



US00D655001S

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

(10) **Patent No.:** **US D655,001 S**

(45) **Date of Patent:** **** Feb. 28, 2012**

(54) **NEEDLE SHIELD**

(75) Inventors: **Bernd Becker**, Aachen (DE); **Dirk Zolcher**, Nideggen (DE)

(73) Assignee: **West Pharmaceutical Services Deutschland GmbH & Co. KG**, Eschweiler (DE)

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

(21) Appl. No.: **29/391,536**

(22) Filed: **May 10, 2011**

(51) **LOC (9) Cl.** **24-02**

(52) **U.S. Cl.** **D24/130**

(58) **Field of Classification Search** D24/112–114, D24/130; 604/93, 6.12, 164–165, 166–167, 604/110, 187–189, 192–194, 198, 208, 218, 604/223, 232, 240–241, 243, 263–264
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 3,434,473 A 3/1969 Smith
- 3,865,236 A 2/1975 Rycroft
- 4,248,246 A 2/1981 Ikeda
- 4,300,678 A 11/1981 Gyure et al.
- 4,430,082 A 2/1984 Schwabacher
- 4,636,201 A 1/1987 Ambrose et al.
- 4,735,311 A 4/1988 Lowe et al.
- 4,747,837 A 5/1988 Hauck
- 4,964,866 A 10/1990 Szwarc
- 4,986,818 A 1/1991 Imbert et al.
- D320,277 S 9/1991 Gyure et al.
- D322,671 S 12/1991 Szwarc
- 5,085,647 A 2/1992 Henderson et al.
- 5,098,400 A 3/1992 Crouse et al.
- 5,147,325 A 9/1992 Mitchell et al.
- D332,308 S 1/1993 Imbert et al.
- D332,490 S 1/1993 Brown et al.
- 5,232,455 A 8/1993 Hollister
- 5,322,515 A 6/1994 Karas et al.

- 5,336,197 A 8/1994 Kuracina et al.
- 5,342,320 A 8/1994 Cameron
- 5,832,971 A 11/1998 Yale et al.
- 5,941,857 A 8/1999 Nguyen et al.
- 5,980,493 A 11/1999 Smith et al.
- 5,980,495 A 11/1999 Heinz et al.

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0876824 A2 11/1998
(Continued)

OTHER PUBLICATIONS

Several photographs of Stelmi Trading International needle protecting device.

(Continued)

Primary Examiner — T. Chase Nelson

Assistant Examiner — Eric Goodman

(74) *Attorney, Agent, or Firm* — Panitch Schwarze Belisario & Nadel LLP

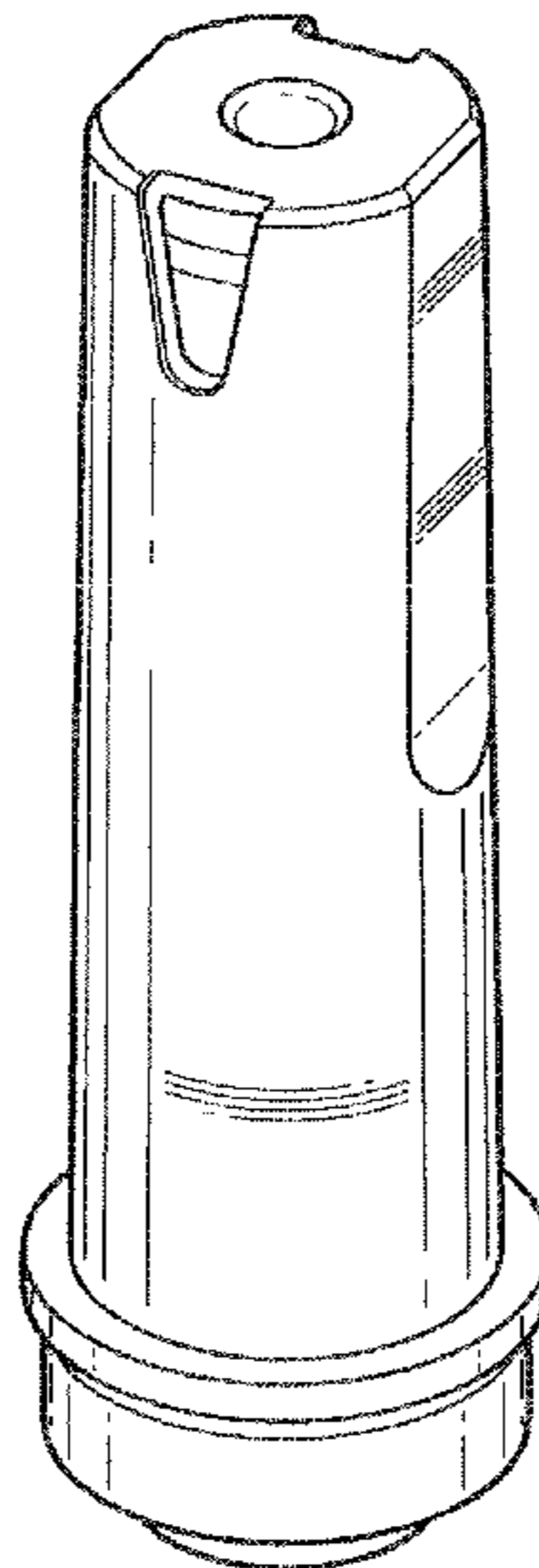
(57) **CLAIM**

The ornamental design for a needle shield, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of a preferred embodiment of a needle shield in accordance with our new design; FIG. 2 is a front elevational view thereof, a rear elevational view thereof being identical; FIG. 3 is a right-side elevational view thereof, a left-side elevational view thereof being identical; and, FIG. 4 is a top plan view thereof. The broken line showing is included for the purpose of illustrating portions of the article that form no part of the claimed design.

1 Claim, 2 Drawing Sheets



US D655,001 S

Page 2

U.S. PATENT DOCUMENTS

5,989,229	A	11/1999	Chiappetta	
6,004,296	A	12/1999	Jansen et al.	
6,186,980	B1	2/2001	Brunel	
6,193,696	B1	2/2001	Jansen et al.	
D460,178	S	7/2002	Courteix	
D461,557	S	8/2002	Courteix	
D465,846	S	11/2002	Hwang	
6,485,474	B1	11/2002	Heinz et al.	
D469,178	S	1/2003	Courteix	
6,551,286	B1	4/2003	Claessens	
6,595,954	B1	7/2003	Luther et al.	
6,629,963	B2	10/2003	Prais et al.	
6,648,855	B2	11/2003	Crawford et al.	
6,719,732	B2	4/2004	Courteix	
6,832,992	B2	12/2004	Wilkinson	
6,855,129	B2	2/2005	Jensen et al.	
6,984,223	B2	1/2006	Newby et al.	
7,001,363	B2	2/2006	Ferguson et al.	
7,036,288	B2	5/2006	Vetter et al.	
7,094,223	B2	8/2006	Brunel	
7,198,618	B2	4/2007	Ferguson et al.	
D565,732	S	4/2008	Pech et al.	
7,387,617	B2	6/2008	Wittland et al.	
D581,046	S	11/2008	Sudo	
D581,049	S	11/2008	Sudo	
D584,407	S *	1/2009	Kawamura	D24/130
D589,612	S *	3/2009	Sudo	D24/130
D596,289	S *	7/2009	Kawamura	D24/130
7,559,919	B2	7/2009	Pech et al.	
D608,000	S *	1/2010	Kawamura	D24/130
7,641,636	B2	1/2010	Moesli et al.	
D612,493	S	3/2010	Claessens et al.	
D627,459	S	11/2010	Uchida et al.	
2001/0004685	A1	6/2001	Jansen et al.	
2002/0062108	A1	5/2002	Courteix	
2003/0181859	A1	9/2003	Brunel	
2003/0208165	A1	11/2003	Christensen et al.	
2003/0229315	A1	12/2003	Leong et al.	

2004/0186440	A1	9/2004	Jansen et al.	
2005/0038391	A1	2/2005	Wittland et al.	
2005/0096596	A1	5/2005	Crawford et al.	
2005/0137528	A1	6/2005	Wilkinson	
2006/0184114	A1	8/2006	Tai	
2006/0189933	A1	8/2006	Alheidt et al.	
2007/0016141	A1	1/2007	Salto et al.	
2008/0215001	A1 *	9/2008	Cowe	604/110
2008/0215013	A1	9/2008	Felix-Faure	
2008/0269690	A1	10/2008	Felix-Faure	
2009/0062744	A1 *	3/2009	Weilbacher et al.	604/192
2010/0076382	A1	3/2010	Weston	
2010/0198163	A1	8/2010	Bonnet	
2011/0046564	A1 *	2/2011	Zhong	604/198

FOREIGN PATENT DOCUMENTS

EP	1099450	A1	5/2001
EP	1208861	A1	5/2002
EP	1502616	A1	2/2005
EP	1964587	A1	9/2008
FR	7045698		7/1972
FR	2777787	A1	10/1999
WO	2008016710	A1	2/2008

OTHER PUBLICATIONS

Advertisement for Stelmi Rigid Needle Shield for Auto-Injectors (2011).

Merceille, "Stelmi Rigid Needle Shield: The Successful Concept with the Anti Pop-Off Patented Design," Prefilled Syringes: The Container of Choice for Today's Injectables, pp. 14-16, published by ONdrugDelivery Ltd. (2008).

"A Rigid Needle Shield for Auto-Injectors," Injectable Delivery 2011: Devices Focus, pp. 8-11, Published by Frederick Furness Publishing, www.ondrugdelivery.com (Jun. 2011).

"Prefilled Syringe: Rigid Needle Shield," Stelmi product brochure, 2 pages.

* cited by examiner

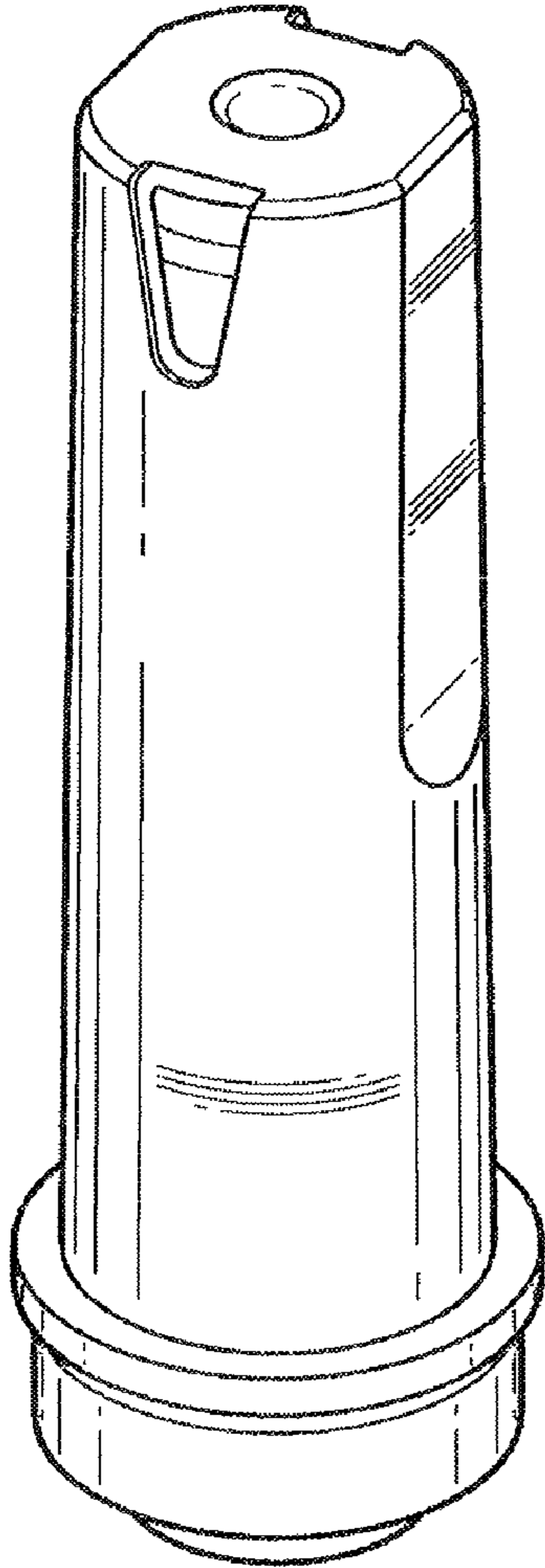


FIG. 1

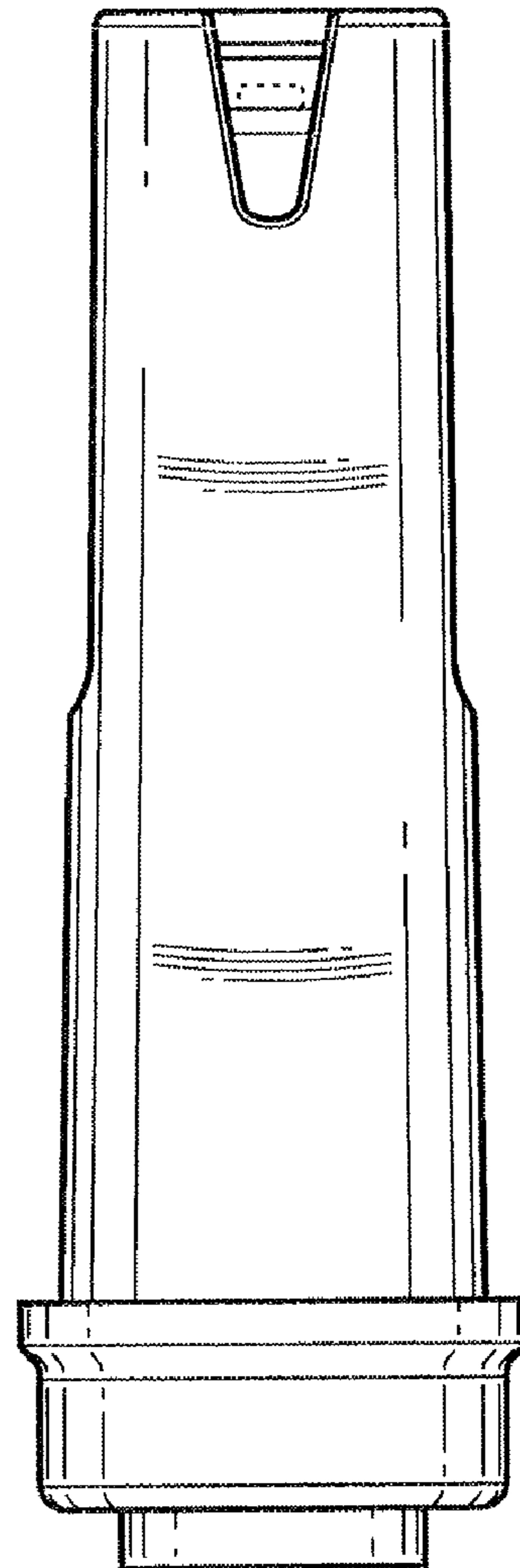


FIG. 2

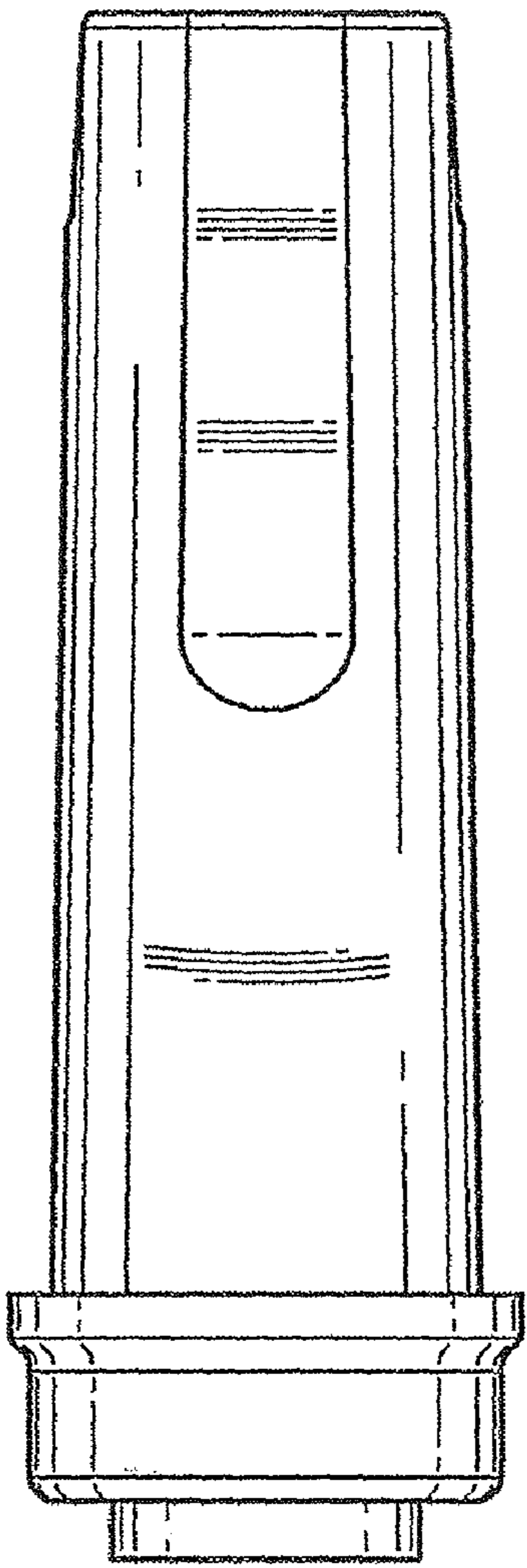


FIG. 3

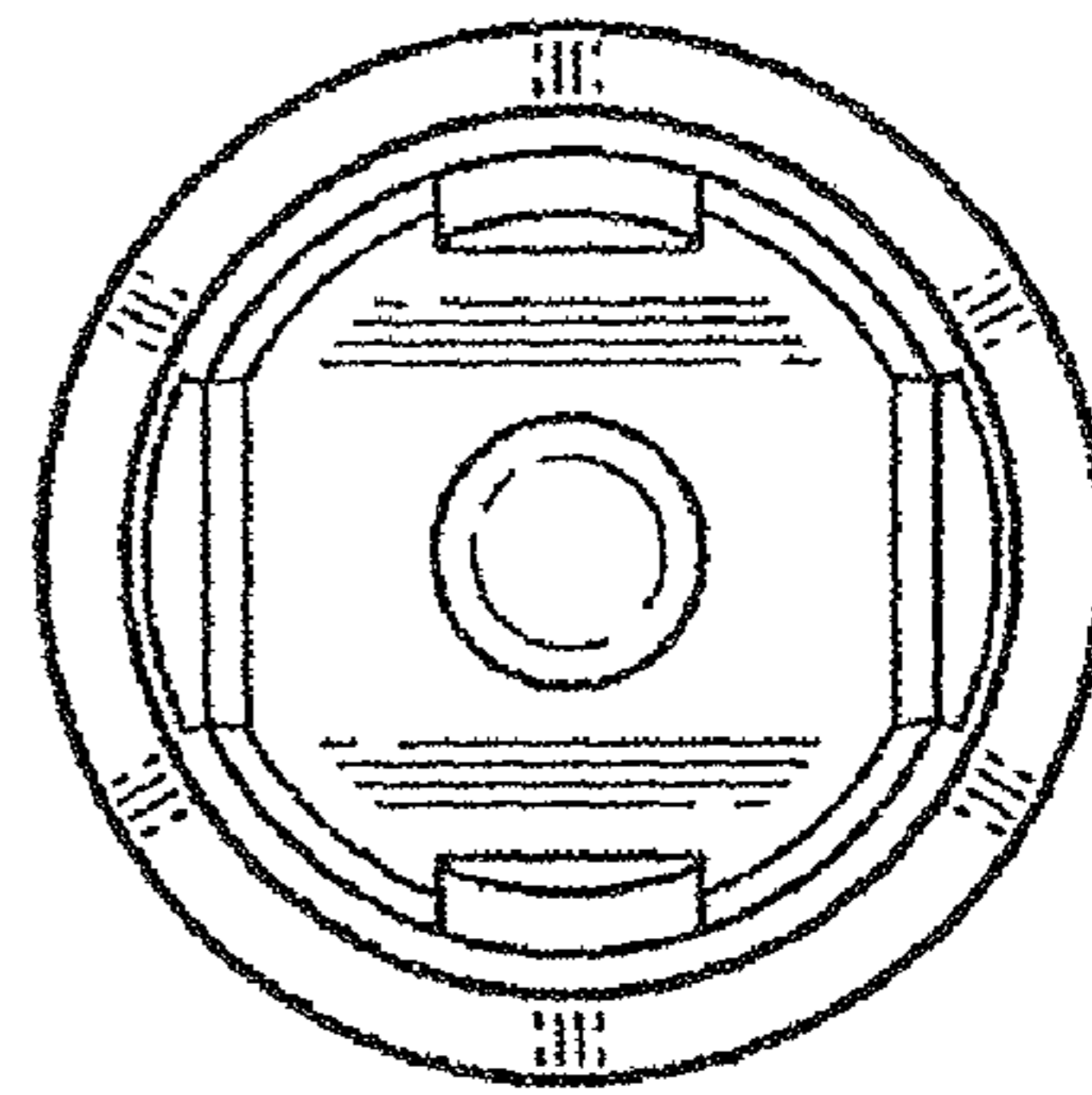


FIG. 4