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Zinger et al.

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(54) **MEDICAL DEVICE HAVING SYRINGE PORT WITH LOCKING MECHANISM**

3,993,063 A 11/1976 Larrabee
4,020,839 A 5/1977 Klapp
4,051,852 A 10/1977 Villari

(Continued)

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FOREIGN PATENT DOCUMENTS

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DE 1913926 A1 9/1970

(Continued)

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

OTHER PUBLICATIONS

(21) Appl. No.: **29/334,696**

The MixJect transfer system, as shown in the article, "Advanced Delivery Devices," Drug Delivery Technology Jul./Aug. 2007 vol. 7. No. 7 [on-line]. [Retrieved from the Internet May 14, 2010.] URL: <<http://www.drugdeliverytech-online.com/drugdelivery/200707/?pg=28#pg28>>. (3 pages).*

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(58) **Field of Classification Search** D24/107, D24/108, 112, 113, 127, 129, 130, 227.231; 137/512; 285/401; 604/31, 32, 41, 164.01, 604/164.03, 164.04, 164.05, 164.07, 164.11, 604/165.03, 174, 198, 224, 244, 246, 264, 604/263, 407, 403, 411, 412, 413, 414, 416, 604/523, 537, 539, 905; 422/103

See application file for complete search history.

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(57) **CLAIM**

The ornamental design for a medical device having syringe port with locking mechanism, substantially as shown and described.

(56) **References Cited**

DESCRIPTION

U.S. PATENT DOCUMENTS

62,333 A	2/1867	Holl	
1,704,817 A *	3/1929	Ayers	137/509
1,930,944 A *	10/1933	Schmitz, Jr.	222/48
2,326,490 A	8/1943	Perelson	
2,931,668 A	4/1960	Baley	
2,968,497 A	1/1961	Treleman	
3,059,643 A	10/1962	Barton	
D198,499 S *	6/1964	Harautuneian	D24/129
3,484,849 A	12/1969	Huebner et al.	
3,618,637 A	11/1971	Santomieri	
3,757,981 A	9/1973	Harris, Sr. et al.	
3,826,261 A	7/1974	Killinger	
3,885,607 A	5/1975	Peltier	
3,957,052 A	5/1976	Topham	
3,977,555 A	8/1976	Larson	

FIG. 1 is a top perspective view of a medical device having syringe port with locking mechanism in accordance with our new design;

FIG. 2 is a bottom perspective view thereof;

FIG. 3 is a right elevation view thereof;

FIG. 4 is a top plan view thereof;

FIG. 5 is a front elevation view thereof;

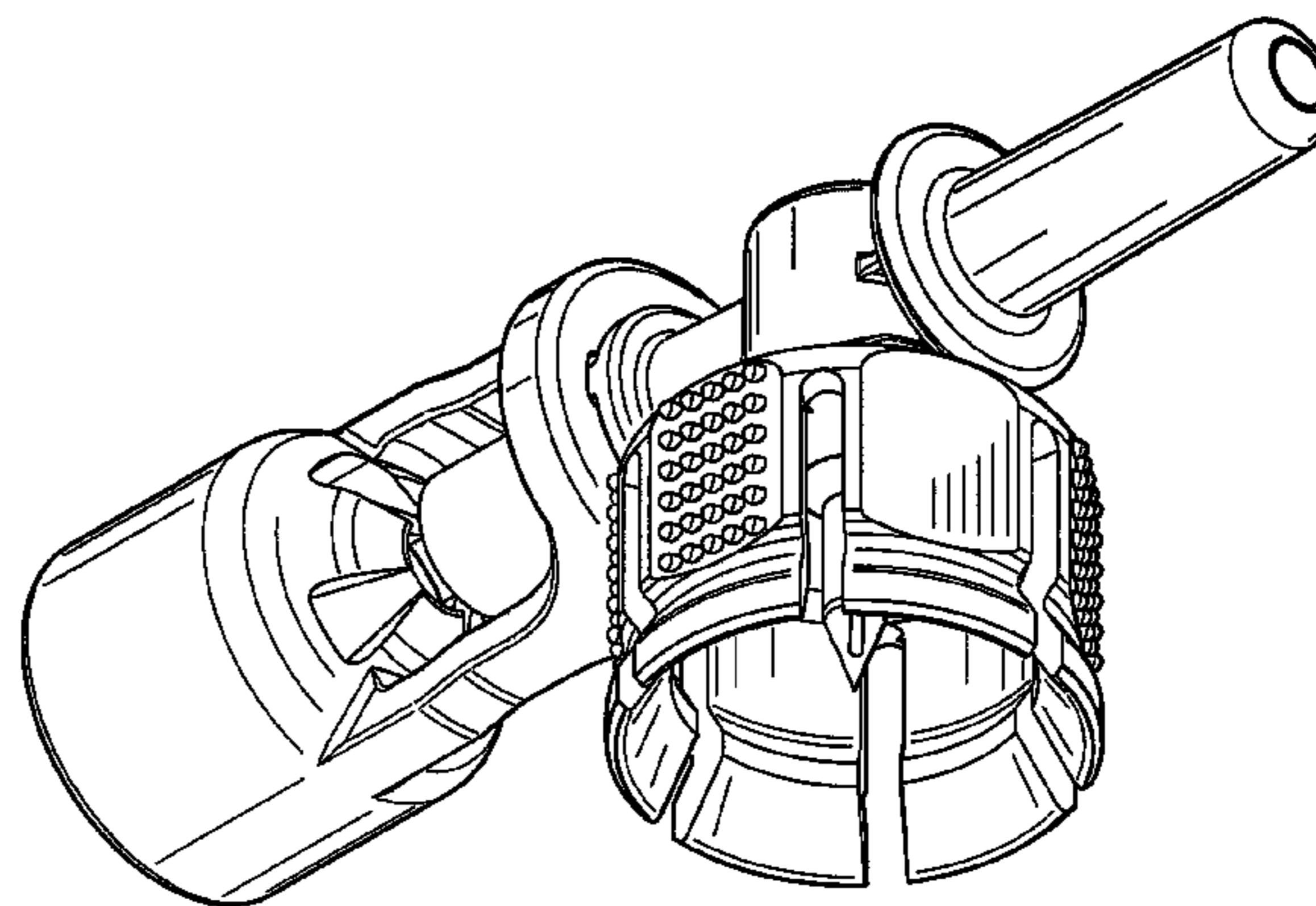
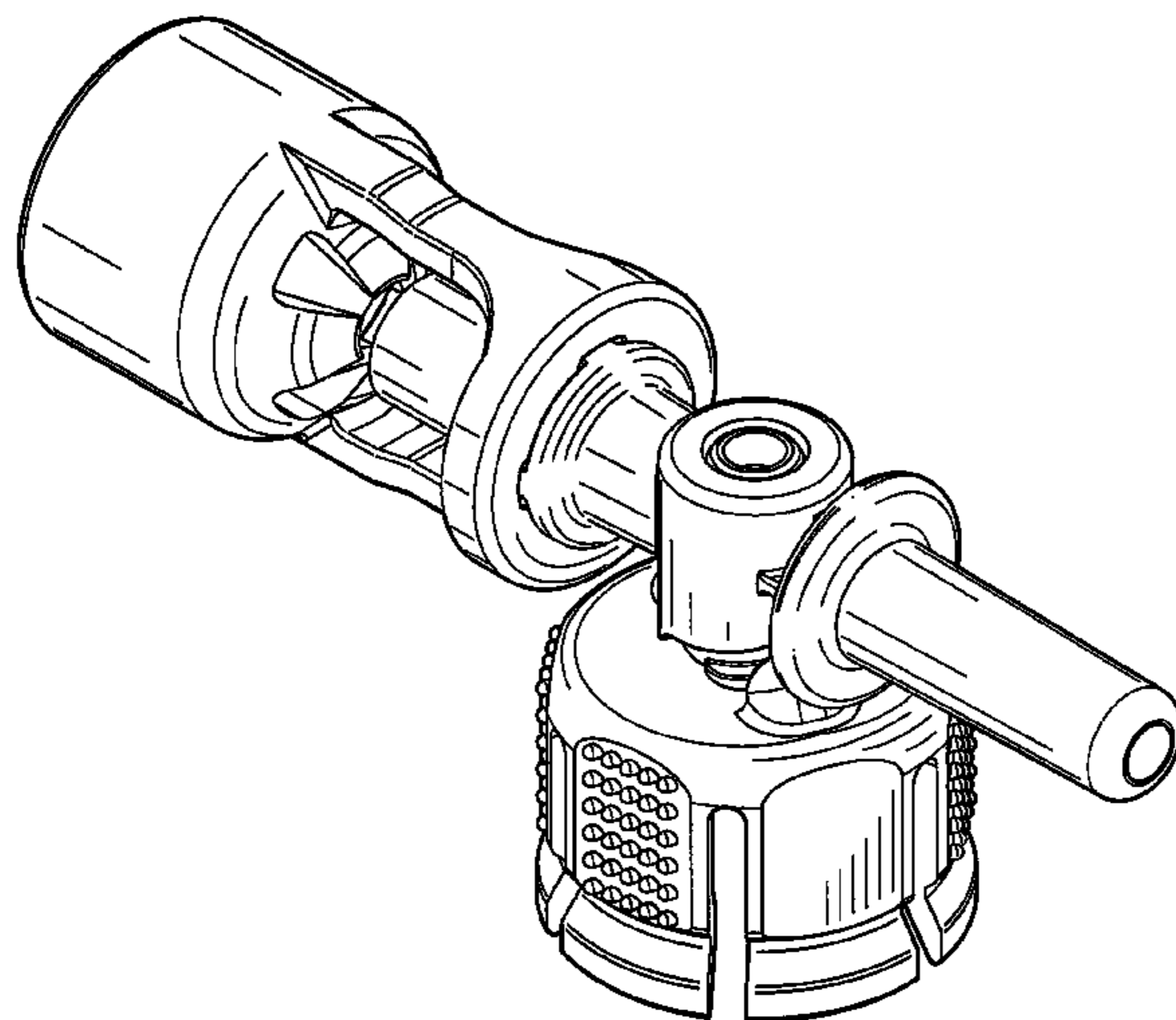
FIG. 6 is a rear elevation view thereof;

FIG. 7 is a left elevation view thereof; and,

FIG. 8 is a bottom plan view thereof.

The broken lines in FIG. 5 illustrate features of the medical device that form no part of the claim.

1 Claim, 7 Drawing Sheets



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U.S. PATENT DOCUMENTS			
4,109,670	A *	8/1978	Slagel 137/119.03
4,187,848	A	2/1980	Taylor
4,210,173	A	7/1980	Choksi et al.
D257,286	S *	10/1980	Folkman D24/129
4,253,501	A	3/1981	Ogle
4,296,786	A	10/1981	Brignola
4,314,586	A *	2/1982	Folkman 137/625.47
D267,199	S	12/1982	Koenig
D271,421	S	11/1983	Fetterman
4,434,823	A	3/1984	Hudspith
4,475,915	A	10/1984	Sloane
4,493,348	A	1/1985	Lemmons
D280,018	S	8/1985	Scott
4,532,969	A	8/1985	Kwaan
4,564,054	A	1/1986	Gustavsson
4,576,211	A	3/1986	Valentini et al.
4,588,396	A	5/1986	Stroebel et al.
4,588,403	A	5/1986	Weiss et al.
D284,603	S *	7/1986	Loignon D23/259
4,604,093	A	8/1986	Brown et al.
4,607,671	A	8/1986	Aalto et al.
4,614,437	A	9/1986	Buehler
4,638,975	A	1/1987	Iuchi et al.
4,639,019	A	1/1987	Mittleman
4,667,927	A *	5/1987	Oscarsson 251/209
4,676,530	A	6/1987	Nordgren et al.
4,697,622	A	10/1987	Swift et al.
4,721,133	A	1/1988	Sundblom
4,729,401	A *	3/1988	Raines 137/512
4,743,229	A	5/1988	Chu
4,743,243	A *	5/1988	Vaillancourt 604/405
4,758,235	A	7/1988	Tu
4,759,756	A	7/1988	Forman et al.
4,778,447	A	10/1988	Velde et al.
4,787,898	A	11/1988	Raines
4,834,152	A	5/1989	Howson et al.
4,865,592	A	9/1989	Rycroft
4,909,290	A	3/1990	Coccia
4,967,797	A	11/1990	Manska
D314,050	S	1/1991	Sone
4,997,430	A	3/1991	Van der Heiden et al.
5,035,686	A	7/1991	Crittenden et al.
5,045,066	A	9/1991	Scheuble et al.
5,049,129	A	9/1991	Zdeb et al.
5,053,015	A	10/1991	Gross
5,061,248	A *	10/1991	Sacco 604/192
5,088,996	A	2/1992	Kopfer et al.
5,096,575	A	3/1992	Cosack
5,104,387	A	4/1992	Pokorney et al.
5,113,904	A	5/1992	Aslanian
5,122,124	A *	6/1992	Novacek et al. 604/195
5,125,908	A	6/1992	Cohen
5,171,230	A *	12/1992	Eland et al. 604/250
5,201,705	A	4/1993	Berglund et al.
5,201,717	A	4/1993	Wyatt et al.
5,203,771	A	4/1993	Melker et al.
5,203,775	A *	4/1993	Frank et al. 604/256
5,211,638	A	5/1993	Dudar et al.
5,232,109	A	8/1993	Tirrell et al.
5,247,972	A	9/1993	Tetreault
5,269,768	A	12/1993	Cheung
5,270,219	A	12/1993	DeCastro et al.
5,279,576	A	1/1994	Loo et al.
5,288,290	A	2/1994	Brody
5,312,377	A	5/1994	Dalton
5,328,474	A	7/1994	Raines
5,334,163	A	8/1994	Sinnett
5,342,346	A	8/1994	Honda et al.
5,344,417	A	9/1994	Wadsworth, Jr.
5,350,372	A	9/1994	Ikeda et al.
5,364,387	A	11/1994	Sweeney
5,374,264	A	12/1994	Wadsworth, Jr.
5,385,547	A	1/1995	Wong et al.
5,445,630	A	8/1995	Richmond
5,464,123	A	11/1995	Scarrow
5,466,219	A *	11/1995	Lynn et al. 604/86
5,466,220	A	11/1995	Brenneman
5,478,337	A	12/1995	Okamoto et al.
5,492,147	A	2/1996	Challender et al.
5,505,714	A	4/1996	Dassa et al.
5,509,433	A	4/1996	Paradis
5,520,659	A	5/1996	Hedges
5,526,853	A	6/1996	McPhee et al.
5,531,695	A	7/1996	Swisher
5,566,729	A	10/1996	Grabenkort et al.
5,569,191	A *	10/1996	Meyer 604/82
5,573,281	A	11/1996	Keller
5,578,015	A *	11/1996	Robb 604/195
5,583,052	A	12/1996	Portnoff et al.
5,584,819	A	12/1996	Kopfer
5,591,143	A	1/1997	Trombley, III et al.
5,607,439	A	3/1997	Yoon
5,611,576	A	3/1997	Guala
5,616,203	A	4/1997	Stevens
5,636,660	A	6/1997	Pfleiderer et al.
5,641,010	A	6/1997	Maier
5,647,845	A	7/1997	Haber et al.
5,651,776	A	7/1997	Appling et al.
5,653,686	A	8/1997	Coulter et al.
5,674,195	A	10/1997	Truthan
5,718,346	A *	2/1998	Weiler 215/50
D393,722	S *	4/1998	Fangrow et al. D24/112
5,738,144	A	4/1998	Rogers
5,743,312	A	4/1998	Pfeifer et al.
5,746,733	A	5/1998	Capaccio et al.
5,755,696	A	5/1998	Caizza
5,772,630	A	6/1998	Ljungquist
5,772,652	A	6/1998	Zielinski
RE35,841	E *	7/1998	Frank et al. 604/256
5,820,621	A	10/1998	Yale et al.
5,827,262	A	10/1998	Neftel et al.
5,832,971	A	11/1998	Yale et al.
5,833,213	A *	11/1998	Ryan 251/149.1
5,834,744	A	11/1998	Risman
5,873,872	A	2/1999	Thibault et al.
5,879,337	A	3/1999	Kuracina et al.
5,879,345	A	3/1999	Aneas
5,887,633	A *	3/1999	Yale et al. 141/329
5,893,397	A	4/1999	Peterson et al.
5,919,182	A	7/1999	Avallone
5,944,700	A	8/1999	Nguyen et al.
5,971,965	A	10/1999	Mayer
5,989,237	A	11/1999	Fowles et al.
6,003,566	A	12/1999	Thibault et al.
6,004,278	A *	12/1999	Botich et al. 600/576
6,063,068	A	5/2000	Fowles et al.
D427,308	S *	6/2000	Zinger D24/129
6,080,132	A	6/2000	Cole et al.
6,090,093	A	7/2000	Thibault et al.
6,099,511	A *	8/2000	Devos et al. 604/246
6,113,583	A	9/2000	Fowles et al.
6,139,534	A	10/2000	Niedospial, Jr. et al.
6,142,446	A	11/2000	Leinsing
6,156,025	A	12/2000	Niedospial, Jr. et al.
6,159,192	A	12/2000	Fowles et al.
6,174,304	B1 *	1/2001	Weston 604/414
6,221,041	B1	4/2001	Russo
6,221,054	B1 *	4/2001	Martin et al. 604/218
6,238,372	B1	5/2001	Zinger et al.
6,245,044	B1	6/2001	Daw et al.
D445,501	S	7/2001	Niedospial, Jr.
6,280,430	B1	8/2001	Neftel et al.
6,343,629	B1	2/2002	Wessman et al.
6,348,044	B1 *	2/2002	Coletti et al. 604/192
6,358,236	B1	3/2002	DeFoggi et al.
6,379,340	B1 *	4/2002	Zinger et al. 604/246
6,408,897	B1	6/2002	Laurent et al.
6,409,708	B1	6/2002	Wessman
6,474,375	B2	11/2002	Spero et al.
6,478,788	B1	11/2002	Aneas
D468,015	S *	12/2002	Horppu D24/129
6,503,240	B1	1/2003	Niedospial, Jr. et al.
6,503,244	B2	1/2003	Hayman
6,524,278	B1	2/2003	Campbell et al.
D472,316	S	3/2003	Douglas et al.
6,530,903	B2 *	3/2003	Wang et al. 604/195
D472,630	S	4/2003	Douglas et al.

US D641,080 S

Page 3

6,544,246	B1	4/2003	Niedospial, Jr.		2003/0199846	A1	10/2003	Fowles et al.	
6,551,299	B2	4/2003	Miyoshi et al.		2003/0199847	A1	10/2003	Akerlund et al.	
6,558,365	B2 *	5/2003	Zinger et al.	604/410	2004/0044327	A1	3/2004	Hasegawa	
6,581,593	B1	6/2003	Rubin et al.		2004/0073189	A1 *	4/2004	Wyatt et al.	604/411
D483,487	S *	12/2003	Harding et al.	D24/129	2004/0153047	A1	8/2004	Blank et al.	
D483,869	S	12/2003	Tran et al.		2004/0181192	A1 *	9/2004	Cuppy	604/256
6,656,433	B2 *	12/2003	Sasso	422/103	2004/0217315	A1	11/2004	Doyle	
6,666,852	B2	12/2003	Niedospial, Jr.		2004/0236305	A1 *	11/2004	Jansen et al.	604/411
6,681,810	B2 *	1/2004	Weston	141/2	2005/0148994	A1 *	7/2005	Leinsing	604/414
6,681,946	B1	1/2004	Jansen et al.		2006/0030832	A1	2/2006	Niedospial et al.	
6,699,229	B2	3/2004	Zinger et al.		2006/0079834	A1	4/2006	Tennican et al.	
6,715,520	B2	4/2004	Andreasson et al.		2006/0089603	A1 *	4/2006	Truitt et al.	604/246
6,729,370	B2	5/2004	Norton et al.		2006/0135948	A1 *	6/2006	Varma	604/523
6,736,798	B2	5/2004	Ohkubo et al.		2006/0253084	A1	11/2006	Nordgren	
6,745,998	B2	6/2004	Doyle		2007/0060904	A1	3/2007	Vedrine et al.	
6,752,180	B2	6/2004	Delay		2007/0083164	A1	4/2007	Barrelle et al.	
D495,416	S	8/2004	Dimeo et al.		2007/0088252	A1	4/2007	Pestotnik et al.	
D496,457	S *	9/2004	Prais et al.	D24/130	2007/0088293	A1	4/2007	Fangrow	
6,832,994	B2	12/2004	Niedospial, Jr. et al.		2007/0088313	A1 *	4/2007	Zinger et al.	604/403
6,852,103	B2	2/2005	Fowles et al.		2007/0106244	A1 *	5/2007	Mosler et al.	604/411
6,875,203	B1	4/2005	Fowles et al.		2007/0156112	A1	7/2007	Walsh	
6,875,205	B2 *	4/2005	Leinsing	604/414	2007/0167904	A1 *	7/2007	Zinger et al.	604/41
6,878,131	B2	4/2005	Novacek et al.		2007/0191760	A1	8/2007	Iguchi et al.	
6,890,328	B2	5/2005	Fowles et al.		2007/0191764	A1	8/2007	Zihlmann	
6,901,975	B2	6/2005	Aramata et al.		2007/0191767	A1	8/2007	Hennessy et al.	
6,949,086	B2 *	9/2005	Ferguson et al.	604/198	2007/0219483	A1	9/2007	Kitani et al.	
RE38,996	E	2/2006	Crawford et al.		2007/0255202	A1	11/2007	Kitani et al.	
6,997,917	B2	2/2006	Niedospial, Jr. et al.		2007/0265574	A1 *	11/2007	Tennican et al.	604/190
7,024,968	B2	4/2006	Raudabough et al.		2007/0265581	A1 *	11/2007	Funamura et al.	604/248
7,074,216	B2	7/2006	Fowles et al.		2007/0270778	A9	11/2007	Zinger et al.	
7,083,600	B2 *	8/2006	Meloul	604/263	2007/0287953	A1	12/2007	Ziv et al.	
7,150,735	B2	12/2006	Hickle		2008/0009789	A1	1/2008	Zinger et al.	
7,192,423	B2	3/2007	Wong		2008/0172024	A1 *	7/2008	Yow	604/411
7,294,122	B2	11/2007	Kubo et al.		2008/0249479	A1 *	10/2008	Zinger et al.	604/244
D561,348	S *	2/2008	Zinger et al.	D24/231	2009/0012492	A1	1/2009	Zihlmann	
7,326,194	B2	2/2008	Zinger et al.		2009/0054834	A1	2/2009	Zinger et al.	
7,350,764	B2	4/2008	Raybuck		2009/0082750	A1	3/2009	Denenburg et al.	
7,354,422	B2 *	4/2008	Riesenberger et al.	604/198	2009/0177177	A1 *	7/2009	Zinger et al.	604/414
7,354,427	B2	4/2008	Fangrow		2009/0187140	A1 *	7/2009	Racz	604/41
7,425,209	B2	9/2008	Fowles et al.		2009/0299325	A1 *	12/2009	Vedrine et al.	604/414
7,435,246	B2	10/2008	Zihlmann		2010/0010443	A1 *	1/2010	Morgan et al.	604/151
7,452,348	B2	11/2008	Hasegawa		2010/0030181	A1	2/2010	Helle et al.	
7,470,265	B2	12/2008	Brugger et al.		2010/0076397	A1	3/2010	Reed et al.	
7,488,297	B2	2/2009	Flaherty		2010/0087786	A1 *	4/2010	Zinger et al.	604/224
7,491,197	B2	2/2009	Jansen et al.		2010/0228220	A1 *	9/2010	Zinger et al.	604/414
7,523,967	B2 *	4/2009	Steppe	285/401	2010/0312220	A1	12/2010	Kalitzki	
D595,420	S	6/2009	Suzuki et al.						
D595,421	S	6/2009	Suzuki et al.						
7,540,865	B2	6/2009	Griffin et al.						
D595,862	S	7/2009	Suzuki et al.						
D595,863	S	7/2009	Suzuki et al.						
7,611,487	B2 *	11/2009	Woehr et al.	604/110					
7,611,502	B2	11/2009	Daly						
7,632,261	B2 *	12/2009	Zinger et al.	604/414					
7,695,445	B2	4/2010	Yuki						
7,722,090	B2	5/2010	Burton et al.						
D616,984	S	6/2010	Gilboa						
7,731,678	B2 *	6/2010	Tennican et al.	604/88					
7,743,799	B2 *	6/2010	Mosler et al.	141/329					
7,758,082	B2	7/2010	Weigel et al.						
7,771,383	B2 *	8/2010	Truitt et al.	604/32					
7,799,009	B2	9/2010	Niedospial, Jr. et al.						
7,803,140	B2	9/2010	Fangrow, Jr.						
7,879,018	B2	2/2011	Zinger						
2001/0029360	A1	10/2001	Miyoshi et al.						
2001/0051793	A1	12/2001	Weston						
2002/0017328	A1	2/2002	Loo						
2002/0087118	A1	7/2002	Reynolds et al.						
2002/0087141	A1	7/2002	Zinger et al.						
2002/0087144	A1	7/2002	Zinger et al.						
2002/0121496	A1	9/2002	Thiebault et al.						
2002/0123736	A1	9/2002	Fowles et al.						
2002/0127150	A1 *	9/2002	Sasso	422/103					
2002/0173752	A1	11/2002	Polzin						
2003/0036725	A1 *	2/2003	Lavi et al.	604/91					
2003/0100866	A1	5/2003	Reynolds						
2003/0120209	A1	6/2003	Jensen et al.						
2003/0153895	A1 *	8/2003	Leinsing	604/403					
2003/0195479	A1	10/2003	Kuracina et al.						

FOREIGN PATENT DOCUMENTS

DE	4122476	A1	1/1993
DE	19504413	A1	8/1996
DE	202004012714	U1	11/2004
EM	000627237-0001	*	9/2007
EP	0192661	A1	9/1986
EP	0195018	A1	9/1986
EP	0258913	A2	3/1988
EP	0416454	A2	3/1991
EP	0518397	A1	12/1992
EP	0521460	A1	1/1993
EP	0637443	A1	2/1995
EP	0806597	A1	11/1997
EP	0814866	A1	1/1998
EP	0898951	A2	3/1999
EP	1008337	A1	6/2000
EP	1029526	A1	8/2000
EP	1051988	A2	11/2000
EP	1329210	A1	7/2003
EP	1454609	A1	9/2004
EP	1454650	A1	9/2004
EP	1498097	A2	1/2005
EP	1872824	A1	1/2008
FR	2029242	A5	10/1970
FR	2869795	A1	11/2005
GB	1444210	A	7/1976
IL	186290	*	1/2008
JP	4329954	A	11/1992
JP	11503627	T	3/1999
WO	9403373	A1	2/1994
WO	9507066	A1	3/1995
WO	9600053	A1	1/1996

WO	9629113	A1	9/1996
WO	9832411	A1	7/1998
WO	9837854	A1	9/1998
WO	0128490	A1	4/2001
WO	0130425	A1	5/2001
WO	0132524	A1	5/2001
WO	0160311	A1	8/2001
WO	0191693	A2	12/2001
WO	200209797	A1	2/2002
WO	03051423	A2	6/2003
WO	2004041148	A1	5/2004
WO	2005105014	A2	11/2005
WO	2007015233	A1	2/2007
WO	2007105221	A1	9/2007
WO	2009029010	A1	3/2009
WO	2009038860	A2	3/2009
WO	2009040804	A2	4/2009
WO	2009040804	A3	4/2009
WO	2009087572	A1	7/2009
WO	2009093249	A1	7/2009
WO	2009112489	A1	9/2009

Int'l Search Report Issued Oct. 17, 2005 in Int'l Application No. PCT/IL2005/000376.

Int'l Preliminary Report on Patentability Issued Jun. 19, 2006 in Int'l Application No. PCT/IL2005/000376.

Written Opinion of ISR Issued in Int'l Application No. PCT/IL2005/000376.

Int'l Search Report Issued Aug. 25, 2008 in Int'l Application No. PCT/IL2008/000517.

Written Opinion of the ISR Issued in Int'l Application No. PCT/IL08/00517.

Int'l Preliminary Report on Patentability Issued Oct. 20, 2009 in Int'l Application No. PCT/IL2008/000517.

Written Opinion of the Int'l Searching Authority Issued Oct. 27, 2008 in Int'l Application No. PCT/US2008/070024.

Int'l Search Report Issued Mar. 12, 2009 in Int'l Application No. PCT/IL2008/001278.

Office Action Issued in JP Application No. 2007-510229.

Office Action Issued Apr. 20, 2010 in U.S. Appl. No. 11/997,569.

Int'l Search Report dated Nov. 20, 2006 in Int'l Application No. PCT/IL2006/000881.

Office Action Issued May 27, 2010 in U.S. Appl. No. 11/559,152.

Decision to Grant mailed Apr. 12, 2010 in EP Application No. 08738307.1.

Office Action issued Jun. 1, 2010 in U.S. Appl. No. 11/568,421.

<http://www.westpharma.com/eu/SiteCollectionDocuments/Recon/mixject%20product%20sheet.pfg>; Mixject product information sheet pp. 1.

Int'l Search Report issued Feb. 3, 2011 in Int'l Application No. PCT/IL2010/000777.

Int'l Search Report issued on Mar. 17, 2011 in Int'l Application No. PCT/IL2010/000854.

Int'l Search Report issued on Mar. 17, 2011 in Int'l Application No. PCT/IL2010/00915.

West Drug Administration Systems, <http://www.westpharma.com/eu/en/products/Pages/Mixject.aspx>. Copyright 2010, West Pharmaceutical Services, Inc. 1 page.

Smart Site.RTM. Needle-Free Systems, Alaris Medical Systems Webpage, 4 pages, Feb. 2006. URL: http://www.alarismed.com/na/products/smartsite_compon.asp.

Office Action issued Nov. 12, 2010 in U.S. Appl. No. 29/334,697.

Int'l Search Report issued Nov. 25, 2010 in Int'l Application No. PCT/IL2010/000530.

Office Action issued Feb. 7, 2011 in U.S. Appl. No. 12/783,194.

Office Action issued Dec. 20, 2010 in U.S. Appl. No. 12/063,176.

Office Action issued Dec. 13, 2010 in U.S. Appl. No. 12/293,122.

Office Action issued Nov. 29, 2010 in U.S. Appl. No. 11/568,421.

OTHER PUBLICATIONS

Publication date of Israeli Patent Application 186290 [on-line]. [Retrieved from Internet May 24, 2010]. URL: <<http://www.ilpatsearch.justice.gov.il/UI/RequestsList.aspx>>. (1 page).*

Grifols Vial Adapter Product Literature, 2 pages, Jan. 2002.

Novel Transfer, Mixing and Drug Delivery Systems, MOP Medimop Medical Projects Ltd. Catalog, 4 pages, Rev. 4, 2004.

Smart Site.RTM. Alaris Medical Systems Product Brochure, 4 pages, Issue 1, Oct. 1999.

Photographs of Alaris Medical Systems SmartSite.RTM. device, 5 pages, 2002.

Non-Vented Vial Access Pin with ULTRASITE.RTM. Valve, B. Braun Medical, Inc. website and product description, 3 pages, Feb. 2006.

Office Action Issued Oct. 6, 2003 in U.S. Appl. No. 10/062,796.

Office Action Issued Feb. 22, 2005 in U.S. Appl. No. 10/062,796.

Office Action Issued Oct. 5, 2005 in U.S. Appl. No. 10/062,796.

Office Action Issued Feb. 20, 2009 in U.S. Appl. No. 11/694,297.

Int'l Search Report Issued Dec. 6, 2006 in Int'l Application No. PCT/IL2006/000912.

Int'l Preliminary Report on Patentability Issued Dec. 4, 2007 in Int'l Application No. PCT/IL2006/000912.

Int'l Search Report Issued Jul. 27, 2007 in Int'l Application No. PCT/IL2007/000343.

Int'l Preliminary Report on Patentability Issued Jun. 19, 2008 in Int'l Application No. PCT/IL2007/000343.

Int'l Search Report Issued Mar. 27, 2009 in Int'l Application No. PCT/US2008/070024.

* cited by examiner

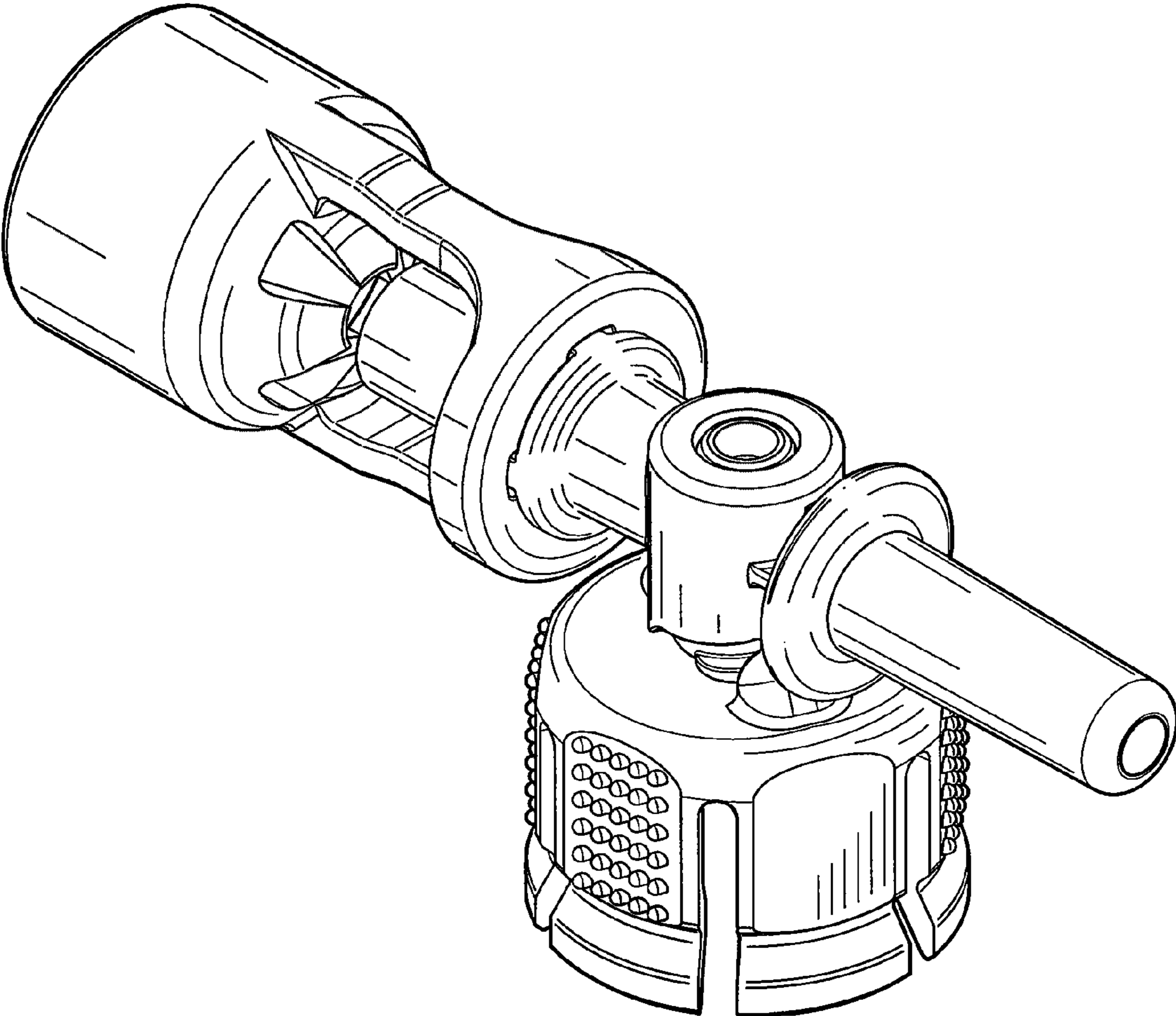


FIG.1

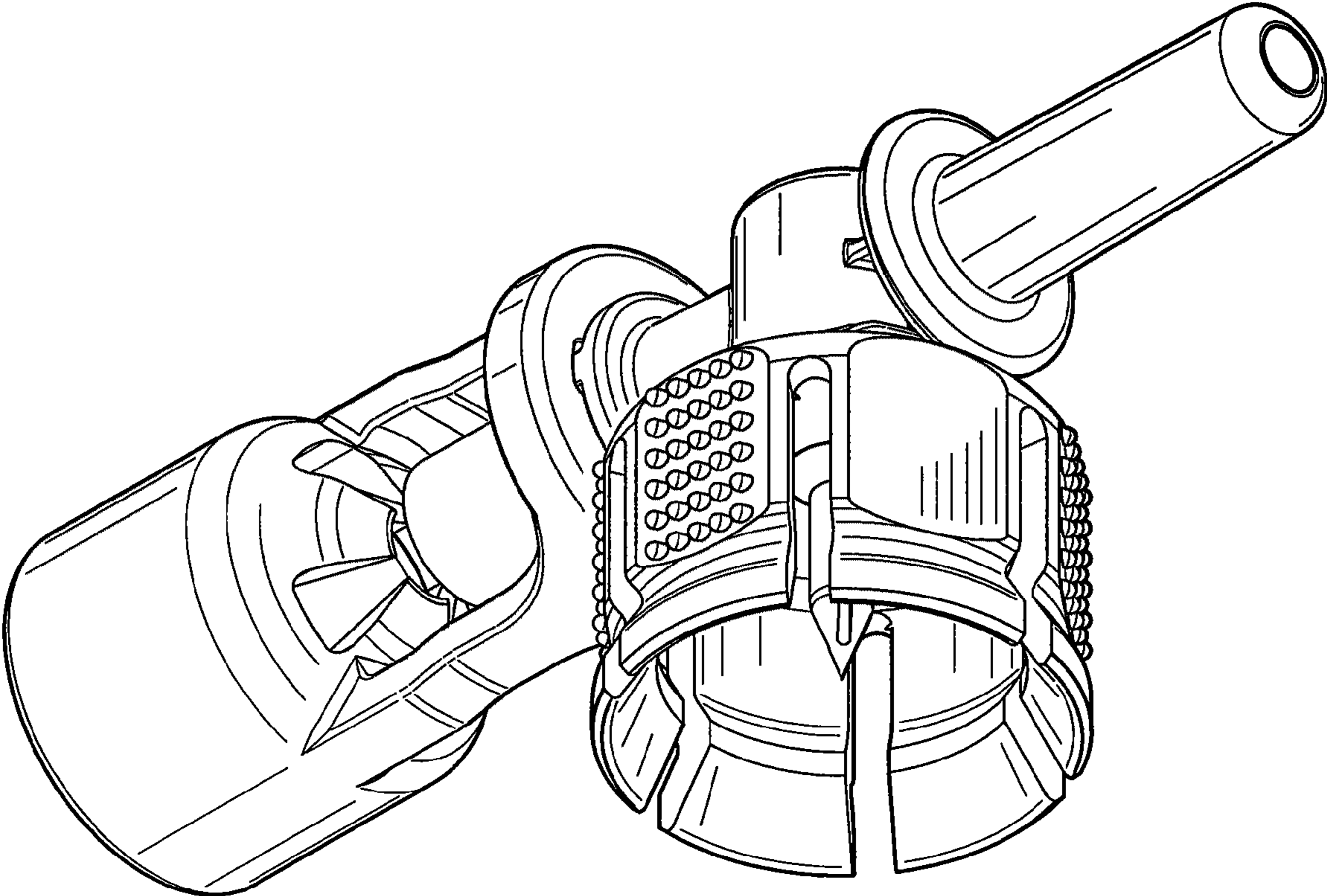


FIG.2

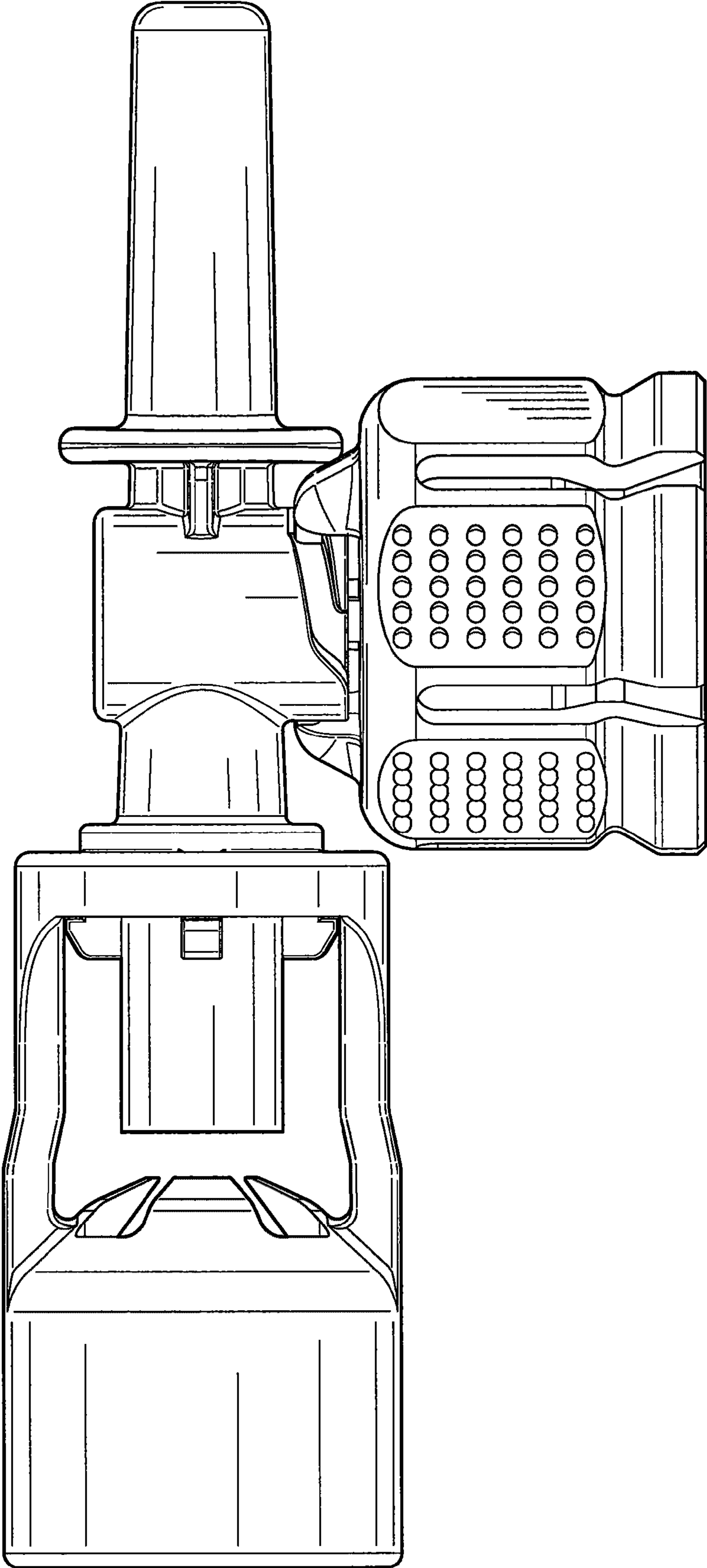


FIG. 3

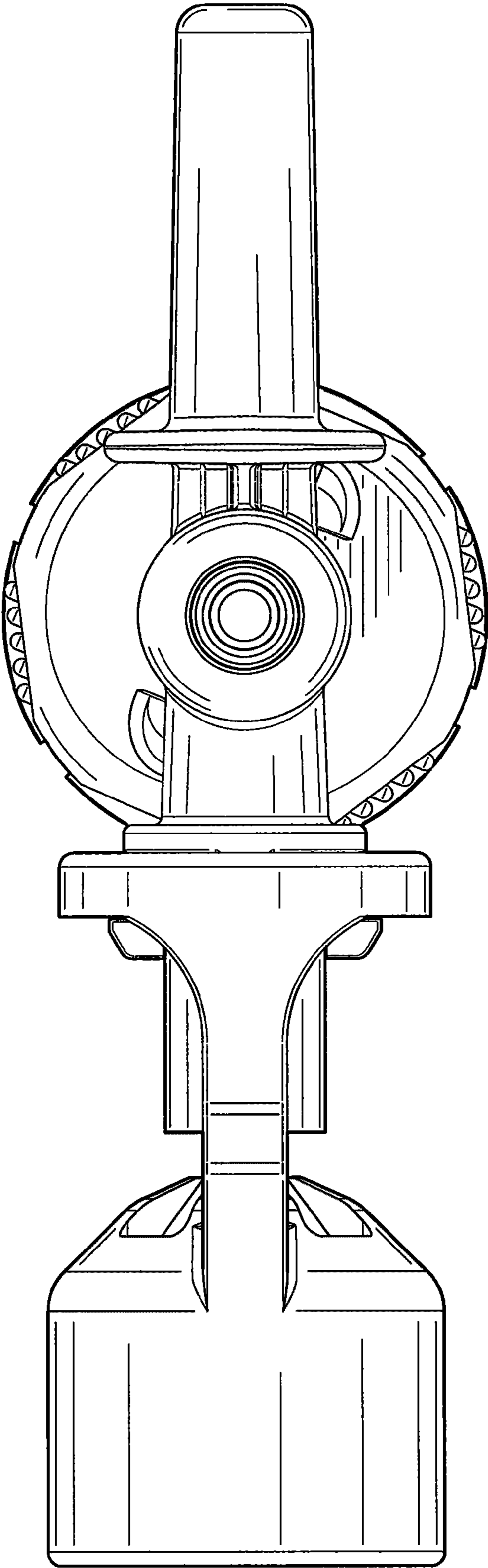


FIG. 4

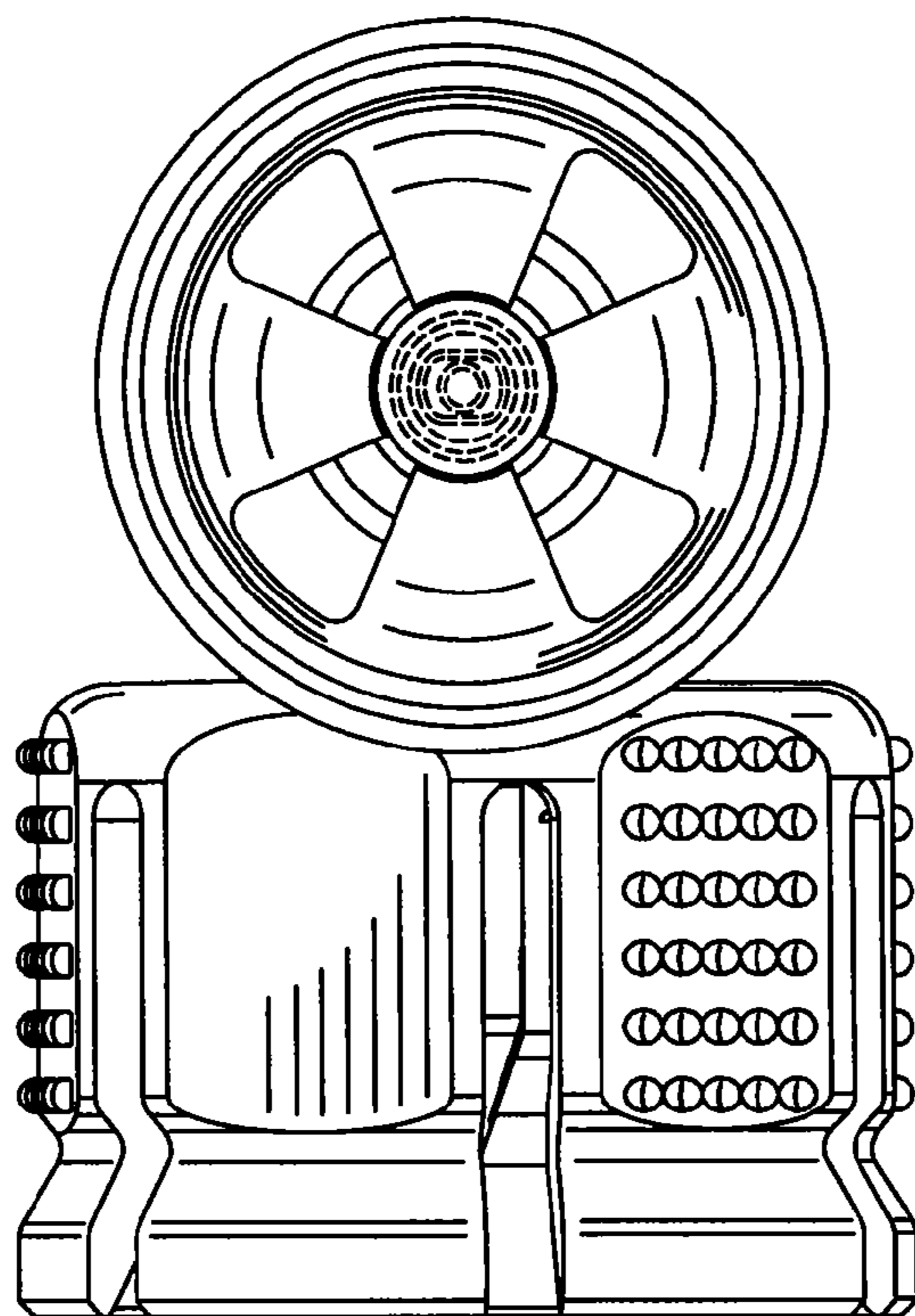


FIG. 5

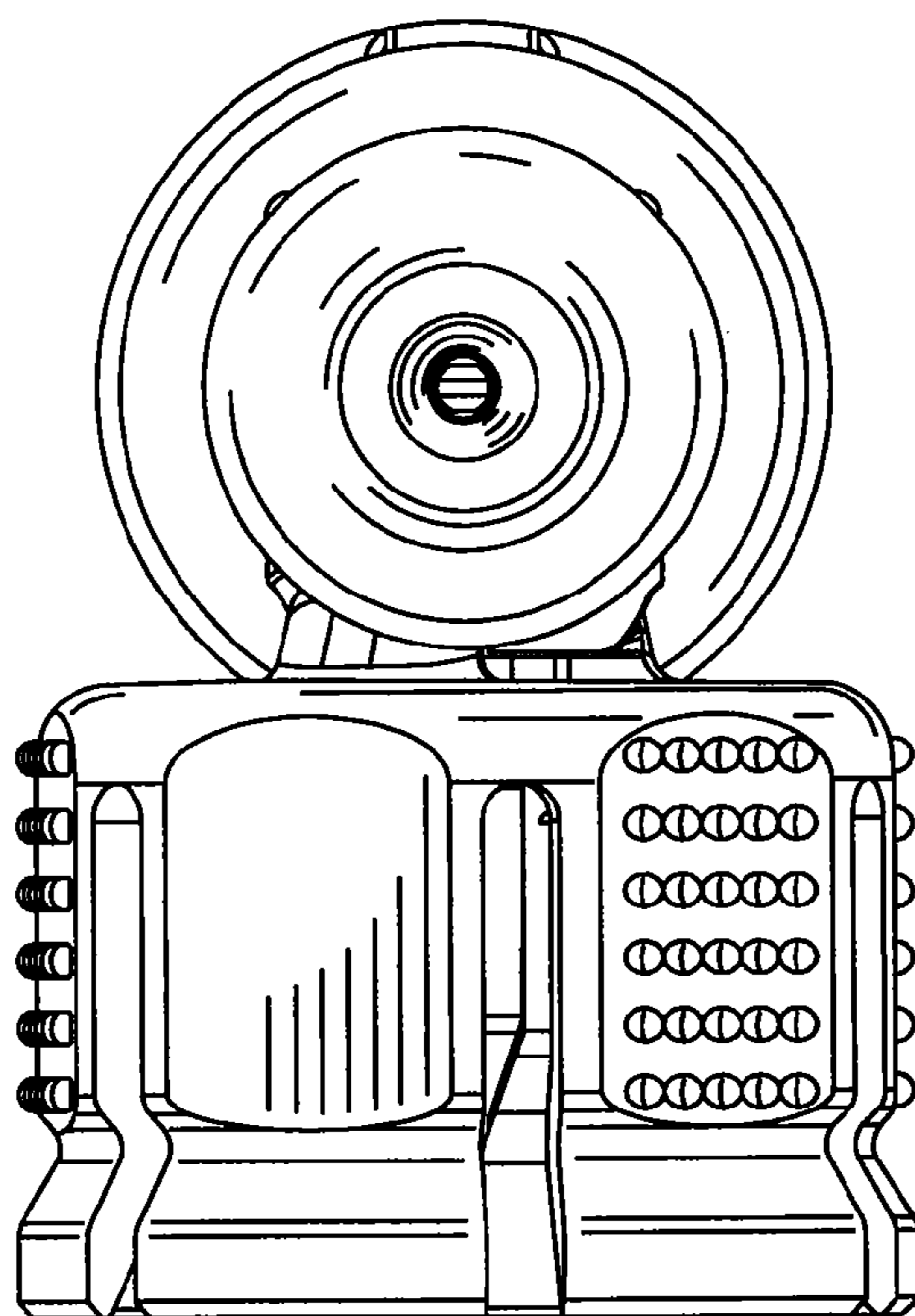


FIG. 6

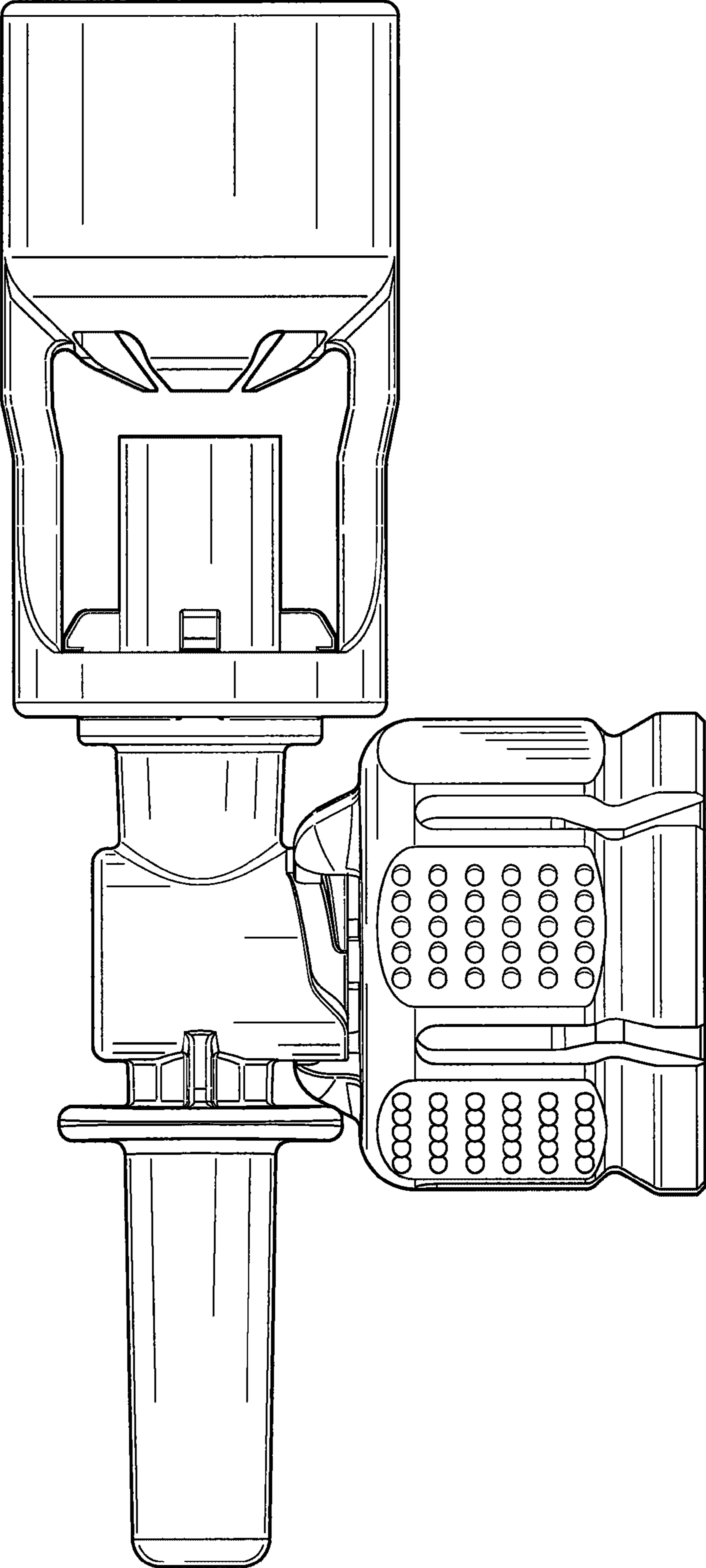


FIG. 7

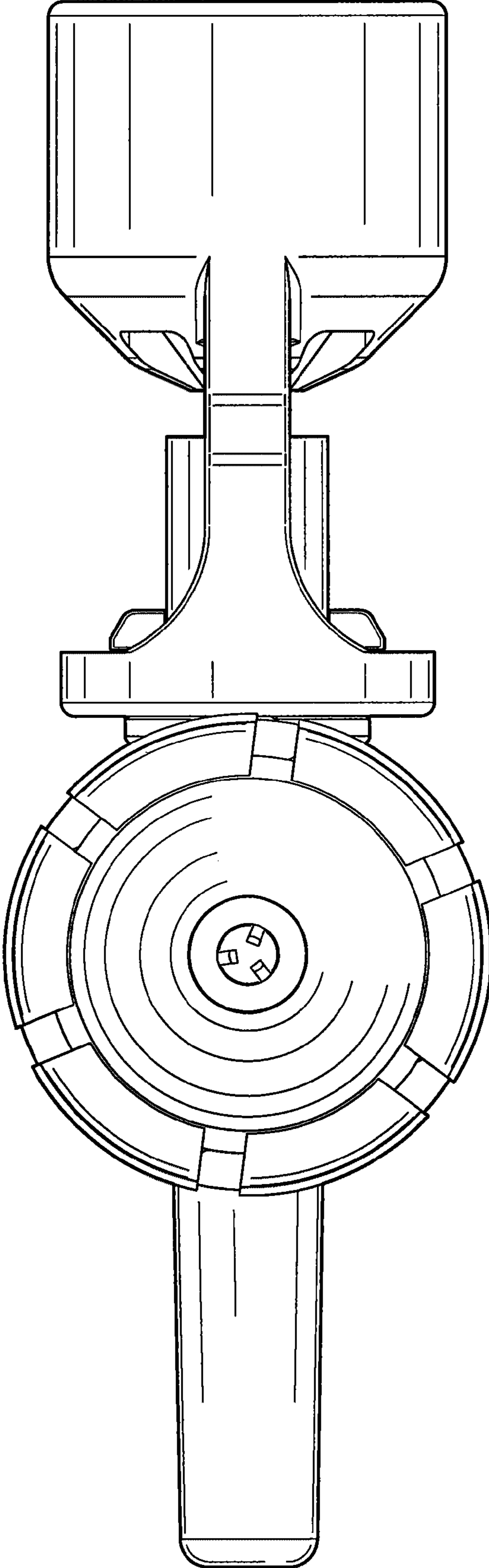


FIG. 8