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(12) **United States Design Patent**
Bertrand et al.

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(54) **TOOL FOR ADJUSTING AN IMPLANTABLE ADJUSTABLE FLUID FLOW CONTROL VALVE**

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(73) Assignee: **Medtronic, Inc.**, Minneapolis, MN (US)

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

(21) Appl. No.: **29/683,135**

(22) Filed: **Mar. 11, 2019**

Related U.S. Application Data

(63) Continuation of application No. 15/180,662, filed on Jun. 13, 2016, now abandoned, which is a (Continued)

(51) **LOC (13) Cl.** **24-02**
(52) **U.S. Cl.**
USPC **D24/129**
(58) **Field of Classification Search**
USPC D24/112–114, 108, 130, 127, 133, 186; 606/181, 185; 604/264, 523–528, 272,
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,156,422 A 5/1979 Hildebrandt et al.
4,360,007 A 11/1982 Levy et al.
(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 15/180,662, 2016-0279396, filed Jun. 13, 2016, Bertrand, et al.
(Continued)

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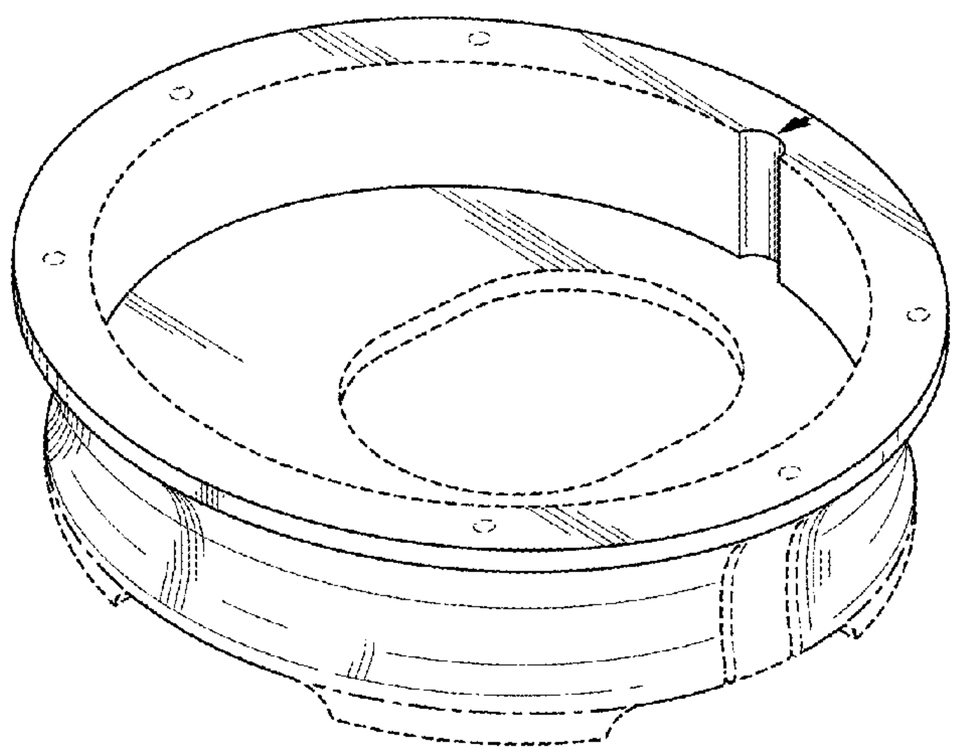
(74) *Attorney, Agent, or Firm* — Harness, Dickey & Pierce, P.L.C.

(57) **CLAIM**

The ornamental design for a tool for adjusting an implantable adjustable fluid flow control valve, as shown and described.

DESCRIPTION

FIG. **1** is a top front perspective view of a design of a tool for adjusting an implantable adjustable fluid flow control valve;
FIG. **2** is a top plan view of the design of the tool for adjusting an implantable adjustable fluid flow control valve;
FIG. **3** is a bottom plan view of the design of the tool for adjusting an implantable adjustable fluid flow control valve;
FIG. **4** is a rear top perspective view of the design of the tool for adjusting an implantable adjustable fluid flow control valve;
FIG. **5** is a rear bottom perspective view of the design of the tool for adjusting an implantable adjustable fluid flow control valve;
FIG. **6** is a first side elevation view of the design of the tool for adjusting an implantable adjustable fluid flow control valve;
FIG. **7** is a second side elevation view of the design of the tool for adjusting an implantable adjustable fluid flow control valve;
FIG. **8** is a third side elevation view of the design of the tool for adjusting an implantable adjustable fluid flow control valve;
FIG. **9** is a fourth side elevation view of the design of the tool for adjusting an implantable adjustable fluid flow control valve; and,
FIG. **10** is a cross-section view of the design of the tool for adjusting an implantable adjustable fluid flow control valve taken along line **20-20** of FIG. **2**.
The even broken lines in the drawings is for illustrating environment only and forms no part of the claimed design.
(Continued)



The dot-dash broken lines define the bounds of the claim design and form no part thereof.

1 Claim, 4 Drawing Sheets

Related U.S. Application Data

continuation of application No. 14/148,151, filed on Jan. 6, 2014, now Pat. No. 9,364,646, which is a continuation of application No. 09/745,108, filed on Dec. 20, 2000, now Pat. No. 8,622,978, which is a continuation of application No. 09/270,540, filed on Mar. 17, 1999, now abandoned.

(58) **Field of Classification Search**

USPC 604/164.01–164.11, 187, 93.01; 600/101, 600/139, 143; 128/200.24, 207.14, 128/207.15

CPC A61B 34/70; A61M 25/065; A61M 5/42; A61M 25/0612; A61M 25/00; A61M 39/00; A61M 27/00; A61M 25/0043; A61M 25/0067; A61M 25/0097; A61F 2/958

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,438,568	A	3/1984	Kramer et al.	
4,540,400	A	9/1985	Hooven	
4,595,390	A	6/1986	Hakim et al.	
4,608,992	A	9/1986	Hakim et al.	
4,615,691	A	10/1986	Hakim et al.	
4,676,772	A	6/1987	Hooven	
5,281,199	A	1/1994	Ensminger et al.	
5,342,311	A	8/1994	Dirina	
5,527,277	A	6/1996	Ensminger et al.	
5,620,419	A	4/1997	Lui et al.	
5,637,083	A	6/1997	Bertrand et al.	
5,643,194	A	7/1997	Negre	
5,738,666	A *	4/1998	Watson	A61B 1/00135 604/247
5,928,182	A	7/1999	Kraus et al.	
6,050,969	A	4/2000	Kraus	
7,044,932	B2	5/2006	Borchard et al.	
7,921,571	B2	4/2011	Moureaux et al.	
8,038,641	B2	10/2011	Soares et al.	
8,322,365	B2	12/2012	Wilson et al.	
8,622,978	B2	1/2014	Bertrand et al.	
8,630,695	B2	1/2014	Negre et al.	
8,733,394	B2	5/2014	Negre et al.	
9,126,010	B2	9/2015	Shah et al.	
9,216,275	B2	12/2015	Soares et al.	
9,364,646	B2	6/2016	Bertrand et al.	
2002/0022793	A1	2/2002	Bertrand et al.	
2009/0112308	A1 *	4/2009	Kassem	A61M 39/22 623/1.24
2010/0298645	A1 *	11/2010	Deutch	A61D 1/16 600/201
2012/0232462	A1 *	9/2012	Miethke	A61M 1/3655 604/9
2016/0361523	A1 *	12/2016	Haughton	A61M 25/10185
2017/0325685	A1 *	11/2017	Shachar	A61B 5/031
2018/0243542	A1 *	8/2018	Pfleiderer	F16K 37/0083
2018/0311485	A1 *	11/2018	Sheehy	A61B 5/4064
2019/0083763	A1 *	3/2019	Boden, Jr.	G01R 33/0076
2019/0350622	A1 *	11/2019	Abou El Kheir	A61B 17/320016
2019/0388660	A1 *	12/2019	Negre	A61M 27/006
2020/0038126	A1 *	2/2020	Cau	B25J 3/00
2020/0375745	A1 *	12/2020	Sampath	A61B 8/42

OTHER PUBLICATIONS

U.S. Appl. No. 14/148,151, 2014-0131586, filed Jan. 6, 2014, Bertrand, et al.

U.S. Appl. No. 09/745,108, 2002-0022793, filed Dec. 20, 2000, Bertrand, et al.

U.S. Appl. No. 09/270,540, N/A (Abd), filed Mar. 17, 1999, Bertrand, et al.

U.S. Appl. No. 29/683,136, filed Mar. 11, 2019, Bertrand, et al.

* cited by examiner

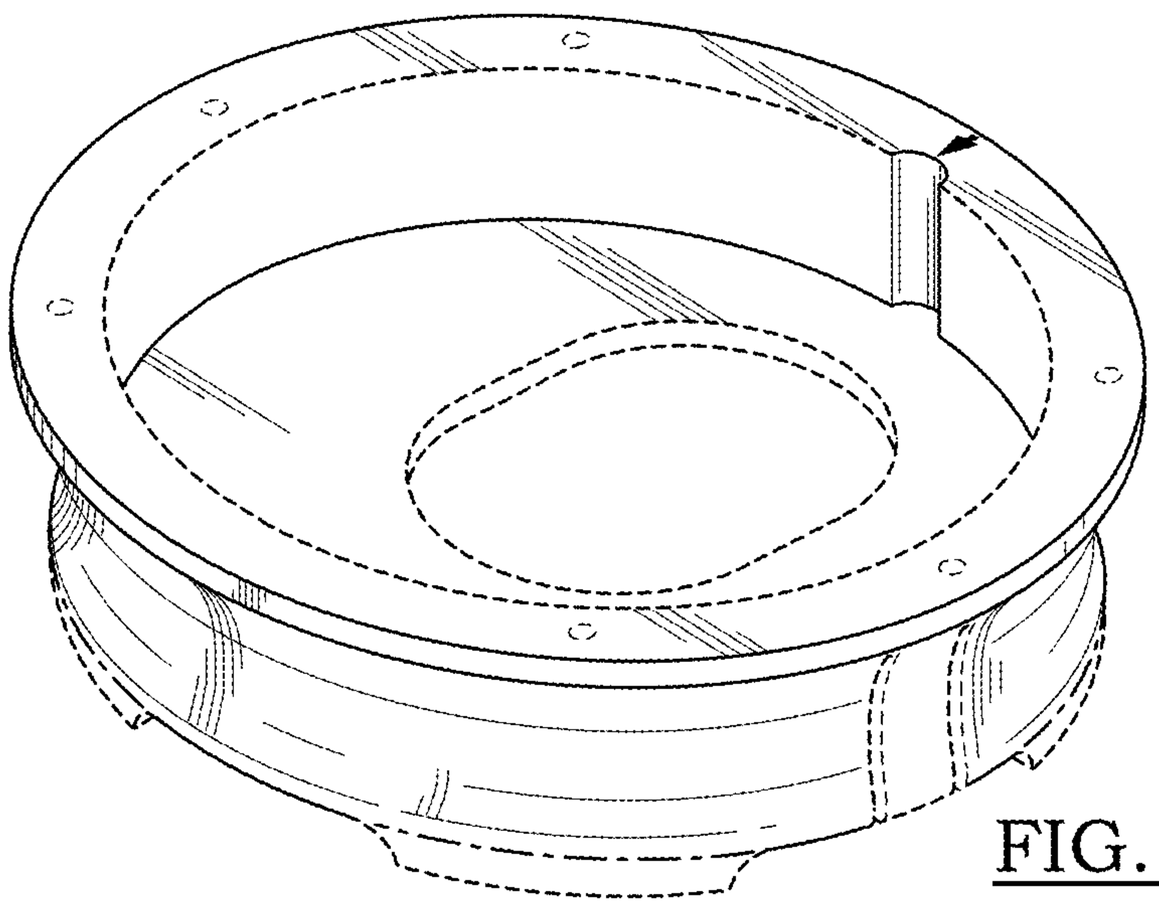


FIG. 1

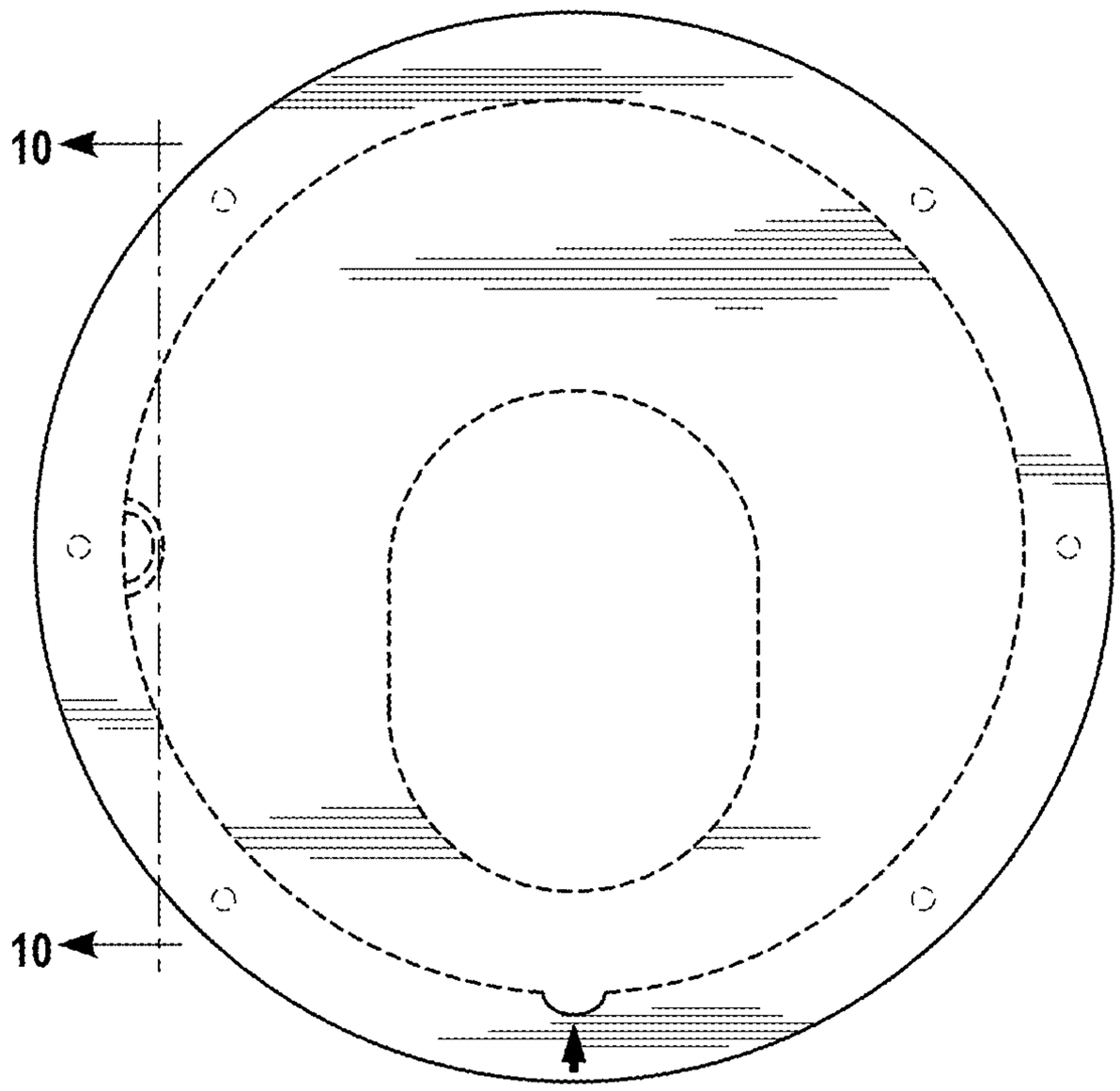
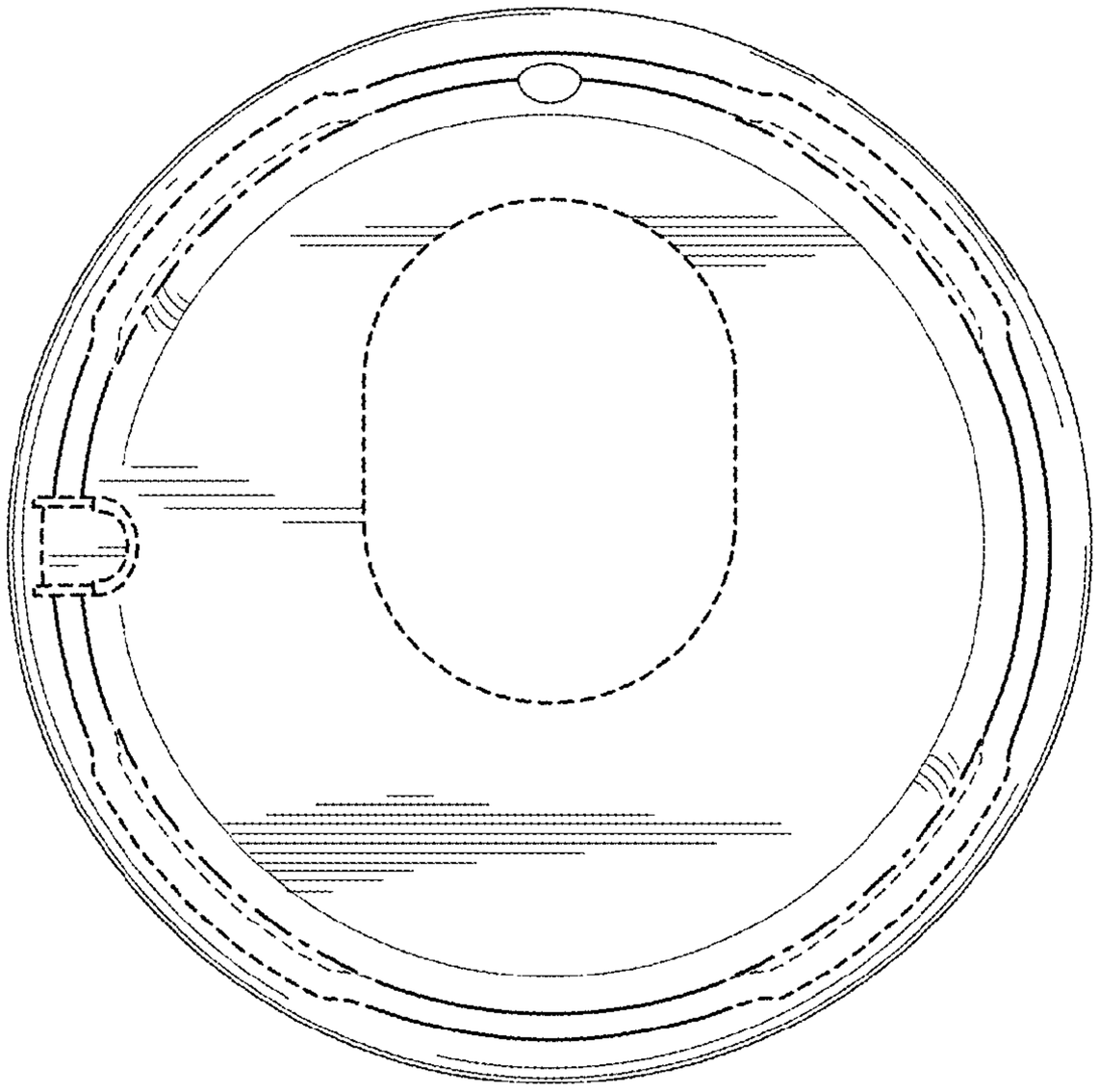


FIG. 2



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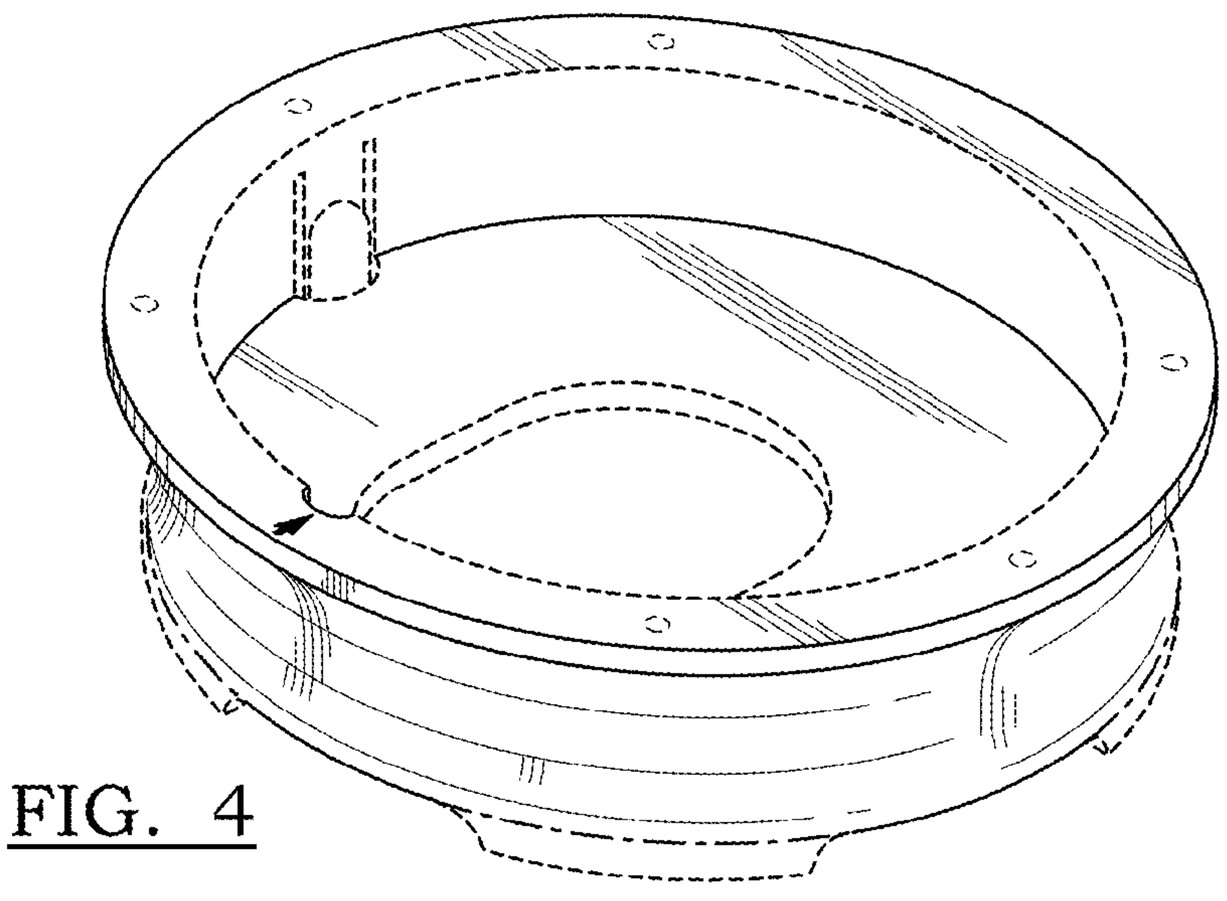

FIG. 4

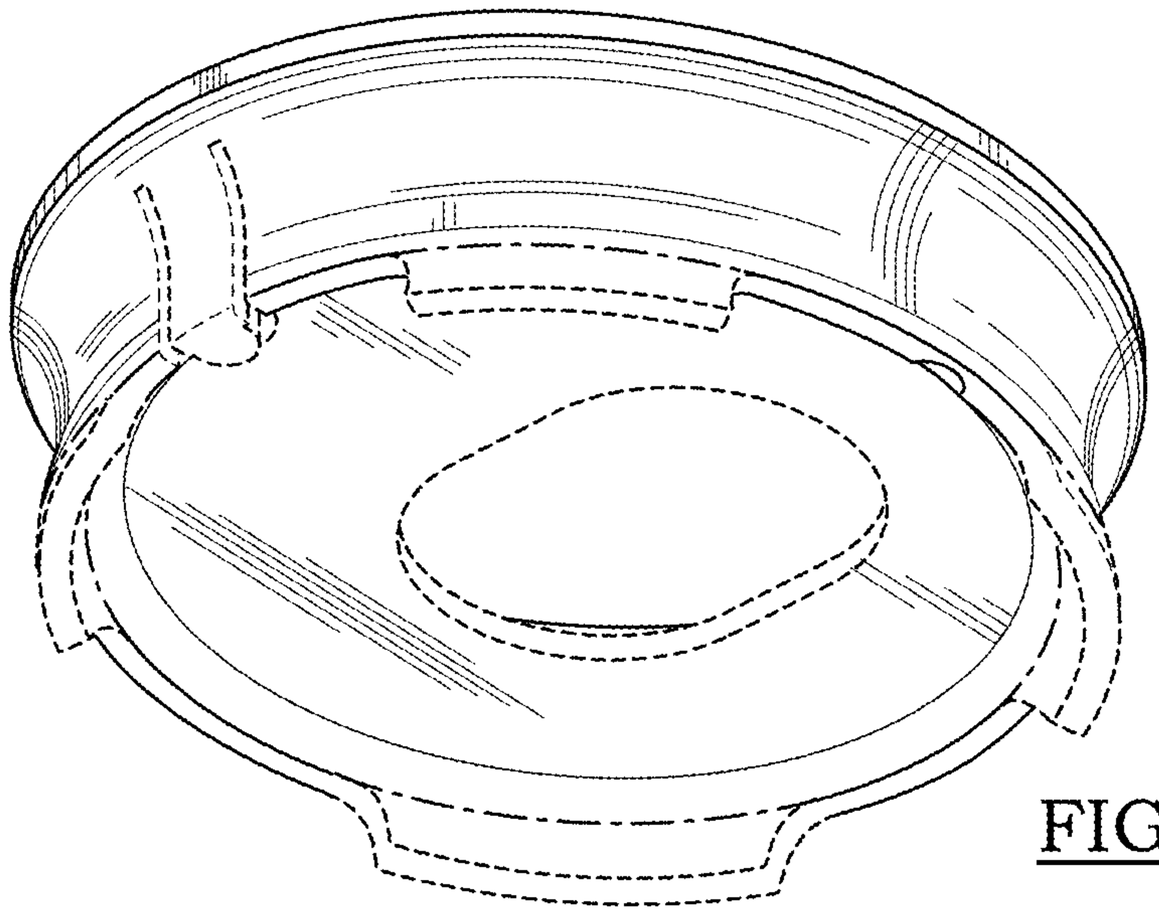

FIG. 5

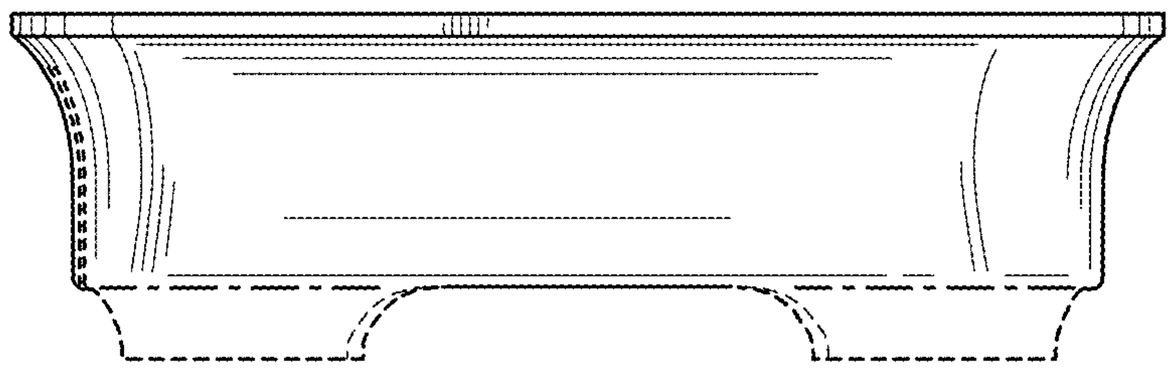

FIG. 6

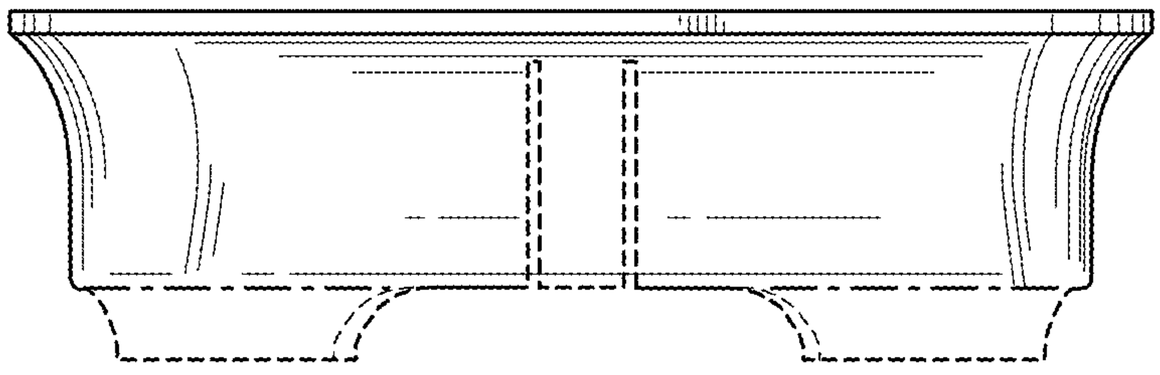

FIG. 7

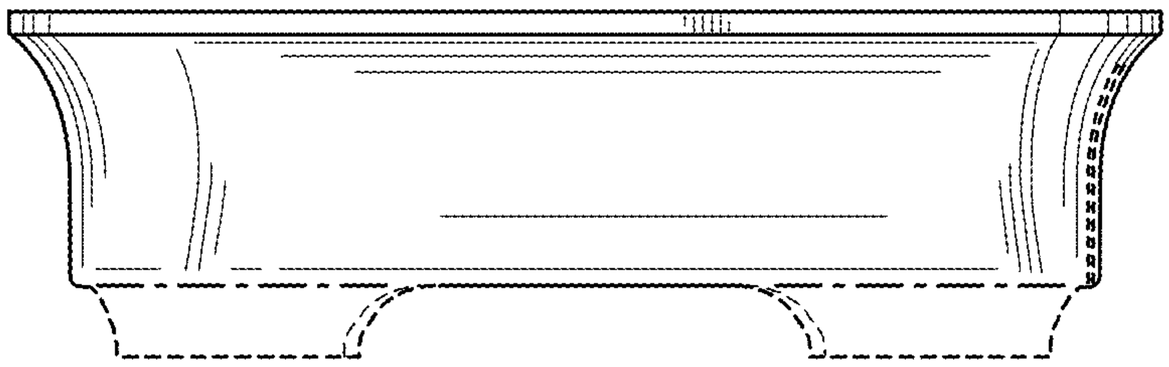

FIG. 8

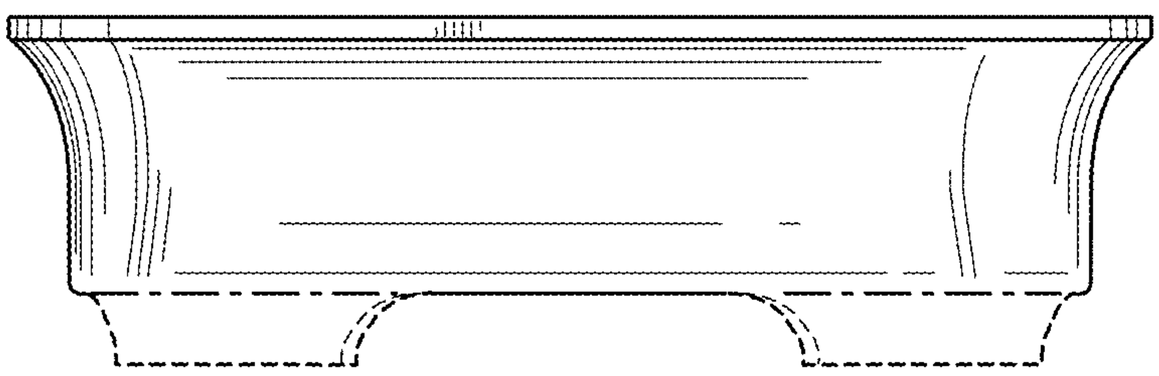

FIG. 9

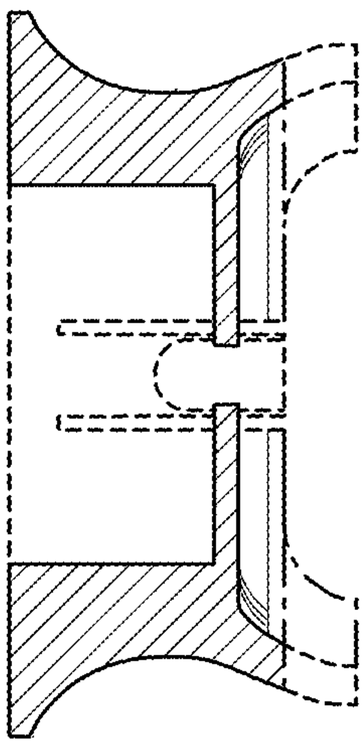

FIG. 10