication Grill.
U.S. Appl. No. 29/491,541 to Blomberg et al., filed May 22, 2014, entitled Respirator Engagement Opening.
U.S. Appl. No. 29/491,542 to Blomberg et al., filed May 22, 2014, entitled Respirator Mask.
U.S. Appl. No. 29/491,544 to Blomberg et al. , filed May 22, 2014, entitled Respirator Mask Exhalation Port.
U.S. Appl. No. 29/491,545 to Blomberg et al., filed May 22, 2014, entitled Respirator Mask Body.
U.S. Appl. No. 29/491,546 to Mittelstadt et al., filed May 22, 2014, entitled Respirator Mask Having A Face Seal Flexing Region.

* cited by examiner

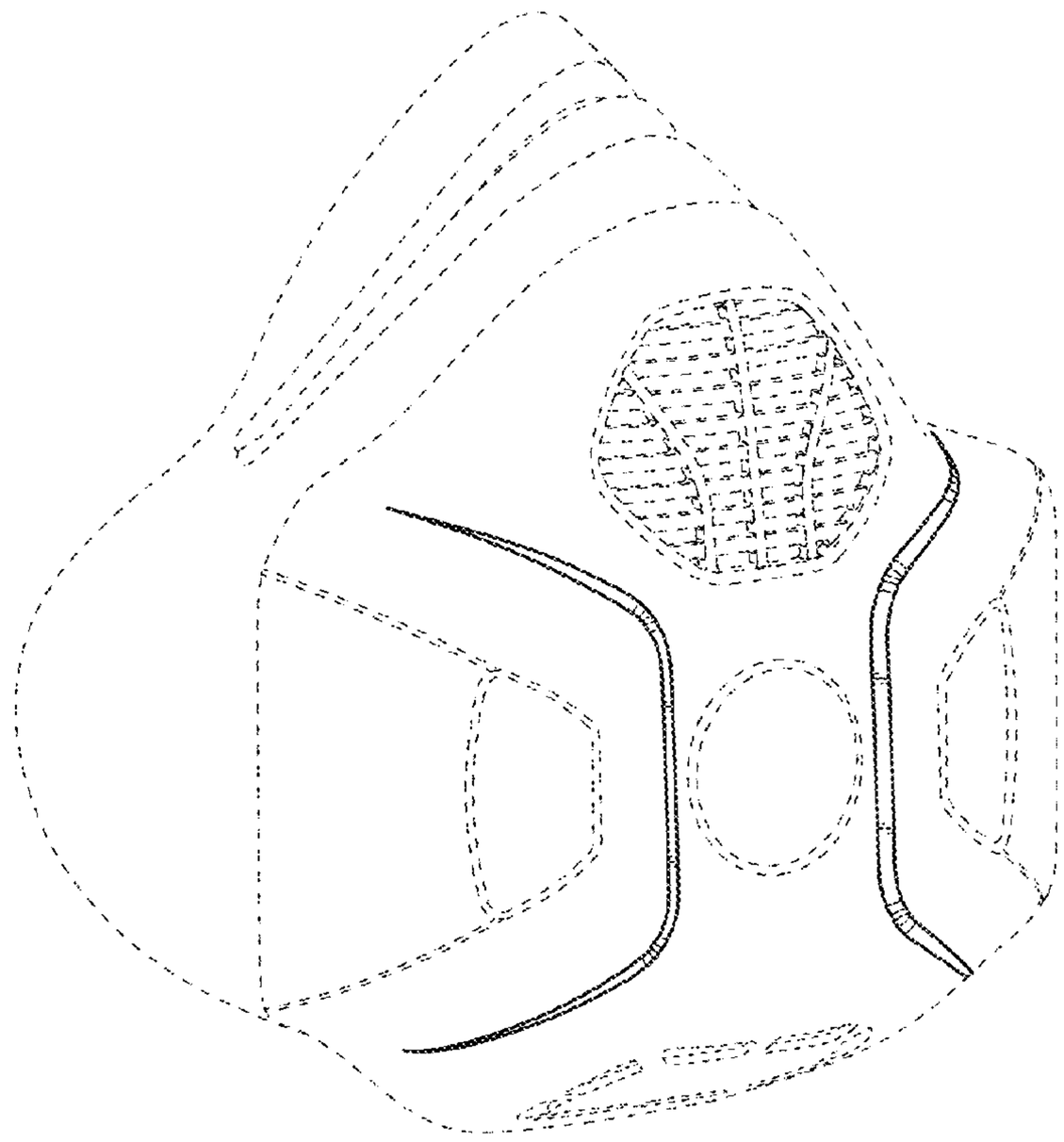


Fig. 1

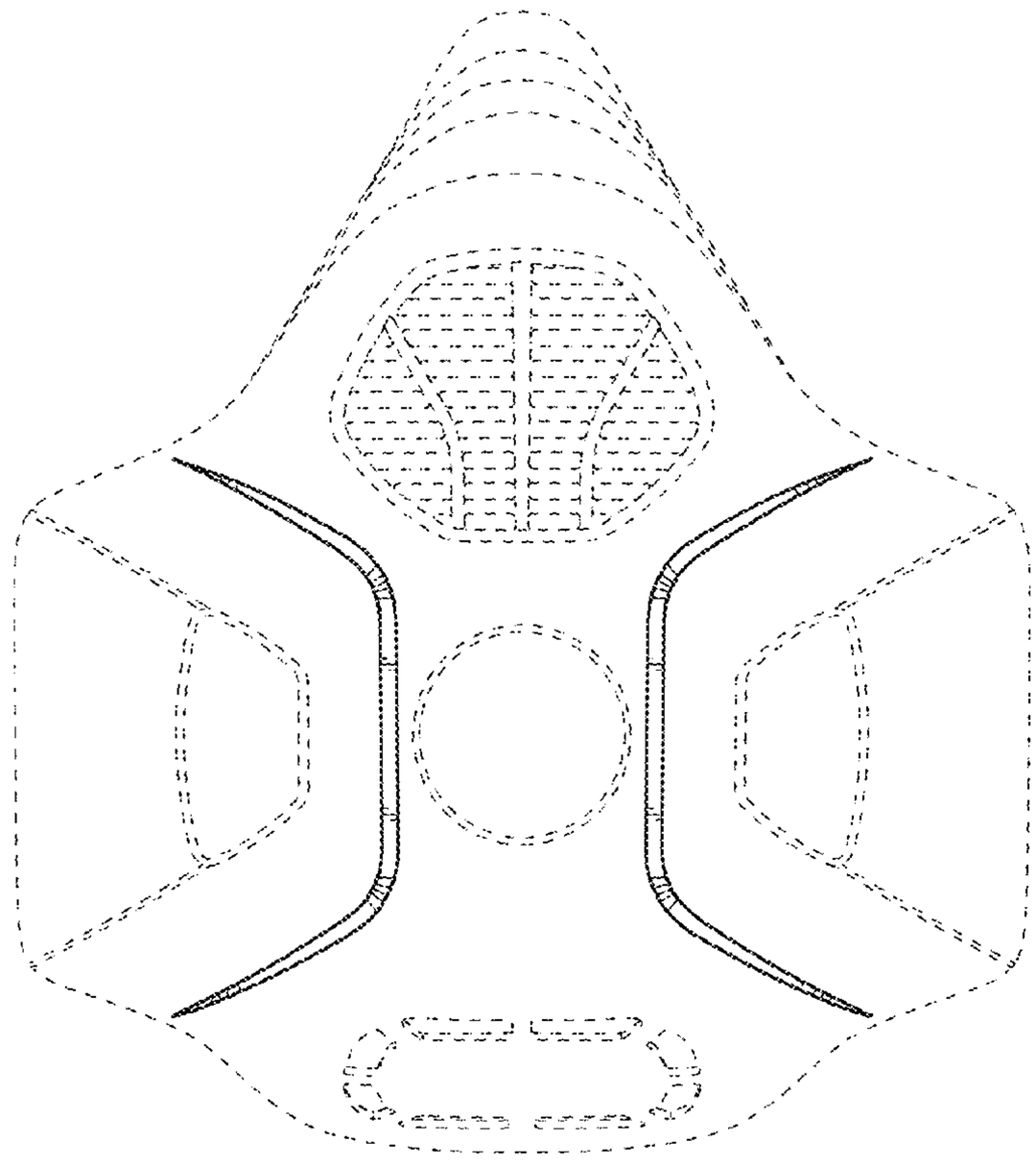


Fig. 2

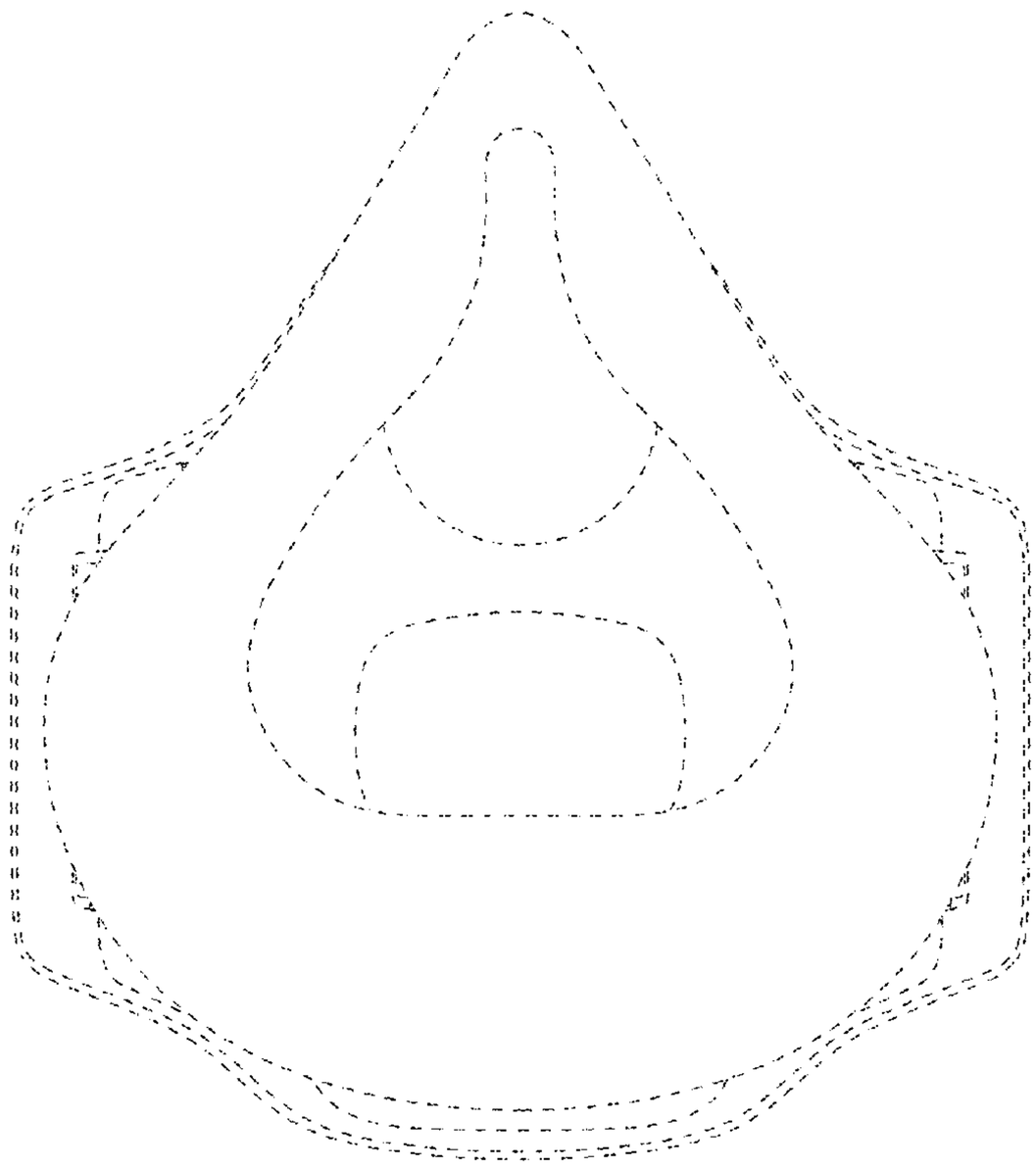


Fig. 3

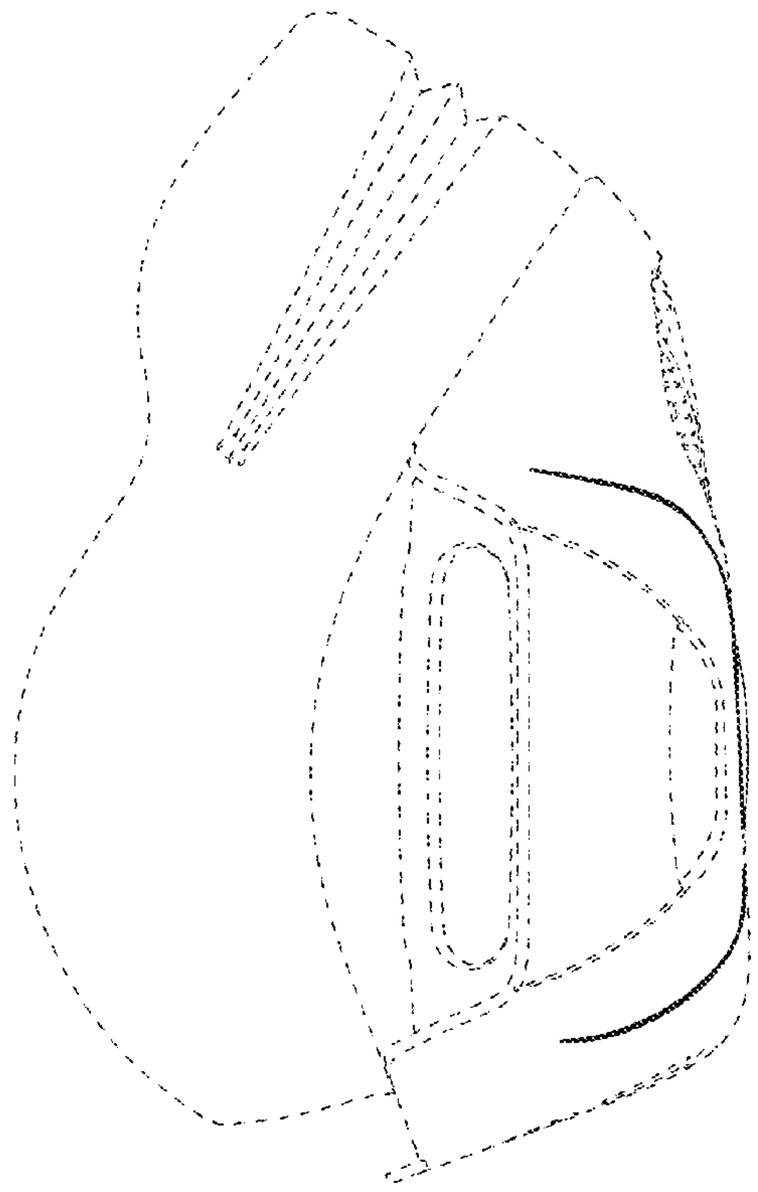


Fig. 4

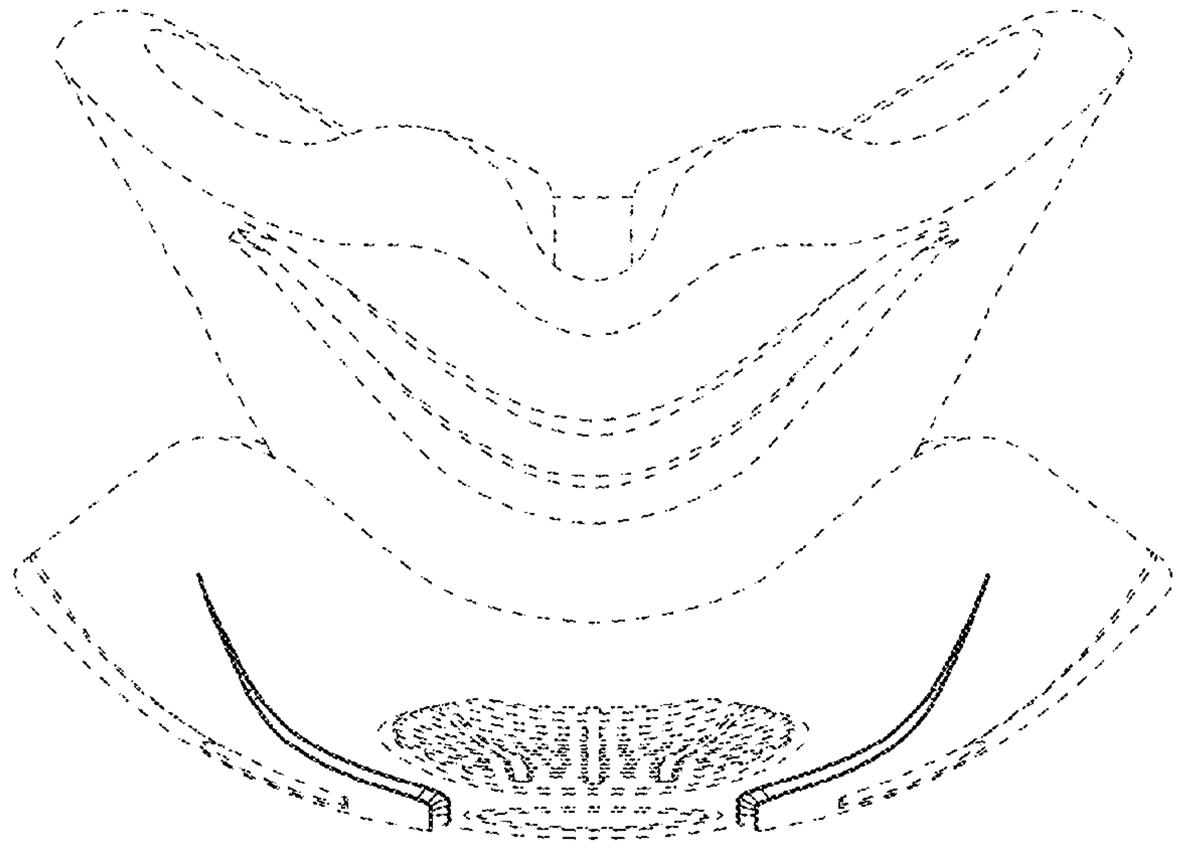


Fig. 5

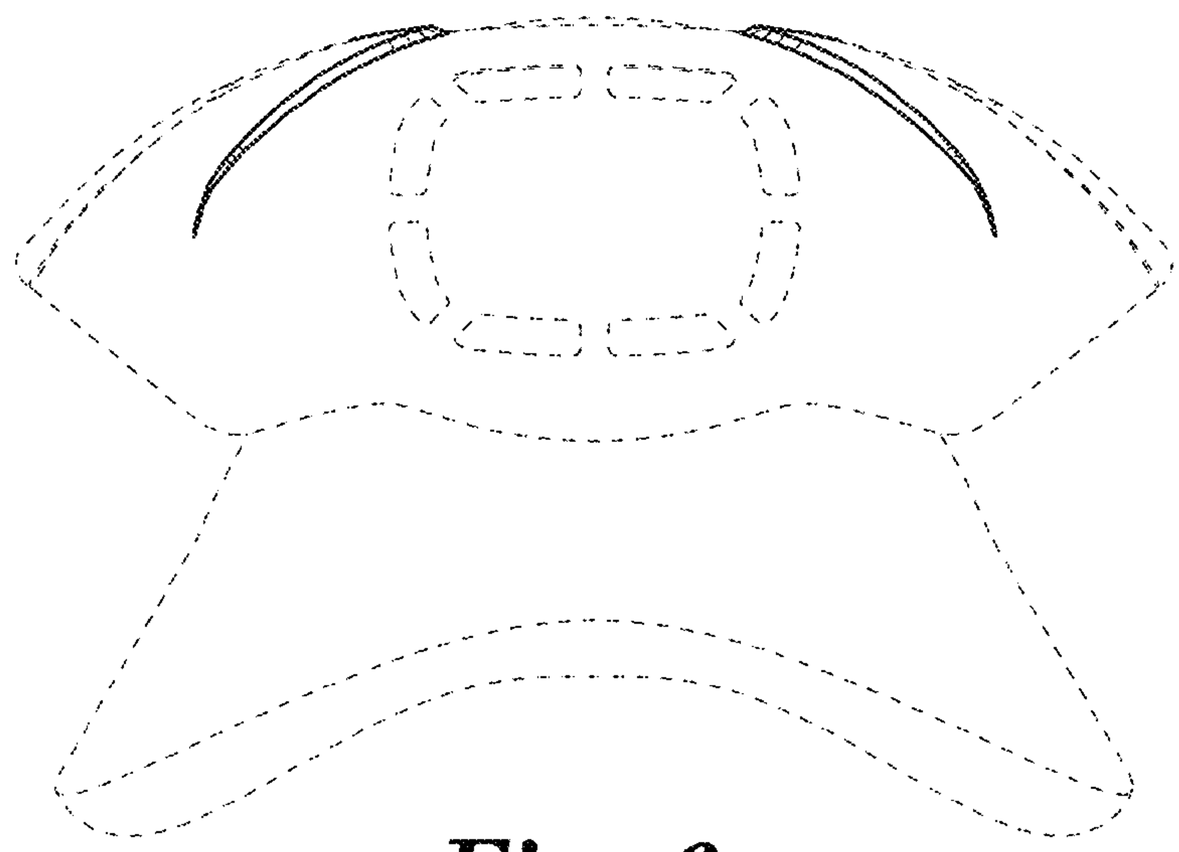


Fig. 6