



US00D654163S

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

(10) **Patent No.:** **US D654,163 S**

(45) **Date of Patent:** **\*\* Feb. 14, 2012**

(54) **EARPLUG**

(75) Inventor: **Jim Tiemens**, Laguna Niguel, CA (US)

(73) Assignee: **Honeywell International Inc.**,  
Morristown, NJ (US)

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

(21) Appl. No.: **29/380,678**

(22) Filed: **Dec. 9, 2010**

**Related U.S. Application Data**

(63) Continuation of application No. 29/345,845, filed on Oct. 22, 2009, now Pat. No. Des. 636,484.

(51) **LOC (9) Cl.** ..... **24-01**

(52) **U.S. Cl.** ..... **D24/106**

(58) **Field of Classification Search** ..... D24/105-109;  
181/129, 130, 134, 135; 264/41; D29/105,  
D29/106, 108, 112; 128/864, 865, 867, 868  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D242,743	S	*	12/1976	Leight	.....	D24/106
4,053,051	A		10/1977	Brinkhoff		
4,434,794	A		3/1984	Leight		
4,774,938	A		10/1988	Leight		
D307,635	S	*	5/1990	Gardner, Jr.	.....	D24/106
5,044,463	A	*	9/1991	Carr	.....	181/135
5,188,123	A		2/1993	Gardner, Jr.		
5,203,352	A		4/1993	Gardner, Jr.		
D375,550	S		11/1996	Esler et al.		
D375,551	S		11/1996	Esler et al.		
5,573,015	A		11/1996	Williams		
5,668,354	A	*	9/1997	Falco	.....	181/135
5,792,998	A		8/1998	Gardner, Jr. et al.		
5,799,658	A		9/1998	Falco		
D402,752	S		12/1998	Falco		
D403,062	S		12/1998	Dix		

(Continued)

FOREIGN PATENT DOCUMENTS

WO WO9200049 A1 1/1992

(Continued)

OTHER PUBLICATIONS

PCT/US2010/037284; PCT International Search Report and Written Opinion of the International Searching Authority; Feb. 22, 2011; 7 pages.

*Primary Examiner* — Ian Simmons

*Assistant Examiner* — Charles Hanson

(74) *Attorney, Agent, or Firm* — Conley Rose, P.C.; Kristin Jordan Harkins

(57) **CLAIM**

The ornamental design for an earplug, as shown and described.

**DESCRIPTION**

FIG. 1 is a rear perspective view of an earplug in accordance with my new design, showing a fingertip insertion area with stem support splines of an earplug shell in context with an insertion stem;

FIG. 2 is a front perspective view thereof;

FIG. 3 is a side elevation view thereof, all other side views displaying the same image thereof;

FIG. 4 is a rear elevation view thereof;

FIG. 5 is a front elevation view thereof;

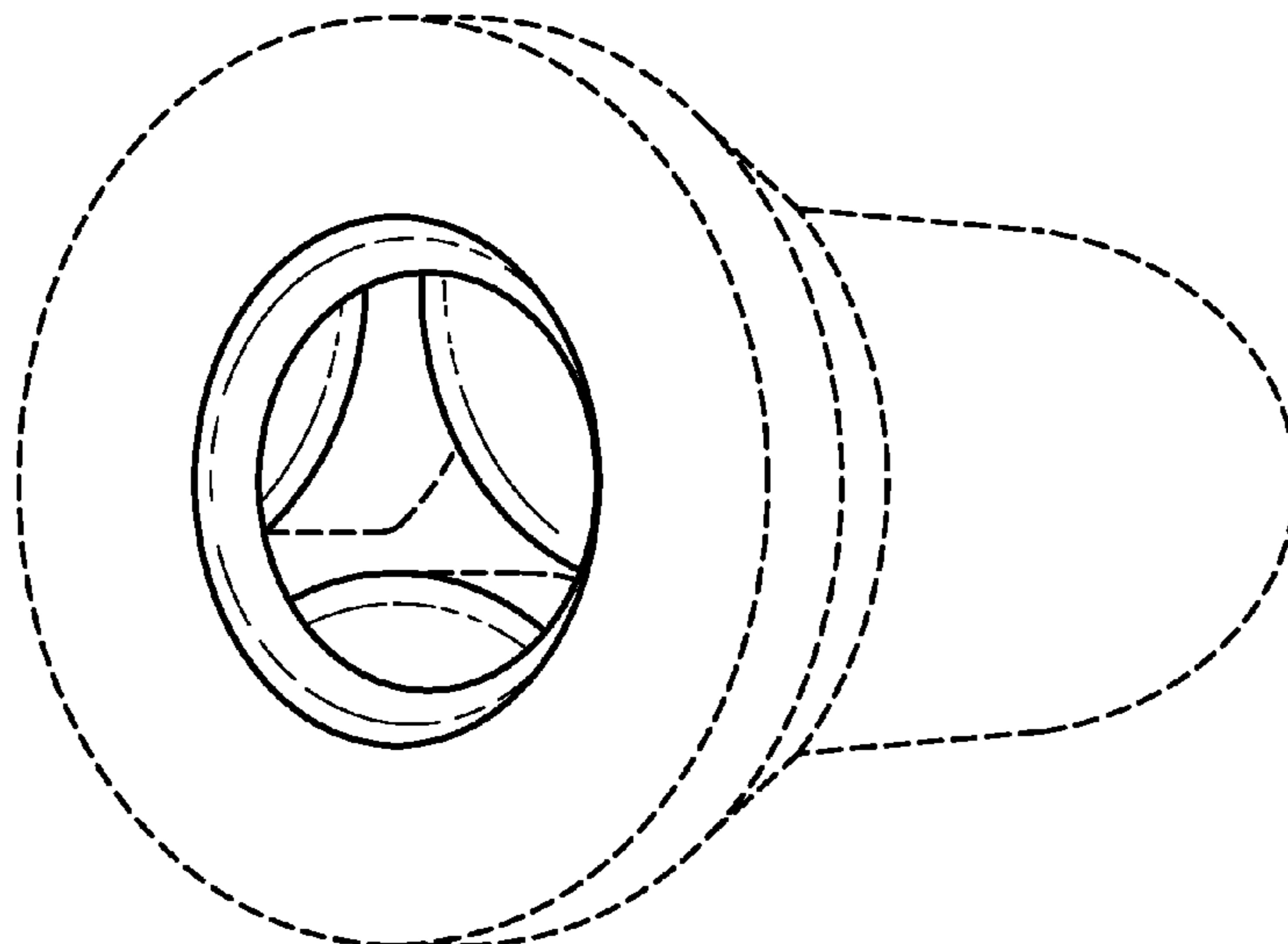
FIG. 6 is a rear perspective view of only the earplug shell portion of FIG. 1, shown without a stem;

FIG. 7 is a rear elevation view of the earplug shell portion of FIG. 6; and,

FIG. 8 is a median cross-sectional side view of the earplug shell portion of FIG. 7 taken at the location and direction shown in FIG. 7.

The broken lines shown in the drawings are only provided to illustrate the environment, context, and/or boundary of the design, and form no part of the claimed design.

**1 Claim, 3 Drawing Sheets**



# US D654,163 S

Page 2

## U.S. PATENT DOCUMENTS

D405,173	S	2/1999	Falco	
D409,743	S	5/1999	Falco et al.	
D413,379	S *	8/1999	Leight .....	D24/106
5,957,136	A	9/1999	Magidson et al.	
5,988,313	A	11/1999	Hakansson	
6,006,857	A	12/1999	Leight et al.	
D427,304	S	6/2000	Magidson et al.	
6,241,042	B1 *	6/2001	Falco .....	181/135
6,425,398	B1	7/2002	Hirshfeld	
D466,995	S	12/2002	Knauer et al.	
D471,625	S *	3/2003	Falco .....	D24/106
D472,627	S	4/2003	Falco	
6,568,394	B2	5/2003	Falco	
D478,658	S	8/2003	Falco	
D481,118	S *	10/2003	Doty et al. ....	D24/106
6,659,103	B2	12/2003	Tiemens	
6,695,093	B1	2/2004	Falco	
D492,766	S	7/2004	Falco	
D492,767	S	7/2004	Knauer et al.	
D492,768	S	7/2004	Knauer et al.	
D496,722	S *	9/2004	Falco et al. ....	D24/106
D512,141	S	11/2005	Mishkin et al.	
6,981,504	B2	1/2006	Jenkins, Jr.	
D524,937	S *	7/2006	Doty et al. ....	D24/106
7,096,872	B2	8/2006	Ligon, Sr. et al.	
D528,204	S *	9/2006	Doty et al. ....	D24/106
D529,169	S	9/2006	Ryan	
7,107,993	B2	9/2006	Magidson	

D536,089	S	1/2007	Magidson et al.	
D538,924	S	3/2007	Doty	
D539,415	S	3/2007	Fleming	
7,192,544	B2	3/2007	Jenkins, Jr. et al.	
7,210,484	B1	5/2007	Tiemens et	
7,264,081	B2 *	9/2007	Bruck .....	181/135
7,305,992	B2	12/2007	Fleming	
D560,792	S	1/2008	Miller	
7,314,047	B2	1/2008	Falco	
D577,812	S	9/2008	Zwart	
7,464,786	B2	12/2008	Falco et al.	
7,475,686	B2	1/2009	Knauer et al.	
7,510,046	B2	3/2009	Doty	
7,537,011	B2	5/2009	Falco	
7,600,604	B2	10/2009	Babcock et al.	
7,697,706	B2	4/2010	Doty	
7,727,433	B2	6/2010	Knauer et al.	
7,743,771	B2	6/2010	Falco	
2003/0051939	A1	3/2003	Werblud	
2004/0045558	A1	3/2004	Taylor et al.	
2005/0056289	A1	3/2005	Jenkins, Jr. et al.	
2006/0162992	A1	7/2006	Seville	
2006/0175722	A1 *	8/2006	Babcock et al. ....	264/41
2007/0221232	A1	9/2007	Jenkins	

## FOREIGN PATENT DOCUMENTS

WO	WO03013390	A2	2/2003
WO	WO2005027776	A2	3/2005

\* cited by examiner

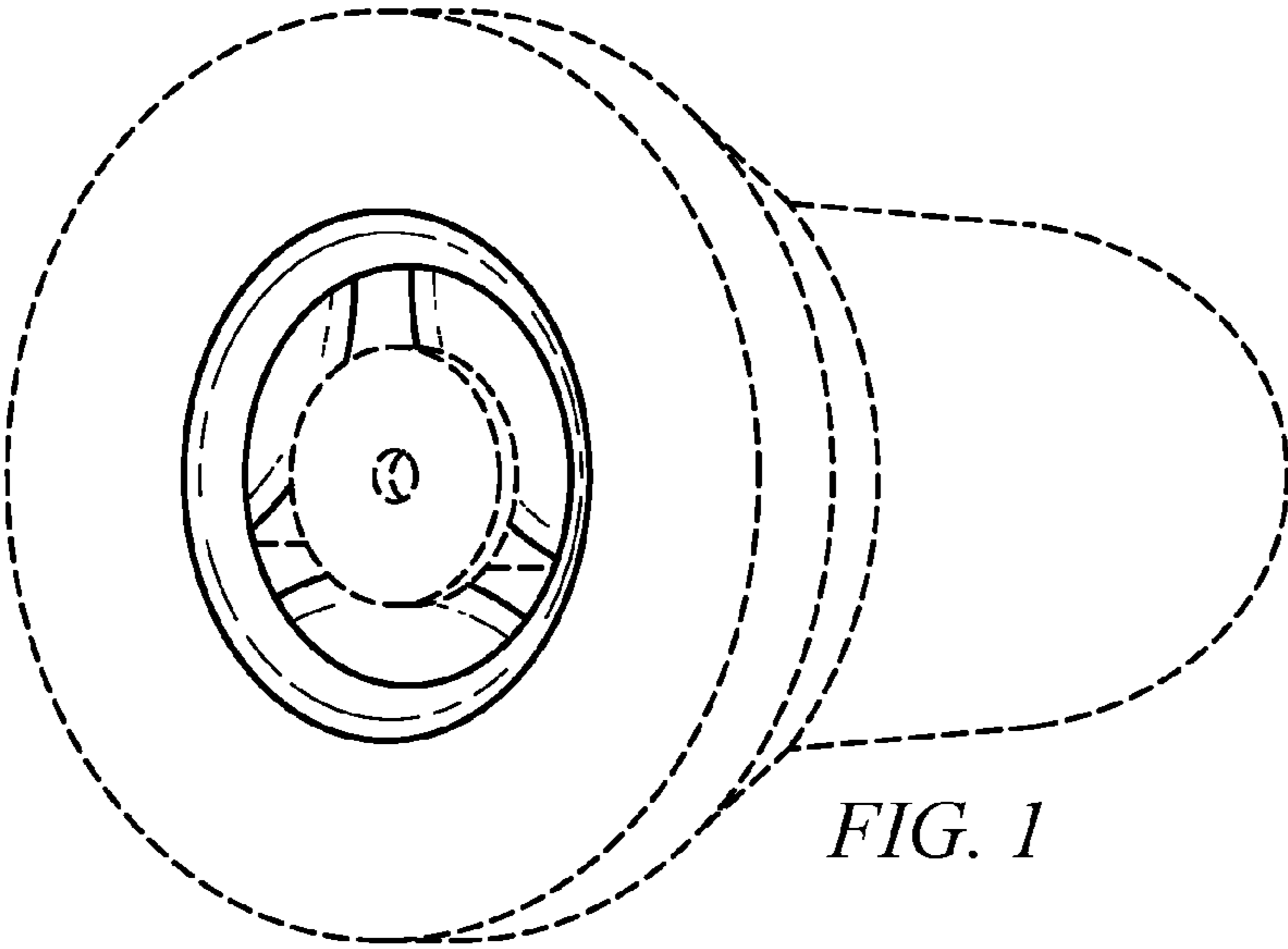


FIG. 1

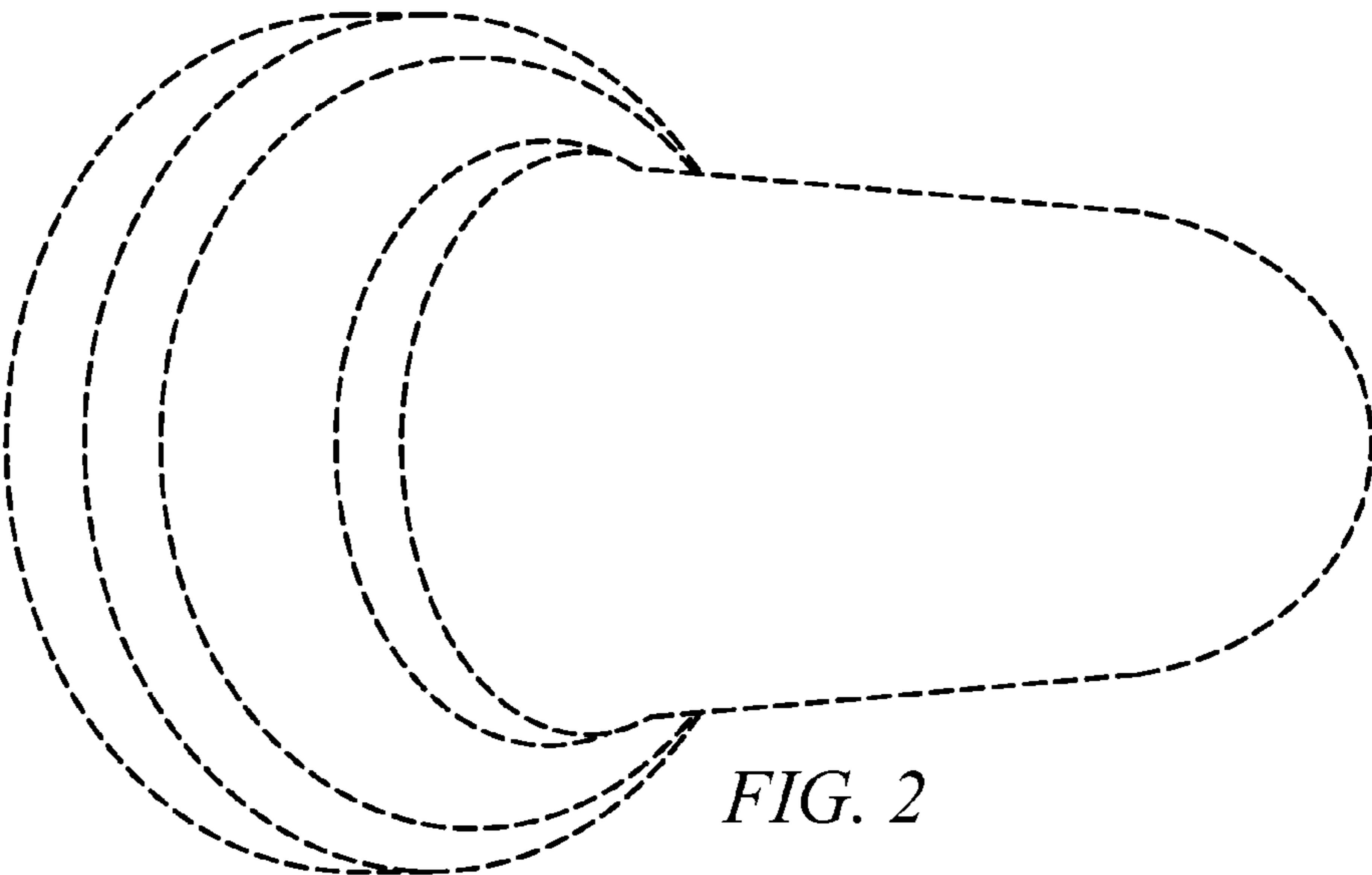


FIG. 2

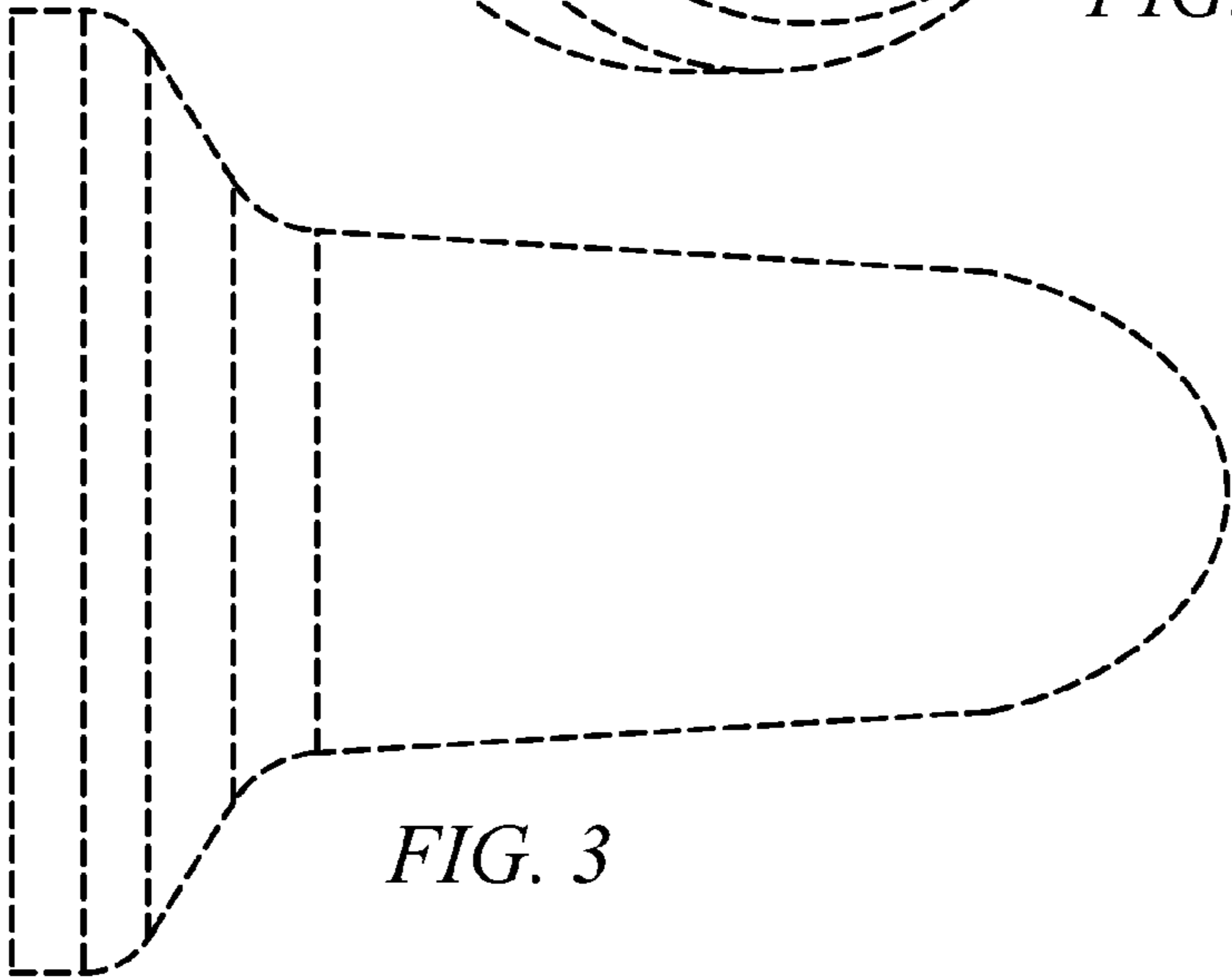


FIG. 3

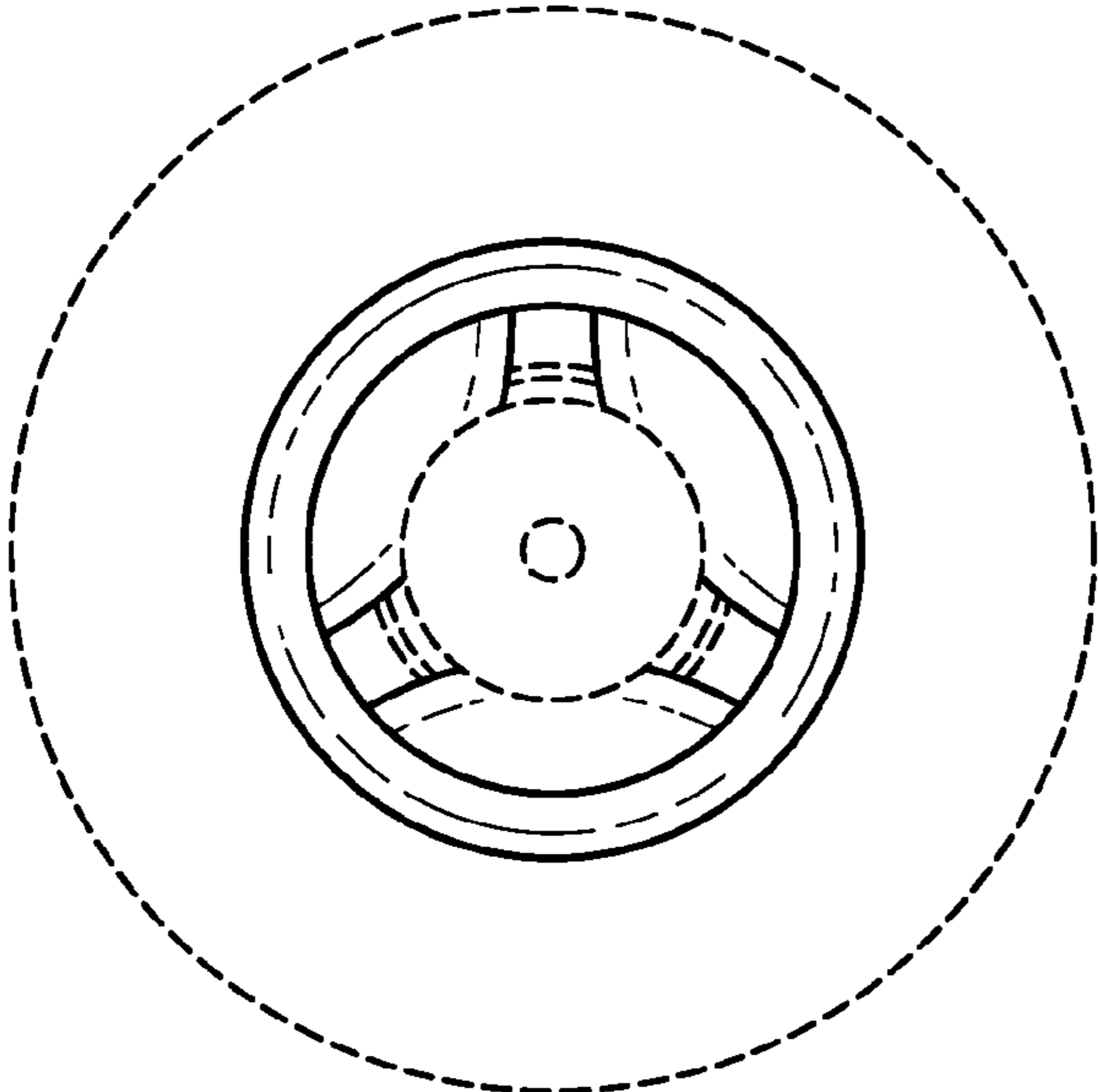


FIG. 4

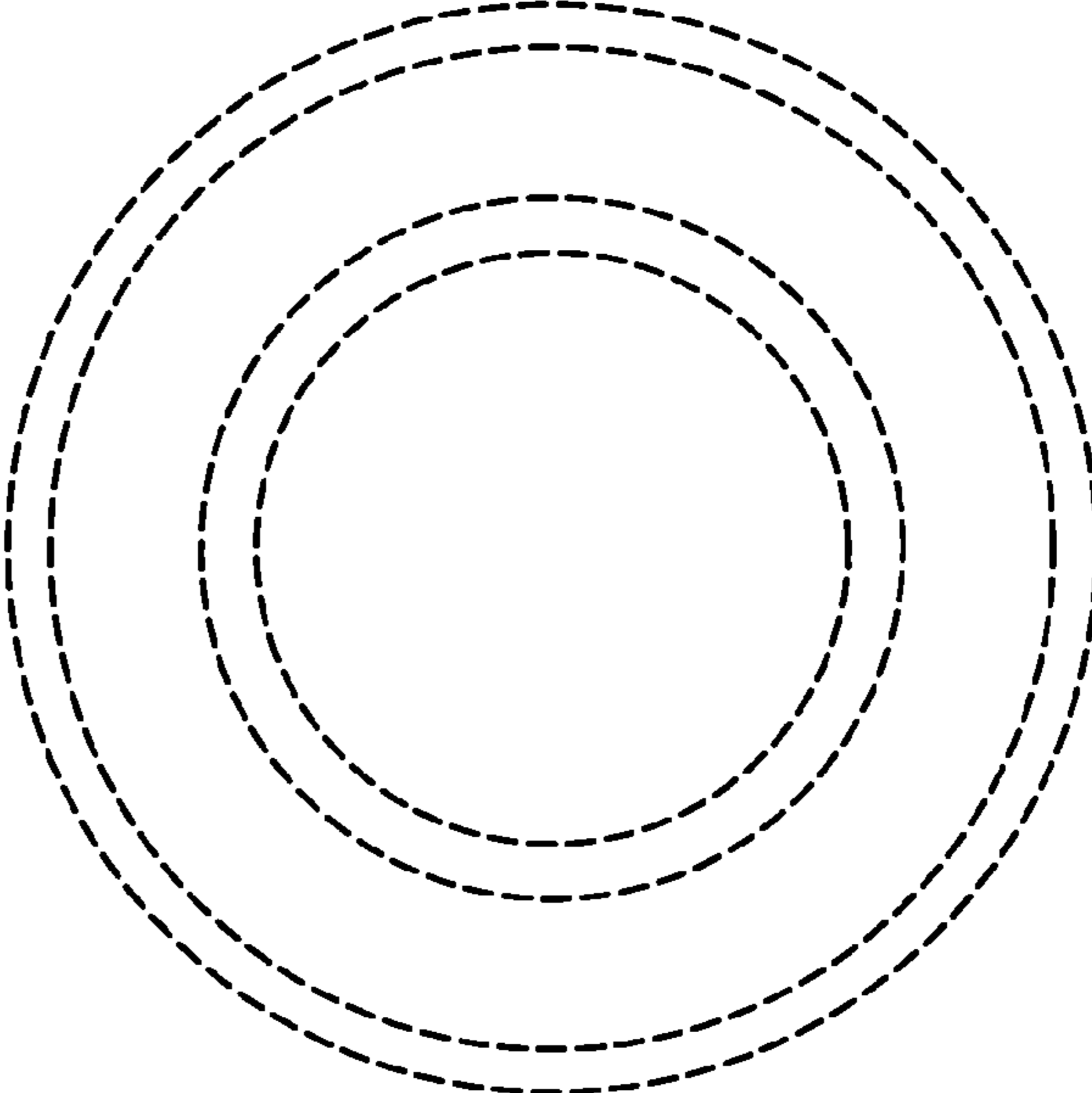


FIG. 5

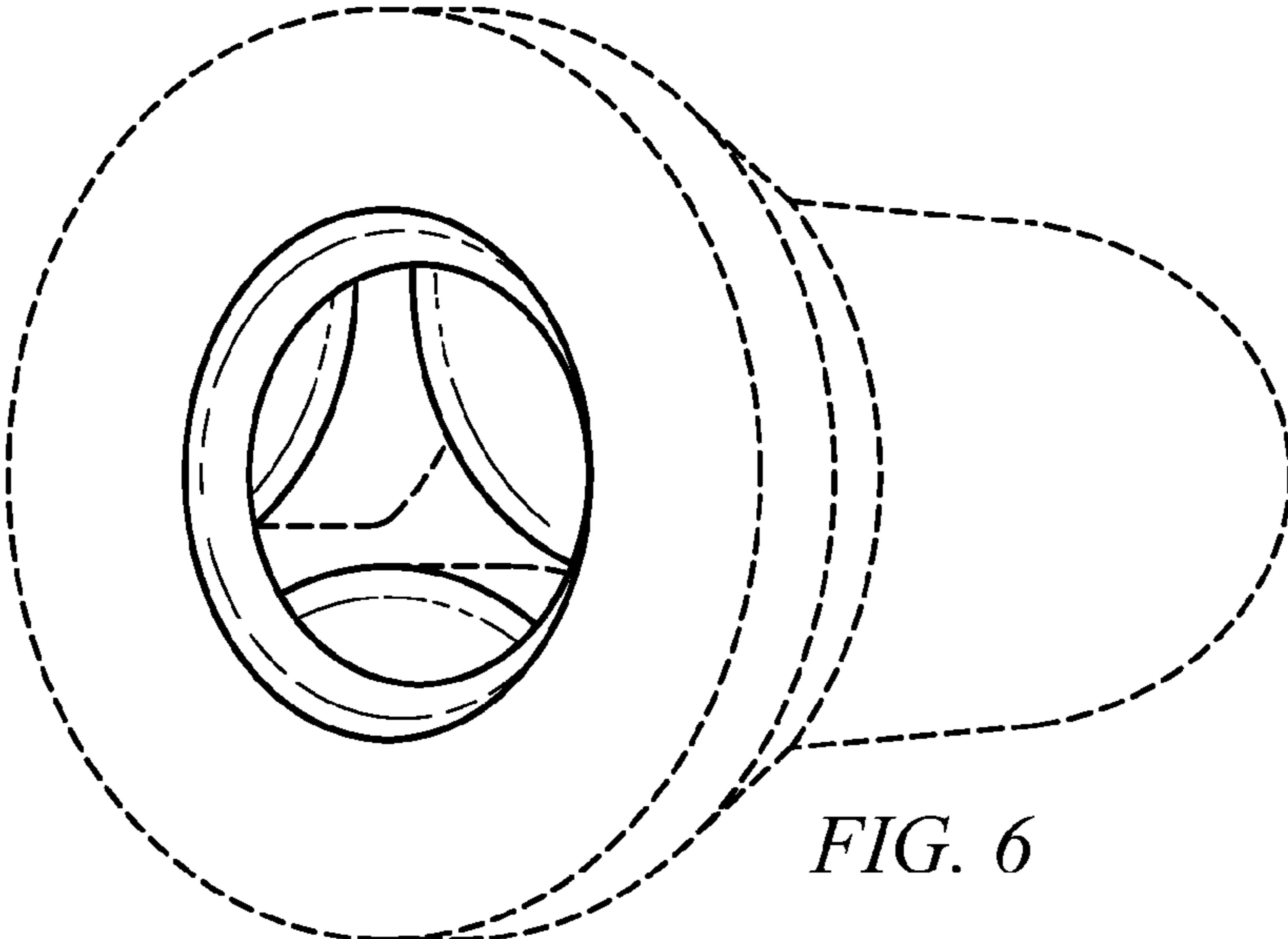


FIG. 6

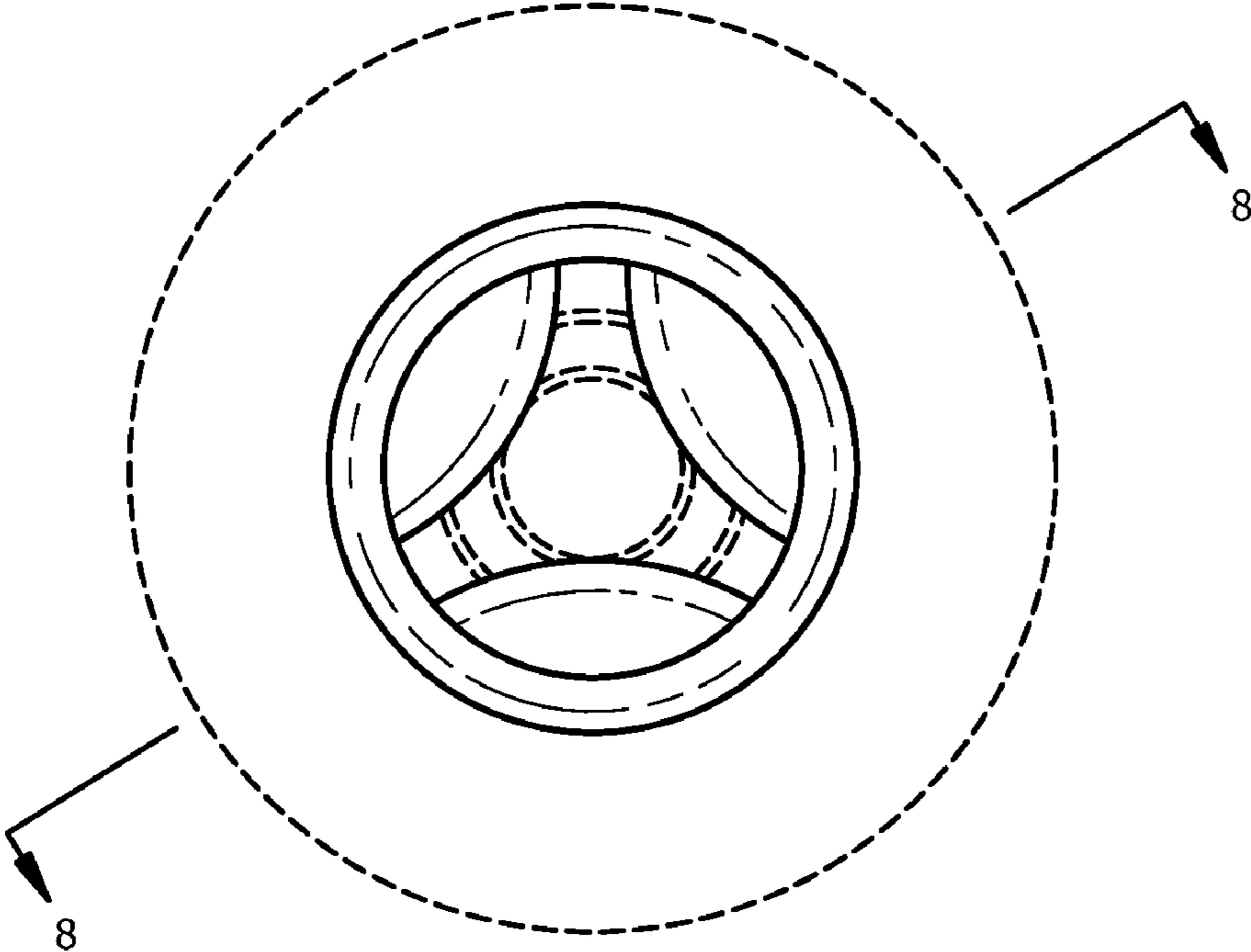


FIG. 7

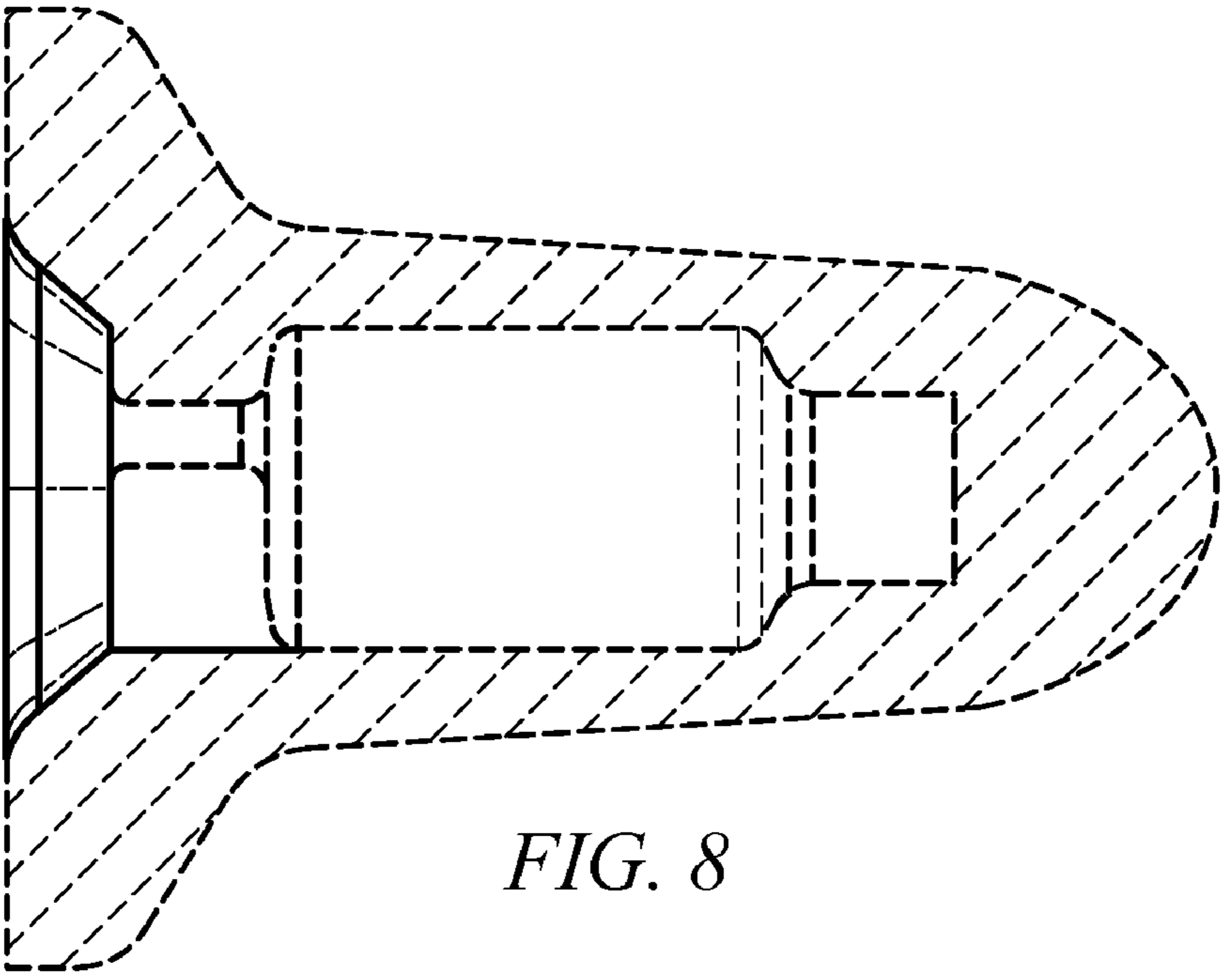


FIG. 8