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

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(54) **WAFER PADDLE**

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(73) Assignee: **Coorstek, Inc.**, Golden, CO (US)

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

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(51) **LOC (10) Cl.** ..... **15-09**

(52) **U.S. Cl.**  
USPC ..... **D15/138**

(58) **Field of Classification Search**  
USPC ..... D15/138, 199  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,951,587	A	4/1976	Alliegro et al.	
4,218,214	A	8/1980	Nelson	
4,355,974	A	10/1982	Lee	
4,440,538	A	4/1984	Bowers	
4,459,104	A	7/1984	Wollmann	
4,471,716	A	9/1984	Milliren	
4,516,897	A	5/1985	Snider et al.	
4,523,885	A	6/1985	Bayne et al.	
4,542,059	A	9/1985	Whang et al.	
4,566,839	A	1/1986	Butler	
4,624,638	A	11/1986	Sarkozy	
4,671,726	A	6/1987	Thuen	
4,676,008	A	6/1987	Armstrong	
4,687,097	A	8/1987	Mortensen	
4,721,424	A *	1/1988	Aldridge et al. ....	414/182
4,744,712	A	5/1988	Mitchell	
4,761,134	A	8/1988	Foster	
4,767,251	A	8/1988	Whang	
4,888,994	A	12/1989	Nakamaki et al.	
4,911,638	A	3/1990	Bayne et al.	
4,943,234	A	7/1990	Sohlbrand	
RE33,341	E	9/1990	Lee et al.	

(Continued)

OTHER PUBLICATIONS

International Preliminary Examination Report for App. PCT/US01/17242, completed Feb. 4, 2004 (2500.2.26PCT).

(Continued)

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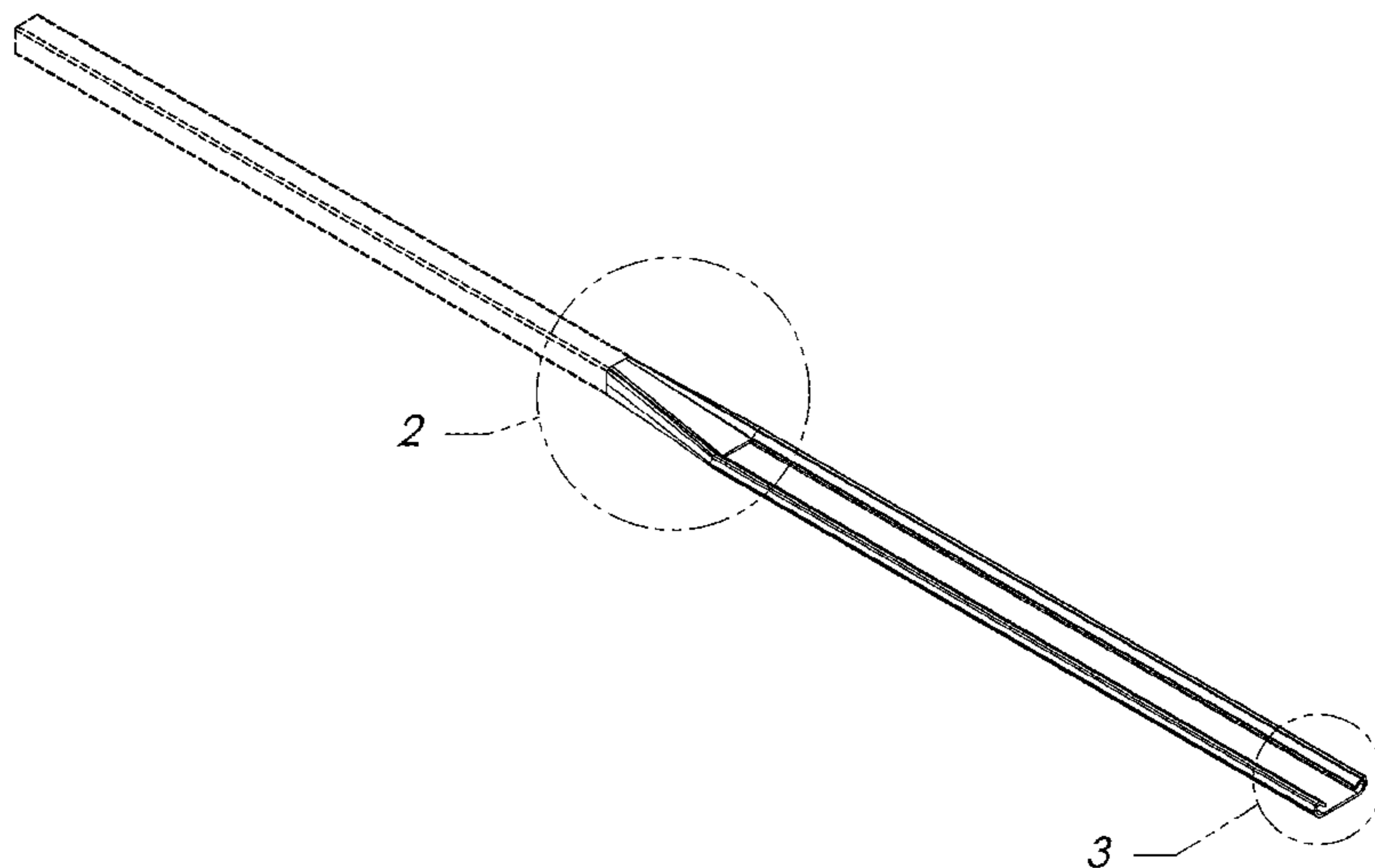
(57) **CLAIM**

The ornamental design for a wafer paddle, as shown and described.

**DESCRIPTION**

FIG. 1 depicts a front perspective view of a wafer paddle. FIG. 2 depicts an enlarged detail view as shown in circle 2 in FIG. 1. FIG. 3 depicts an enlarged detail view as shown in circle 3 in FIG. 1. FIG. 4 depicts a left elevation view of the wafer paddle of FIG. 1. FIG. 5 depicts an enlarged detail view as shown in circle 5 in FIG. 4. FIG. 6 depicts a right elevation view of the wafer paddle of FIG. 1. FIG. 7 depicts an enlarged detail view as shown in circle 7 in FIG. 6. FIG. 8 depicts a top plan view of the wafer paddle of FIG. 1. FIG. 9 depicts a bottom plan view of the wafer paddle of FIG. 1. FIG. 10 depicts a rear elevation view of the wafer paddle of FIG. 1; and, FIG. 11 depicts a front elevation view of the wafer paddle of FIG. 1. The broken lines in the drawings illustrate environmental structure on the article and form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

4,954,079	A	9/1990	Yamaga
4,976,610	A	12/1990	Yates
4,979,897	A	12/1990	Yates
4,998,879	A	3/1991	Foster et al.
5,033,406	A	7/1991	Lee
5,050,534	A	9/1991	Yates
3,679,893	A	7/1992	Bell
5,208,961	A	5/1993	Lajoie
5,225,375	A	7/1993	Aite et al.
5,283,089	A	2/1994	Bates
5,354,198	A	10/1994	Yates
5,443,649	A	8/1995	Sibley
5,476,176	A	12/1995	Gregerson et al.
5,505,577	A	4/1996	Nishi
5,520,205	A	5/1996	Guldi et al.
5,538,230	A	7/1996	Sibley
5,765,982	A	6/1998	Martin et al.
5,776,391	A	7/1998	Sibley
5,820,367	A	10/1998	Osawa
5,857,576	A	1/1999	Kim
5,878,889	A	3/1999	Koyanagi
5,882,807	A	3/1999	Funato et al.
6,095,806	A	8/2000	Suzuki et al.
6,199,564	B1	3/2001	Yokomizo

6,318,389	B1	11/2001	Schmidt et al.
6,601,592	B1	8/2003	Chen
6,631,934	B1	10/2003	Buckley
6,716,027	B2	4/2004	Kim et al.
6,811,040	B2	11/2004	Payne
7,501,370	B2	3/2009	Narendar et al.
7,762,208	B2	7/2010	Juergensen et al.
2005/0148455	A1	7/2005	Narendar et al.
2007/0238062	A1	10/2007	Asari et al.
2009/0159897	A1	6/2009	Narendar et al.
2009/0214999	A1	8/2009	Kaempfe et al.

OTHER PUBLICATIONS

International Preliminary Report on Patentability for App. PCT/US09/34667, issued Sep. 30, 2009 (2500.2.62PCT).  
 Translation of Notice of Preliminary Rejection for Korean App. 10-2010-7018859, issued Jan. 20, 2012 (2500.2.62KR).  
 Chinese Office Action with translation for CN App. 200980104800.5, issued Jul. 15, 2011 (2500.2.62CN).  
 Translation of Office Action for Taiwanese App. 098105542, issued Jan. 24, 2013 (2500.2.62TW).  
 Non-Final Office Action dated Oct. 17, 2013, issued in U.S. Appl. No. 12/389,741 (File 2500.2.62).  
 Amendment and Response to Non-Final Office Action submitted on Feb. 14, 2014 in U.S. Appl. No. 12/389,741 (File 2500.2.62).

\* cited by examiner

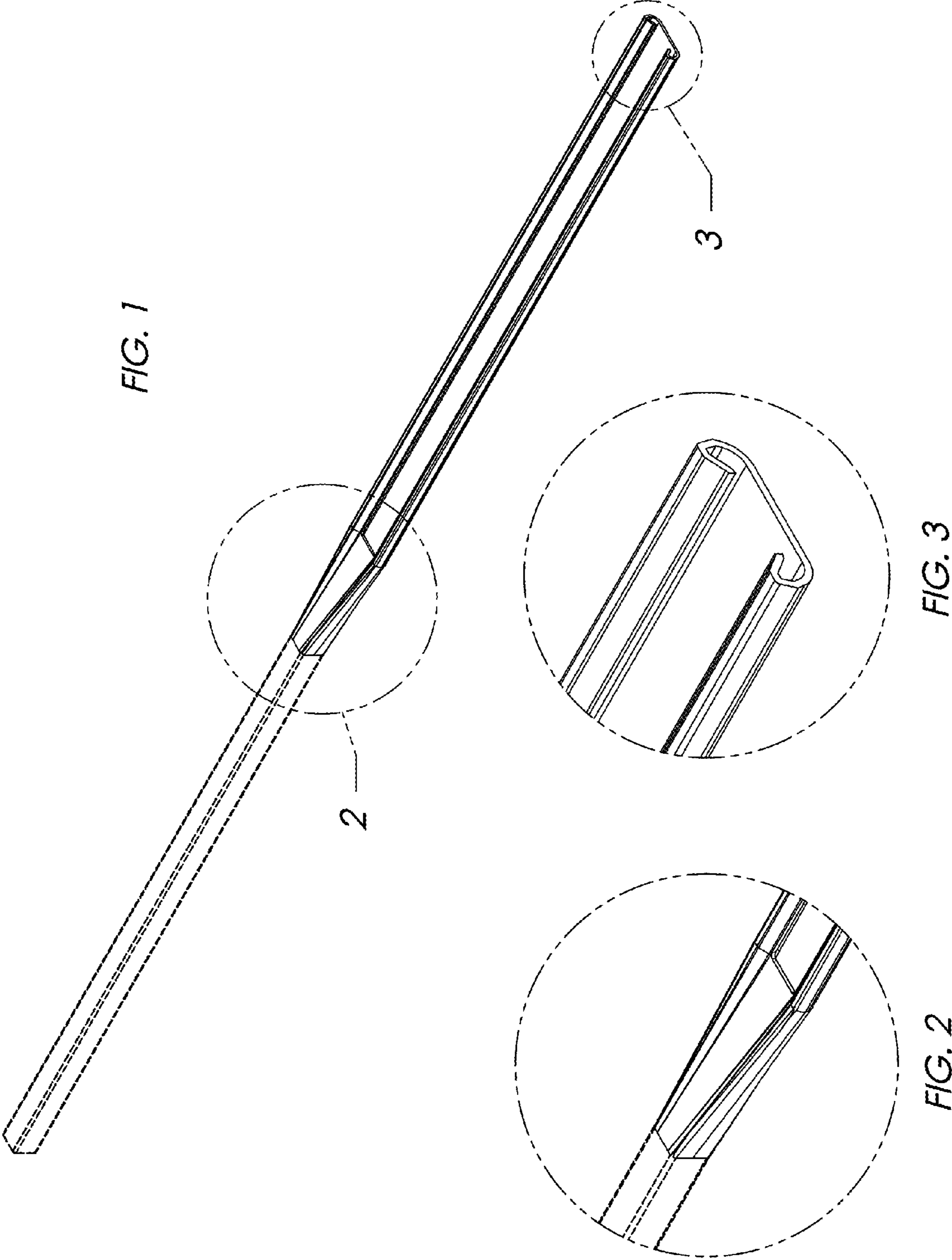


FIG. 1

FIG. 3

FIG. 2

FIG. 4

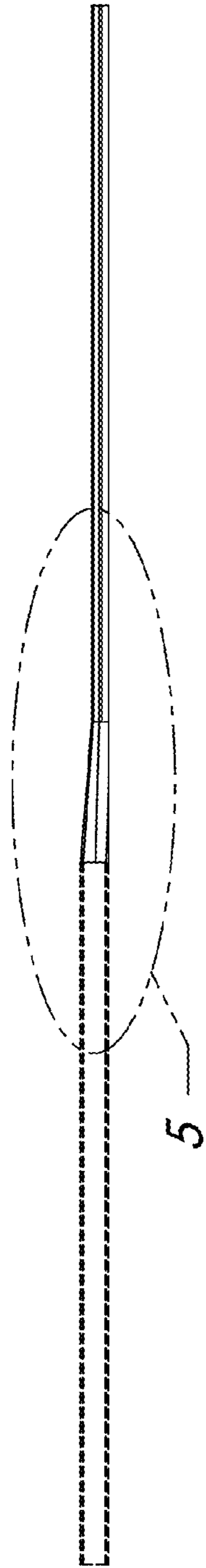


FIG. 5

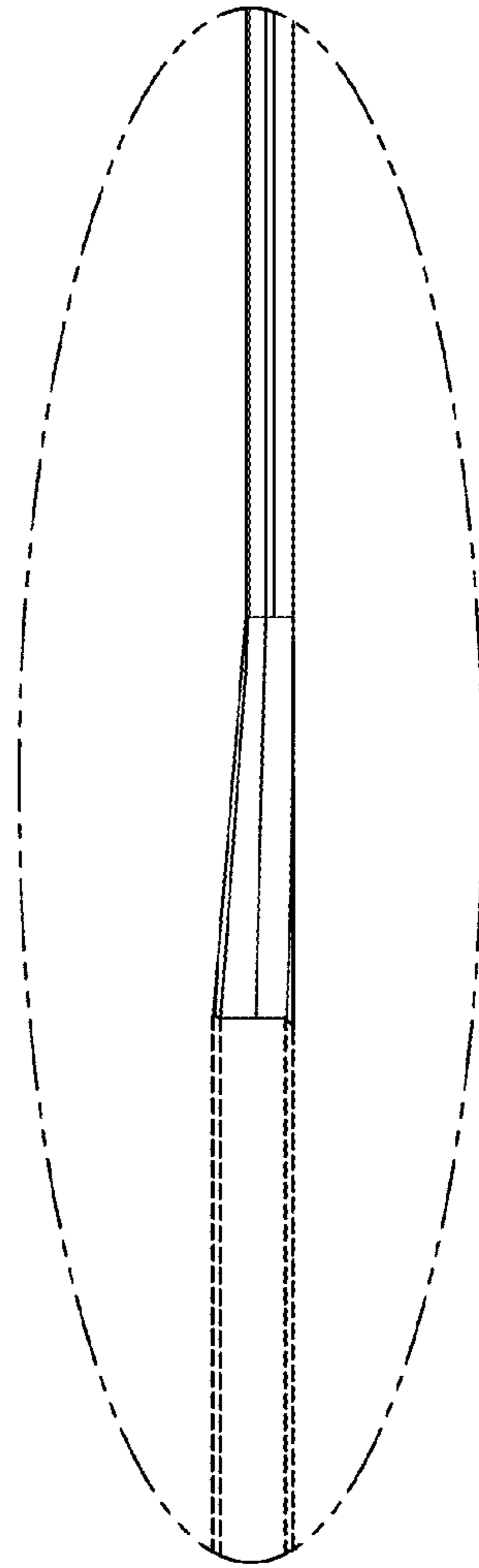


FIG. 6

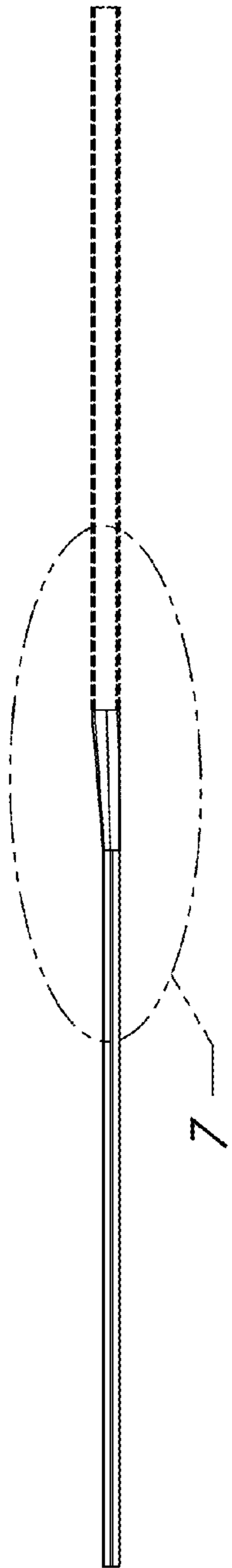


FIG. 7

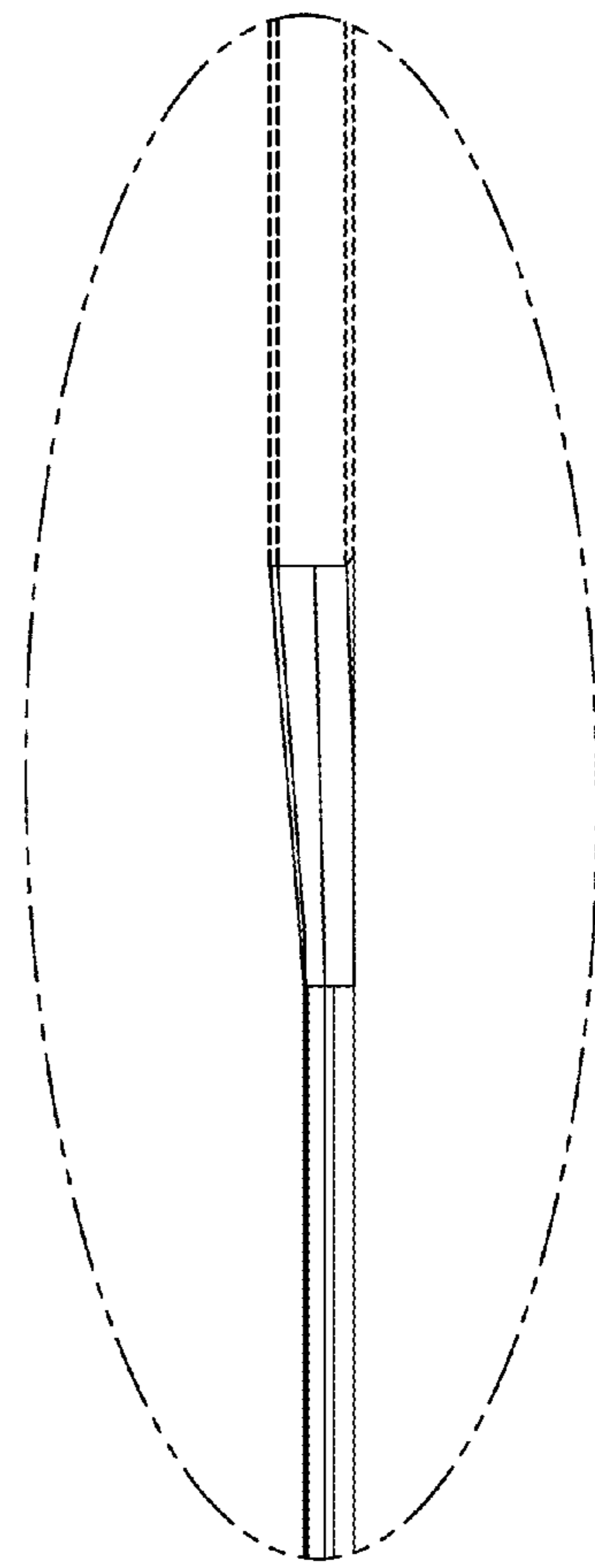




FIG. 8



FIG. 9

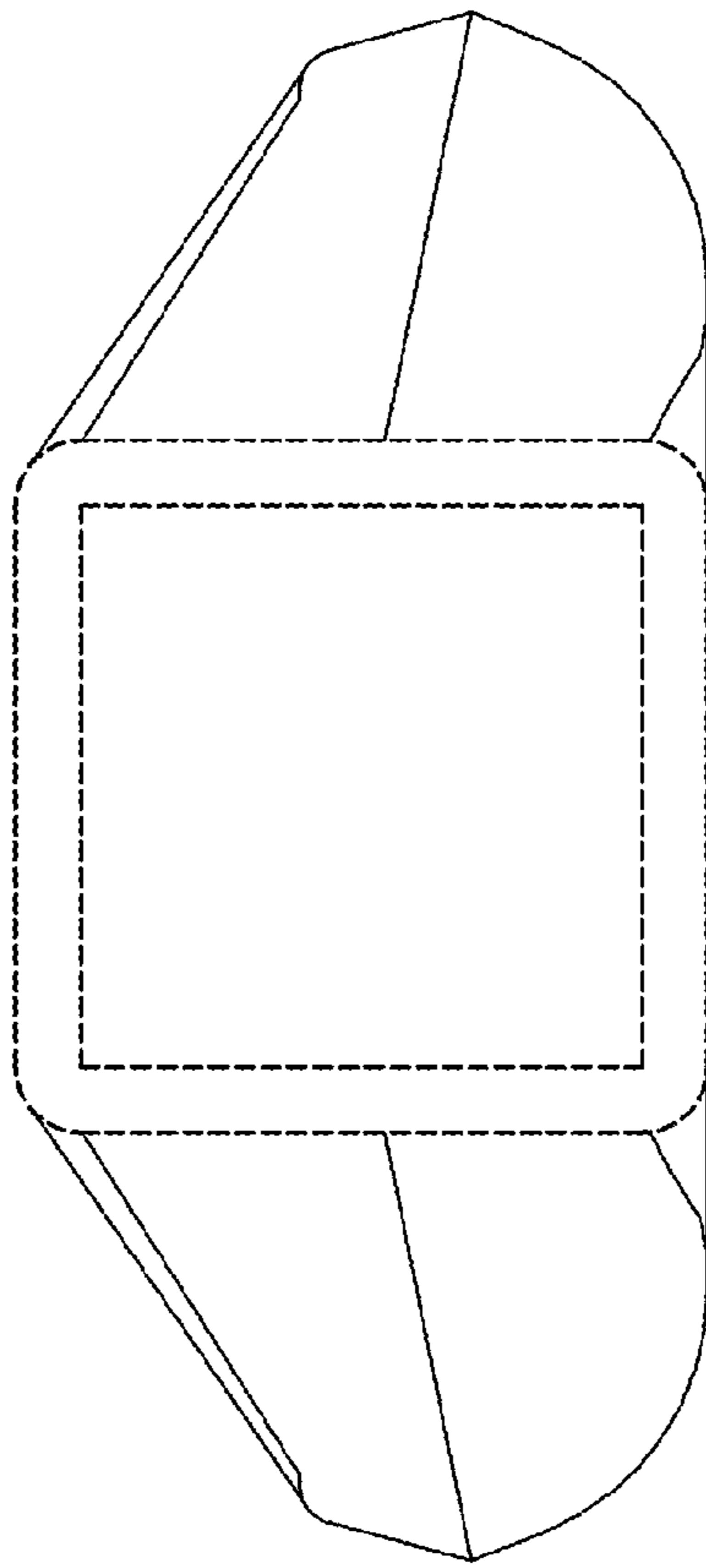


FIG. 10



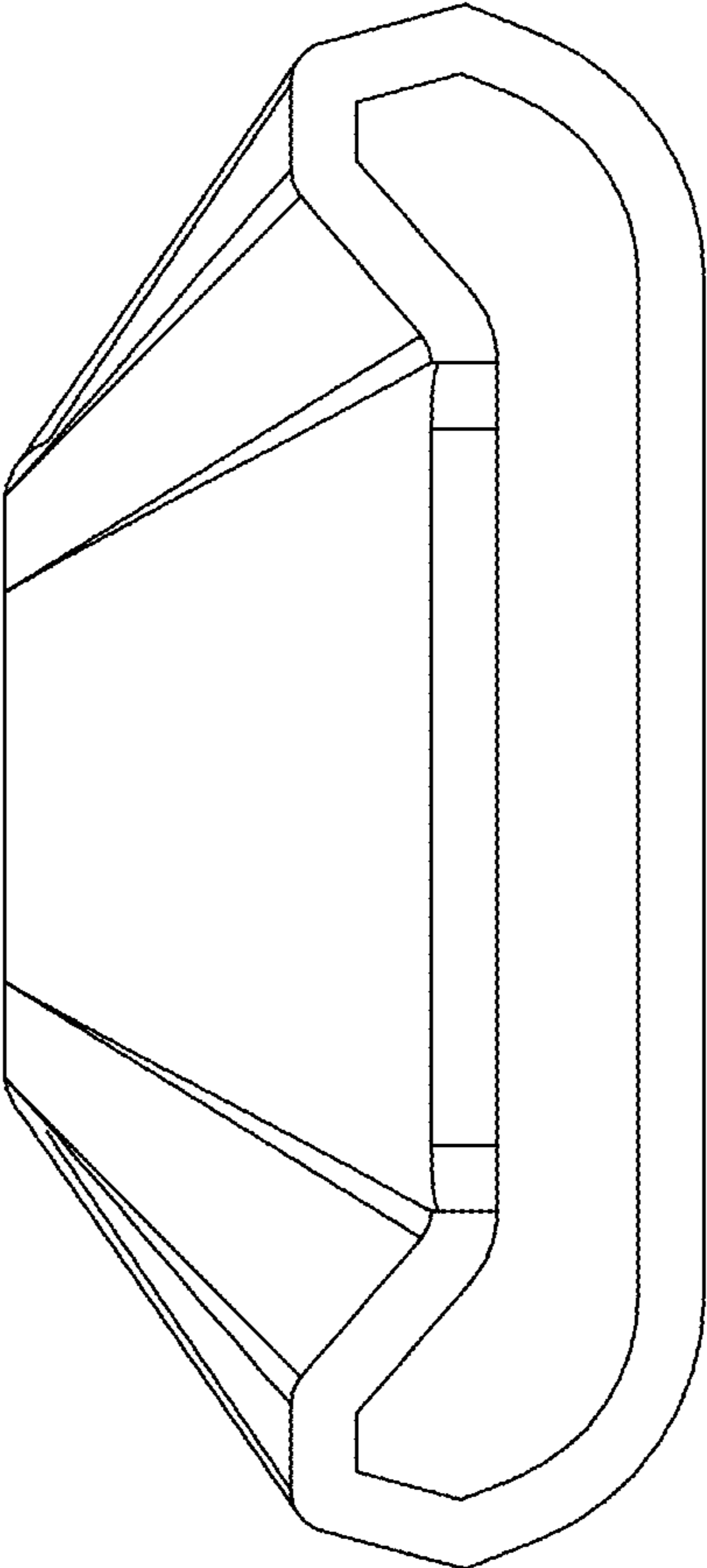


FIG. 11