



US00D782028S

(12) **United States Design Patent**
Kwok

(10) **Patent No.:** **US D782,028 S**

(45) **Date of Patent:** **** Mar. 21, 2017**

(54) **PAD FOR FOREHEAD SUPPORT**

(71) Applicant: **ResMed Limited**, Bella Vista, New South Wales (AU)

(72) Inventor: **Philip Rodney Kwok**, Sydney (AU)

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

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

(21) Appl. No.: **29/496,315**

(22) Filed: **Jul. 11, 2014**

Related U.S. Application Data

(60) Continuation of application No. 12/980,821, filed on Dec. 29, 2010, which is a continuation of application No. 11/207,006, filed on Aug. 19, 2005, now Pat. No. 7,882,837, which is a continuation of application No. 10/661,570, filed on Sep. 15, 2003, now Pat. No. 6,997,188, which is a continuation of application No. 10/230,169, filed on Aug. 29, 2002, now Pat. No. 6,691,708, which is a division of application No. 09/608,440, filed on Jun. 30, 2000, now Pat. No. 6,463,931, which is a continuation of application No. 09/008,708, filed on Jan. 16, 1998, now Pat. No. 6,119,693.

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

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

(58) **Field of Classification Search**
USPC D24/110-110.6, 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

4,429 A	3/1846	Cooke et al.
781,516 A	1/1905	Guthrie
812,706 A	2/1906	Warbasse
1,081,745 A	12/1913	Johnston et al.
1,192,186 A	7/1916	Greene
1,653,572 A	12/1927	Jackson

(Continued)

FOREIGN PATENT DOCUMENTS

AU	91/77110 B	11/1991
AU	94/64816 B	12/1994

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 60/227,472, filed Aug. 2000, Lithgow et al.

(Continued)

Primary Examiner — Barbara Fox

Assistant Examiner — Lilyana Bekic

(74) *Attorney, Agent, or Firm* — Nixon & Vanderhye P.C.

(57) **CLAIM**

The ornamental design for a pad for forehead support, as shown and described.

DESCRIPTION

FIG. 1 is a front isometric view of a pad for forehead support according to my new design;

FIG. 2 is a reverse isometric view thereof;

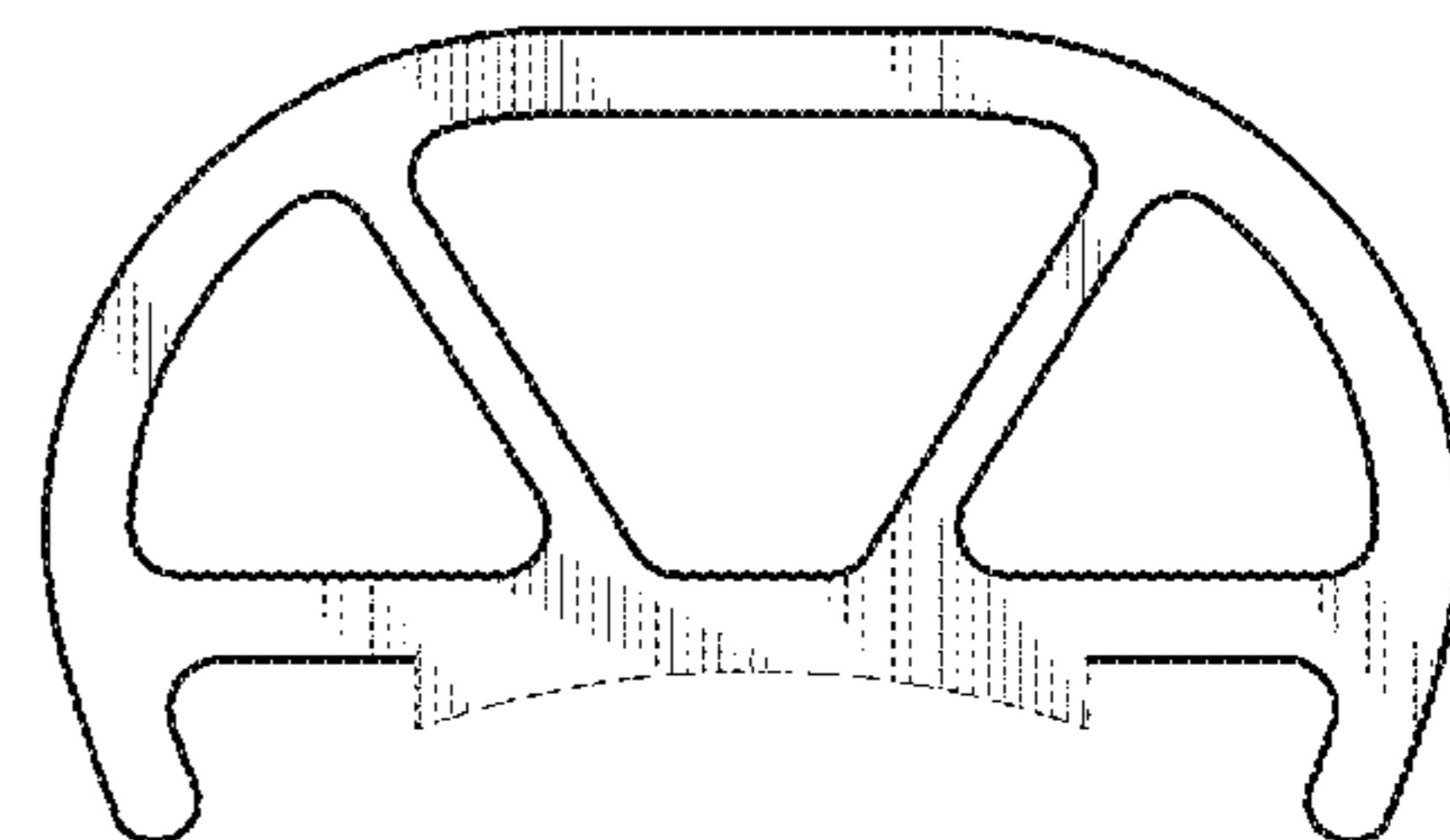
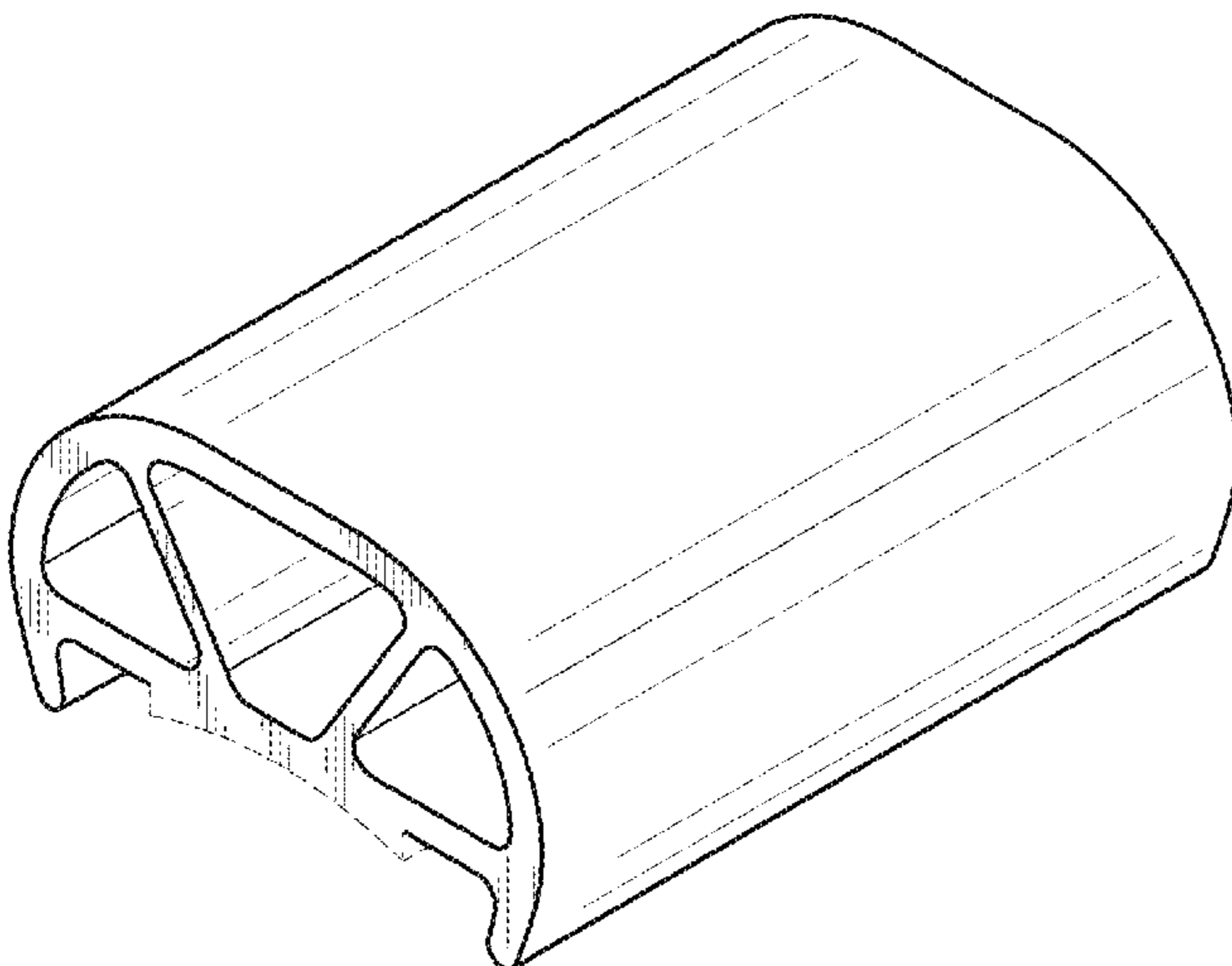
FIG. 3 is another front isometric view thereof; and

FIG. 4 is a top view thereof; and

FIG. 5 is an end view thereof.

The broken lines in the drawings illustrate portions of the pad for forehead support that form no part of the claimed design.

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

1,926,027 A	9/1933	Biggs	4,919,128 A	4/1990	Kopala et al.
2,123,353 A	7/1938	Catt	4,938,210 A	7/1990	Shene
2,245,969 A	6/1941	Francisco et al.	4,938,212 A	7/1990	Snook et al.
2,248,477 A	7/1941	Lombard	4,944,310 A	7/1990	Sullivan
2,254,854 A	9/1941	O'Connell	D310,431 S	9/1990	Bellm
2,287,353 A	6/1942	Minnick	4,971,051 A	11/1990	Toffolon
2,317,608 A	4/1943	Heidbrink	4,986,269 A	1/1991	Hakkinen
2,371,965 A	3/1945	Lehmberg	4,989,596 A	2/1991	Macris et al.
2,376,671 A	5/1945	Fink	4,989,599 A	2/1991	Carter
2,415,846 A	2/1947	Randall	5,005,568 A	4/1991	Loescher et al.
2,438,058 A	3/1948	Kincheloe	5,005,571 A	4/1991	Dietz
2,578,621 A	12/1951	Yant	5,038,776 A	8/1991	Harrison et al.
2,590,006 A	3/1952	Gordon	5,042,473 A	8/1991	Lewis
2,617,751 A	11/1952	Bickett	5,042,478 A	8/1991	Kopala et al.
2,664,084 A	12/1953	Hammermann	5,046,200 A	9/1991	Feder
2,931,356 A	4/1960	Schwarz	5,063,922 A	11/1991	Hakkinen
D188,084 S	5/1960	Garelick	5,069,205 A	12/1991	Urso
2,939,458 A	6/1960	Lundquist	D323,908 S	2/1992	Hollister et al.
3,013,556 A	12/1961	Galleher	5,109,839 A	5/1992	Blasdell et al.
3,182,659 A	5/1965	Blount et al.	5,109,840 A	5/1992	Daleiden
3,189,027 A	6/1965	Bartlett	5,121,745 A	6/1992	Israel
3,193,624 A	7/1965	Webb et al.	5,133,347 A	7/1992	Huenebeck
3,238,943 A	3/1966	Holley	5,140,980 A	8/1992	Haughey et al.
3,315,674 A	4/1967	Bloom et al.	5,140,982 A	8/1992	Bauman
3,330,273 A	7/1967	Bennett	5,159,938 A	11/1992	Laughlin
3,362,420 A	1/1968	Blackburn et al.	5,178,138 A	1/1993	Walstrom et al.
3,363,833 A	1/1968	Laerdal	D334,633 S	4/1993	Rudolph
3,556,122 A	1/1971	Laerdal	5,220,699 A	6/1993	Farris
3,580,051 A	5/1971	Blevins	5,231,983 A	8/1993	Matson et al.
3,700,000 A	10/1972	Hesse et al.	5,233,978 A	8/1993	Callaway
3,720,235 A	3/1973	Schrock	5,243,971 A	9/1993	Sullivan et al.
3,750,333 A	8/1973	Vance	5,265,595 A	11/1993	Rudolph
3,752,157 A	8/1973	Malmin	5,279,289 A	1/1994	Kirk
3,796,216 A	3/1974	Schwarz	5,280,784 A	1/1994	Kohler
3,799,164 A	3/1974	Rollins	5,311,862 A	5/1994	Blasdell et al.
D231,803 S	6/1974	Huddy	5,322,057 A	6/1994	Raabe et al.
3,830,230 A	8/1974	Chester	5,322,059 A	6/1994	Walther
4,077,404 A	3/1978	Elam	5,343,878 A	9/1994	Scarberry et al.
D250,131 S	10/1978	Lewis et al.	5,357,951 A	10/1994	Ratner
4,167,185 A	9/1979	Lewis	5,372,130 A	12/1994	Stern et al.
4,226,234 A	10/1980	Gunderson	5,388,273 A	2/1995	Sydor et al.
4,245,632 A	1/1981	Houston	5,388,571 A	2/1995	Roberts et al.
D262,322 S	12/1981	Mizerak	5,404,871 A	4/1995	Goodman et al.
4,304,229 A	12/1981	Curtin	5,419,318 A	5/1995	Tayebi
4,328,797 A	5/1982	Rollins et al.	5,429,126 A	7/1995	Bracken
4,347,205 A	8/1982	Stewart	5,429,683 A	7/1995	Le Mitouard
4,354,488 A	10/1982	Bartos	5,431,158 A	7/1995	Tirota
4,402,316 A	9/1983	Gadberry	5,438,981 A	8/1995	Starr et al.
4,412,537 A	11/1983	Tiger	5,441,046 A	8/1995	Starr et al.
4,467,799 A	8/1984	Steinberg	D362,061 S	9/1995	McGinnis et al.
4,522,639 A	6/1985	Ansire et al.	5,477,852 A	12/1995	Landis et al.
4,558,710 A	12/1985	Eichler	5,479,920 A	1/1996	Piper et al.
4,566,137 A	1/1986	Gooding	5,481,763 A	1/1996	Brostrom et al.
4,616,647 A	10/1986	McCreadie	5,488,948 A	2/1996	Dubruille et al.
4,622,964 A	11/1986	Flynn	5,492,116 A	2/1996	Scarberry et al.
4,655,213 A	4/1987	Rapoport et al.	5,501,214 A	3/1996	Sabo
4,665,570 A	5/1987	Davis	5,509,404 A	4/1996	Lloyd et al.
4,671,271 A	6/1987	Bishop et al.	5,517,986 A	5/1996	Starr et al.
4,677,975 A	7/1987	Edgar et al.	5,538,000 A	7/1996	Rudolph
4,677,977 A	7/1987	Wilcox	5,540,223 A	7/1996	Starr et al.
D293,613 S	1/1988	Wingler	5,542,128 A	8/1996	Lomas
4,732,147 A	3/1988	Fuller	5,546,936 A	8/1996	Virag et al.
4,739,755 A	4/1988	White et al.	5,558,090 A	9/1996	James
4,770,169 A	9/1988	Schmoegner et al.	RE35,339 E	10/1996	Rapoport
4,774,941 A	10/1988	Cook	5,560,354 A	10/1996	Berthon-Jones et al.
4,782,832 A	11/1988	Trimble et al.	5,566,389 A	10/1996	Li
4,799,477 A	1/1989	Lewis	5,570,682 A	11/1996	Johnson
4,809,692 A	3/1989	Nowacki et al.	5,570,689 A	11/1996	Starr et al.
4,819,629 A	4/1989	Jonson	D377,089 S	12/1996	Starr et al.
4,821,713 A	4/1989	Bauman	5,592,938 A	1/1997	Scarberry et al.
4,841,953 A	6/1989	Dodrill	5,608,647 A	3/1997	Rubsamen et al.
4,848,334 A	7/1989	Bellm	5,642,730 A	7/1997	Baran
4,848,366 A	7/1989	Aita et al.	5,647,355 A	7/1997	Starr et al.
4,907,584 A	3/1990	McGinnis	5,647,357 A	7/1997	Barnett et al.
4,910,806 A	3/1990	Baker et al.	5,649,532 A	7/1997	Griffiths
			5,649,533 A	7/1997	Oren
			5,655,520 A	8/1997	Howe et al.
			5,655,527 A	8/1997	Scarberry et al.
			5,657,493 A	8/1997	Ferrero et al.

(56)

References Cited

FOREIGN PATENT DOCUMENTS

U.S. PATENT DOCUMENTS			FOREIGN PATENT DOCUMENTS		
			AU	95/16178 B	7/1995
			AU	9459430	2/1996
5,657,752 A	8/1997	Landis et al.	AU	A 32914/95	2/1996
5,662,101 A	9/1997	Ogden et al.	AU	A 41018/97	4/1998
5,666,946 A	9/1997	Langenback	AU	A 89312/98	1/1999
5,685,296 A	11/1997	Zdrojkowski et al.	CA	1039144	9/1978
5,687,715 A	11/1997	Landis et al.	DE	459104	4/1928
5,715,814 A	2/1998	Ebers	DE	701 690 C	1/1941
5,724,965 A	3/1998	Handke et al.	DE	159396	6/1981
5,746,201 A	5/1998	Kidd	DE	3015279 A1	10/1981
5,813,423 A	9/1998	Kirchgeorg	DE	3345067 A1	6/1984
5,832,918 A	11/1998	Pantino	DE	3537507	4/1987
5,921,239 A	7/1999	McCall et al.	DE	3537507 A1	4/1987
5,937,851 A	8/1999	Serowski et al.	DE	3539073 A1	5/1987
6,044,844 A	4/2000	Kwok et al.	DE	4004157 C1	4/1991
6,098,205 A	8/2000	Schwartz et al.	DE	4343205 A1	6/1995
6,112,746 A	9/2000	Kwok et al.	DE	197 35 359	1/1998
6,119,693 A	9/2000	Kwok et al.	DE	197 35 359 A1	1/1998
6,123,071 A	9/2000	Berthon-Jones et al.	DE	297 23 101 U1	7/1998
6,152,137 A	11/2000	Schwartz et al.	DE	298 10 846 U1	8/1998
D439,326 S	3/2001	Hecker et al.	EP	0 054 154 A1	6/1982
D443,355 S	6/2001	Gunaratnam et al.	EP	0 178 925 A2	4/1986
6,257,237 B1	7/2001	Suzuki	EP	0 252 052 A1	1/1988
6,341,606 B1	1/2002	Bordewick et al.	EP	0 264 772 A1	4/1988
6,374,826 B1	4/2002	Gunaratnam et al.	EP	0 386 605 A1	2/1990
6,397,847 B1	6/2002	Scarberry et al.	EP	0 386 605 A1	9/1990
6,463,931 B1	10/2002	Kwok et al.	EP	0 427 474 A2	5/1991
6,467,483 B1 *	10/2002	Kopacko A61M 16/06 128/205.25	EP	0 462 701 A1	12/1991
			EP	0 602 424	11/1993
D468,823 S	1/2003	Smart	EP	0 602 424 A1	6/1994
6,520,182 B1	2/2003	Gunaratnam	EP	0 608 684 A1	8/1994
6,532,961 B1	3/2003	Kwok	EP	0 697 225	7/1995
6,557,556 B2	5/2003	Kwok	EP	0 697 225 A2	2/1996
D476,732 S *	7/2003	Smart D24/110.1	EP	178 925 A2	4/1996
D484,237 S	12/2003	Lang et al.	EP	0 747 078 A2	12/1996
6,679,261 B2 *	1/2004	Lithgow A61M 16/06 128/205.25	EP	0 821 978	2/1998
			EP	0 821 978 A2	2/1998
6,691,707 B1	2/2004	Gunaratnam et al.	FR	2 574 657 A1	6/1986
6,691,708 B2	2/2004	Kwok et al.	FR	2 658 725 A1	8/1991
D492,992 S	7/2004	Guney et al.	FR	2 749 176	12/1997
6,918,390 B2	7/2005	Lithgow et al.	FR	2 749 176 A1	12/1997
D510,439 S *	10/2005	Wilkens D24/180	GB	1395391	5/1975
6,997,188 B2	2/2006	Kwok et al.	GB	1 467 828	3/1977
7,296,574 B2 *	11/2007	Ho A61M 16/0633 128/201.24	GB	2145335 A	3/1985
			GB	2147506 A	5/1985
7,523,753 B2 *	4/2009	Gunaratnam A61M 16/06 128/206.21	GB	2 164 569 A	3/1986
			GB	2 267 648 A	12/1993
7,640,933 B1 *	1/2010	Ho A61M 16/06 128/206.21	JP	09-216240 A	8/1997
			WO	WO 80/01044	5/1980
D624,642 S *	9/2010	Collazo D24/110.1	WO	WO 82/03548 A1	10/1982
D626,215 S *	10/2010	Collazo D24/110.1	WO	WO 86/06969 A1	12/1986
7,882,837 B2	2/2011	Kwok et al.	WO	WO 87/01950 A1	4/1987
D684,257 S *	6/2013	Clarke D24/110.1	WO	WO 91/03277	3/1991
D684,683 S *	6/2013	Curti D24/110	WO	WO 91/03277 A1	3/1991
D687,538 S *	8/2013	Collazo D24/110.1	WO	WO 92/15353	9/1992
D692,126 S *	10/2013	Lee D24/110.4	WO	WO 92/15353 A2	9/1992
D693,460 S *	11/2013	Rothermel D24/110.4	WO	WO 92/20395	11/1992
D693,461 S *	11/2013	Rothermel D24/110.4	WO	WO 93/01854	2/1993
D693,462 S *	11/2013	Rothermel D24/110.4	WO	WO 94/02190	2/1994
D697,203 S *	1/2014	Clarke D24/110.4	WO	WO 94/16759	8/1994
D700,697 S *	3/2014	Ho D24/110.4	WO	WO 94/16759 A1	8/1994
D700,961 S *	3/2014	Tellez D24/110	WO	WO 94/20051	9/1994
2002/0026934 A1 *	3/2002	Lithgow A61M 16/06 128/97.1	WO	WO 94/20051 A1	9/1994
			WO	WO 95/02428	1/1995
2003/0005935 A1	1/2003	Kwok et al.	WO	WO 96/17643	6/1996
2003/0084904 A1	5/2003	Gunaratnam	WO	WO 96/25983	8/1996
2003/0221691 A1	12/2003	Biener et al.	WO	WO 96/25983 A1	8/1996
2004/0025881 A1 *	2/2004	Gunaratnam A61M 16/06 128/206.15	WO	WO 96/39206	12/1996
			WO	WO 97/07847	3/1997
2004/0045550 A1	3/2004	Lang et al.	WO	WO 97/41911	11/1997
2004/0060561 A1	4/2004	Kwok et al.	WO	WO 98/04310	2/1998
2005/0011522 A1 *	1/2005	Ho A61M 16/0633 128/206.21	WO	WO 98/04310 A1	2/1998
			WO	WO 98/11930	3/1998
2005/0155605 A1	7/2005	Lithgow et al.	WO	WO 98/11930 A1	3/1998
2006/0011202 A1	1/2006	Kwok et al.	WO	WO 98/18514 A1	5/1998
2011/0094517 A1	4/2011	Kwok et al.	WO	WO 98/24499 A1	6/1998

(56)

References Cited

FOREIGN PATENT DOCUMENTS

WO	WO 98/26829	A1	6/1998
WO	WO 98/26830	A1	6/1998
WO	WO 98/48878	A2	11/1998

OTHER PUBLICATIONS

Mask 1 Photographs, Respiroics Inc., Reusable Full Mask (small) Part #452033 Lot #951108.
 Mask 2 Photographs, Puritan—Bennett, Adam Circuit, Shell Part #231700, Swivel Part #616329-00, Pillows (medium) Part #616324.
 Mask 3 Photographs, DeVilbiss Healthcare Inc., Devilbiss Seal-Ring and CPAP Mask Kit (medium), Part #73510-669.
 Mask 4 Photographs, Respiroics Inc., Monarch Mini Mask with Pressure Port, Part #572004, Monarch Headgear, Part #572011.
 Mask 5 Photographs, Healthdyne Technologies, Nasal CPAP Mask (medium narrow), Part #702510.
 Mask 6 Photographs, Healthdyne Technologies, Soft Series Nasal CPAP Mask, Part #702020.
 Mask 7 Photographs, DeVilbiss Healthcare Inc., Small Mask and Seal Rings, Part #73510-668.

Mask 8 Photographs, Respiroics Inc., Reusable Contour Mask (medium), Part #302180.
 Mask 9 Photographs, Healthdyne Technologies, Healthdyne Large Headgear.
 Mask 10 Photographs, Respiroics Inc., Soft Cap (medium), Part #302142.
 Mask 11 Photographs, Weinmann: Hamburg, Nasalmaskensystem mit Schalldämpfer (medium), Part #WN 23105.
 Mask 12 Photographs, Life Care.
 Mask 13 Photographs, Healthdyne Technologies.
 Mask 14 Photographs, King System.
 Mask 15 Photographs, Respiroics Inc., Pediatric Mask.
 Mask 16 Photographs, Hans Rudolph Inc., Hans Rudolph Silicone Rubber Face Mask/8900.
 Photograph of Weinmann Mask acquired prior to 1998.
 Sullivan Mirage brochure. © 1997. ResMed Limited.
 Sullivan Mirage brochure. © 1998. ResMed Limited.
 Somotron CPAP-Gerat WM 2300 Instruction Manual, Weinmann Hamburg, 11 pages, 1991.
 9 photographs of Weinmann mask. WM 23122. 1991.
 The ResMed Range of Mask Systems, product brochure, Nov. 1995, 4 pages.

* cited by examiner

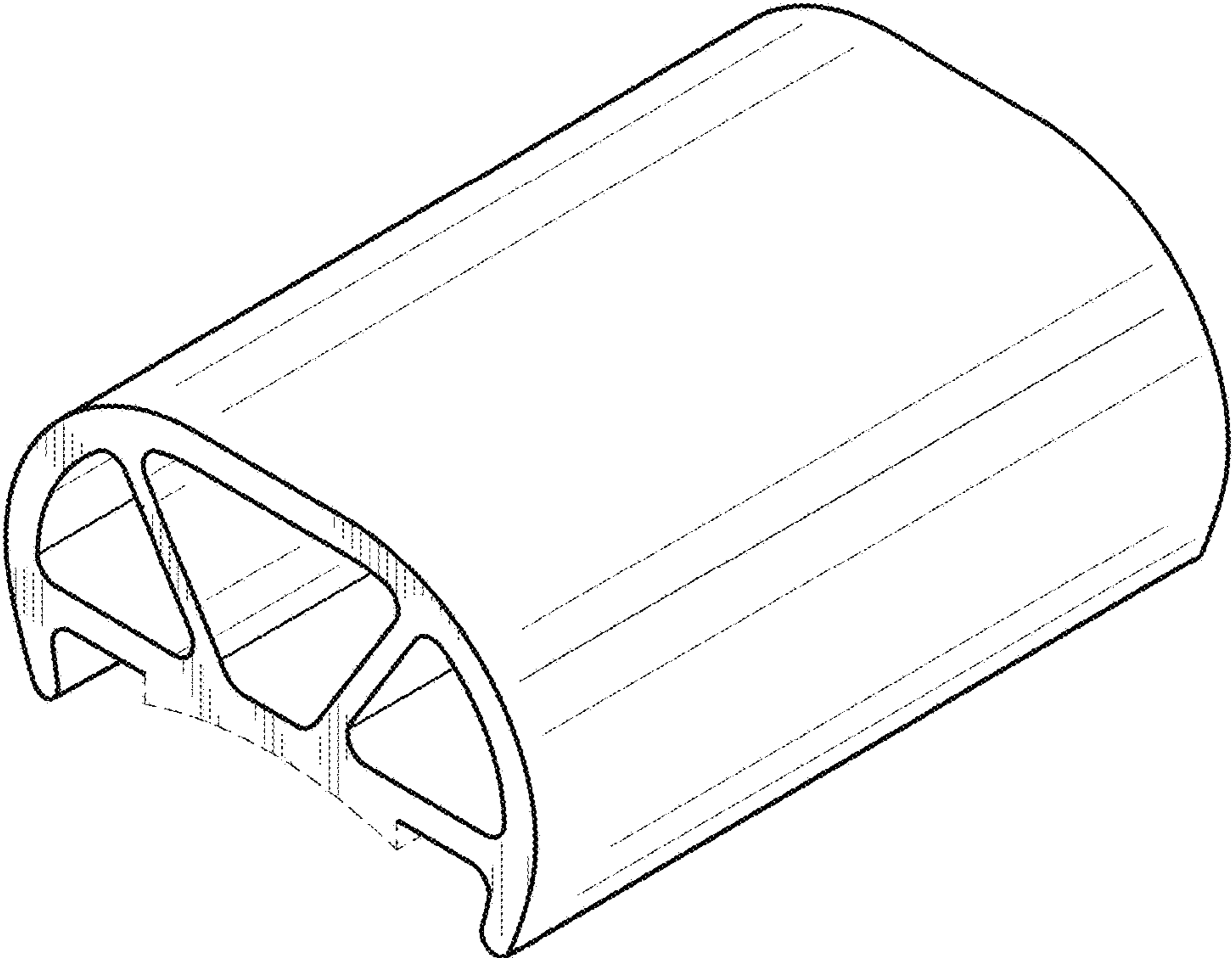


FIG. 1

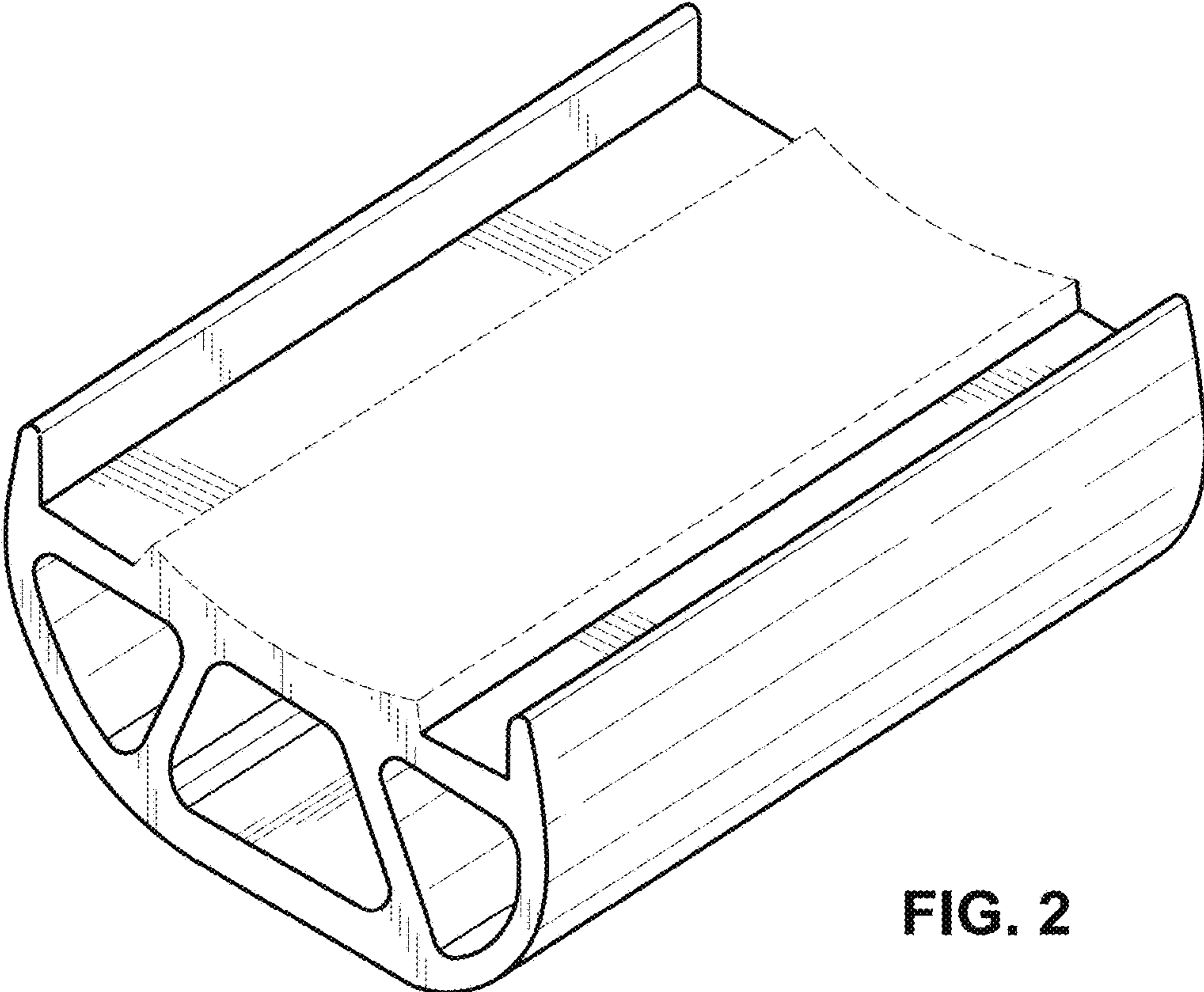


FIG. 2

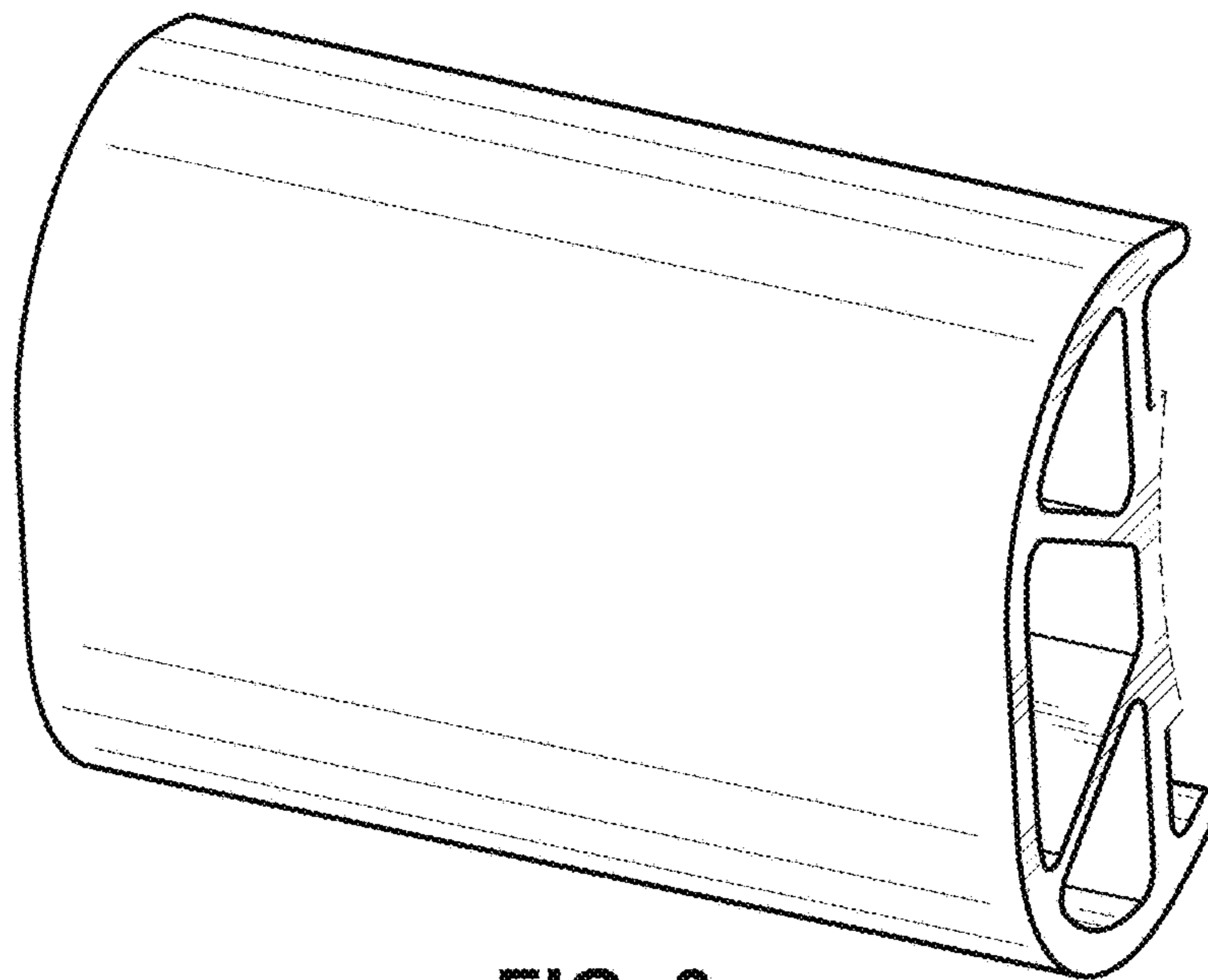


FIG. 3

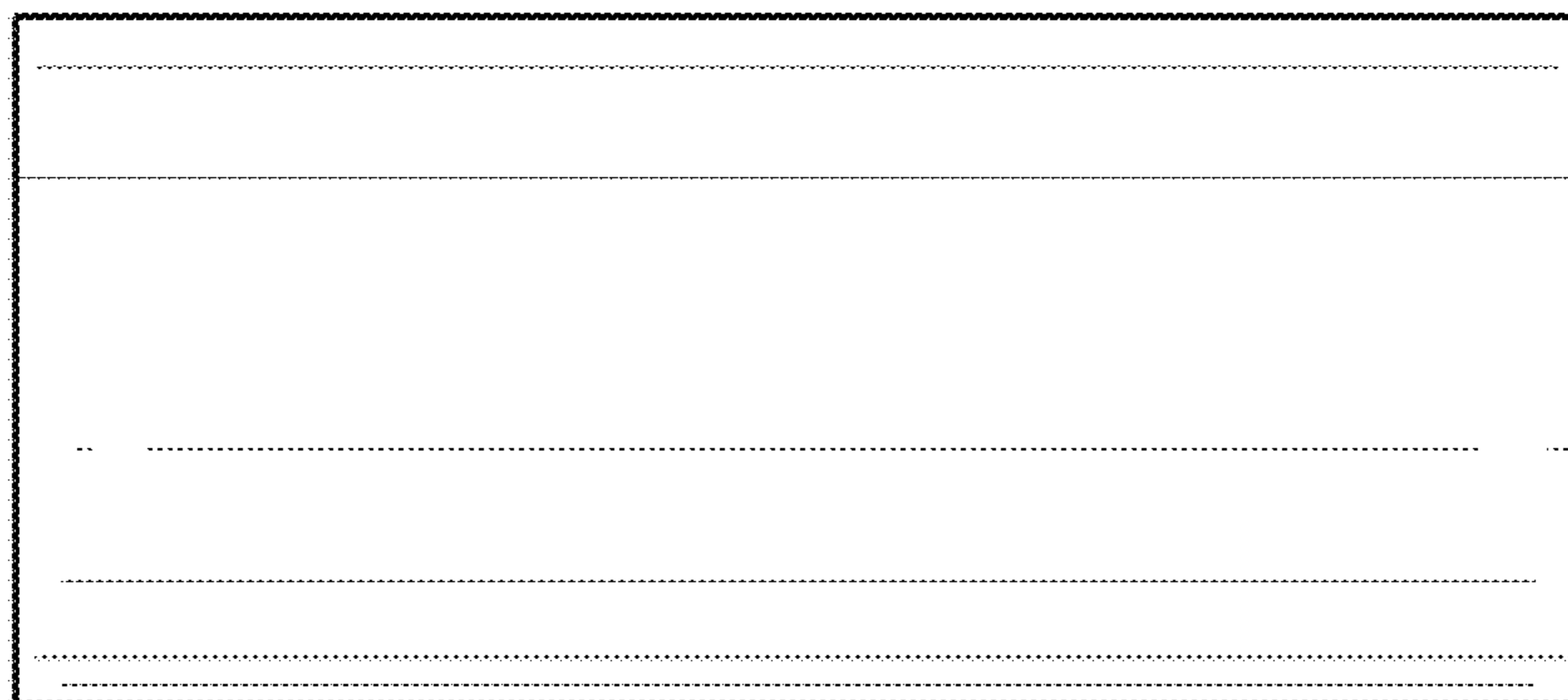


FIG. 4

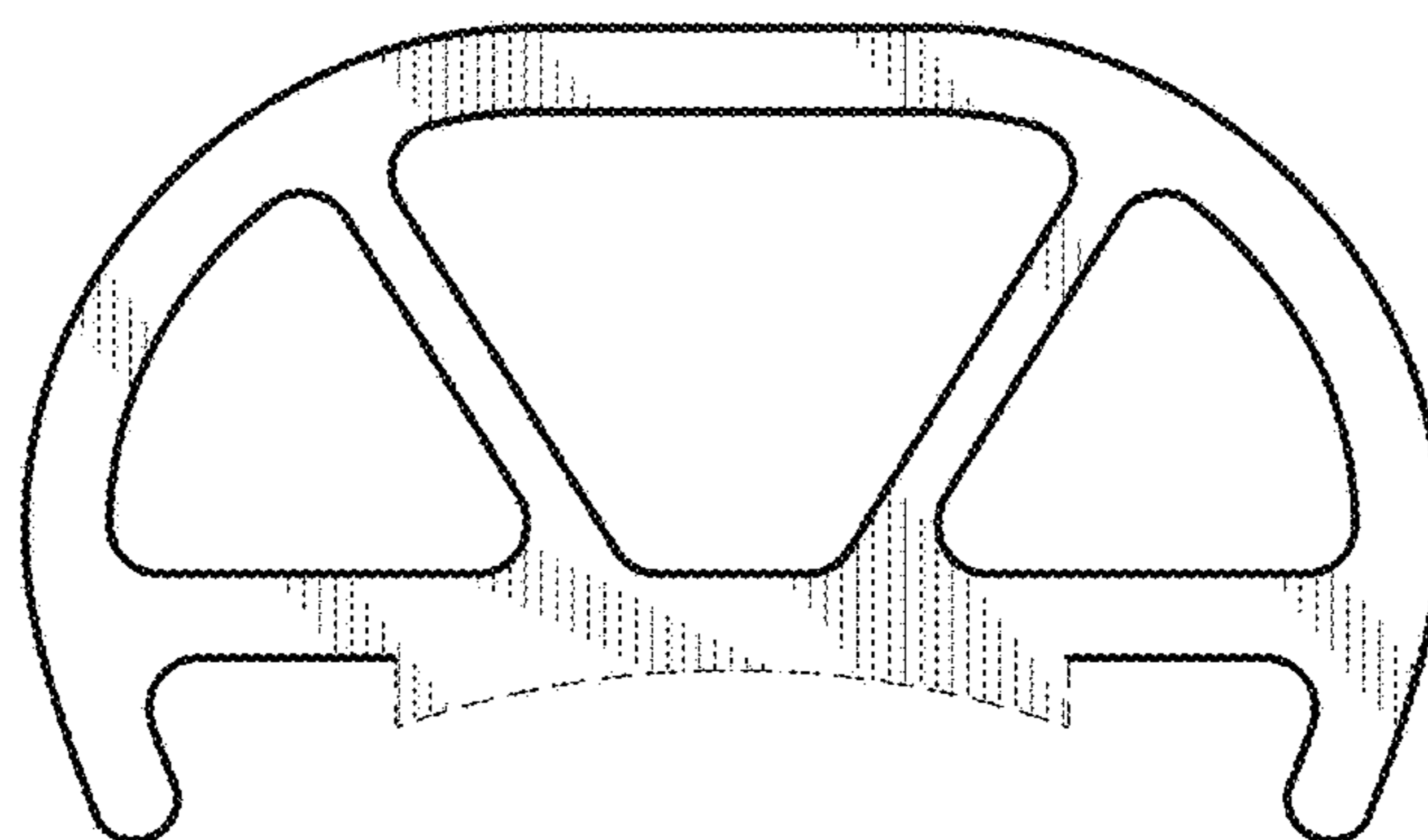


FIG. 5