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

(10) **Patent No.:** **US D814,443 S**
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(54) **SUB TRAGUS EAR UNIT**

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(*) Notice: This patent is subject to a terminal disclaimer.

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

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Related U.S. Application Data

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(30) **Foreign Application Priority Data**

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(51) **LOC (11) Cl.** **14-01**

(52) **U.S. Cl.**
USPC **D14/223**; D24/174

(58) **Field of Classification Search**
USPC D14/223, 205; D24/174; 128/864, 866, 128/867; 181/129, 130, 135; 379/430, 379/431; 381/72, 380, 381, 330, 311, 381/328, 322, 324, 371, 313; 455/90.3, 455/575.1, 569.1

CPC H04R 25/00; H04R 1/10; H04R 1/105; H04R 5/02; H04R 1/1016

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

333,724 A * 1/1886 Blodgett H04R 25/652 181/130

588,099 A 8/1897 Blout et al.

931,768 A 8/1909 Kirkpatrick
1,564,474 A 12/1925 Fensky
1,614,987 A * 1/1927 Langenbeck H04R 25/65 181/135
1,668,890 A 5/1928 Curran et al.
(Continued)

FOREIGN PATENT DOCUMENTS

DE 29718483 U1 2/1999
EP 1377113 A2 1/2004
(Continued)

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(57) **CLAIM**

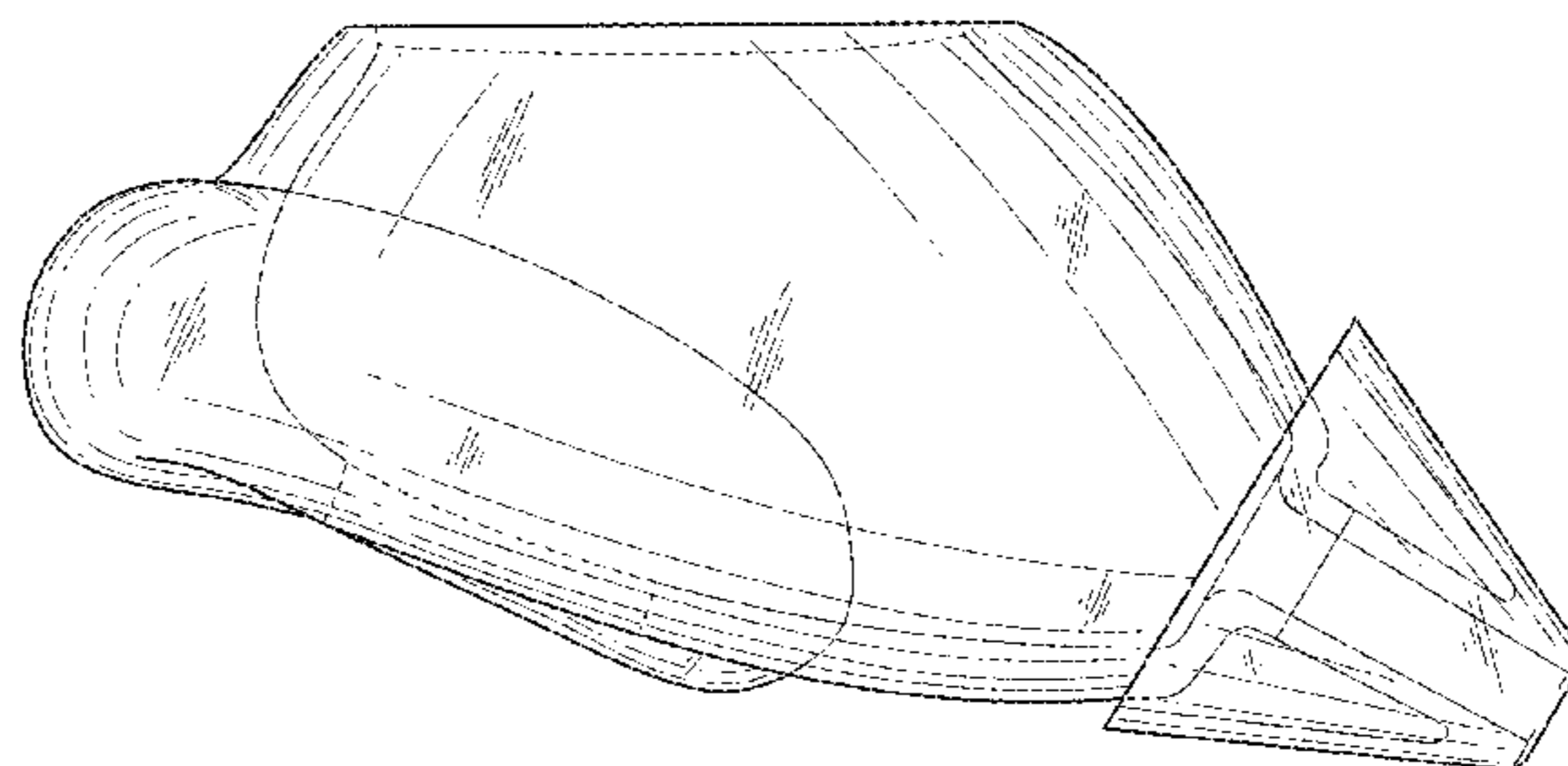
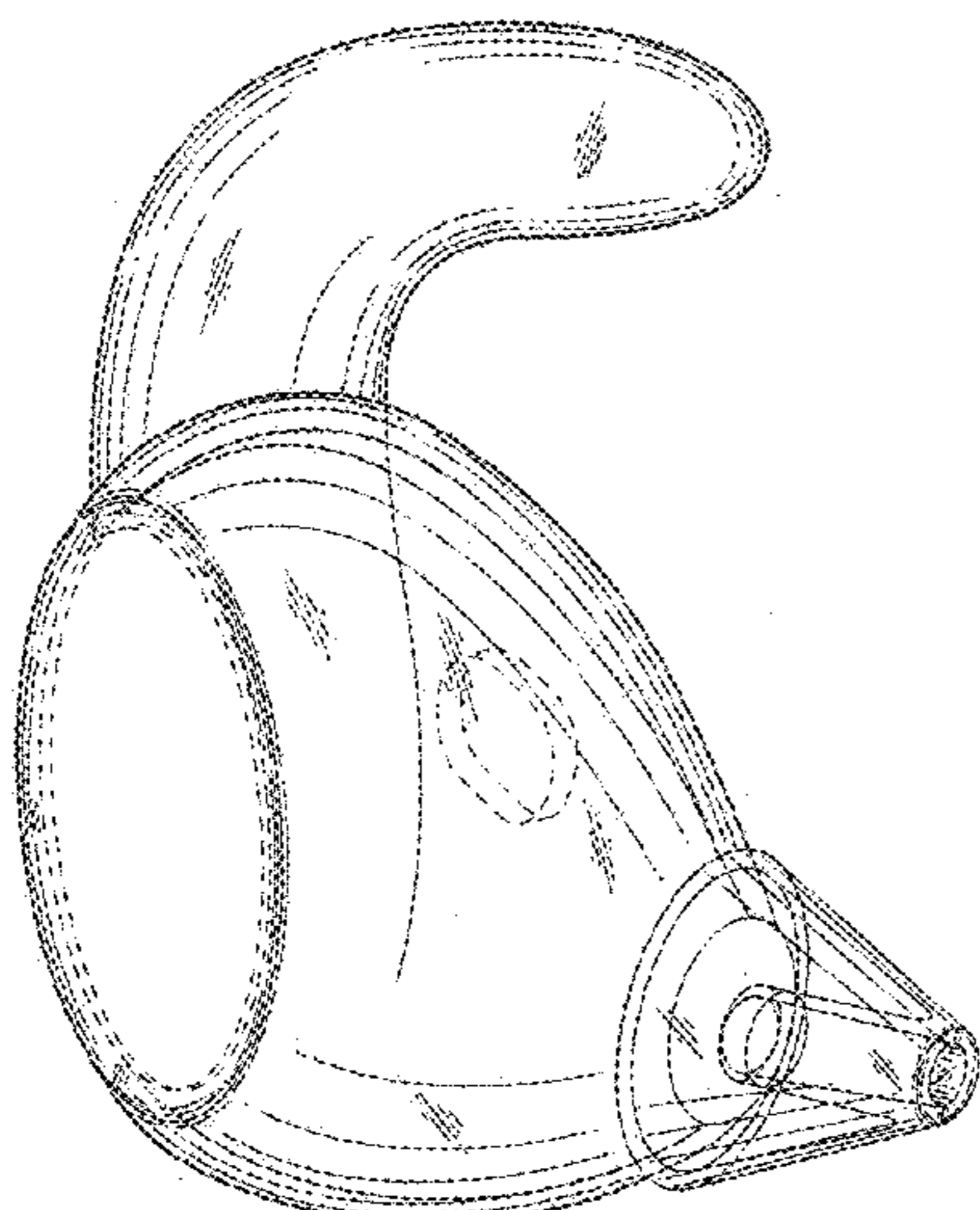
The ornamental design for a sub tragus ear unit, as shown and described.

DESCRIPTION

FIG. 1 is a front, left side, and top perspective view of a sub tragus ear unit showing the new design;
FIG. 2 is a top plan thereof;
FIG. 3 is a left side elevation thereof;
FIG. 4 is a front elevation thereof;
FIG. 5 is a right side elevation thereof;
FIG. 6 is a rear elevation thereof;
FIG. 7 is a bottom plan thereof;
FIG. 8 is a front, left side, and top perspective view of a second embodiment showing the new design;
FIG. 9 is a top plan thereof;
FIG. 10 is a left side elevation thereof;
FIG. 11 is a front elevation thereof;
FIG. 12 is a right side elevation thereof;
FIG. 13 is a rear elevation thereof; and,
FIG. 14 is a bottom plan thereof.

The broken lines depict environment that forms no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

1,688,910 A	10/1928	Winship		6,690,807 B1	2/2004	Meyer	
1,753,817 A	4/1930	Aber		6,795,718 B2	9/2004	Bae	
1,893,143 A	1/1933	Koch		6,819,762 B2	11/2004	Jones et al.	
1,969,559 A	8/1934	Kelly		6,820,717 B2	11/2004	Fleming et al.	
2,325,590 A *	7/1943	Carlisle	H04R 11/06	6,879,697 B2	4/2005	Topholm	
			381/322	D505,132 S	5/2005	Linville et al.	
D141,071 S *	5/1945	Hechler	D24/174	6,944,307 B2	9/2005	Berg	
2,377,739 A *	6/1945	Wyckoff	A61F 11/008	D510,574 S	10/2005	Okada	
			181/132	6,961,440 B1	11/2005	Schlaegel	
2,430,229 A *	11/1947	Kelsey	H04R 1/1058	D514,094 S *	1/2006	Griffin	D14/223
			181/130	7,050,599 B2	5/2006	Baskerville	
2,437,490 A	3/1948	Watson et al.		7,068,803 B2 *	6/2006	Kuhlmann	A61F 11/00
2,521,414 A	9/1950	Schier					381/315
2,545,731 A	3/1951	French		D525,962 S	8/2006	Elson	
2,595,489 A *	5/1952	Rutter	H04R 17/00	D538,271 S	3/2007	Kim et al.	
			381/190	7,233,676 B2	6/2007	Bayer	
2,763,334 A	9/1956	Starkey		D558,735 S	1/2008	Carr et al.	
2,804,932 A *	9/1957	Bedard	H04R 25/652	D566,099 S	4/2008	Komiyama	
			181/132	D566,691 S	4/2008	Andre et al.	
2,908,343 A	10/1959	Hummert		D568,302 S	5/2008	Oh	
3,053,061 A	9/1962	French		D569,841 S	5/2008	Chung et al.	
3,059,066 A *	10/1962	Hillmeyer	G02C 11/06	D575,277 S	8/2008	Gaarde et al.	
			381/321	D575,772 S	8/2008	Schultz et al.	
3,126,977 A *	3/1964	McGee	H04R 25/356	D578,507 S	10/2008	Ando	
			181/135	D578,508 S	10/2008	Wang	
3,157,245 A	11/1964	Bernstein		D579,006 S	10/2008	Kim et al.	
D221,442 S	8/1971	Feingold		D582,389 S	12/2008	Bose et al.	
4,010,820 A *	3/1977	Johnson	H04R 25/652	D582,397 S	12/2008	Christopher	
			181/130	D582,398 S	12/2008	Nam et al.	
4,055,233 A	10/1977	Huntress		D582,889 S	12/2008	Bose et al.	
4,219,018 A	8/1980	Draper, Jr.		D584,284 S	1/2009	Carr et al.	
D266,590 S	10/1982	Bennett		D584,294 S	1/2009	Nam et al.	
4,353,364 A	10/1982	Woods		D585,429 S *	1/2009	Dean	D14/223
4,407,389 A *	10/1983	Johnson	H04R 25/652	D585,881 S	2/2009	Nam et al.	
			181/130	D588,099 S	3/2009	Yiyama	
D274,814 S	7/1984	Tang		D589,945 S	4/2009	Esses	
4,540,063 A	9/1985	Ochi et al.		D596,164 S	7/2009	Henning	
4,646,872 A	3/1987	Kamon et al.		D601,134 S	9/2009	Elabidi et al.	
4,896,679 A	1/1990	St. Pierre		D602,476 S	10/2009	Lee	
D316,550 S	4/1991	Sogabe		D605,170 S	12/2009	Klenanen	
D318,670 S	7/1991	Taniguchi		D605,628 S	12/2009	Ando	
5,048,090 A	9/1991	Geers		D607,875 S	1/2010	Pedersen, II	
5,055,233 A	10/1991	Borland et al.		D618,219 S	6/2010	Burgett et al.	
D326,655 S	6/1992	Iribe		D618,221 S	6/2010	Fahrendorff et al.	
5,222,151 A	6/1993	Nagayoshi et al.		D620,927 S	8/2010	Li	
5,319,163 A *	6/1994	Scott	H04R 25/652	D621,817 S	8/2010	Brickstad	
			181/130	D622,265 S	8/2010	Rye	
5,548,643 A	8/1996	Dalgleish et al.		D622,704 S	8/2010	Faherendorff et al.	
5,625,171 A	4/1997	Marshall		7,778,410 B2	8/2010	Liu et al.	
5,654,530 A	8/1997	Sauer et al.		7,778,435 B2	8/2010	Smith et al.	
5,655,026 A *	8/1997	Peters	H04R 1/1066	D628,188 S	11/2010	Koch	
			381/370	D633,481 S	3/2011	Cheng	
5,668,354 A	9/1997	Falco		D634,305 S	3/2011	Hoggarth	
D388,093 S	12/1997	Frengley		D634,306 S *	3/2011	Pedersen	D14/223
5,712,453 A	1/1998	Bungardt et al.		7,949,127 B2	5/2011	Pedersen et al.	
5,727,566 A	3/1998	Leight		D640,670 S	6/2011	Rye	
5,957,136 A	9/1999	Magidson et al.		7,965,855 B1	6/2011	Ham	
6,006,361 A *	12/1999	Falco	A61F 11/12	D641,737 S *	7/2011	Krauss	D14/205
			128/866	D641,747 S	7/2011	Gisborne	
D430,139 S	8/2000	Peters et al.		D645,458 S *	9/2011	Silvestri	H04R 1/1016
D430,547 S	9/2000	Yoon					D14/223
D430,860 S	9/2000	Yoon		8,111,864 B2 *	2/2012	Oliveira	H04R 1/10
6,129,175 A	10/2000	Tutor					381/328
6,241,041 B1	6/2001	Leight		D655,693 S *	3/2012	Silvestri	D14/223
6,449,374 B1	9/2002	Skulley et al.		D664,124 S *	7/2012	Smith	D14/223
D469,755 S	2/2003	Hlas et al.		D687,021 S *	7/2013	Yuen	D14/223
D470,122 S	2/2003	Hlas et al.		8,538,056 B2	9/2013	Ishibashi et al.	
D470,123 S	2/2003	Hlas et al.		8,737,669 B2 *	5/2014	Monahan	H04R 1/1016
D470,128 S	2/2003	Hlas et al.					381/325
D470,129 S	2/2003	Hlas et al.		D714,260 S *	9/2014	Han	D14/223
D471,537 S	3/2003	Ham		D716,770 S *	11/2014	Bonahoom	D14/223
D471,890 S	3/2003	Clarkson		D721,354 S *	1/2015	Thompson	D14/223
D473,204 S	4/2003	Tanio		9,161,114 B2	10/2015	Bone et al.	
D478,991 S	8/2003	Dyer et al.		D744,456 S *	12/2015	Pedersen	D14/223
				D754,638 S	4/2016	Krissman	
				D755,158 S *	5/2016	Lee	D14/205
				D758,355 S *	6/2016	Lee	D14/223
				9,398,365 B2	7/2016	Liu et al.	

(56)

References Cited

U.S. PATENT DOCUMENTS

D763,224 S * 8/2016 Silvestri H04R 1/1016
 D14/205
 D773,439 S * 12/2016 Walker D14/205
 D773,440 S * 12/2016 Pedersen D14/223
 D773,441 S * 12/2016 Pedersen D14/223
 D779,461 S * 2/2017 Smith D14/223
 D780,157 S * 2/2017 Ugglä D14/205
 2002/0096391 A1 7/2002 Smith
 2002/0172386 A1 11/2002 Bayer
 2003/0091210 A1 5/2003 Baskerville
 2003/0173144 A1* 9/2003 Werblud A61B 7/02
 181/131
 2003/0174853 A1 9/2003 Howes
 2004/0045558 A1 3/2004 Taylor
 2004/0163653 A1 8/2004 Fleming
 2005/0008180 A1 1/2005 Smith
 2006/0050912 A1* 3/2006 Kidd H04R 25/656
 381/322
 2006/0067556 A1 3/2006 Bailey et al.
 2006/0177080 A1 8/2006 Smith
 2006/0188122 A1 8/2006 Smith
 2006/0215864 A1 9/2006 Espersen et al.
 2007/0116309 A1 5/2007 Smith
 2007/0183615 A1 8/2007 Wurfel
 2007/0254725 A1 11/2007 Smith
 2008/0085030 A1 4/2008 Smith
 2008/0159577 A1 7/2008 Smith

2008/0181441 A1 7/2008 Smith
 2008/0247561 A1 10/2008 Smith
 2009/0092269 A1 4/2009 Nielsen et al.
 2009/0141923 A1 6/2009 Smith
 2009/0180654 A1 7/2009 Nielsen
 2009/0202094 A1 8/2009 Ammitzboll
 2010/0278364 A1 11/2010 Berg
 2012/0321114 A1 12/2012 Ishibashi
 2014/0119589 A1* 5/2014 Wyzisk H04R 1/105
 381/380
 2016/0073186 A1* 3/2016 Searl H04R 1/1016
 381/380

FOREIGN PATENT DOCUMENTS

EP 786241 B1 7/2004
 EP 1594340 A1 11/2005
 EP 368125 A2 7/2008
 JP 2001333484 A 11/2001
 JP 2005184579 A 7/2005
 WO 2001050813 A2 7/2001
 WO 2001050993 A1 7/2001
 WO 2002045390 A1 6/2002
 WO 2006104981 A2 10/2006
 WO 2008147215 A1 12/2008
 WO 2009030229 A1 3/2009
 WO 2010031775 A1 3/2010
 WO 2010040350 A1 4/2010
 WO 2010040351 A1 4/2010

* cited by examiner

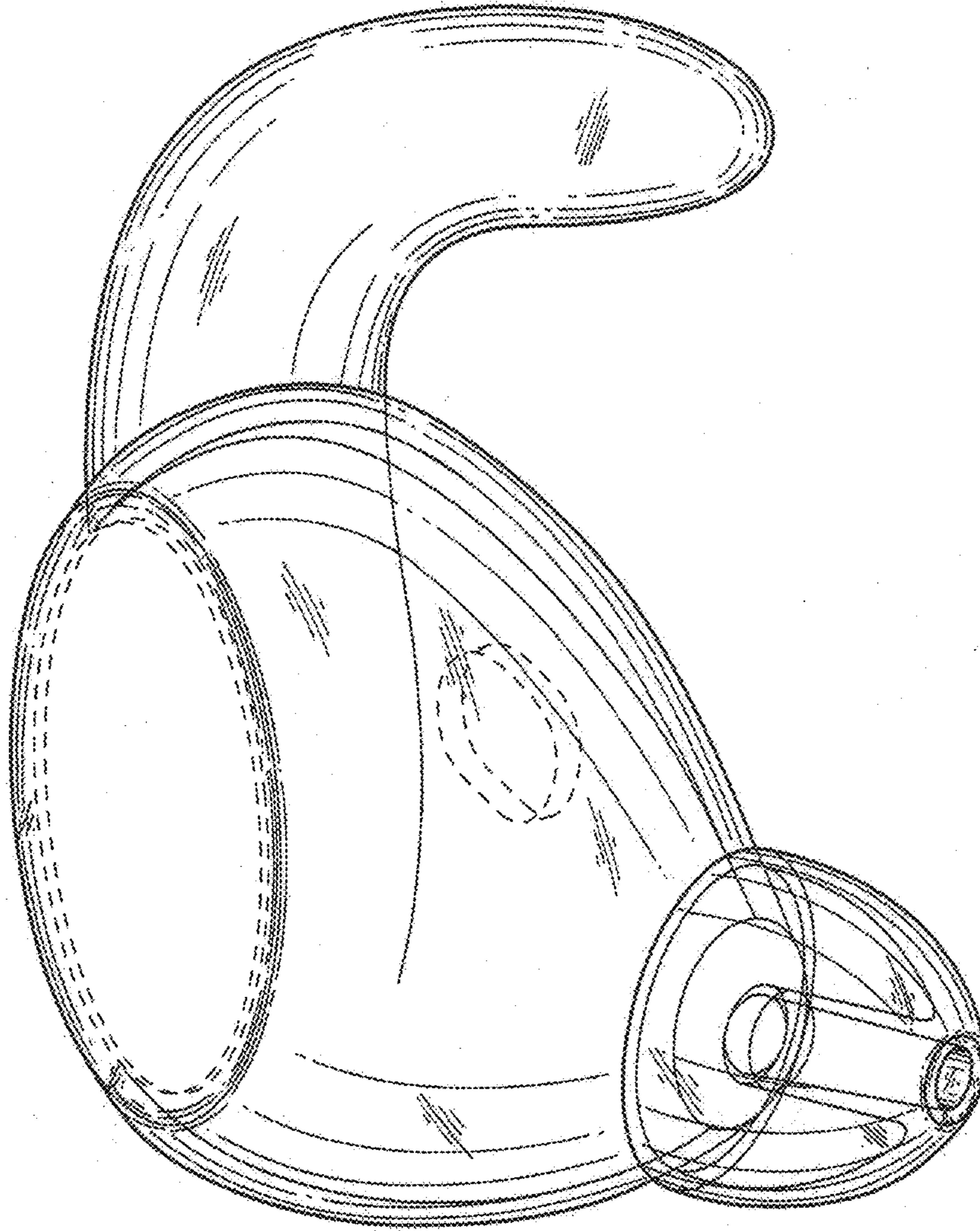


FIG. 1

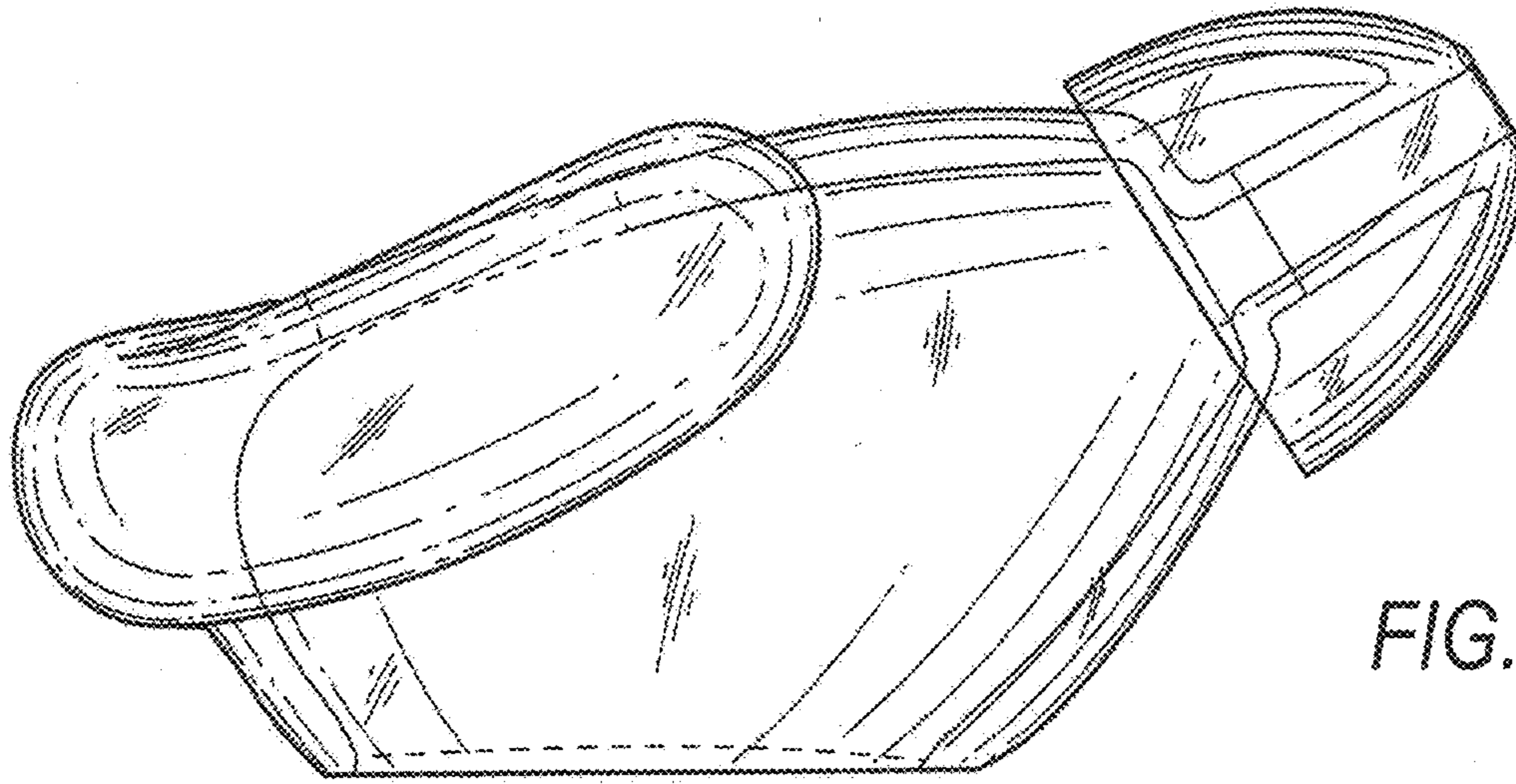


FIG. 2

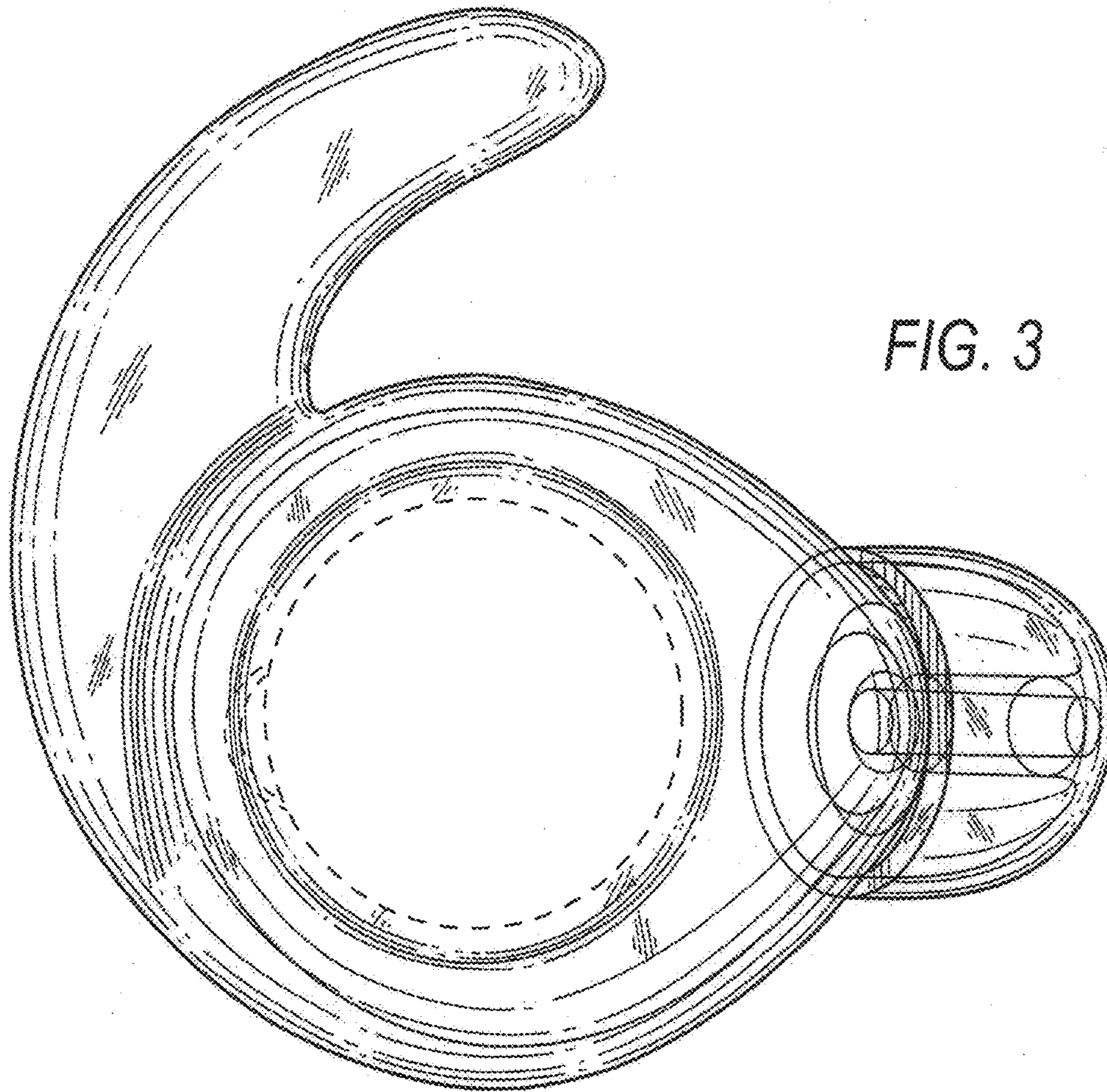


FIG. 3

FIG. 5

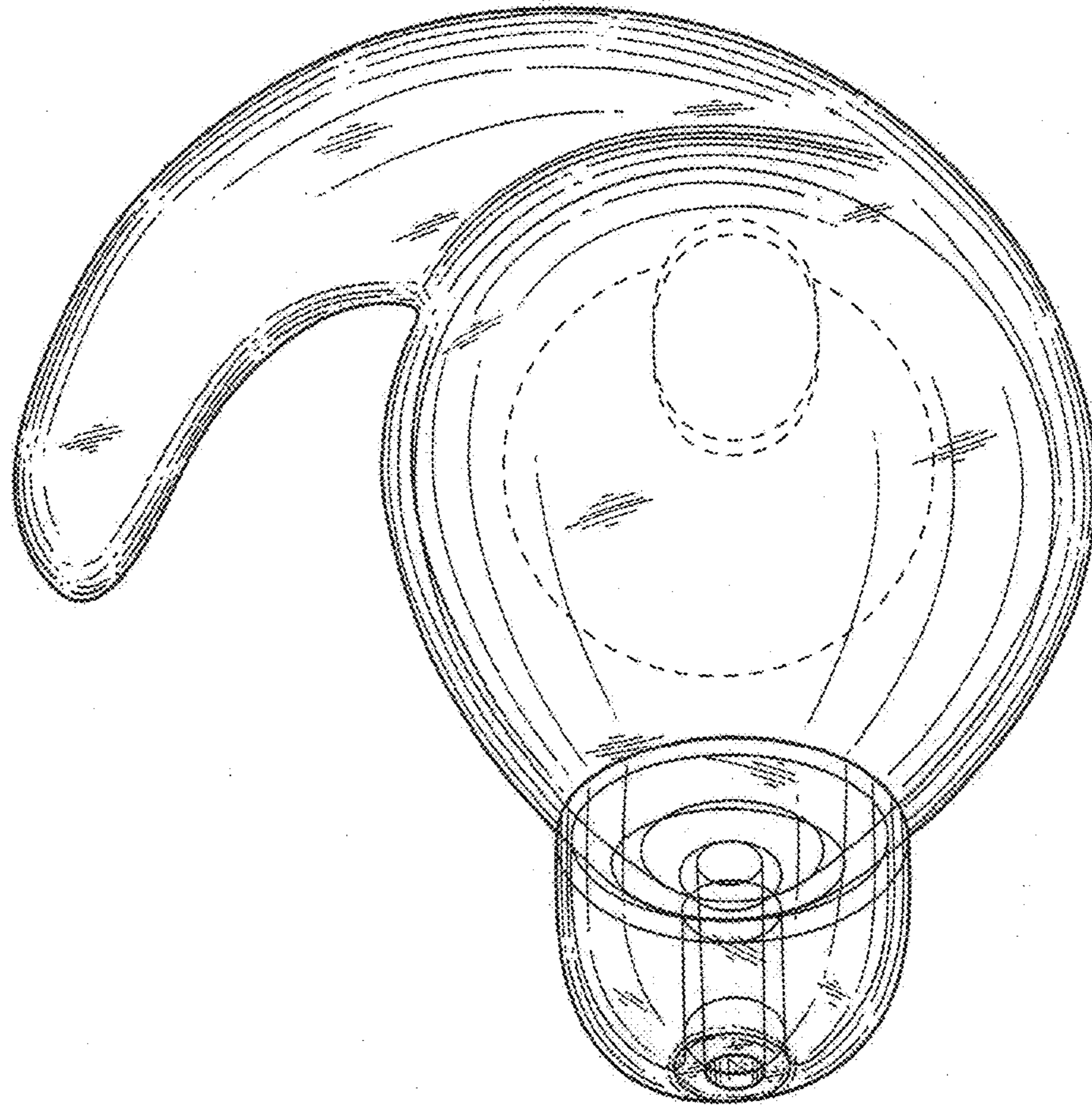
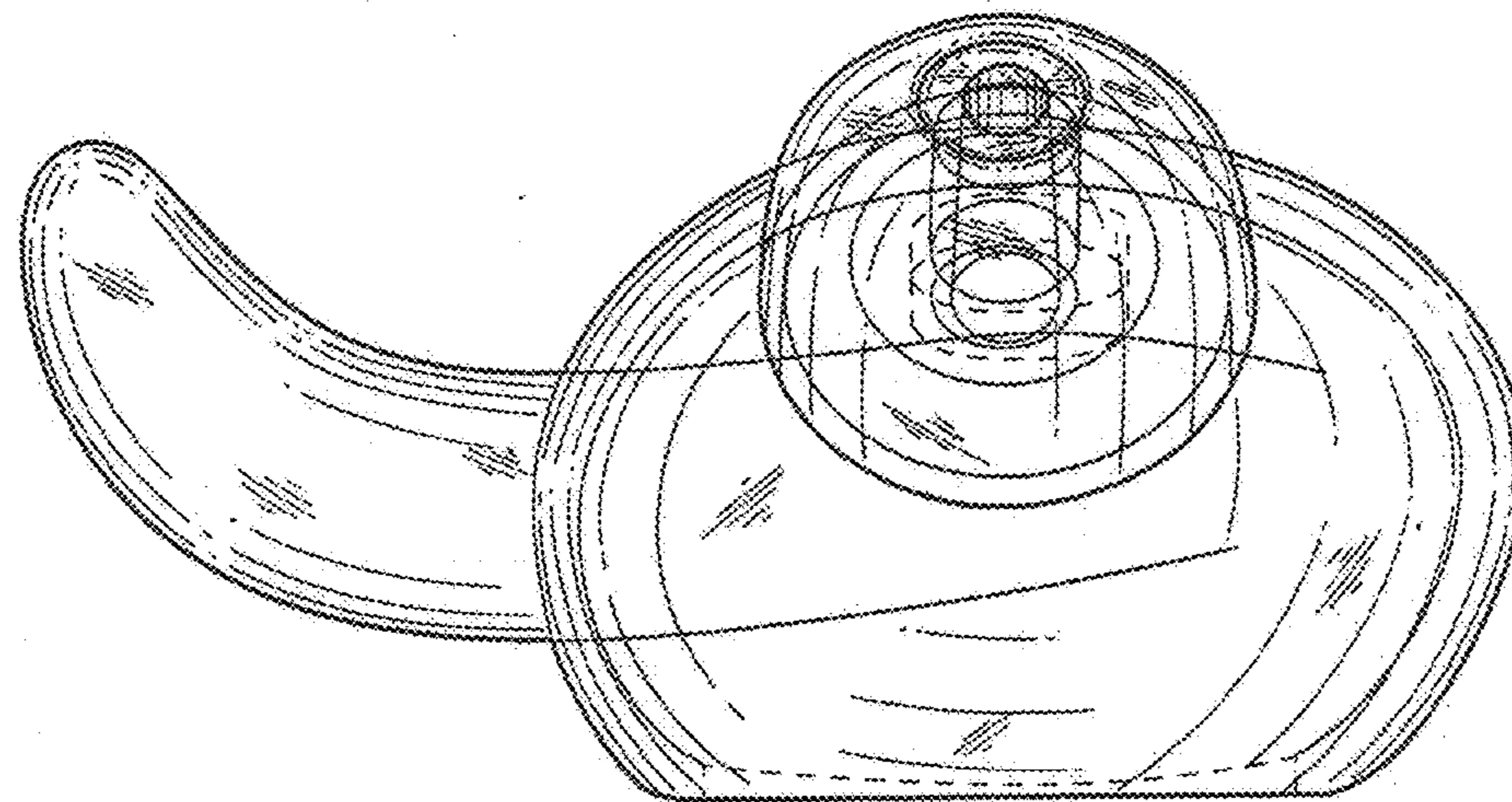


FIG. 4



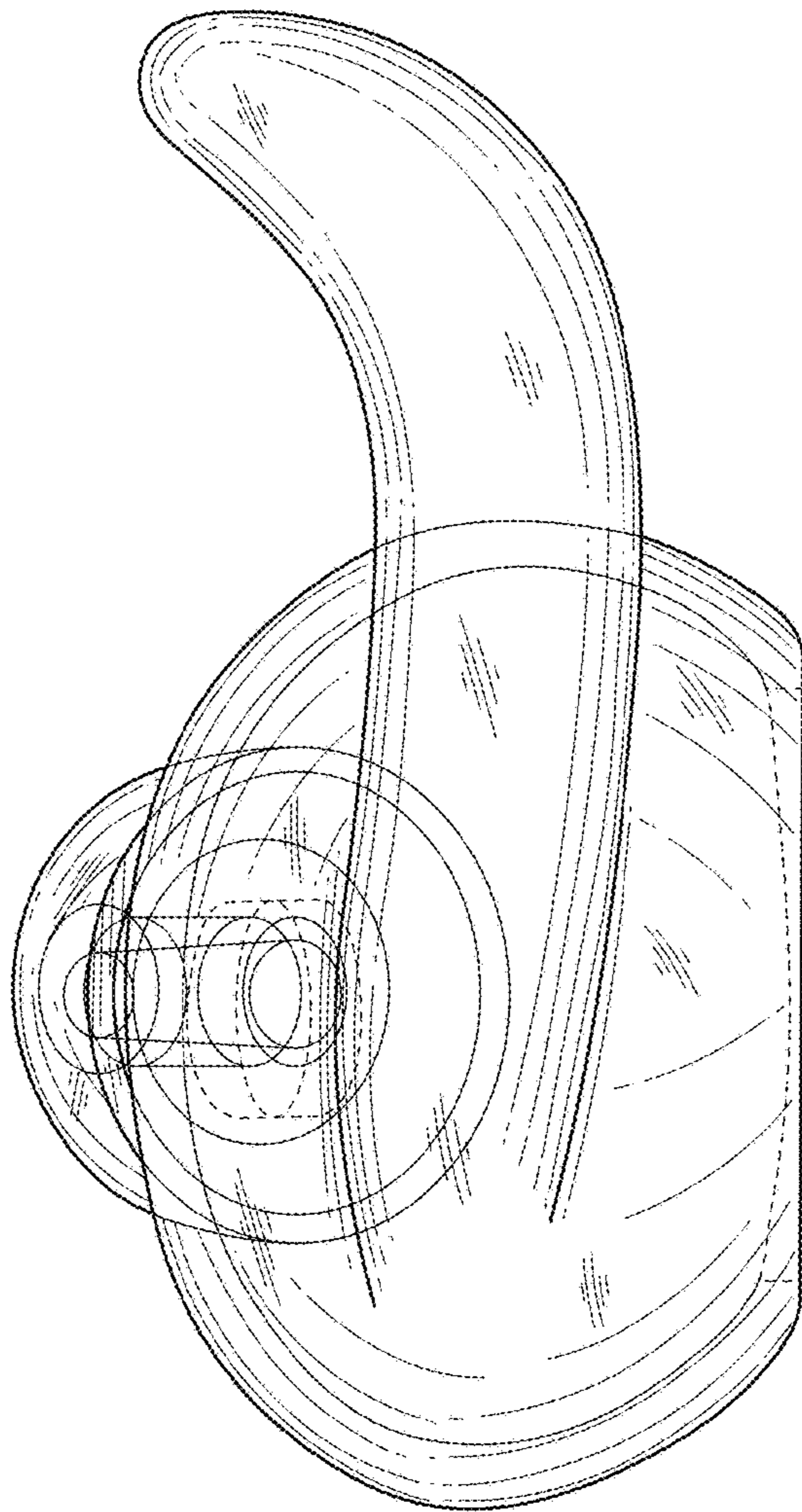


FIG. 6

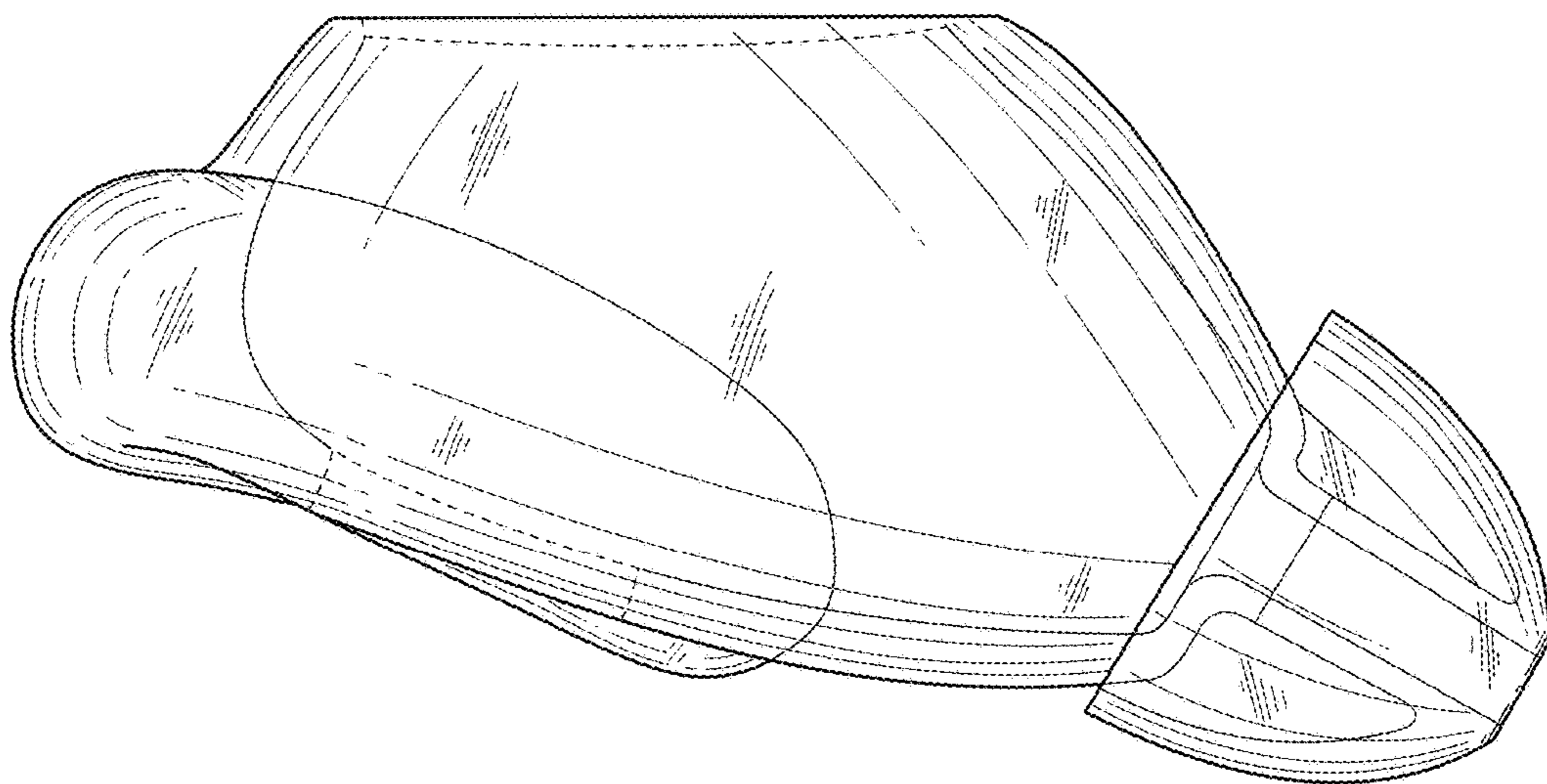


FIG. 7

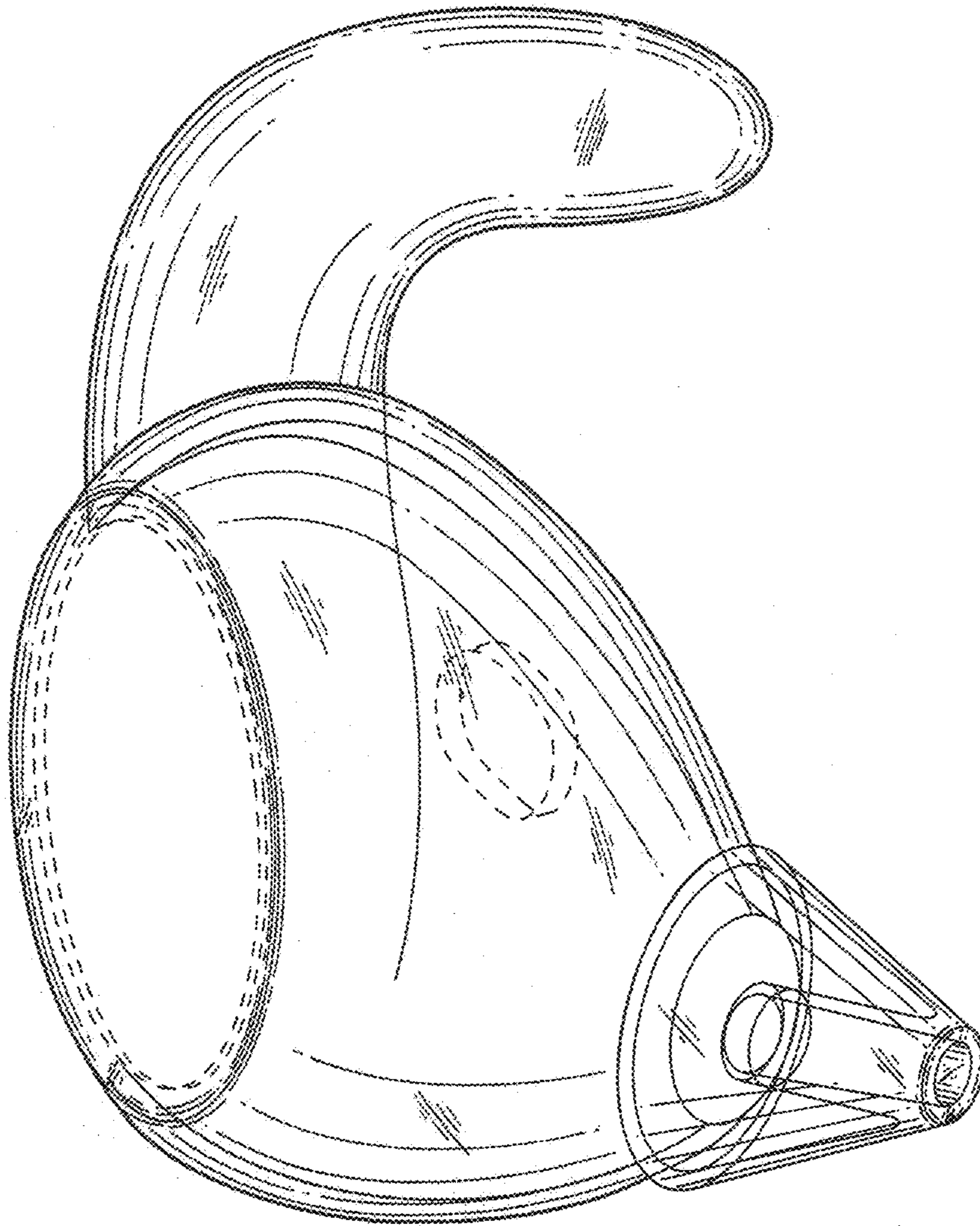


FIG. 8

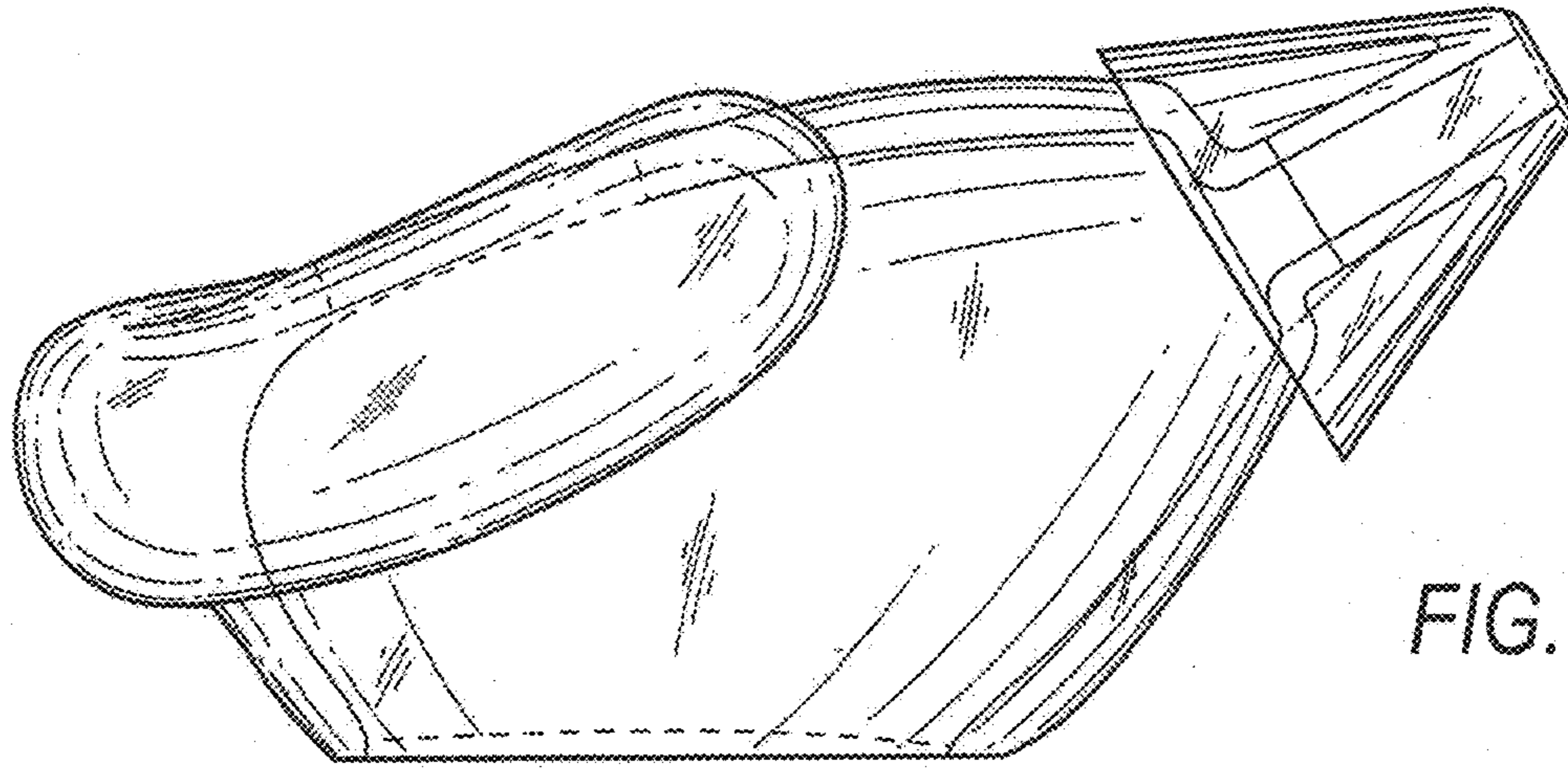


FIG. 9

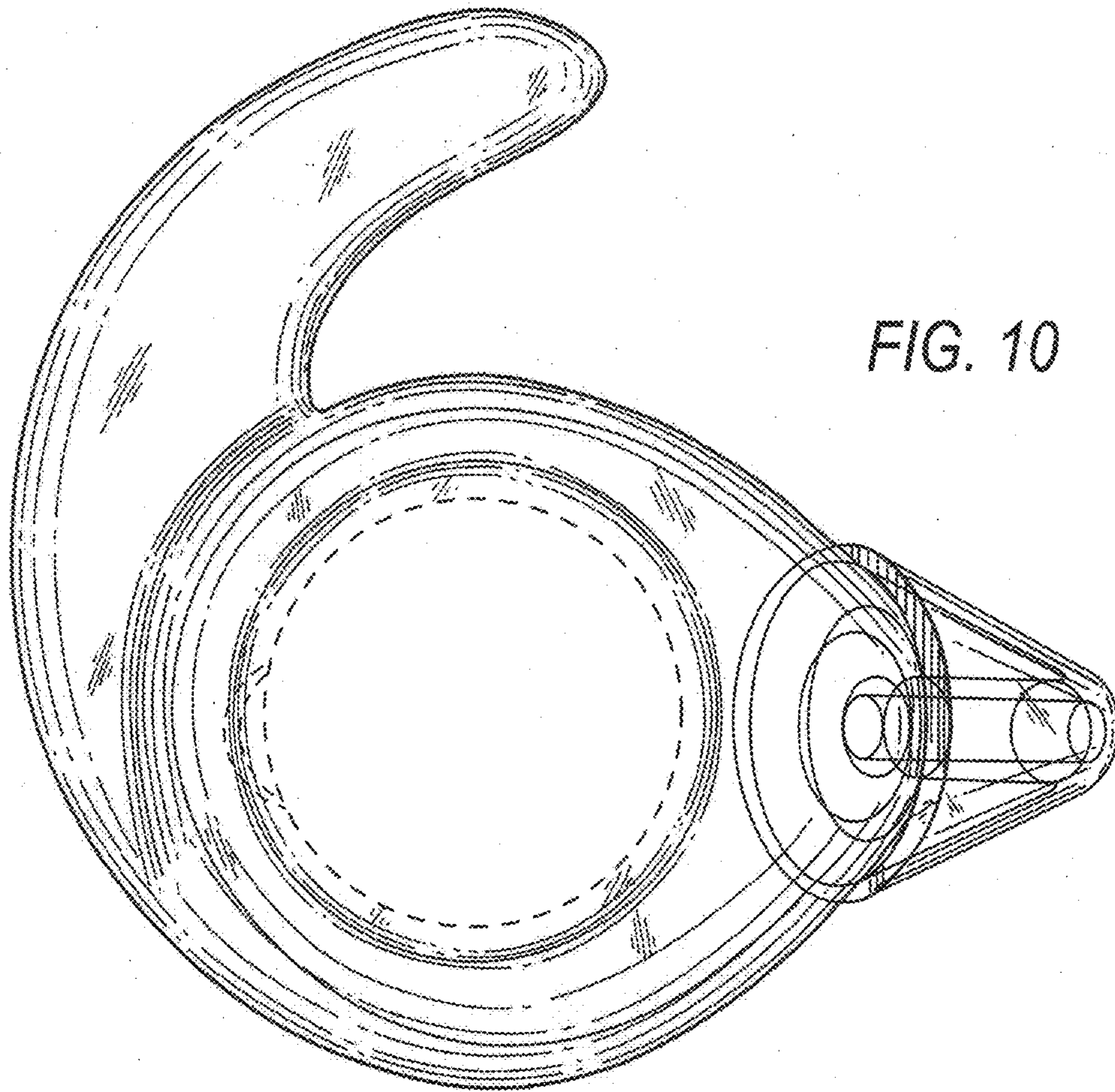


FIG. 10

FIG. 12

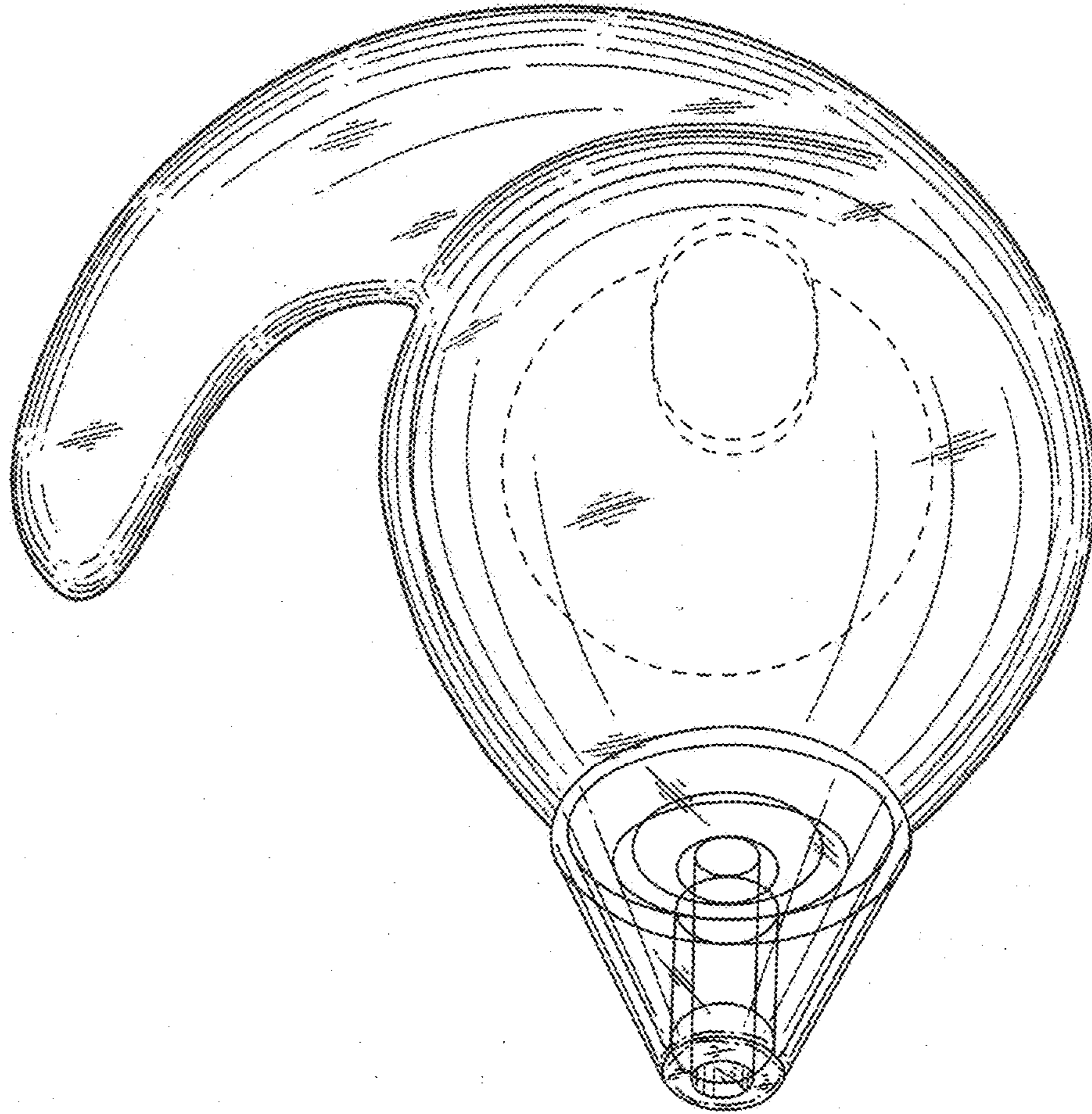
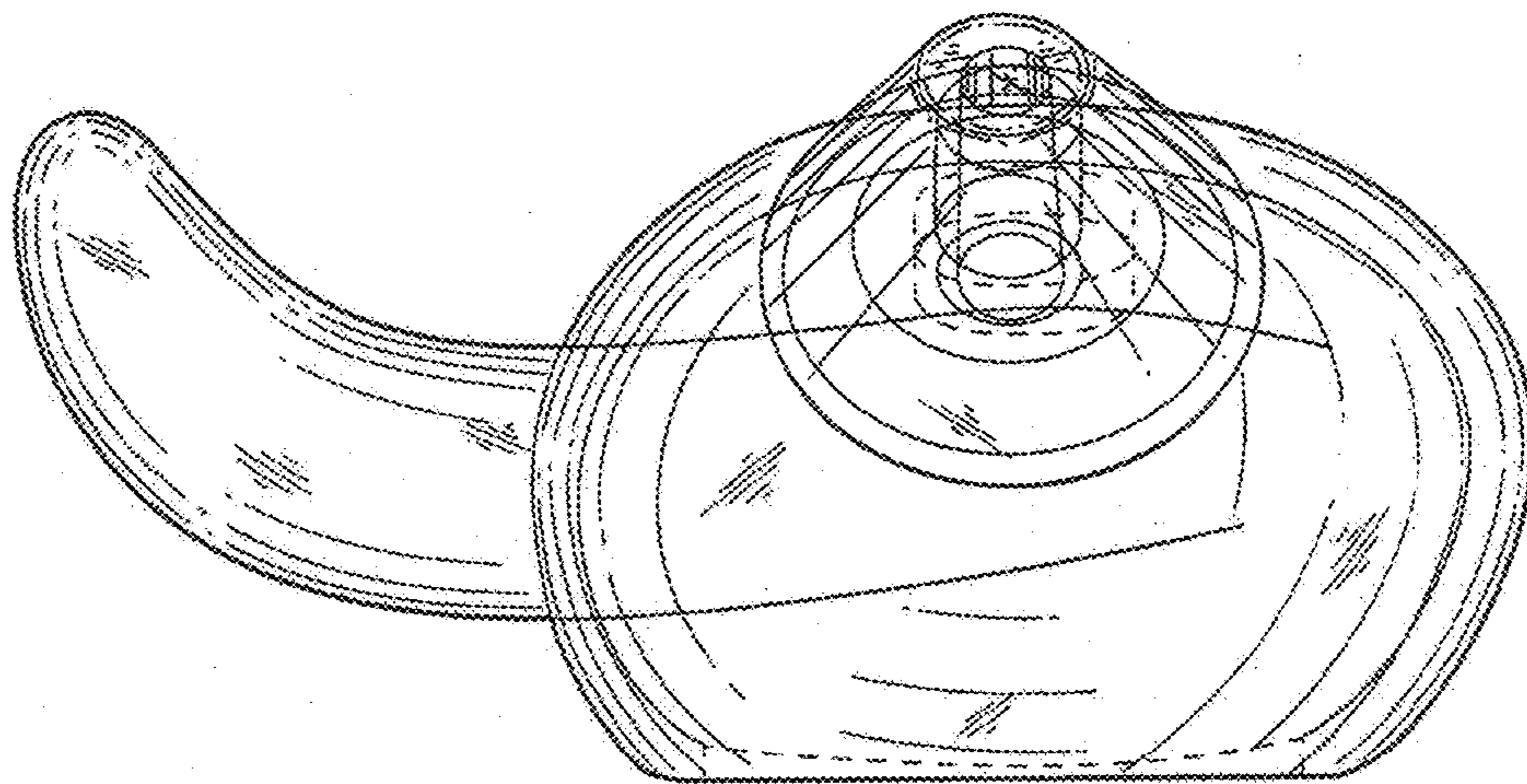


FIG. 11



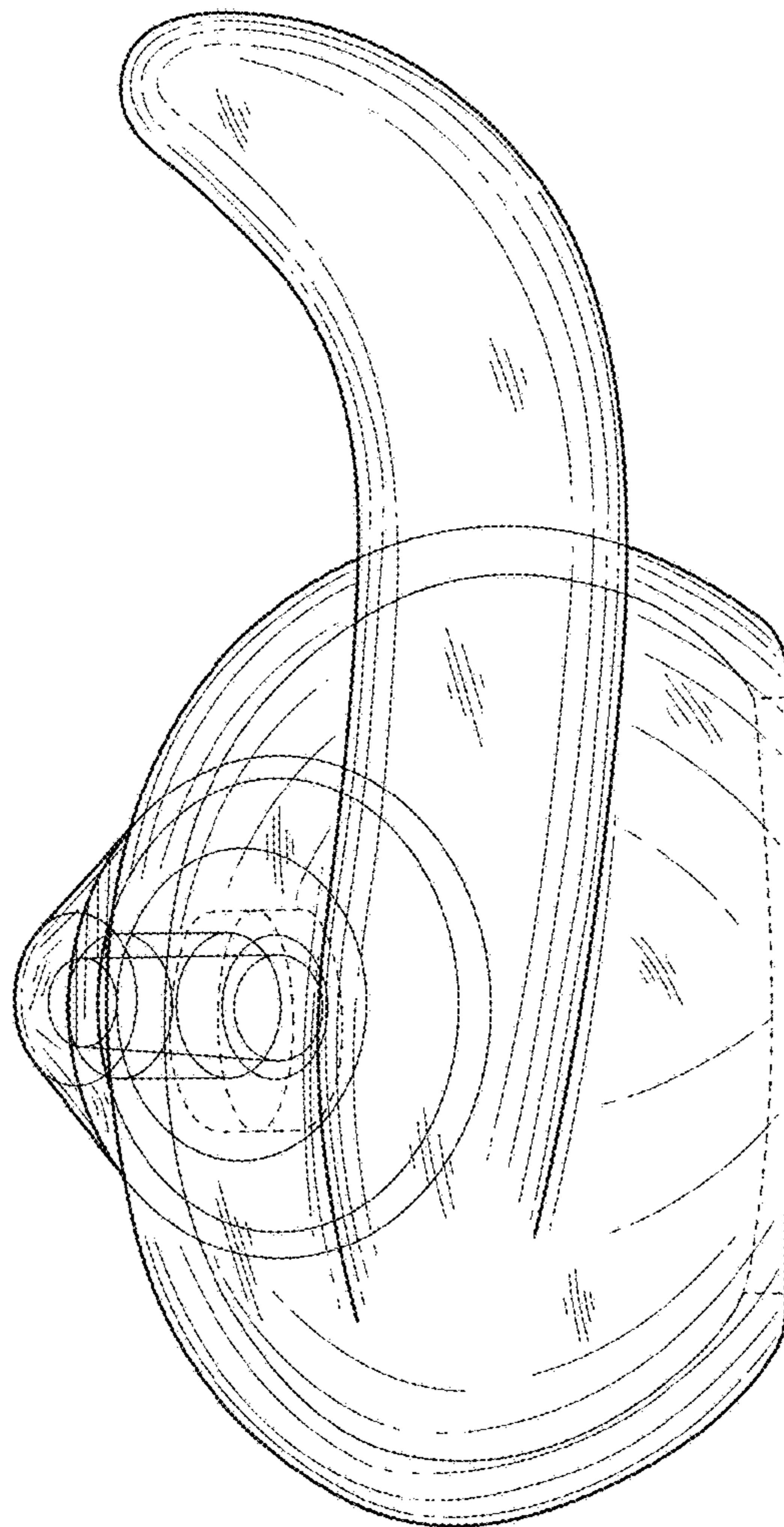


FIG. 13

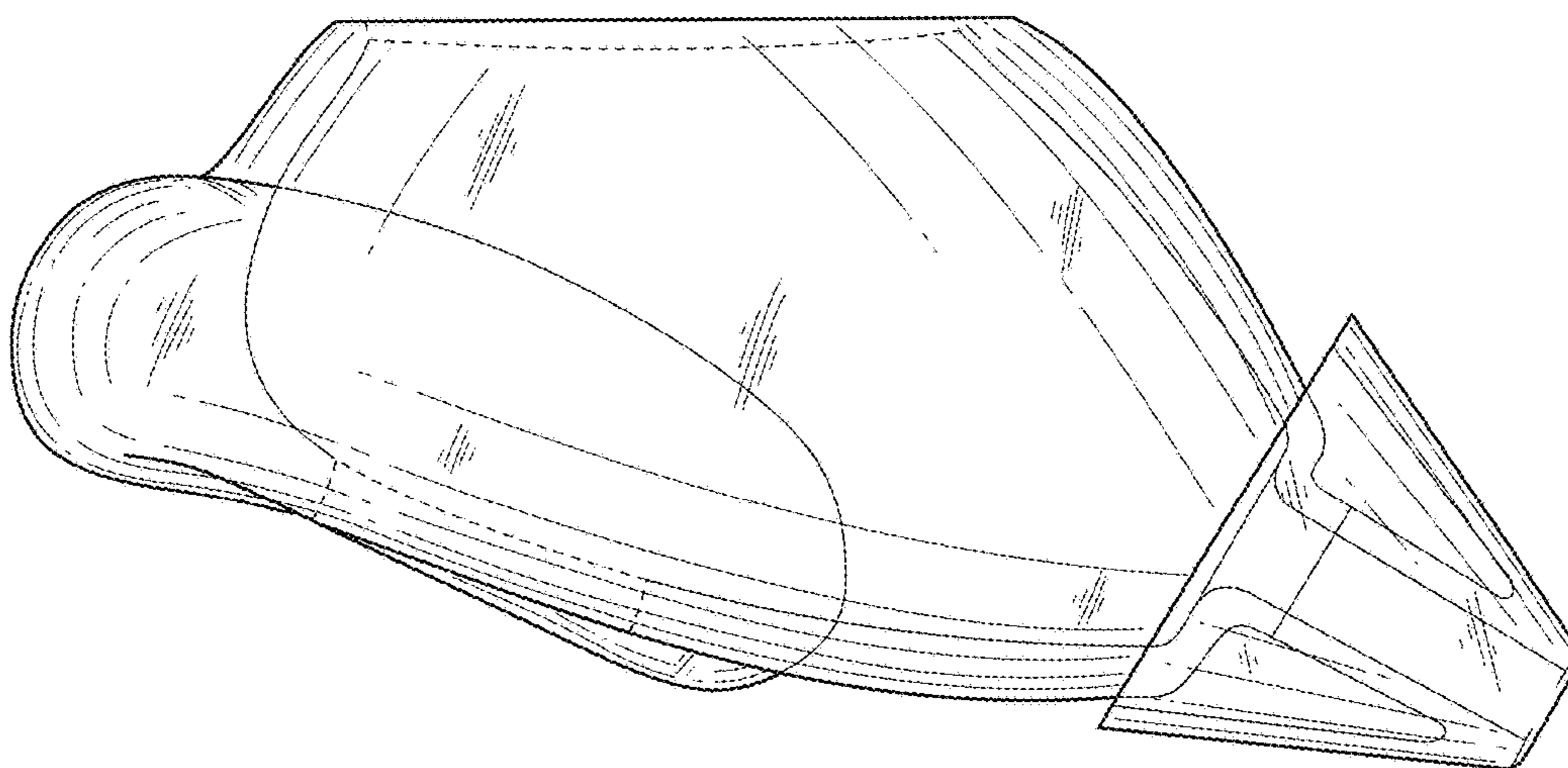


FIG. 14