



US00D781393S

(12) **United States Design Patent** (10) **Patent No.:** **US D781,393 S**  
**Burrow** (45) **Date of Patent:** **\*\* Mar. 14, 2017**

(54) **NOTCHED CARTRIDGE BASE INSERT**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **True Velocity, Inc.**, Dallas, TX (US)  
(72) Inventor: **Lonnie Burrow**, Carrollton, TX (US)  
(73) Assignee: **TRUE VELOCITY, INC.**, Dallas, TX (US)

CA 2813634 A1 4/2012  
EP 2625486 A1 8/2013  
(Continued)

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

OTHER PUBLICATIONS

(21) Appl. No.: **29/525,190**

Korean Intellectual Property Office (ISA), International Search Report and Written Opinion for PCT/US2011/062781 dated Nov. 30, 2012, 16 pp.

(22) Filed: **Apr. 28, 2015**

*Primary Examiner* — Michael A Pratt

(51) **LOC (10) Cl.** ..... **22-03**

(74) *Attorney, Agent, or Firm* — Chainey P. Singleton; Edwin S. Flores; Chalker Flores, LLP

(52) **U.S. Cl.**  
USPC ..... **D22/115**

(57) **CLAIM**

(58) **Field of Classification Search**  
USPC ..... D22/115–116  
CPC ..... F41A 9/83; F41A 9/82; F41A 9/01; F41A 9/09; F41A 9/86; F42B 30/02; F42B 5/02; F42B 5/26; F42B 12/34; F42B 8/04; F42B 10/22; F42B 8/14

The ornamental design for a notched cartridge base insert, as shown and described.

See application file for complete search history.

**DESCRIPTION**

(56) **References Cited**

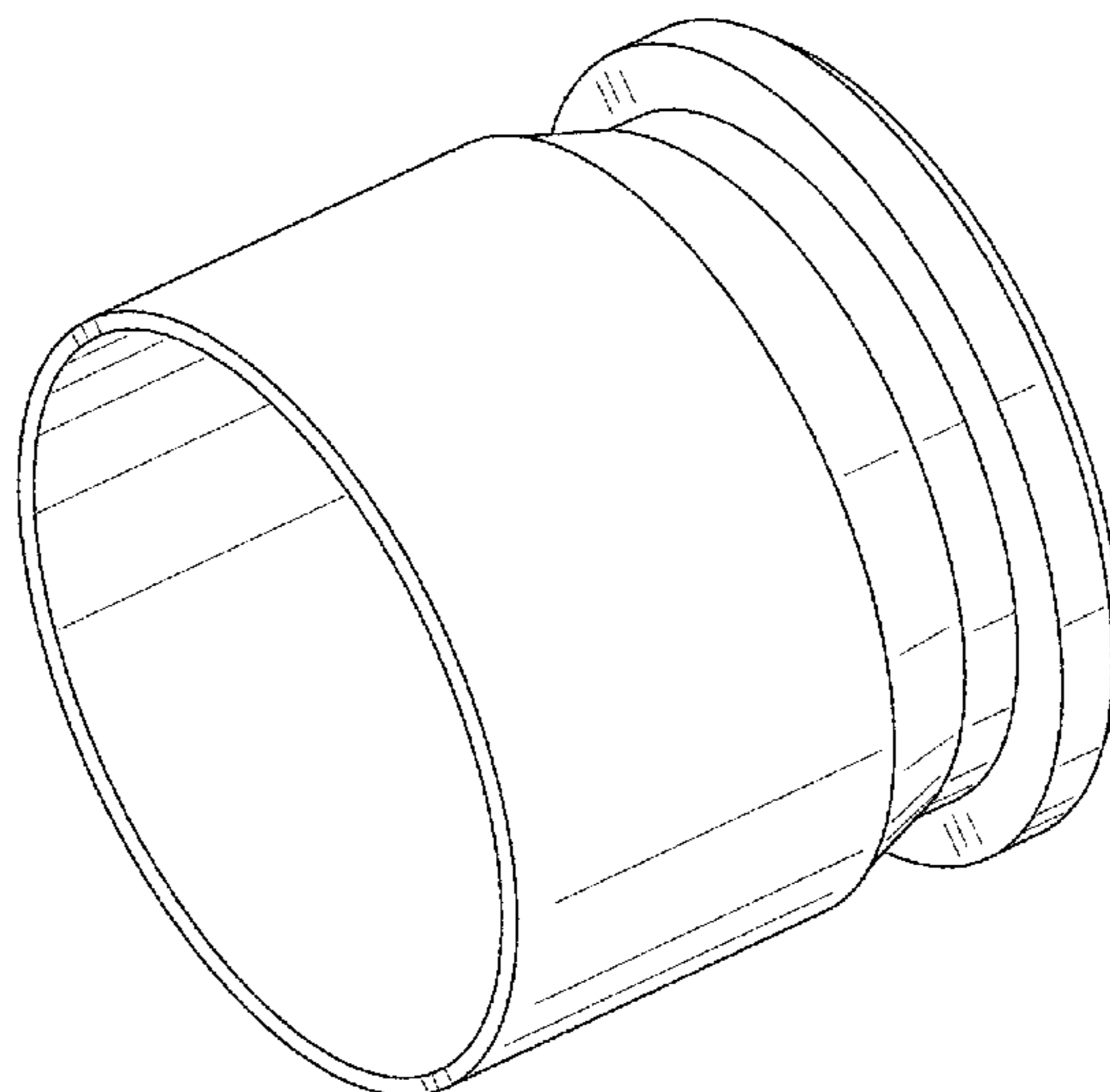
U.S. PATENT DOCUMENTS

2,294,822 A \* 9/1942 Albree ..... F42B 5/285  
102/464  
2,654,319 A \* 10/1953 Roske ..... F42B 5/307  
102/467  
2,862,446 A \* 12/1958 Ringdal ..... F42B 5/067  
102/430  
3,099,958 A \* 8/1963 Daubenspeck ..... F42B 5/307  
102/449  
3,955,506 A 5/1976 Luther et al.  
4,228,724 A 10/1980 Leich  
4,475,435 A 10/1984 Mantel  
4,598,445 A \* 7/1986 O'Connor ..... F42B 5/285  
86/19.6

FIG. 1 is an isometric view of a notched cartridge base insert showing my new design.  
FIG. 2 is a top view of a notched cartridge base insert showing my new design.  
FIG. 3 is a cross sectional view of a notched cartridge base insert showing my new design.  
FIG. 4 is a side view of a notched cartridge base insert showing my new design.  
FIG. 5 is a side view of a notched cartridge base insert showing my new design.  
FIG. 6 is a bottom view of a notched cartridge base insert showing my new design; and,  
FIG. 7 is an isometric cross sectional view showing the notched cartridge base insert molded into a cartridge casing. The nature and intended use of the article in which the design is embodied is a primer insert used in the manufacture of polymer ammunition casings.

(Continued)

**1 Claim, 5 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

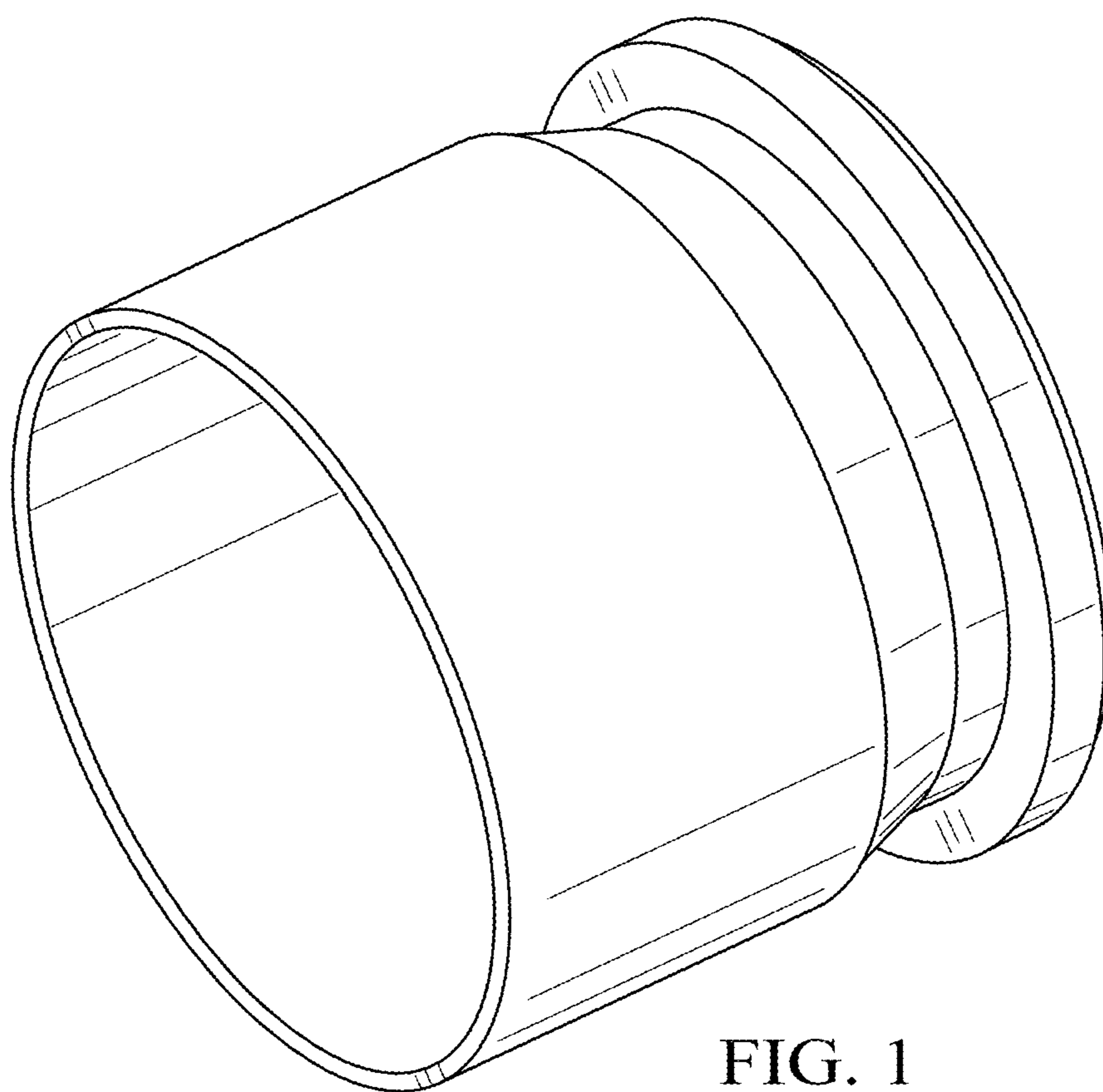
5,021,206 A \* 6/1991 Stoops ..... F42B 5/313  
102/466  
5,151,555 A \* 9/1992 Vatsvog ..... F42B 5/307  
86/10  
5,259,288 A \* 11/1993 Vatsvog ..... F42B 5/307  
102/430  
5,950,063 A 9/1999 Hens et al.  
5,961,200 A 10/1999 Friis  
6,004,682 A 12/1999 Rackovan et al.  
6,272,993 B1 8/2001 Cook et al.  
6,460,464 B1 10/2002 Attarwala  
6,845,716 B2 1/2005 Husseini et al.  
7,204,191 B2 4/2007 Wiley et al.  
7,213,519 B2 5/2007 Wiley et al.  
7,392,746 B2 7/2008 Hansen  
7,441,504 B2 10/2008 Husseini et al.  
7,610,858 B2 11/2009 Chung  
7,750,091 B2 7/2010 Maljkovic et al.  
8,443,730 B2 \* 5/2013 Padgett ..... F42B 5/313  
102/464  
8,522,684 B2 9/2013 Davies et al.  
8,561,543 B2 10/2013 Burrow  
8,573,126 B2 11/2013 Klein et al.  
8,641,842 B2 \* 2/2014 Hafner ..... C06B 25/24  
149/108.8  
8,763,535 B2 7/2014 Padgett  
8,790,455 B2 7/2014 Borissov et al.  
8,807,008 B2 8/2014 Padgett et al.  
8,813,650 B2 8/2014 Maljkovic et al.  
D715,888 S \* 10/2014 Padgett ..... D22/115  
8,869,702 B2 10/2014 Padgett

8,875,633 B2 11/2014 Padgett  
8,978,559 B2 3/2015 Davies et al.  
9,091,516 B2 \* 7/2015 Davies ..... F42B 5/307  
9,212,879 B2 \* 12/2015 Whitworth ..... F42B 14/00  
9,213,175 B2 \* 12/2015 Arnold ..... G02B 21/025  
D765,214 S \* 8/2016 Padgett ..... D22/115  
2001/0013299 A1 8/2001 Husseini et al.  
2003/0217665 A1 11/2003 Rennard  
2005/0005807 A1 1/2005 Wiley  
2005/0056183 A1 3/2005 Meshirer  
2007/0214992 A1 \* 9/2007 Dittrich ..... F42B 5/36  
102/469  
2010/0016518 A1 1/2010 El-Hibri et al.  
2010/0300319 A1 12/2010 Guindon  
2010/0305261 A1 12/2010 Maljkovic et al.  
2012/0024183 A1 2/2012 Klein  
2012/0180687 A1 7/2012 Padgett et al.  
2013/0180392 A1 7/2013 Nuetzman et al.  
2014/0060372 A1 3/2014 Padgett  
2014/0060373 A1 3/2014 Maljkovic et al.  
2014/0076188 A1 3/2014 Maljkovic et al.  
2014/0216293 A1 8/2014 Klein et al.  
2014/0235784 A1 8/2014 Maljkovic et al.  
2014/0260925 A1 9/2014 Beach et al.  
2014/0373744 A1 12/2014 Padgett

FOREIGN PATENT DOCUMENTS

WO 2012047615 A1 4/2012  
WO 2012097317 A2 7/2012  
WO 2012097320 A1 7/2012  
WO 2013070250 A1 5/2013  
WO 2014062256 A2 4/2014

\* cited by examiner



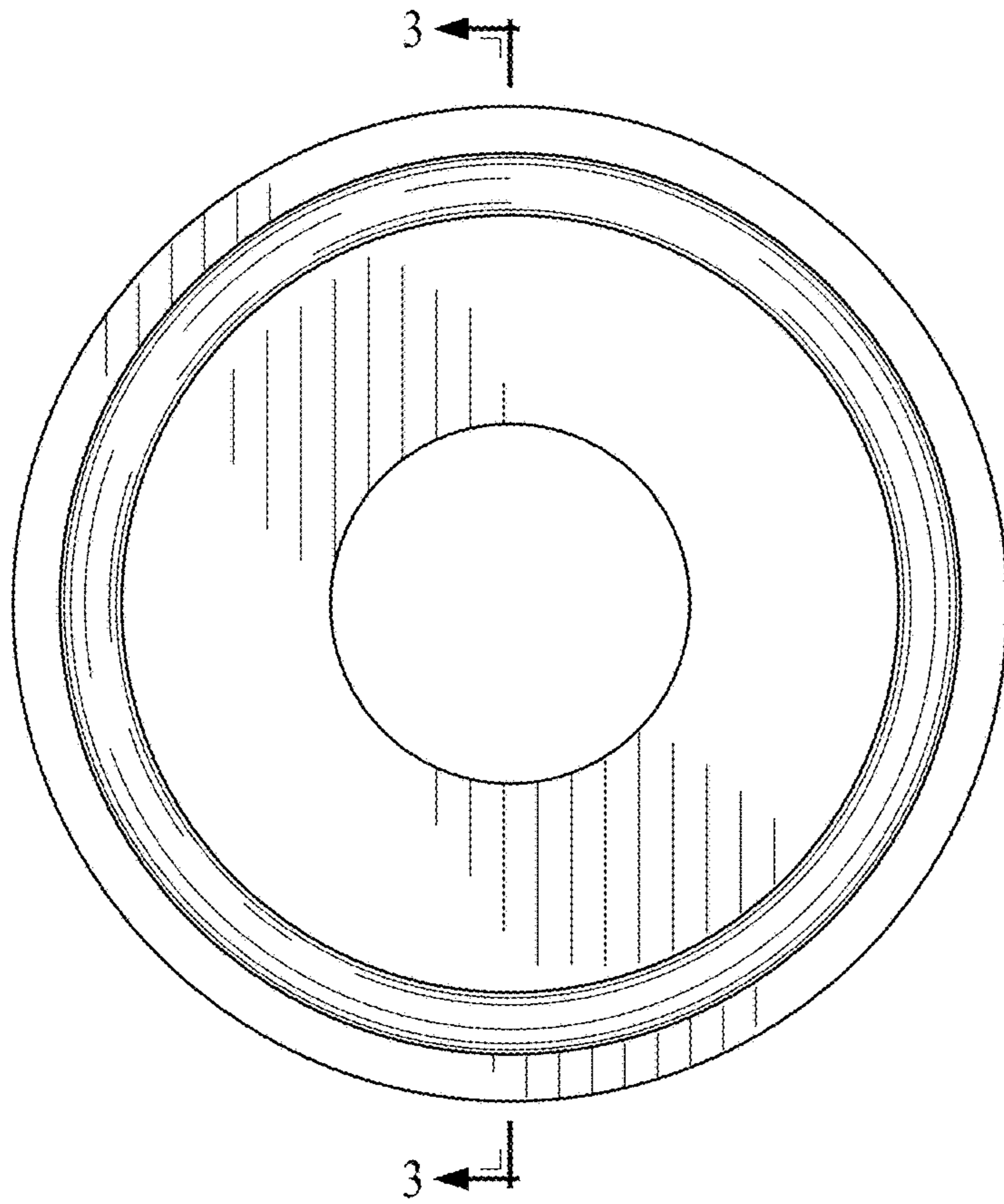


FIG. 2

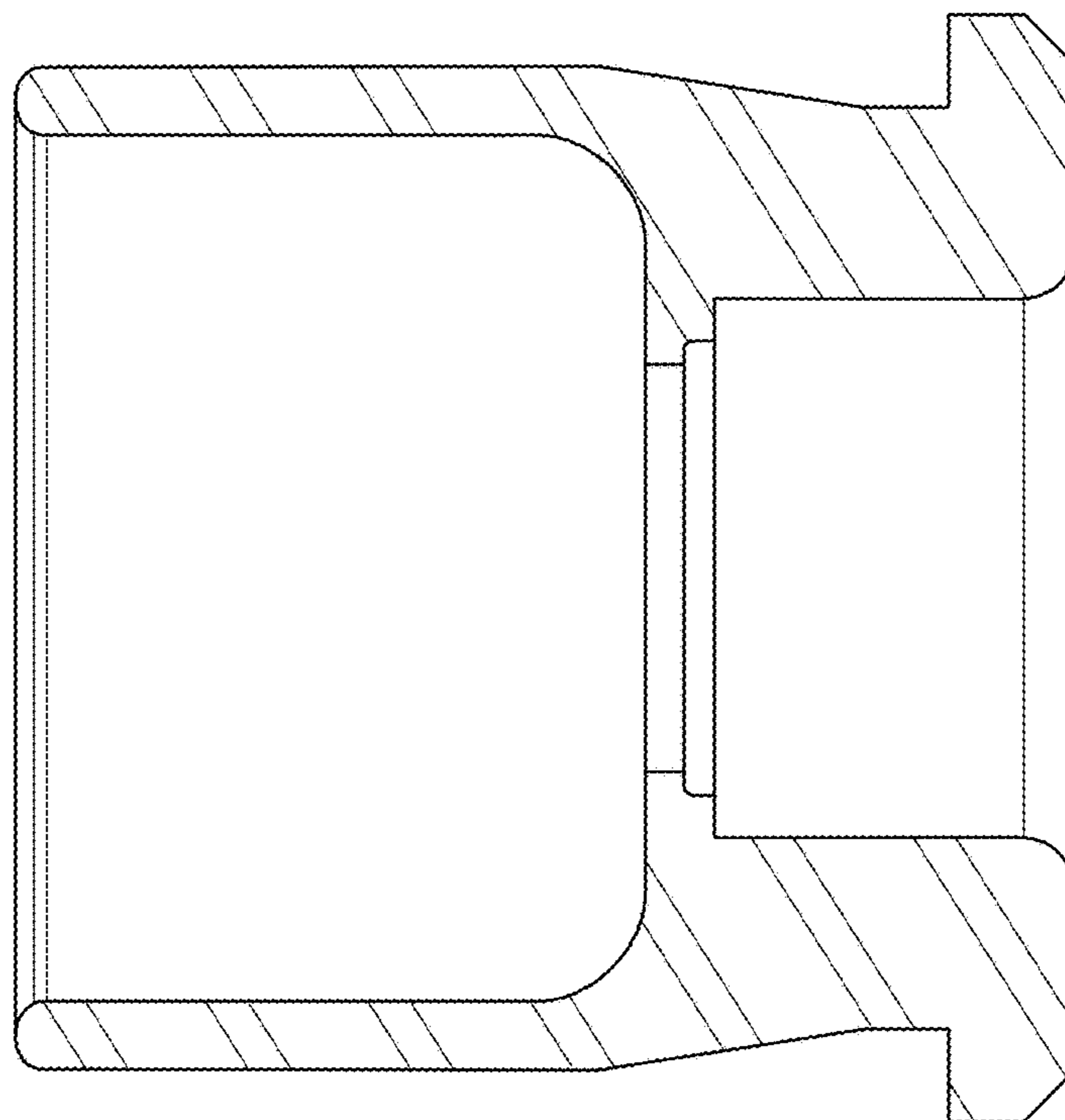


FIG. 3



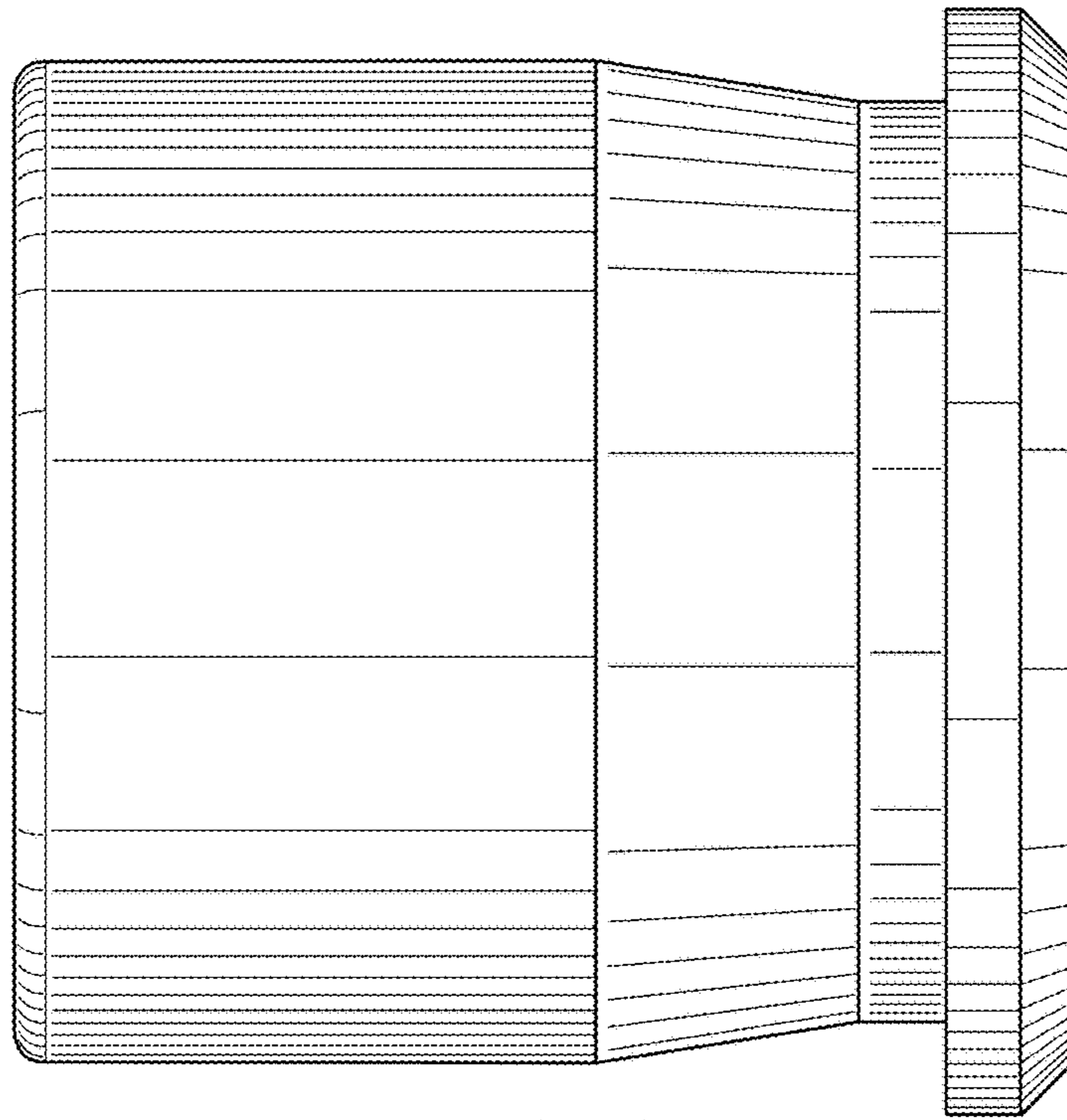


FIG. 4

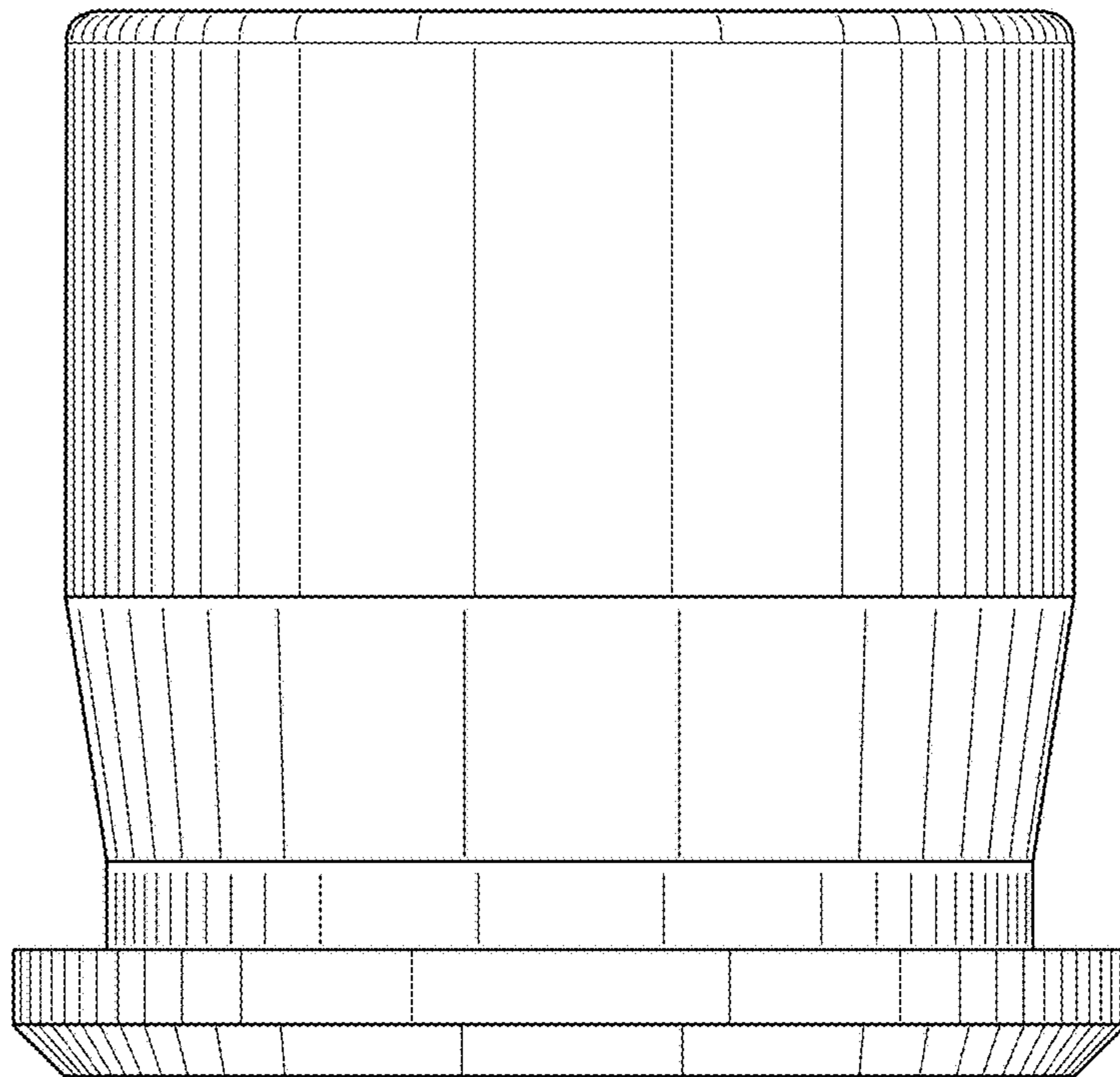


FIG. 5

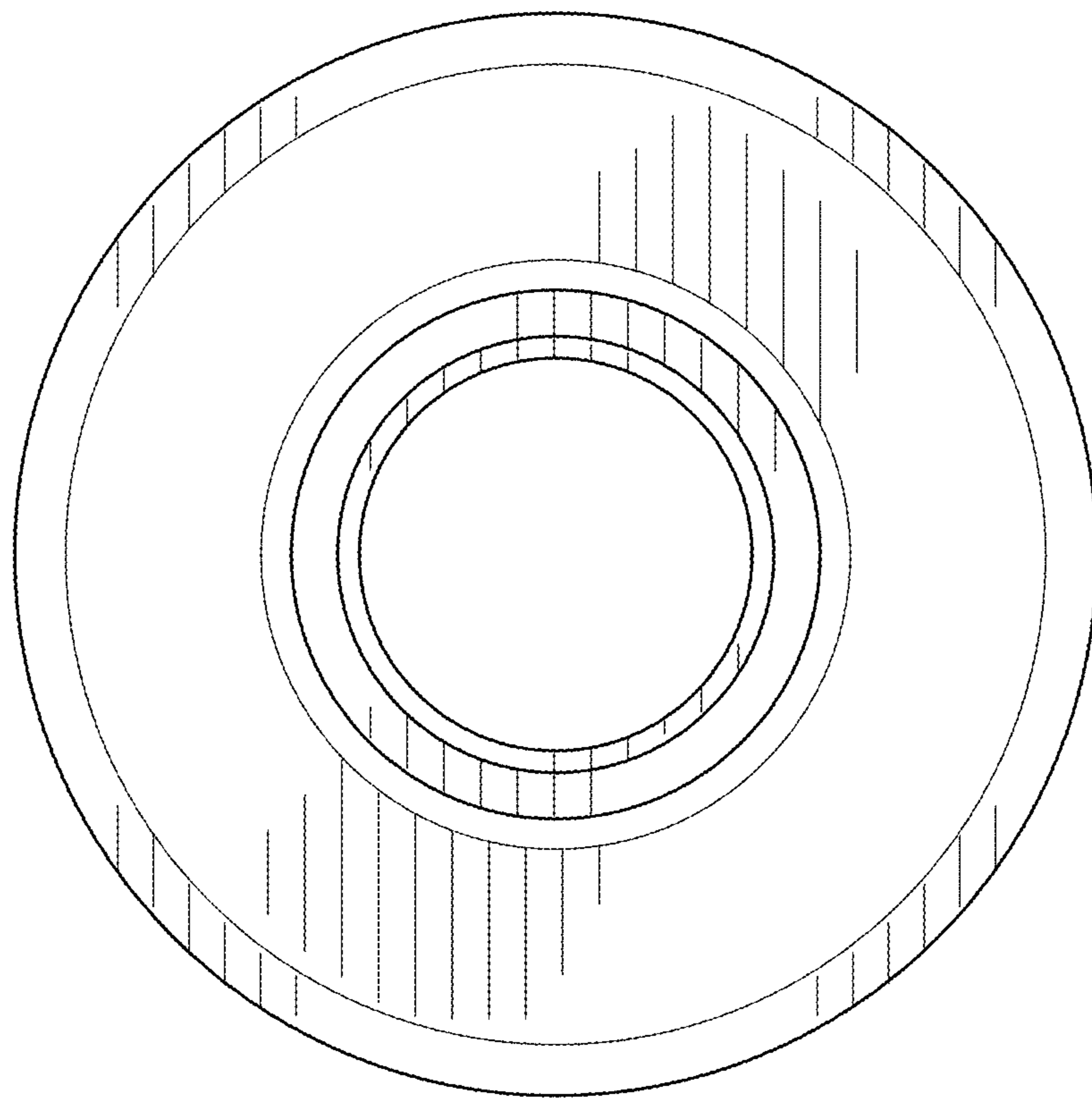


FIG. 6

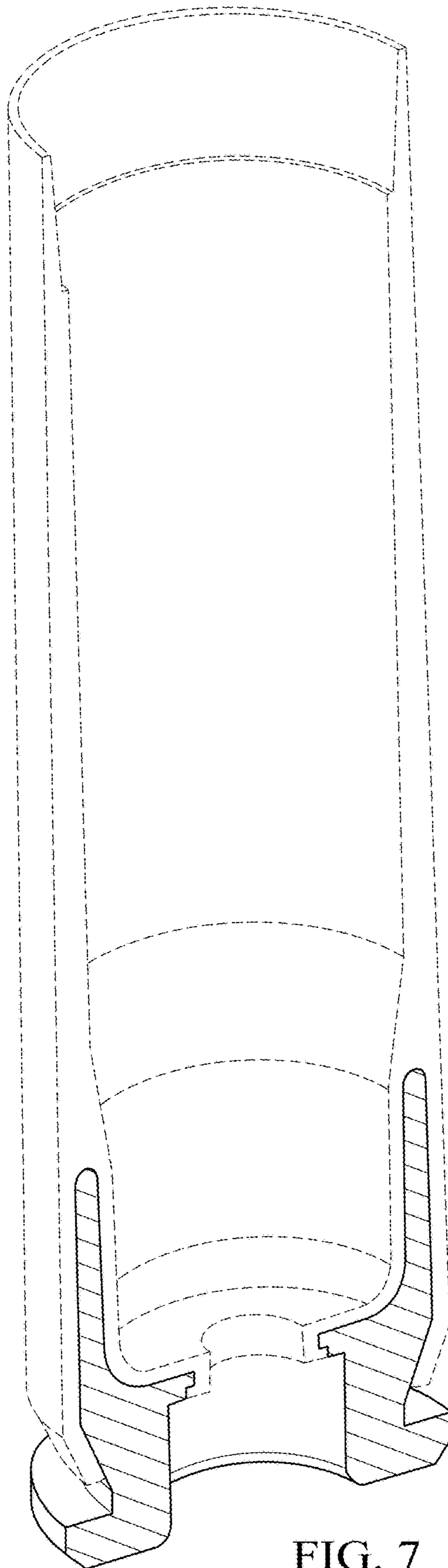


FIG. 7