



US00D494654S1

(12) **United States Design Patent** (10) **Patent No.:** **US D494,654 S**  
**Macaulay et al.** (45) **Date of Patent:** **\*\* Aug. 17, 2004**

- (54) **FLUIDIC CARTRIDGE FITTINGS**
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- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/180,628**
- (22) Filed: **Apr. 25, 2003**
- (51) **LOC (7) Cl.** ..... **23-01**
- (52) **U.S. Cl.** ..... **D23/209**
- (58) **Field of Search** ..... D23/207, 209; 210/232, 443, 444

- 3,313,417 A 4/1967 Rosaen
- 3,313,418 A 4/1967 Rosaen
- 3,319,791 A 5/1967 Horne
- 3,330,098 A 7/1967 Delin
- 3,333,697 A 8/1967 Rosaen
- 3,333,703 A 8/1967 Scavuzzo et al.
- 3,342,340 A 9/1967 Shindell
- 3,347,386 A 10/1967 Kraissi, Jr.
- 3,358,839 A 12/1967 Simons
- 3,360,910 A 1/1968 Soltis
- 3,383,841 A 5/1968 Olson et al.
- 3,392,837 A 7/1968 Sanzenbacher
- 3,399,776 A 9/1968 Knuth
- 3,423,908 A 1/1969 Hart
- 3,426,512 A 2/1969 Neshner
- 3,426,998 A 2/1969 Kintner

(List continued on next page.)

**FOREIGN PATENT DOCUMENTS**

- CA 2113703 1/1994
- CA 2215114 10/1996

(List continued on next page.)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 1,020,212 A 3/1912 Lukowski
- 1,814,572 A 7/1931 Shaffer
- 2,056,756 A 10/1936 Wiedhofft
- 2,107,165 A 2/1938 Rice
- 2,158,347 A 5/1939 Yirava
- 2,240,648 A 5/1941 Hartman
- 2,382,278 A 8/1945 Widmann
- 2,544,244 A 3/1951 Vokes
- 2,563,548 A 8/1951 Plante
- 2,568,181 A 9/1951 Zimmerman et al.
- 2,681,572 A 6/1954 Lamb
- 2,790,572 A 4/1957 Flaith et al.
- 2,932,400 A 4/1960 Scavuzzo
- D188,688 S 8/1960 Sicard
- 2,979,208 A 4/1961 Humbert, Jr.
- 3,040,894 A 6/1962 Pall
- 3,105,042 A 9/1963 Roosa
- 3,217,942 A 11/1965 Humbert, Jr. et al.
- 3,237,770 A 3/1966 Humbert, Jr.
- 3,266,628 A 8/1966 Price
- 3,283,907 A 11/1966 Whiting
- 3,306,451 A 2/1967 Kudiaty

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(57) **CLAIM**

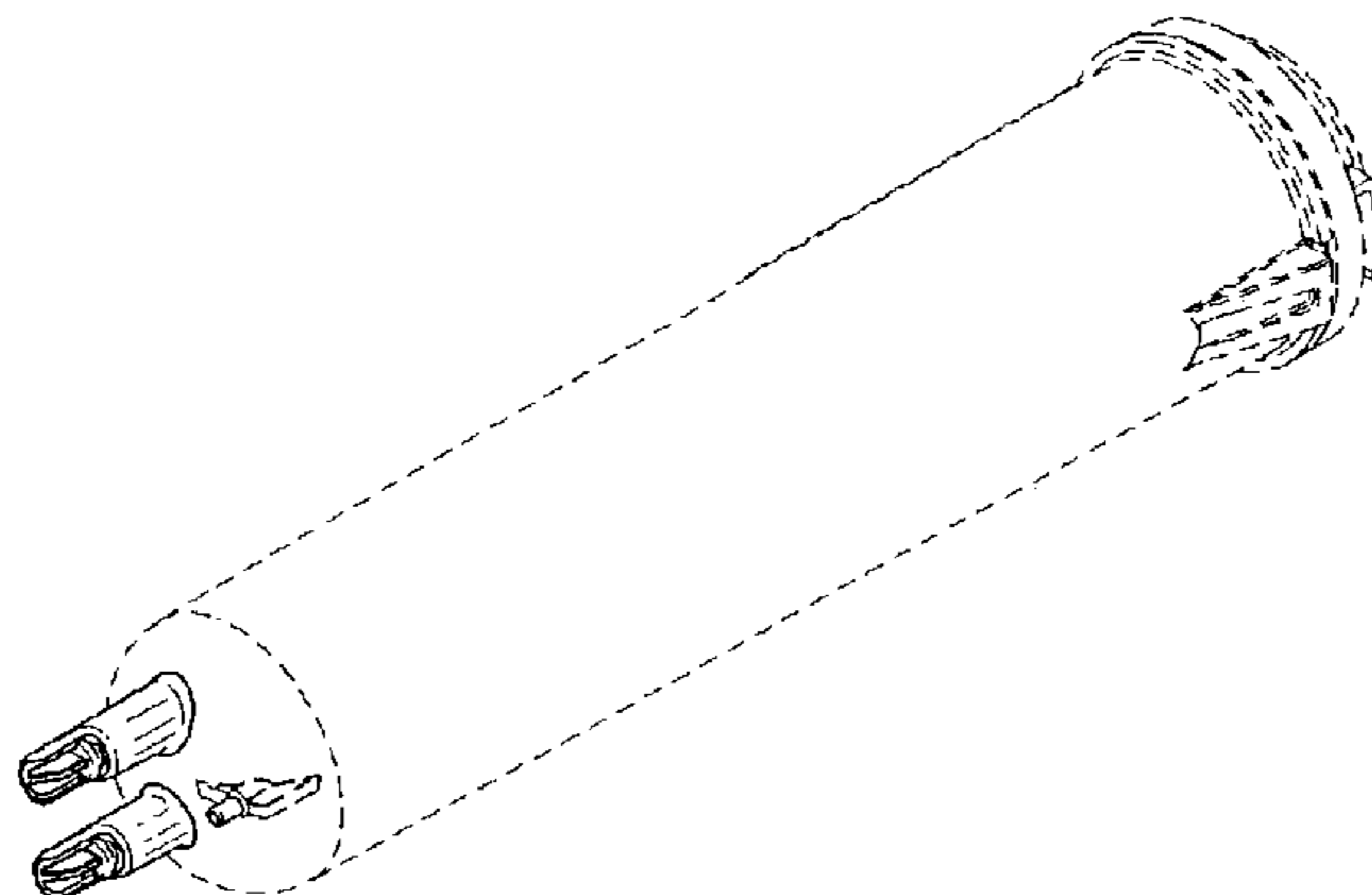
The ornamental design for fluidic cartridge fittings, as shown and described.

**DESCRIPTION**

FIG. 1 is a rear elevational view of fittings of a fluidic cartridge showing our new design; FIG. 2 is a top plan view thereof; FIG. 3 is a left side view thereof; FIG. 4 is a front elevational view thereof; FIG. 5 is a bottom plan view thereof; FIG. 6 is a right side view thereof; and, FIG. 7 is a perspective view thereof.

The parts shown in broken lines in FIGS. 1–7 are shown for illustrative purposes only and form no part of the claimed design.

**1 Claim, 3 Drawing Sheets**



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U.S. PATENT DOCUMENTS					
3,434,269 A	3/1969	Hyatt	4,948,503 A	8/1990	Baumann et al.
3,447,558 A	6/1969	Cserny	4,948,505 A	8/1990	Petrucci et al.
3,470,679 A	10/1969	Ramsey	4,989,636 A	2/1991	Hunter et al.
3,497,071 A	2/1970	Mineo	5,022,986 A *	6/1991	Lang ..... 210/94
3,502,214 A	3/1970	Mills et al.	D322,836 S	12/1991	Petrucci et al.
3,540,594 A	11/1970	Sanderson	5,083,442 A	1/1992	Vlock
3,556,300 A	1/1971	Codo	5,098,559 A	3/1992	Mack et al.
D220,263 S	3/1971	Hughes	5,102,543 A	4/1992	Burroughs
D221,850 S	9/1971	Anderson	5,108,598 A	4/1992	Posner
3,640,390 A	2/1972	Goy et al.	5,114,572 A	5/1992	Hunter et al.
3,715,032 A	2/1973	Nicko	5,135,645 A	8/1992	Sklenak et al.
3,729,905 A	5/1973	Diccianni	D330,712 S	11/1992	Pingel et al.
3,746,171 A	7/1973	Thomsen	5,186,830 A	2/1993	Rait
3,777,889 A	12/1973	Henderson	5,256,285 A	10/1993	Tomita et al.
3,800,948 A	4/1974	LaVallee	5,273,255 A	12/1993	Klicek et al.
3,814,251 A	6/1974	Aspinwall et al.	5,300,223 A	4/1994	Wright
3,852,196 A	12/1974	Szpur	5,320,752 A	6/1994	Clack et al.
3,853,761 A	12/1974	McClory	5,336,406 A	8/1994	Stanford et al.
3,859,216 A	1/1975	Sisson et al.	5,354,464 A	10/1994	Slovak et al.
3,909,221 A	9/1975	Bengtsson et al.	5,380,432 A	1/1995	Brandt
3,950,251 A	4/1976	Hiller	5,382,359 A	1/1995	Brandt
3,954,624 A	5/1976	Petrucci	5,397,462 A	3/1995	Higashijima et al.
D243,767 S	3/1977	Rutherford	5,397,468 A	3/1995	Chomka et al.
4,046,696 A	9/1977	Mouwen	5,456,830 A	10/1995	Stanford et al.
4,051,036 A	9/1977	Conrad et al.	5,460,719 A	10/1995	Clack et al.
4,052,307 A	10/1977	Humbert, Jr.	5,468,386 A	11/1995	Ardes
4,077,876 A	3/1978	Southall	5,486,288 A	1/1996	Stanford et al.
4,082,673 A	4/1978	Cilento	5,501,791 A	3/1996	Theisen et al.
4,094,779 A	6/1978	Behrman	5,503,740 A	4/1996	Callaghan et al.
4,105,561 A	8/1978	Domnick	5,516,425 A	5/1996	Brieden et al.
D251,380 S	3/1979	Casamitjana	5,520,801 A	5/1996	Gerber et al.
4,172,796 A	10/1979	Corder	5,527,451 A	6/1996	Hembree et al.
4,199,443 A	4/1980	Tauber	5,560,824 A	10/1996	Sann et al.
4,204,965 A	5/1980	Vincent	5,589,060 A	12/1996	Gerbert et al.
4,222,875 A	9/1980	Sikula, Jr.	5,591,332 A	1/1997	Reid et al.
4,268,384 A	5/1981	Rosaen et al.	D377,826 S *	2/1997	Robbins ..... D23/209
4,271,020 A	6/1981	Van Meter	5,607,582 A	3/1997	Yamazaki et al.
4,303,514 A	12/1981	Theorell	5,611,923 A	3/1997	Suri et al.
4,304,736 A	12/1981	McMillin et al.	5,681,475 A	10/1997	Lamensdorf et al.
4,317,725 A	3/1982	Kume et al.	5,688,396 A	11/1997	Baumann et al.
4,349,438 A	9/1982	Sims	D388,500 S *	12/1997	Burchard et al. .... D23/209
4,371,439 A	2/1983	Thornton	5,695,168 A	12/1997	Williams
4,379,053 A	4/1983	Brane	5,698,093 A	12/1997	Pyle et al.
4,434,903 A	3/1984	Cooke	5,698,098 A	12/1997	Ernst et al.
4,446,987 A	5/1984	White	5,700,371 A	12/1997	Koslow
4,465,595 A	8/1984	Cooper	5,707,518 A	1/1998	Coates et al.
4,495,072 A	1/1985	Fields	5,715,699 A	2/1998	Coates et al.
4,497,348 A	2/1985	Sedam	5,725,623 A	3/1998	Bowerman et al.
4,505,823 A	3/1985	Klein	5,744,030 A	4/1998	Reid et al.
4,515,692 A	5/1985	Chandler et al.	5,753,107 A	5/1998	Magnusson et al.
4,520,950 A	6/1985	Jeans	5,753,111 A	5/1998	Patton et al.
4,529,050 A	7/1985	Mosher et al.	5,785,848 A	7/1998	Strand
4,529,514 A	7/1985	Gruett	D398,367 S	9/1998	Andrepoint et al.
4,529,515 A	7/1985	Selz	5,813,245 A	9/1998	Coates et al.
4,559,136 A	12/1985	Dockery	5,826,854 A	10/1998	Janvrin et al.
4,571,953 A	2/1986	Caruso	5,846,417 A	12/1998	Jiang et al.
4,615,812 A	10/1986	Darling	5,858,227 A	1/1999	Stone et al.
4,617,118 A	10/1986	Smart	5,863,425 A	1/1999	Herichy et al.
4,637,874 A	1/1987	Ansteth	D410,520 S	6/1999	King
4,645,601 A	2/1987	Regunathan et al.	5,907,958 A	6/1999	Coates et al.
4,684,471 A	8/1987	Manojlovic	5,914,037 A	6/1999	Yen
4,719,012 A	1/1988	Groezinger et al.	5,925,025 A	7/1999	Weilbacher et al.
4,731,183 A	3/1988	Schumacher, II	5,925,245 A	7/1999	Bradford et al.
4,735,716 A	4/1988	Petrucci et al.	5,928,504 A	7/1999	Hembre et al.
4,764,275 A	8/1988	Robichaud	5,947,462 A	9/1999	Roussel
4,806,240 A	2/1989	Giordano et al.	D420,093 S *	2/2000	Hayes et al. .... D23/209
4,855,041 A	8/1989	Church et al.	6,024,869 A	2/2000	Stifelman
4,877,521 A	10/1989	Petrucci et al.	6,027,644 A	2/2000	Magnusson et al.
4,904,382 A	2/1990	Thomsen	D423,081 S	4/2000	Niermeyer
4,915,831 A	4/1990	Taylor	6,068,770 A	5/2000	Niermeyer et al.
			6,086,752 A	7/2000	Dell et al.



# US D494,654 S

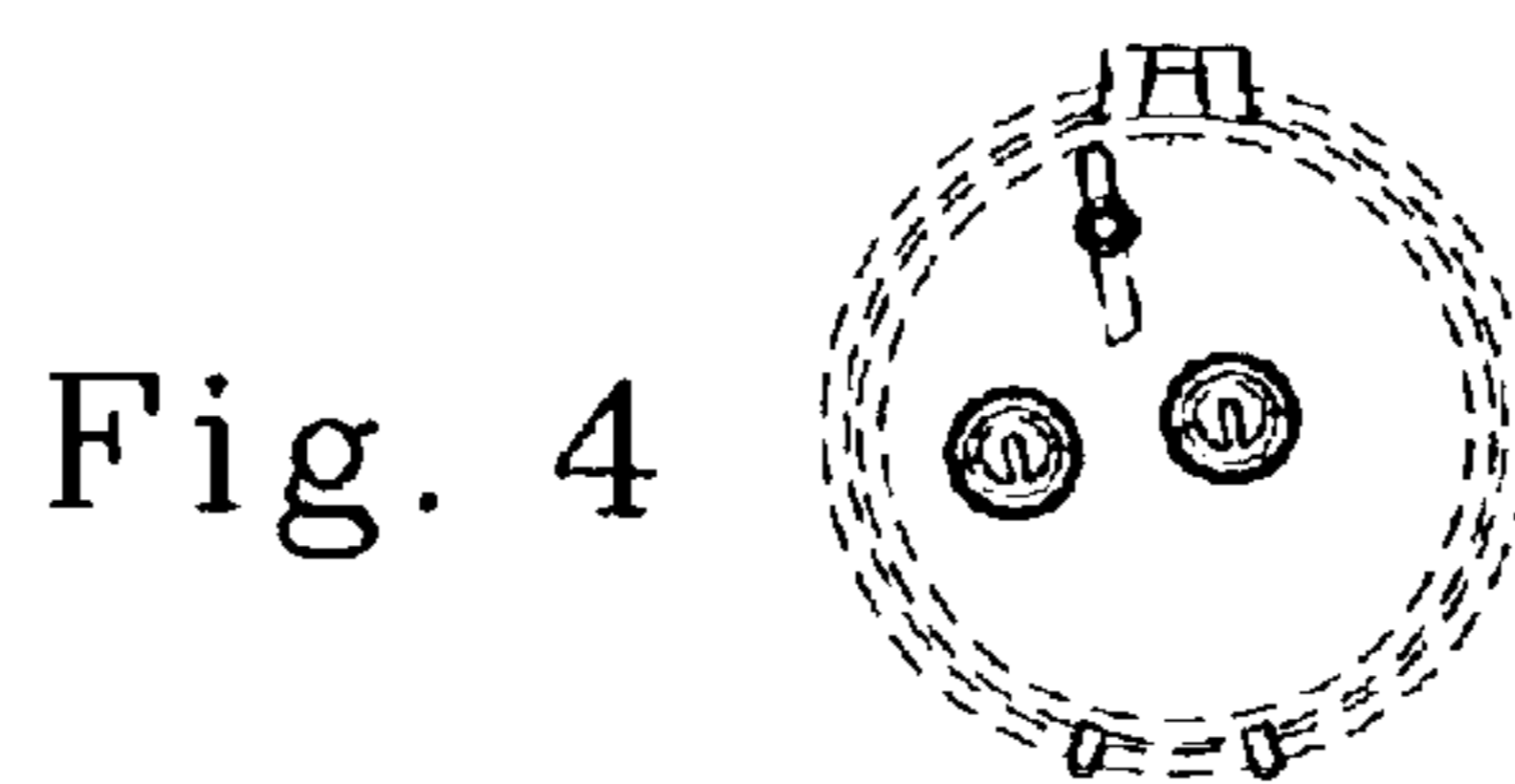
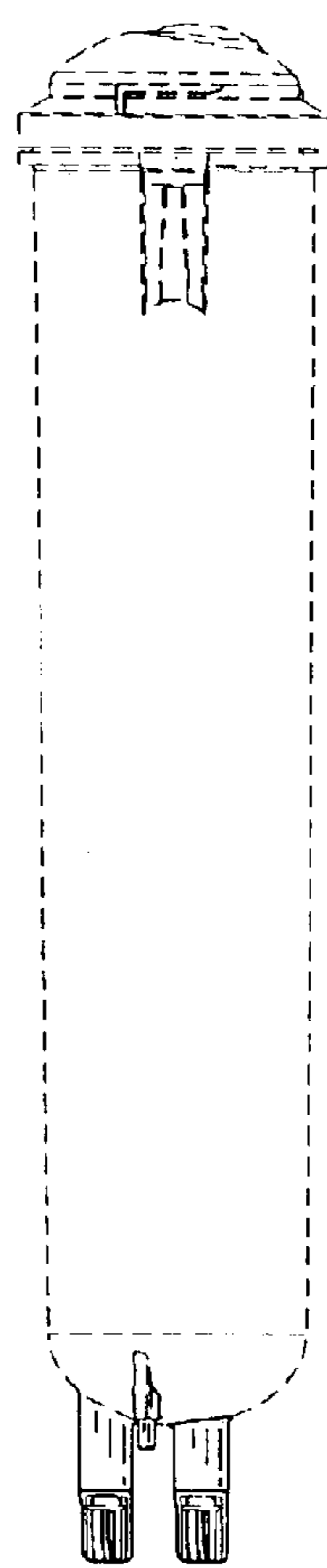
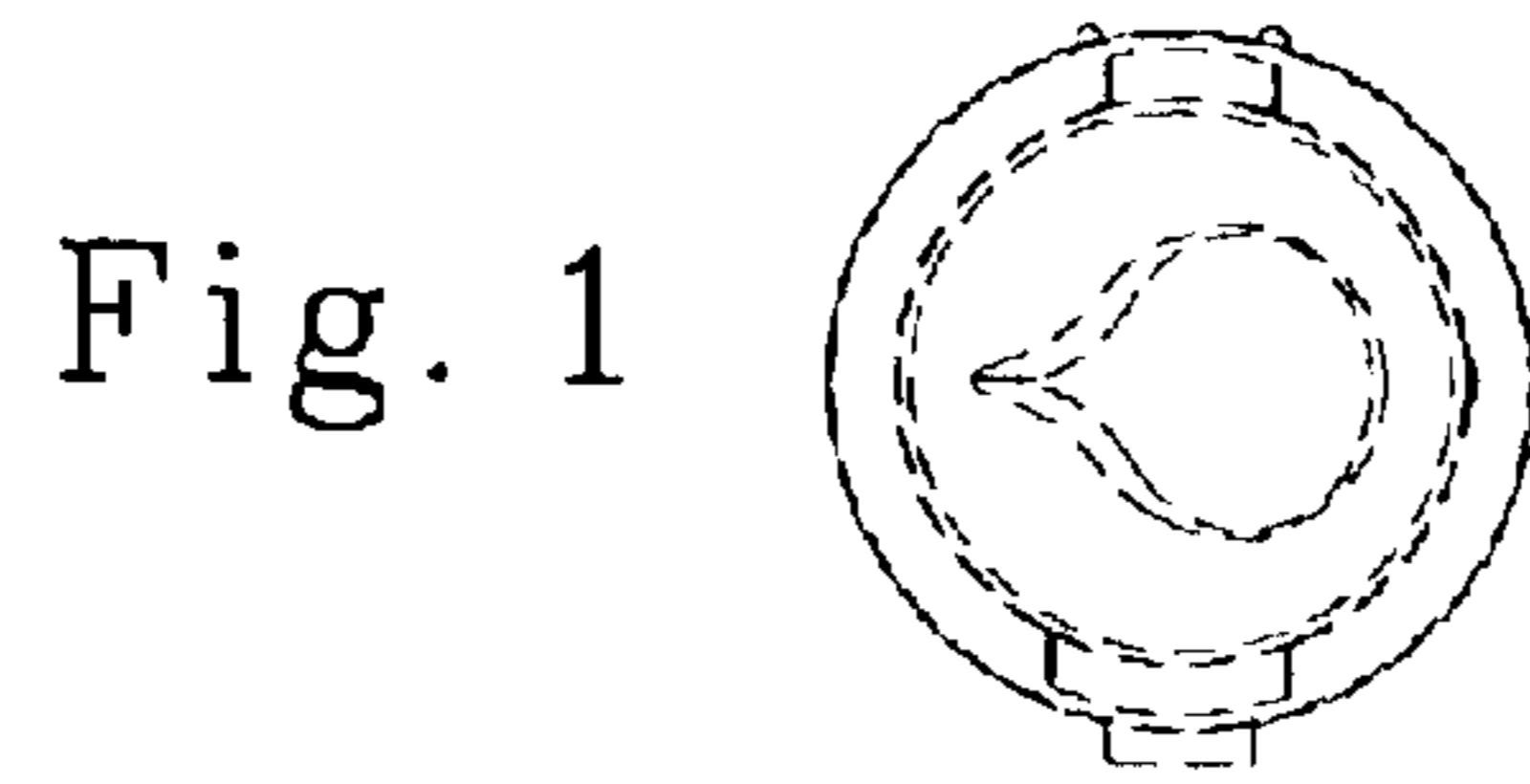
Page 3

6,090,283	A	7/2000	Schumann et al.	FR	2 684 738	6/1993
6,120,685	A	9/2000	Carlson et al.	FR	2 779 661	12/1999
6,129,841	A	10/2000	Dann	GB	450490	7/1936
6,139,739	A	10/2000	Hamlin et al.	GB	541488	11/1941
6,193,884	B1	2/2001	Magnusson et al.	GB	841603	7/1960
6,224,754	B1	5/2001	Schiavon et al.	GB	915760	1/1963
RE37,216	E	6/2001	Koslow	GB	944384	12/1963
6,303,031	B1	10/2001	Senner	GB	982548	2/1965
6,325,929	B1	12/2001	Bassett	GB	1025981	4/1966
6,337,015	B1	1/2002	Poirier	GB	1 239 068	7/1971
6,355,177	B2	3/2002	Senner et al.	GB	1 296 051	11/1972
6,360,764	B1	3/2002	Fritze	GB	1427031	3/1976
6,409,786	B1	6/2002	Wright et al.	GB	2 018 956 A	10/1979
6,475,379	B2	11/2002	Jousset et al.	GB	2 021 445 A	12/1979
6,485,643	B2	11/2002	Vardion	GB	2 045 102 A	10/1980
6,500,335	B2	12/2002	Janik et al.	GB	2 061 122 A	5/1981
6,532,758	B2	3/2003	DuHack	GB	2062810 A	5/1981
6,579,455	B1	6/2003	Muzik et al.	GB	2 088 021 A	6/1982
6,632,355	B2	10/2003	Fritze	GB	2 099 111 A	12/1982
6,652,749	B2	11/2003	Stankowski et al.	GB	2 132 499 A	7/1984
2001/0045386	A1	11/2001	Stankowski et al.	GB	2 139 247 A	11/1984
2002/0017497	A1	2/2002	Fritze	GB	2 162 079 A	1/1986
2002/0020661	A1	2/2002	Jainek	GB	2 188 399 A	9/1987
2002/0023614	A1	2/2002	Hartmann et al.	GB	2 206 292 A	1/1989
2002/0023863	A1	2/2002	Binder et al.	GB	2 208 068 A	2/1989
2002/0036162	A1	3/2002	Magnusson et al.	GB	2 230 473 A	10/1990
2002/0043491	A1	4/2002	Janik et al.	GB	2 230 589 A	10/1990
2003/0024860	A1	2/2003	Fritze	GB	2 233 068 A	1/1991
2003/0141235	A1	7/2003	Stankowski et al.	GB	2 233 727 A	1/1991
2003/0178354	A1	9/2003	Wall	GB	2 312 383 A	10/1997

## FOREIGN PATENT DOCUMENTS

CA	221645	8/2003		IT	678800	12/1964
DE	24 53 445	5/1976		JP	404083578 A	3/1992
DE	2456428 A1	8/1976		WO	WO 92/05856	4/1992
DE	3048219 A1	7/1982		WO	WO 92/12784	8/1992
DE	3122047 A1	12/1982		WO	WO 92/18218	10/1992
DE	3409219	9/1985		WO	WO 93/13847	7/1993
DE	3432855 A1	3/1986		WO	WO 95/07745	3/1995
DE	3446772 A1	7/1986		WO	WO 95/13468	5/1995
DE	3538589 A1	5/1987		WO	WO 95/27574	10/1995
DE	3622153	8/1987		WO	WO 96/06668	3/1996
DE	3903675	8/1990		WO	WO 96/37274	11/1996
DE	4023763	1/1992		WO	WO 97/26066	7/1997
DE	43 24 158 A1	1/1994		WO	WO 98/05408	2/1998
DE	4408888	9/1994		WO	WO 98/17371	4/1998
DE	4330839	3/1995		WO	WO 99/08773	2/1999
DE	4331467	3/1995		WO	WO 99/37375	7/1999
DE	43 31 598 A1	3/1995		WO	WO 99/37908	7/1999
DE	4411279	10/1995		WO	WO 99/65589	12/1999
DE	296 10 290 U1	8/1996		WO	WO 00/20093	4/2000
DE	3613041	10/1998		WO	WO 01/80967 A1	1/2001
DE	299 22 324 U1	5/2001		WO	WO 01/17654 A1	3/2001
EP	0 040 133 A2	11/1981		WO	WO 01/17657 A2	3/2001
EP	0 079 841 B1	5/1983		WO	WO 01/19494 A1	3/2001
EP	0 408 375 A2	1/1991		WO	WO 01/23819 A1	4/2001
EP	0438595	1/1991		WO	WO 01/30480 A1	5/2001
EP	0 319 518 B1	5/1993		WO	WO 01/39859 A1	6/2001
EP	0 937 868 A1	8/1999		WO	WO 01/64312 A1	9/2001
EP	1 008 375 A1	6/2000		WO	WO 01/83079 A1	11/2001
EP	1 058 000 A2	12/2000		WO	WO 01/91881 A2	12/2001
EP	1 106 795 A1	6/2001		WO	WO 01/92714 A2	12/2001
EP	1 136 110 A2	9/2001		WO	WO 02/05926 A1	1/2002
				WO	WO 02/11854 A1	2/2002

\* cited by examiner



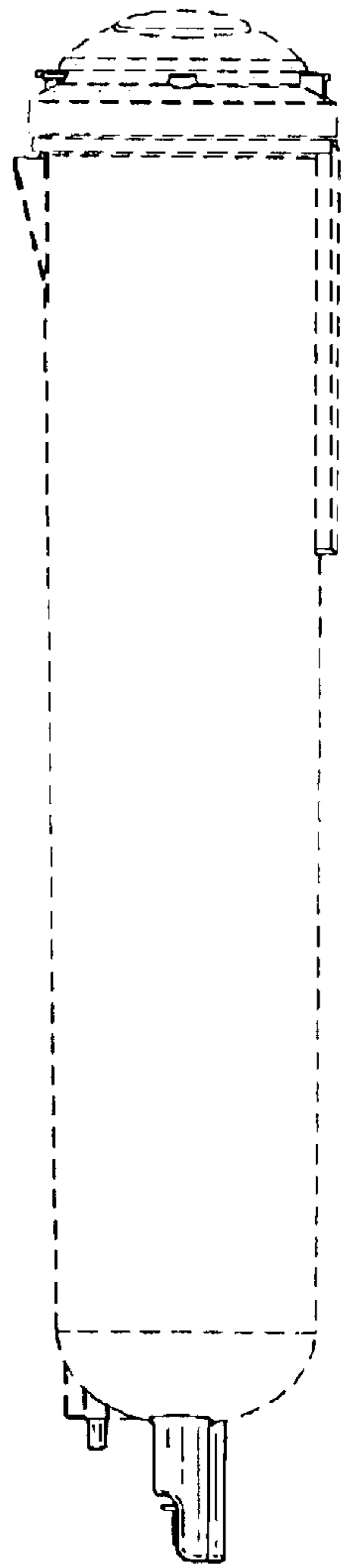


Fig. 5

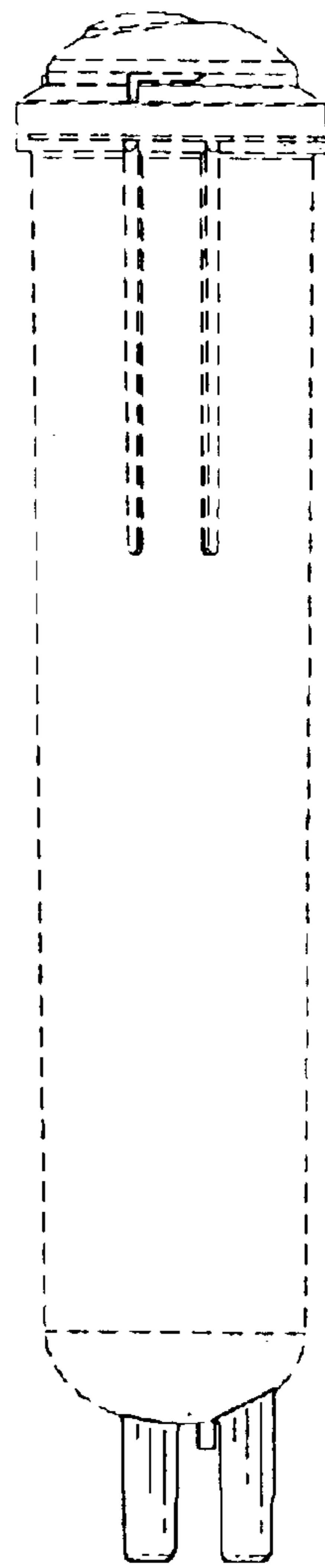


Fig. 6

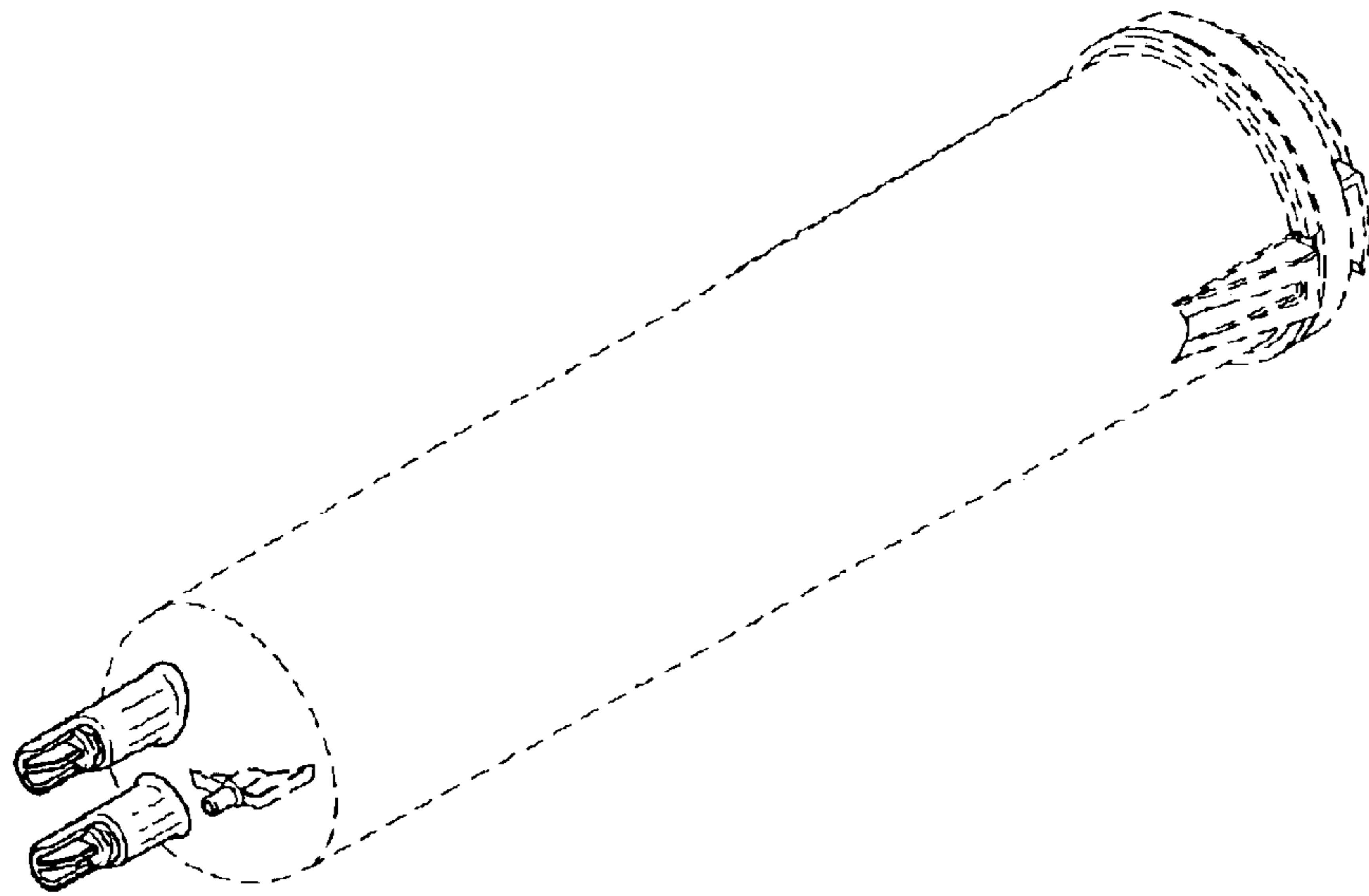


Fig. 7