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References Cited

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U.S. PATENT DOCUMENTS

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2,211,975 A	8/1940	Hendrickson
2,259,488 A	10/1941	Raiche
2,330,400 A	9/1943	Winder
D138,589 S	8/1944	Brandenburg
3,185,151 A	5/1965	Czomy
3,297,030 A	1/1967	Czomy et al.
3,416,567 A	12/1968	von Dardel et al.
3,469,579 A	9/1969	Hubert
3,500,828 A	3/1970	Podhora
3,552,384 A	1/1971	Pierie et al.
3,572,334 A	3/1971	Petterson
3,585,996 A	6/1971	Reynolds et al.
3,589,361 A	6/1971	Loper et al.
3,592,192 A	7/1971	Harautuneian
3,595,230 A	7/1971	Suyeoka et al.
3,610,240 A	10/1971	Harautuneian
3,682,173 A	8/1972	Center
3,884,242 A	5/1975	Bazell et al.
3,921,631 A	11/1975	Thompson
3,995,628 A	12/1976	Gula et al.
4,027,668 A	6/1977	Dunn
4,037,600 A	7/1977	Poncy et al.
4,079,738 A	3/1978	Dunn et al.
4,106,506 A	8/1978	Koehn et al.
4,177,809 A	12/1979	Moorehead
4,292,970 A	10/1981	Hession, Jr.
4,317,445 A	3/1982	Robinson
4,345,602 A	8/1982	Yoshimura et al.
4,354,491 A	10/1982	Marbry
4,368,730 A	1/1983	Sharrock
4,387,879 A	6/1983	Tauschinski
4,417,886 A	11/1983	Frankhouser et al.
4,449,693 A	5/1984	Gereg
4,456,017 A	6/1984	Miles
4,464,171 A	8/1984	Garwin
4,509,534 A	4/1985	Tassin, Jr.
4,509,945 A	4/1985	Kramann et al.
4,511,359 A	4/1985	Vaillancourt
4,512,766 A	4/1985	Vaillancourt
4,525,157 A	6/1985	Vaillancourt
4,581,019 A	4/1986	Curelaru et al.
4,585,440 A	4/1986	Tchervenkov et al.
D287,877 S	1/1987	Holewinski et al.
4,728,322 A	3/1988	Walker et al.
4,738,659 A	4/1988	Sleiman

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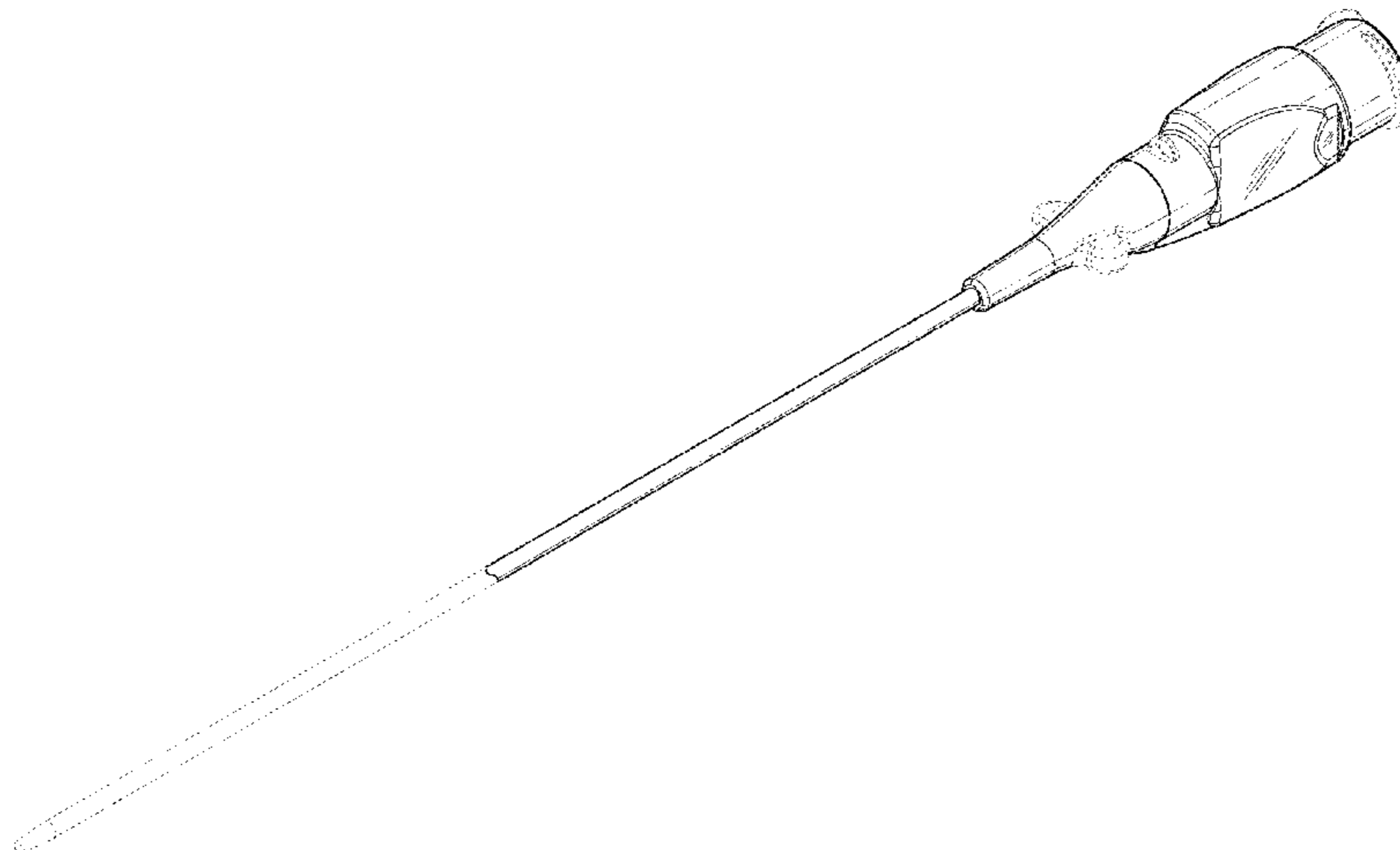
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4,747,831 A	5/1988	Kulli	5,156,590 A	10/1992	Vilmar
4,767,407 A	8/1988	Foran	5,156,596 A	10/1992	Balbierz et al.
4,772,264 A	9/1988	Cragg	5,158,544 A	10/1992	Weinstein
4,772,267 A	9/1988	Brown	5,167,637 A	12/1992	Okada et al.
4,781,703 A	11/1988	Walker et al.	5,176,650 A	1/1993	Haining
4,792,531 A	12/1988	Kakahana	5,186,168 A	2/1993	Spofford et al.
4,798,193 A	1/1989	Giesy et al.	5,186,712 A	2/1993	Kelso et al.
4,813,934 A	3/1989	Engelson et al.	5,188,607 A	2/1993	Wu
4,826,070 A	5/1989	Kakahana	5,190,528 A	3/1993	Fonger et al.
4,828,547 A	5/1989	Sahi et al.	5,192,301 A	3/1993	Kamiya et al.
4,834,708 A	5/1989	Pillari	5,195,974 A	3/1993	Hardy
4,834,718 A	5/1989	McDonald	5,195,980 A	3/1993	Catlin
4,840,613 A	6/1989	Balbierz	5,195,985 A	3/1993	Hall
4,840,622 A	6/1989	Hardy	5,205,830 A	4/1993	Dassa et al.
4,842,591 A	6/1989	Luther	5,215,527 A	6/1993	Beck et al.
4,846,812 A	7/1989	Walker et al.	5,215,528 A	6/1993	Purdy et al.
4,850,961 A	7/1989	Wanderer et al.	5,217,435 A	6/1993	Kring
4,860,757 A	8/1989	Lynch et al.	5,219,335 A	6/1993	Willard et al.
4,869,259 A	9/1989	Elkins	5,221,255 A	6/1993	Mahurkar et al.
D304,079 S	10/1989	McFarlane	5,222,944 A	6/1993	Harris
4,871,358 A	10/1989	Gold	5,225,369 A	7/1993	Su et al.
4,874,377 A	10/1989	Newgard et al.	5,226,899 A	7/1993	Lee et al.
4,883,461 A	11/1989	Sawyer	D338,955 S	8/1993	Gresl et al.
4,883,699 A	11/1989	Aniuk et al.	5,234,410 A	8/1993	Graham et al.
4,894,052 A	1/1990	Crawford	5,242,411 A	9/1993	Yamamoto et al.
4,895,346 A	1/1990	Steigerwald	5,246,426 A	9/1993	Lewis et al.
4,900,307 A	2/1990	Kulli	5,246,430 A	9/1993	MacFarlane
4,906,956 A	3/1990	Kakahana	5,254,107 A	10/1993	Soltesz
4,908,021 A	3/1990	McFarlane	5,257,980 A	11/1993	Van Antwerp et al.
4,909,793 A	3/1990	Vining et al.	5,267,982 A	12/1993	Sylvanowicz
4,911,691 A	3/1990	Aniuk et al.	5,269,771 A	12/1993	Thomas et al.
4,913,704 A	4/1990	Kurimoto	D345,419 S	3/1994	Horrigan et al.
4,917,102 A	4/1990	Miller et al.	5,290,310 A	3/1994	Makower et al.
4,917,668 A	4/1990	Haindl et al.	5,297,546 A	3/1994	Spofford et al.
4,917,671 A	4/1990	Chang	5,312,359 A	5/1994	Wallace
4,929,235 A	5/1990	Merry et al.	5,312,361 A	5/1994	Zadini et al.
4,935,010 A	6/1990	Cox et al.	5,312,363 A	5/1994	Ryan et al.
4,944,725 A	7/1990	McDonald	5,320,608 A	6/1994	Gerrone
4,944,728 A	7/1990	Carrell et al.	5,322,517 A	6/1994	Sircom et al.
4,955,863 A	9/1990	Walker et al.	5,330,435 A	7/1994	Vaillancourt
4,961,729 A	10/1990	Vaillancourt	5,334,159 A	8/1994	Turkel
4,966,586 A	10/1990	Vaillancourt	5,338,311 A	8/1994	Mahurkar
4,966,589 A	10/1990	Kaufman	5,352,205 A	10/1994	Dales et al.
4,994,042 A	2/1991	Vadher	5,358,796 A	10/1994	Nakamura et al.
4,994,047 A	2/1991	Walker et al.	5,366,441 A	11/1994	Crawford
4,995,866 A	2/1991	Amplatz et al.	5,368,661 A	11/1994	Nakamura et al.
5,007,901 A	4/1991	Shields	D353,668 S	12/1994	Banks et al.
5,009,642 A	4/1991	Sahi	5,376,082 A	12/1994	Phelps
5,019,048 A	5/1991	Margolin	5,376,094 A	12/1994	Kline
5,019,049 A	5/1991	Raining	5,380,290 A	1/1995	Makower et al.
D318,733 S	7/1991	Wyzgala	5,380,292 A	1/1995	Wilson
5,034,347 A	7/1991	Kakahana	5,395,341 A	3/1995	Slater
5,047,013 A	9/1991	Rossdeutscher	5,397,311 A	3/1995	Walker et al.
D321,250 S	10/1991	Jepson et al.	5,405,323 A	4/1995	Rogers et al.
5,053,014 A	10/1991	Van Heugten	5,415,177 A	5/1995	Zadini et al.
5,054,501 A	10/1991	Chuttani et al.	5,415,645 A	5/1995	Friend et al.
5,061,254 A	10/1991	Karakelle et al.	5,419,766 A	5/1995	Chang
5,064,416 A	11/1991	Newgard et al.	5,419,777 A	5/1995	Honing
5,078,694 A	1/1992	Wallace	5,423,760 A	6/1995	Yoon
5,078,696 A	1/1992	Nedbaluk	5,425,718 A	6/1995	Tay et al.
5,078,702 A	1/1992	Pomeranz	5,431,506 A	7/1995	Masunaga
5,084,023 A	1/1992	Lemieux	5,445,625 A	8/1995	Voda
5,085,645 A	2/1992	Purdy et al.	5,454,785 A	10/1995	Smith
5,088,984 A	2/1992	Fields	5,454,790 A	10/1995	Dubrul
5,093,692 A	3/1992	Su et al.	5,456,258 A	10/1995	Kondo et al.
5,098,392 A	3/1992	Fleischhacker et al.	5,456,668 A	10/1995	Ogle, II
5,098,395 A	3/1992	Fields	5,458,658 A	10/1995	Sircom
5,098,396 A	3/1992	Taylor et al.	5,466,230 A	11/1995	Davila
5,098,405 A	3/1992	Peterson et al.	5,480,389 A	1/1996	McWha et al.
5,108,375 A	4/1992	Harrison et al.	5,482,395 A	1/1996	Gasparini
5,108,376 A	4/1992	Bonaldo	5,484,419 A	1/1996	Fleck
5,112,312 A	5/1992	Luther	5,487,734 A	1/1996	Thorne et al.
5,116,323 A	5/1992	Kreuzer et al.	5,489,273 A	2/1996	Whitney et al.
5,120,317 A	6/1992	Luther	5,496,281 A	3/1996	Krebs
5,125,906 A	6/1992	Fleck	5,501,675 A	3/1996	Erskine
5,135,487 A	8/1992	Morrill et al.	5,507,300 A	4/1996	Mukai et al.
5,137,515 A	8/1992	Hogan	5,512,052 A	4/1996	Jesch
5,149,326 A	9/1992	Woodgrift et al.	5,514,108 A	5/1996	Stevens
5,154,703 A	10/1992	Bonaldo	5,520,655 A	5/1996	Davila et al.

US D903,101 S

5,520,657 A	5/1996	Sellers et al.	5,813,411 A	9/1998	Van Bladel et al.
D371,195 S	6/1996	Krebs	5,817,058 A	10/1998	Shaw
5,522,807 A	6/1996	Luther	5,817,069 A	10/1998	Arnett
5,527,290 A	6/1996	Zadini et al.	5,824,001 A	10/1998	Erskine
5,527,291 A	6/1996	Zadini et al.	5,827,202 A	10/1998	Miraki et al.
5,531,701 A	7/1996	Luther	5,827,221 A	10/1998	Phelps
5,531,713 A	7/1996	Mastronardi et al.	5,827,227 A	10/1998	DeLago
5,533,988 A	7/1996	Dickerson et al.	5,830,190 A	11/1998	Howell
5,535,785 A	7/1996	Verge et al.	5,830,224 A	11/1998	Cohn et al.
5,542,933 A	8/1996	Marks	5,839,470 A	11/1998	Hiejima et al.
5,554,136 A	9/1996	Luther	5,843,002 A	12/1998	Pecor et al.
5,562,629 A	10/1996	Naughton et al.	5,843,038 A	12/1998	Bailey
5,562,630 A	10/1996	Nichols	5,846,259 A	12/1998	Berthiaume
5,562,631 A	10/1996	Bogert	5,851,196 A	12/1998	Arnett
5,562,633 A	10/1996	Wozencroft	5,853,393 A	12/1998	Bogert
5,562,634 A	10/1996	Flumene et al.	5,855,615 A	1/1999	Bley et al.
5,569,202 A	10/1996	Kovalic et al.	5,858,002 A	1/1999	Jesch
5,569,217 A	10/1996	Luther	5,865,806 A	2/1999	Howell
5,571,073 A	11/1996	Castillo	5,873,864 A	2/1999	Luther
5,573,510 A	11/1996	Isaacson	5,879,332 A	3/1999	Schwemberger et al.
5,575,777 A	11/1996	Cover et al.	5,879,337 A	3/1999	Kuracina et al.
5,591,194 A	1/1997	Berthiaume	5,885,217 A	3/1999	Gisselberg et al.
5,599,291 A	2/1997	Balbierz et al.	5,885,251 A	3/1999	Luther
5,599,327 A	2/1997	Sugahara et al.	5,891,098 A	4/1999	Huang
5,609,583 A	3/1997	Hakki et al.	5,891,105 A	4/1999	Mahurkar
5,613,663 A	3/1997	Schmidt et al.	5,895,398 A	4/1999	Wensel et al.
5,613,954 A	3/1997	Nelson et al.	5,902,274 A	5/1999	Yamamoto et al.
5,630,802 A	5/1997	Moellmann et al.	5,902,832 A	5/1999	Van Bladel et al.
5,630,823 A	5/1997	Schmitz-Rode et al.	5,911,705 A	6/1999	Howell
5,634,475 A	6/1997	Wolvek	5,911,710 A	6/1999	Barry et al.
5,634,913 A	6/1997	Stinger	5,913,848 A	6/1999	Luther et al.
5,637,091 A	6/1997	Hakky et al.	5,916,208 A	6/1999	Luther et al.
5,645,076 A	7/1997	Yoon	5,928,199 A	7/1999	Nakagami
5,651,772 A	7/1997	Arnett	D413,382 S	8/1999	Maissami
D383,538 S	9/1997	Erskine et al.	5,935,110 A	8/1999	Brimhall
5,662,622 A	9/1997	Gore et al.	5,941,854 A	8/1999	Bhitiyakul
5,674,241 A	10/1997	Bley et al.	5,944,690 A	8/1999	Falwell et al.
5,676,658 A	10/1997	Erskine	5,947,930 A	9/1999	Schwemberger et al.
5,683,368 A	11/1997	Schmidt	5,951,520 A	9/1999	Burzynski et al.
5,683,370 A	11/1997	Luther et al.	5,954,698 A	9/1999	Pike
5,685,855 A	11/1997	Erskine	5,957,893 A	9/1999	Luther et al.
5,685,858 A	11/1997	Kawand	5,964,744 A	10/1999	Balbierz et al.
5,685,860 A	11/1997	Chang et al.	5,967,490 A	10/1999	Pike
5,688,249 A	11/1997	Chang et al.	5,984,895 A	11/1999	Padilla et al.
5,693,025 A	12/1997	Stevens	5,984,903 A	11/1999	Nadal
5,695,474 A	12/1997	Daugherty	5,989,220 A	11/1999	Shaw et al.
5,700,250 A	12/1997	Erskine	5,989,271 A	11/1999	Bonnette et al.
5,702,367 A	12/1997	Cover et al.	5,997,507 A	12/1999	Dysarz
5,702,369 A	12/1997	Mercereau	5,997,510 A	12/1999	Schwemberger
5,704,914 A	1/1998	Stocking et al.	6,001,080 A	12/1999	Kuracina et al.
5,722,425 A	3/1998	Bostrom	6,004,278 A	12/1999	Botich et al.
5,725,503 A	3/1998	Arnett	6,004,294 A	12/1999	Brimhall et al.
5,730,150 A	3/1998	Peppel et al.	6,004,295 A	12/1999	Langer et al.
5,730,733 A	3/1998	Mortier et al.	6,011,988 A	1/2000	Lynch et al.
5,730,741 A	3/1998	Horzewski et al.	6,019,736 A	2/2000	Avellanet et al.
5,738,144 A	4/1998	Rogers	6,022,319 A	2/2000	Willard et al.
5,738,660 A	4/1998	Luther	6,024,727 A	2/2000	Thorne et al.
5,743,882 A	4/1998	Luther	6,024,729 A	2/2000	Dehdashtian et al.
5,743,888 A	4/1998	Wilkes et al.	6,045,734 A	4/2000	Luther et al.
5,749,371 A	5/1998	Zadini et al.	6,056,726 A	5/2000	Isaacson
5,749,857 A	5/1998	Cuppy	6,059,484 A	5/2000	Greive
5,749,861 A	5/1998	Guala et al.	6,066,100 A	5/2000	Willard et al.
5,750,741 A	5/1998	Crocker et al.	6,074,378 A	6/2000	Mouri et al.
5,755,693 A	5/1998	Walker et al.	6,077,244 A	6/2000	Botich et al.
5,755,709 A	5/1998	Cuppy	6,080,137 A	6/2000	Pike
5,762,630 A	6/1998	Bley et al.	6,083,237 A	7/2000	Huitema et al.
5,762,636 A	6/1998	Rupp et al.	6,096,004 A	8/2000	Meglan et al.
5,765,682 A	6/1998	Bley et al.	6,096,005 A	8/2000	Botich et al.
5,779,679 A	7/1998	Shaw	6,109,264 A	8/2000	Sauer
5,779,680 A	7/1998	Yoon	6,117,108 A	9/2000	Woehr et al.
5,779,681 A	7/1998	Bonn	6,120,494 A	9/2000	Jonkman
5,782,807 A	7/1998	Falvai et al.	6,126,633 A	10/2000	Kaji et al.
D397,434 S	8/1998	Pike	6,126,641 A	10/2000	Shields
5,792,124 A	8/1998	Horrigan et al.	6,139,532 A	10/2000	Howell et al.
5,800,395 A	9/1998	Botich et al.	6,139,557 A	10/2000	Passafaro et al.
5,807,339 A	9/1998	Bostrom et al.	6,159,179 A	12/2000	Simonson
5,807,342 A	9/1998	Musgrave et al.	6,171,234 B1	1/2001	White et al.
5,807,350 A	9/1998	Diaz	6,171,287 B1	1/2001	Lynn et al.
5,810,835 A	9/1998	Ryan et al.	6,176,842 B1	1/2001	Tachibana et al.

US D903,101 S

6,193,690 B1	2/2001	Dysarz	6,666,865 B2	12/2003	Platt
6,197,001 B1	3/2001	Wilson et al.	6,679,900 B2	1/2004	Kieturakis et al.
6,197,007 B1	3/2001	Thorne et al.	6,689,102 B2	2/2004	Greene
6,197,041 B1	3/2001	Shichman et al.	6,692,508 B2	2/2004	Wensel et al.
6,203,527 B1	3/2001	Zadini et al.	6,692,509 B2	2/2004	Wensel et al.
6,213,978 B1	4/2001	Voyten	6,695,814 B2	2/2004	Greene et al.
6,217,558 B1	4/2001	Zadini et al.	6,695,856 B2	2/2004	Kieturakis et al.
6,221,047 B1	4/2001	Greene et al.	6,695,860 B1	2/2004	Ward et al.
6,221,048 B1	4/2001	Phelps	6,699,221 B2	3/2004	Vaillancourt
6,221,049 B1	4/2001	Selmon et al.	6,702,811 B2	3/2004	Stewart et al.
6,224,569 B1	5/2001	Brimhall	6,706,018 B2	3/2004	Westlund et al.
6,228,060 B1	5/2001	Howell	6,711,444 B2	3/2004	Koblish
6,228,062 B1	5/2001	Howell et al.	6,712,790 B1	3/2004	Prestidge et al.
6,228,073 B1	5/2001	Noone	6,712,797 B1	3/2004	Southern, Jr.
6,245,045 B1	6/2001	Stratienko	6,716,197 B2	4/2004	Svendsen
6,251,092 B1	6/2001	Din et al.	6,730,062 B2	5/2004	Hoffman et al.
6,268,399 B1	7/2001	Hultine et al.	6,740,063 B2	5/2004	Lynn
6,270,480 B1	8/2001	Dorr et al.	6,740,096 B2	5/2004	Teague et al.
6,273,871 B1	8/2001	Davis et al.	6,745,080 B2	6/2004	Koblish
6,280,419 B1	8/2001	Vojtasek	6,749,588 B1	6/2004	Howell et al.
6,287,278 B1	9/2001	Woehr et al.	6,764,468 B1	7/2004	East
6,309,379 B1	10/2001	Willard et al.	D494,270 S	8/2004	Reschke
6,319,244 B2	11/2001	Suresh et al.	6,776,788 B1	8/2004	Klint et al.
6,322,537 B1	11/2001	Chang	6,796,962 B2	9/2004	Ferguson et al.
D452,003 S	12/2001	Niermann	6,824,545 B2	11/2004	Sepetka et al.
6,325,781 B1	12/2001	Takagi et al.	6,832,715 B2	12/2004	Eungard et al.
6,325,797 B1	12/2001	Stewart et al.	6,835,190 B2	12/2004	Nguyen
6,336,914 B1	1/2002	Gillespie, III	6,837,867 B2	1/2005	Kortelling
6,352,520 B1	3/2002	Miyazaki	6,860,871 B2	3/2005	Kuracina et al.
6,368,337 B1	4/2002	Kieturakis et al.	6,872,193 B2	3/2005	Shaw et al.
6,379,333 B1	4/2002	Brimhall et al.	6,887,220 B2	5/2005	Hogendijk
6,379,372 B1	4/2002	Dehdashtian et al.	6,902,546 B2	6/2005	Ferguson
D457,955 S	5/2002	Bilitz	6,905,483 B2	6/2005	Newby et al.
6,406,442 B1	6/2002	McFann et al.	6,913,595 B2	7/2005	Mastorakis
D460,179 S	7/2002	Isoda et al.	6,916,311 B2	7/2005	Vojtasek
6,422,989 B1	7/2002	Hektner	6,921,386 B2	7/2005	Shue et al.
6,436,070 B1	8/2002	Botich et al.	6,921,391 B1	7/2005	Barker et al.
6,436,112 B2	8/2002	Wensel et al.	6,929,624 B1	8/2005	Del Castillo
6,443,929 B1	9/2002	Kuracina et al.	6,939,325 B2	9/2005	Haining
6,451,052 B1	9/2002	Burmeister et al.	6,942,652 B1	9/2005	Pressly, Sr. et al.
6,461,362 B1	10/2002	Halseth et al.	6,953,448 B2	10/2005	Moulton et al.
6,475,217 B1	11/2002	Platt	6,958,054 B2	10/2005	Fitzgerald
6,478,779 B1	11/2002	Hu	6,958,055 B2	10/2005	Donnan et al.
6,485,473 B1	11/2002	Lynn	6,960,191 B2	11/2005	Howlett et al.
6,485,497 B2	11/2002	Wensel et al.	6,972,002 B2	12/2005	Thorne
6,497,681 B1	12/2002	Brenner	6,974,438 B2	12/2005	Shekalim
6,506,181 B2	1/2003	Meng et al.	6,994,693 B2	2/2006	Tal
6,514,236 B1	2/2003	Stratienko	7,001,396 B2	2/2006	Glazier et al.
6,524,276 B1	2/2003	Halseth et al.	7,004,927 B2	2/2006	Ferguson et al.
D471,980 S	3/2003	Caizza	7,008,404 B2	3/2006	Nakajima
6,527,759 B1	3/2003	Tachibana et al.	7,018,372 B2	3/2006	Casey
6,530,913 B1	3/2003	Giba et al.	7,018,390 B2	3/2006	Turovskiy et al.
6,530,935 B2	3/2003	Wensel et al.	7,025,746 B2	4/2006	Tal
6,540,725 B1	4/2003	Ponzi	7,029,467 B2	4/2006	Currier et al.
6,540,732 B1	4/2003	Botich et al.	7,033,335 B2	4/2006	Haarala et al.
6,544,239 B2	4/2003	Kinsey et al.	7,044,935 B2	5/2006	Shue et al.
6,547,762 B1	4/2003	Botich et al.	7,060,055 B2	6/2006	Wilkinson et al.
6,558,355 B1	5/2003	Metzger et al.	7,090,656 B1	8/2006	Botich et al.
6,582,402 B1	6/2003	Erskine	7,094,243 B2	8/2006	Mulholland et al.
6,582,440 B1	6/2003	Brumbach	7,097,633 B2	8/2006	Botich et al.
6,585,703 B1	7/2003	Kassel et al.	7,125,396 B2	10/2006	Leinsing et al.
6,589,262 B1	7/2003	Honebrink et al.	7,125,397 B2	10/2006	Woehr et al.
6,595,955 B2	7/2003	Ferguson et al.	7,141,040 B2	11/2006	Lichtenberg
6,595,959 B1	7/2003	Stratienko	7,153,276 B2	12/2006	Barker et al.
6,607,511 B2	8/2003	Halseth et al.	7,163,520 B2	1/2007	Bernard et al.
6,616,630 B1	9/2003	Woehr	7,169,159 B2	1/2007	Green et al.
6,620,136 B1	9/2003	Pressly, Sr. et al.	7,179,244 B2	2/2007	Smith et al.
6,623,449 B2	9/2003	Paskar	7,186,239 B2	3/2007	Woehr
6,626,868 B1	9/2003	Prestidge et al.	7,191,900 B2	3/2007	Opie et al.
6,626,869 B1	9/2003	Bint	7,192,433 B2	3/2007	Osyepka et al.
6,629,959 B2	10/2003	Kuracina et al.	7,204,813 B2	4/2007	Shue et al.
6,632,201 B1	10/2003	Mathias et al.	7,214,211 B2	5/2007	Woehr et al.
6,638,252 B2	10/2003	Moulton et al.	7,264,613 B2	9/2007	Woehr et al.
6,641,564 B1	11/2003	Kraus	7,291,130 B2	11/2007	McGurk
6,645,178 B1	11/2003	Junker et al.	7,303,547 B2	12/2007	Pressly, Sr. et al.
6,652,486 B2	11/2003	Bialecki et al.	7,303,548 B2	12/2007	Rhad et al.
6,652,490 B2	11/2003	Howell	7,314,462 B2	1/2008	O'Reagan et al.
6,663,577 B2	12/2003	Jen et al.	7,331,966 B2	2/2008	Soma et al.
6,663,592 B2	12/2003	Rhad et al.	7,344,516 B2	3/2008	Erskine

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7,354,422	B2	4/2008	Riesenberger et al.	7,922,696	B2	4/2011	Tal et al.
7,374,554	B2	5/2008	Menzi et al.	7,922,698	B2	4/2011	Riesenberger et al.
7,381,205	B2	6/2008	Thommen	7,927,314	B2	4/2011	Kuracina et al.
7,396,346	B2	7/2008	Nakajima	7,935,080	B2	5/2011	Howell et al.
7,413,562	B2	8/2008	Ferguson et al.	7,959,613	B2	6/2011	Rhad et al.
7,422,572	B2	9/2008	Popov	7,972,313	B2	7/2011	Woehr et al.
7,458,954	B2	12/2008	Ferguson et al.	7,972,324	B2	7/2011	Quint
7,465,294	B1	12/2008	Vladimirsky	D643,531	S	8/2011	van der Weiden
7,468,057	B2	12/2008	Ponzi	8,029,470	B2	10/2011	Whiting et al.
7,470,254	B2	12/2008	Basta et al.	8,029,472	B2	10/2011	Leinsing et al.
7,491,176	B2	2/2009	Mann	8,048,031	B2	11/2011	Shaw et al.
7,494,010	B2	2/2009	Opie et al.	8,048,039	B2	11/2011	Carlyon et al.
7,500,965	B2	3/2009	Menzi et al.	8,057,404	B2	11/2011	Fujiwara et al.
7,507,222	B2	3/2009	Cindrich et al.	8,062,261	B2	11/2011	Adams
7,513,887	B2	4/2009	Halseth et al.	8,075,529	B2	12/2011	Nakajima et al.
7,513,888	B2	4/2009	Sircom et al.	8,079,979	B2	12/2011	Moorehead
7,524,306	B2	4/2009	Botich et al.	D653,329	S	1/2012	Lee-Sepsick
7,530,965	B2	5/2009	Villa et al.	8,100,858	B2	1/2012	Woehr et al.
7,534,227	B2	5/2009	Kulli	8,105,286	B2	1/2012	Anderson et al.
7,534,231	B2	5/2009	Kuracina et al.	8,105,315	B2	1/2012	Johnson et al.
7,544,170	B2	6/2009	Williams et al.	8,123,727	B2	2/2012	Luther et al.
7,556,617	B2	7/2009	Voorhees, Jr. et al.	8,152,758	B2	4/2012	Chan et al.
7,566,323	B2	7/2009	Chang	8,162,881	B2	4/2012	Lilley, Jr. et al.
D601,243	S	9/2009	Bierman et al.	8,167,851	B2	5/2012	Sen
7,597,681	B2	10/2009	Sutton et al.	8,177,753	B2	5/2012	Vitullo et al.
7,608,057	B2	10/2009	Woehr et al.	RE43,473	E	6/2012	Newby et al.
D604,839	S	11/2009	Crawford et al.	8,192,402	B2	6/2012	Anderson et al.
7,611,485	B2	11/2009	Ferguson	8,202,251	B2	6/2012	Bierman et al.
7,611,487	B2	11/2009	Woehr et al.	8,202,253	B1	6/2012	Wexler
7,611,499	B2	11/2009	Woehr et al.	8,206,343	B2	6/2012	Racz
7,618,395	B2	11/2009	Ferguson	8,211,070	B2	7/2012	Woehr et al.
7,625,360	B2	12/2009	Woehr et al.	8,221,387	B2	7/2012	Shelso et al.
7,628,769	B2	12/2009	Grandt et al.	8,226,612	B2	7/2012	Nakajima
7,632,243	B2	12/2009	Bialecki et al.	8,235,945	B2	8/2012	Baid
7,645,263	B2	1/2010	Angel et al.	8,251,923	B2	8/2012	Carrez et al.
7,654,988	B2	2/2010	Moulton et al.	8,251,950	B2	8/2012	Albert et al.
7,658,725	B2	2/2010	Bialecki et al.	D667,111	S	9/2012	Robinson
D612,043	S	3/2010	Young et al.	8,257,322	B2	9/2012	Koehler et al.
7,678,080	B2	3/2010	Shue et al.	8,273,054	B2	9/2012	St. Germain et al.
7,682,358	B2	3/2010	Gullickson et al.	8,286,657	B2	10/2012	Belley et al.
7,691,088	B2	4/2010	Howell	8,298,186	B2	10/2012	Popov
7,691,090	B2	4/2010	Belley et al.	8,303,543	B2	11/2012	Abulhaj
7,691,093	B2	4/2010	Brimhall	8,308,685	B2	11/2012	Botich et al.
7,695,458	B2	4/2010	Belley et al.	8,308,691	B2	11/2012	Woehr et al.
7,699,807	B2	4/2010	Faust et al.	D672,456	S	12/2012	Lee-Sepsick
D615,197	S	5/2010	Koh et al.	8,328,762	B2	12/2012	Woehr et al.
7,708,721	B2	5/2010	Khaw	8,328,837	B2	12/2012	Binmoeller
7,713,243	B2	5/2010	Hillman	8,333,735	B2	12/2012	Woehr et al.
7,717,875	B2	5/2010	Knudson et al.	8,337,424	B2	12/2012	Palmer et al.
7,722,567	B2	5/2010	Tal	8,337,463	B2	12/2012	Woehr et al.
7,722,569	B2	5/2010	Soderholm et al.	8,337,471	B2	12/2012	Baid
D617,893	S	6/2010	Bierman et al.	D675,318	S	1/2013	Luk et al.
7,731,687	B2	6/2010	Menzi et al.	8,361,020	B2	1/2013	Stout
7,731,691	B2	6/2010	Cote et al.	8,361,038	B2	1/2013	McKinnon et al.
7,736,332	B2	6/2010	Carlyon et al.	8,376,994	B2	2/2013	Woehr et al.
7,736,337	B2	6/2010	Diep et al.	8,377,006	B2	2/2013	Tal et al.
7,736,339	B2	6/2010	Woehr et al.	8,382,721	B2	2/2013	Woehr et al.
7,736,342	B2	6/2010	Abriles et al.	8,388,583	B2	3/2013	Stout et al.
7,740,615	B2	6/2010	Shaw et al.	8,403,886	B2	3/2013	Bialecki et al.
7,744,574	B2	6/2010	Pederson et al.	8,412,300	B2	4/2013	Sonderegger
7,753,877	B2	7/2010	Bialecki et al.	8,414,539	B1	4/2013	Kuracina et al.
7,753,887	B2	7/2010	Botich et al.	8,419,688	B2	4/2013	Woehr et al.
7,762,984	B2	7/2010	Kumoyama et al.	8,444,605	B2	5/2013	Kuracina et al.
7,762,993	B2	7/2010	Perez	8,454,536	B2	6/2013	Raulerson et al.
7,766,879	B2	8/2010	Tan et al.	8,460,247	B2	6/2013	Woehr et al.
7,776,052	B2	8/2010	Greenberg et al.	8,469,928	B2	6/2013	Stout et al.
7,785,296	B2	8/2010	Muskatello et al.	8,496,628	B2	7/2013	Erskine
7,794,424	B2	9/2010	Paskar	D687,548	S	8/2013	Hayashi
7,798,994	B2	9/2010	Brimhall	8,506,533	B2	8/2013	Carlyon et al.
7,803,142	B2	9/2010	Longson et al.	8,509,340	B2	8/2013	Michelitsch
7,828,773	B2	11/2010	Swisher et al.	8,517,959	B2	8/2013	Kurosawa et al.
7,828,774	B2	11/2010	Harding et al.	8,529,515	B2	9/2013	Woehr et al.
7,850,644	B2	12/2010	Gonzalez et al.	8,535,271	B2	9/2013	Fuchs et al.
7,857,770	B2	12/2010	Raulerson et al.	8,540,728	B2	9/2013	Woehr et al.
D634,843	S	3/2011	Kim et al.	8,545,454	B2	10/2013	Kuracina et al.
7,896,862	B2	3/2011	Long et al.	8,568,372	B2	10/2013	Woehr et al.
7,905,857	B2	3/2011	Swisher	8,574,203	B2	11/2013	Stout et al.
7,914,488	B2	3/2011	Dickerson	8,579,881	B2	11/2013	Agro et al.
7,914,492	B2	3/2011	Heuser	8,585,651	B2	11/2013	Asai

US D903,101 S

8,585,660 B2	11/2013	Murphy		9,242,071 B2	1/2016	Morgan et al.	
8,591,467 B2	11/2013	Walker et al.		9,242,072 B2	1/2016	Morgan et al.	
8,591,468 B2	11/2013	Woehr et al.		RE45,896 E	2/2016	Stout et al.	
8,597,249 B2	12/2013	Woehr et al.		D748,774 S *	2/2016	Caron	D24/112
8,622,931 B2	1/2014	Teague et al.		D748,777 S *	2/2016	Uenishi	D24/130
8,622,972 B2	1/2014	Nystrom et al.		D749,214 S *	2/2016	Uenishi	D24/130
D700,318 S *	2/2014	Amoah	D24/112	D749,727 S *	2/2016	Wapler	D24/133
8,647,301 B2	2/2014	Bialecki et al.		D751,194 S *	3/2016	Yu	D24/130
8,647,313 B2	2/2014	Woehr et al.		D752,737 S *	3/2016	Ohashi	D24/112
8,647,324 B2	2/2014	Delegge et al.		9,289,237 B2	3/2016	Woehr et al.	
8,652,104 B2	2/2014	Goral et al.		9,308,352 B2	4/2016	Teoh et al.	
8,657,790 B2	2/2014	Tal et al.		9,308,354 B2	4/2016	Farrell et al.	
8,672,888 B2	3/2014	Tal		9,320,870 B2	4/2016	Woehr	
8,679,063 B2	3/2014	Stout et al.		D755,368 S *	5/2016	Efinger	D24/112
8,690,833 B2	4/2014	Belson		9,352,119 B2	5/2016	Burkholz et al.	
8,715,242 B2	5/2014	Helm, Jr.		9,352,127 B2	5/2016	Yeh et al.	
8,721,546 B2	5/2014	Belson		9,352,129 B2	5/2016	Nardeo et al.	
8,728,030 B2	5/2014	Woehr		9,358,364 B2	6/2016	Isaacson et al.	
8,728,035 B2	5/2014	Warring et al.		9,370,641 B2	6/2016	Woehr et al.	
8,740,859 B2	6/2014	McKinnon et al.		9,381,324 B2	7/2016	Fuchs et al.	
8,740,964 B2	6/2014	Hartley		9,399,116 B2	7/2016	Goral et al.	
8,747,387 B2	6/2014	Belley et al.		9,408,569 B2	8/2016	Andreae et al.	
8,753,317 B2	6/2014	Osborne et al.		9,421,345 B2	8/2016	Woehr et al.	
8,764,711 B2	7/2014	Kuracina et al.		9,427,549 B2	8/2016	Woehr et al.	
D710,495 S	8/2014	Wu et al.		D775,330 S	12/2016	Blennow et al.	
8,814,833 B2	8/2014	Farrell et al.		9,522,254 B2	12/2016	Belson	
D713,957 S	9/2014	Woehr et al.		D776,259 S	1/2017	Eldredge	
D714,436 S *	9/2014	Lee-Sepsick	D24/112	9,545,495 B2	1/2017	Goral et al.	
8,827,965 B2	9/2014	Woehr et al.		9,554,817 B2	1/2017	Goldfarb et al.	
8,845,584 B2	9/2014	Ferguson et al.		D779,059 S	2/2017	Nino et al.	
D715,931 S *	10/2014	Watanabe	D24/130	D779,661 S	2/2017	McKnight et al.	
8,864,714 B2	10/2014	Harding et al.		9,579,486 B2	2/2017	Burkholz et al.	
8,900,192 B2	12/2014	Anderson et al.		9,586,027 B2	3/2017	Tisci et al.	
8,932,257 B2	1/2015	Woehr		9,592,367 B2	3/2017	Harding et al.	
8,932,258 B2	1/2015	Blanchard et al.		9,616,201 B2	4/2017	Belson	
8,932,259 B2	1/2015	Stout et al.		9,623,210 B2	4/2017	Woehr	
8,945,011 B2	2/2015	Sheldon et al.		9,675,784 B2	6/2017	Belson	
8,951,230 B2	2/2015	Tanabe et al.		9,687,633 B2	6/2017	Teoh	
8,956,327 B2	2/2015	Bierman et al.		D791,311 S	7/2017	Yantz	
8,974,426 B2	3/2015	Corcoran et al.		9,707,378 B2	7/2017	Leinsing et al.	
8,979,802 B2	3/2015	Woehr		9,717,523 B2	8/2017	Feng et al.	
8,986,227 B2	3/2015	Belson		9,717,887 B2	8/2017	Tan	
D726,908 S	4/2015	Yu et al.		9,737,252 B2	8/2017	Teoh et al.	
8,998,852 B2	4/2015	Blanchard et al.		9,750,532 B2	9/2017	Toomey et al.	
9,005,169 B2	4/2015	Gravesen et al.		9,750,928 B2	9/2017	Burkholz et al.	
9,011,351 B2	4/2015	Hoshinouchi		9,757,540 B2	9/2017	Belson	
9,011,381 B2	4/2015	Yamada et al.		9,764,085 B2	9/2017	Teoh	
D728,781 S *	5/2015	Pierson	D24/112	9,764,117 B2	9/2017	Bierman et al.	
9,022,979 B2	5/2015	Woehr		9,775,972 B2	10/2017	Christensen et al.	
9,033,927 B2	5/2015	Maan et al.		9,782,568 B2	10/2017	Belson	
D733,289 S	6/2015	Blanchard et al.		9,789,279 B2	10/2017	Burkholz et al.	
9,044,583 B2	6/2015	Vaillancourt		9,795,766 B2	10/2017	Teoh	
D735,321 S	7/2015	Blanchard		9,844,646 B2	12/2017	Knutsson	
9,089,671 B2	7/2015	Stout et al.		9,861,792 B2	1/2018	Hall et al.	
9,095,683 B2	8/2015	Hall et al.		9,872,971 B2	1/2018	Blanchard	
9,101,746 B2	8/2015	Stout et al.		D810,282 S	2/2018	Ratjen	
9,108,021 B2	8/2015	Flyer et al.		D815,737 S	4/2018	Bergstrom et al.	
9,114,231 B2	8/2015	Woehr et al.		9,950,139 B2	4/2018	Blanchard et al.	
9,114,241 B2	8/2015	Stout et al.		9,962,525 B2	5/2018	Woehr	
9,126,012 B2	9/2015	McKinnon et al.		10,004,878 B2	6/2018	Ishida	
9,138,252 B2	9/2015	Bierman et al.		10,086,171 B2	10/2018	Belson	
9,138,545 B2	9/2015	Shaw et al.		10,232,146 B2	3/2019	Braithwaite et al.	
9,138,559 B2	9/2015	Odland et al.		10,328,239 B2	6/2019	Belson	
RE45,776 E	10/2015	Root et al.		10,384,039 B2	8/2019	Ribelin et al.	
D740,410 S	10/2015	Korkuch et al.		10,426,931 B2	10/2019	Blanchard et al.	
9,149,625 B2	10/2015	Woehr		D870,271 S	12/2019	Kheradpir et al.	
9,149,626 B2	10/2015	Woehr		D870,883 S	12/2019	Harding et al.	
9,155,863 B2	10/2015	Isaacson et al.		10,493,262 B2	12/2019	Tran et al.	
9,162,036 B2	10/2015	Caples et al.		10,525,236 B2	1/2020	Belson	
9,162,037 B2	10/2015	Belson et al.		10,688,280 B2	6/2020	Blanchard et al.	
9,180,275 B2	11/2015	Helm		10,688,281 B2	6/2020	Blanchard et al.	
D746,445 S *	12/2015	Lazarus	D24/127	10,722,685 B2	7/2020	Blanchard et al.	
9,205,231 B2	12/2015	Call et al.		2001/0014786 A1	8/2001	Greene et al.	
9,216,109 B2	12/2015	Badawi et al.		2001/0020153 A1	9/2001	Howell	
9,220,531 B2	12/2015	Datta et al.		2002/0052576 A1	5/2002	Massengale	
9,220,871 B2	12/2015	Thorne et al.		2002/0077595 A1	6/2002	Hundertmark et al.	
9,220,882 B2	12/2015	Belley et al.		2002/0103446 A1	8/2002	McFann et al.	
D748,254 S *	1/2016	Freigang	D24/133	2002/0107526 A1	8/2002	Greenberg et al.	
9,227,038 B2	1/2016	Woehr		2002/0128604 A1	9/2002	Nakajima	

US D903,101 S

2002/0165497	A1	11/2002	Greene	2008/0300574	A1	12/2008	Belson et al.
2002/0177812	A1	11/2002	Moulton et al.	2009/0018567	A1	1/2009	Escudero et al.
2003/0032922	A1	2/2003	Moorehead	2009/0030380	A1	1/2009	Binmoeller
2003/0032936	A1	2/2003	Lederman	2009/0036836	A1	2/2009	Nystrom et al.
2003/0060760	A1	3/2003	Botich et al.	2009/0048566	A1	2/2009	Ferguson et al.
2003/0073956	A1	4/2003	Hoffman et al.	2009/0131872	A1	5/2009	Popov
2003/0120214	A1	6/2003	Howell	2009/0157006	A1	6/2009	Nardeo et al.
2003/0153874	A1	8/2003	Tal	2009/0221961	A1	9/2009	Tal et al.
2003/0187396	A1	10/2003	Ponzi	2009/0292243	A1	11/2009	Harding et al.
2003/0204186	A1	10/2003	Geistert	2009/0299291	A1	12/2009	Baid
2004/0019329	A1	1/2004	Erskine	2010/0010441	A1	1/2010	Belson
2004/0034383	A1	2/2004	Belson	2010/0010447	A1	1/2010	Luther et al.
2004/0044302	A1	3/2004	Bernard et al.	2010/0036331	A1	2/2010	Sen
2004/0044313	A1	3/2004	Nakajima	2010/0056910	A1	3/2010	Yanuma
2004/0092879	A1	5/2004	Kraus et al.	2010/0087787	A1	4/2010	Woehr et al.
2004/0106903	A1	6/2004	Shue et al.	2010/0094310	A1	4/2010	Warring et al.
2004/0111059	A1	6/2004	Howlett et al.	2010/0137815	A1	6/2010	Kuracina et al.
2004/0122373	A1	6/2004	Botich et al.	2010/0168674	A1	7/2010	Shaw et al.
2004/0176758	A1	9/2004	Yassinzadeh	2010/0204654	A1	8/2010	Mulholland et al.
2004/0193118	A1	9/2004	Bergeron	2010/0204660	A1	8/2010	McKinnon et al.
2004/0215146	A1	10/2004	Lampropoulos et al.	2010/0204675	A1	8/2010	Woehr et al.
2004/0236288	A1	11/2004	Howell et al.	2010/0210934	A1	8/2010	Belson
2004/0243061	A1	12/2004	McGurk	2010/0238705	A1	9/2010	Kim et al.
2004/0267204	A1	12/2004	Brustowicz	2010/0246707	A1	9/2010	Michelitsch
2005/0004524	A1	1/2005	Newby et al.	2010/0331732	A1	12/2010	Raulerson et al.
2005/0010095	A1	1/2005	Stewart et al.	2011/0009827	A1	1/2011	Bierman et al.
2005/0020940	A1	1/2005	Opie et al.	2011/0015573	A1	1/2011	Maan et al.
2005/0021002	A1	1/2005	Deckman et al.	2011/0021994	A1	1/2011	Anderson et al.
2005/0027256	A1	2/2005	Barker et al.	2011/0125097	A1	5/2011	Shaw et al.
2005/0033137	A1	2/2005	Oral et al.	2011/0137252	A1	6/2011	Oster et al.
2005/0040061	A1	2/2005	Opie et al.	2011/0196315	A1	8/2011	Chappel
2005/0075606	A1	4/2005	Botich et al.	2011/0207157	A1	8/2011	Gautier et al.
2005/0107769	A1	5/2005	Thommen	2011/0218496	A1	9/2011	Bierman
2005/0119619	A1	6/2005	Haining	2011/0251559	A1	10/2011	Tal et al.
2005/0131350	A1	6/2005	Shaw et al.	2011/0276002	A1	11/2011	Bierman
2005/0165355	A1	7/2005	Fitzgerald	2011/0282285	A1	11/2011	Blanchard et al.
2005/0197623	A1	9/2005	Leeffang et al.	2011/0288482	A1	11/2011	Farrell et al.
2005/0245847	A1	11/2005	Schaeffer	2011/0306933	A1	12/2011	Djordjevic et al.
2005/0256505	A1	11/2005	Long et al.	2011/0319838	A1	12/2011	Goral et al.
2005/0273057	A1	12/2005	Popov	2012/0053523	A1	3/2012	Harding
2006/0025721	A1	2/2006	Duffy et al.	2012/0071857	A1	3/2012	Goldfarb et al.
2006/0079787	A1	4/2006	Whiting et al.	2012/0078231	A1	3/2012	Hoshinouchi
2006/0084964	A1	4/2006	Knudson et al.	2012/0101440	A1	4/2012	Kamen et al.
2006/0155245	A1	7/2006	Woehr	2012/0123332	A1	5/2012	Erskine
2006/0161115	A1	7/2006	Fangrow	2012/0123354	A1	5/2012	Woehr
2006/0167405	A1	7/2006	King et al.	2012/0157854	A1	6/2012	Kurrus et al.
2006/0200080	A1	9/2006	Abulhaj	2012/0179104	A1	7/2012	Woehr et al.
2006/0229563	A1	10/2006	O'Reagan et al.	2012/0184896	A1	7/2012	DeLegge et al.
2006/0264834	A1	11/2006	Vaillancourt	2012/0197200	A1	8/2012	Belson
2007/0043422	A1	2/2007	Shmulewitz et al.	2012/0220942	A1	8/2012	Hall et al.
2007/0060999	A1	3/2007	Randall et al.	2012/0220956	A1	8/2012	Kuracina et al.
2007/0083162	A1	4/2007	O'Reagan et al.	2012/0259293	A1	10/2012	Bialecki et al.
2007/0083188	A1	4/2007	Grandt et al.	2012/0271232	A1	10/2012	Katsurada et al.
2007/0100284	A1	5/2007	Leinsing et al.	2012/0296282	A1	11/2012	Koehler et al.
2007/0123803	A1	5/2007	Fujiwara et al.	2012/0316500	A1	12/2012	Bierman et al.
2007/0142779	A1	6/2007	Duane et al.	2012/0323181	A1	12/2012	Shaw et al.
2007/0179446	A1	8/2007	Carrez et al.	2013/0030391	A1	1/2013	Baid
2007/0191777	A1	8/2007	King	2013/0184645	A1	7/2013	Baid
2007/0193903	A1	8/2007	Opie et al.	2013/0204206	A1	8/2013	Morgan et al.
2007/0225647	A1	9/2007	Luther et al.	2013/0204226	A1	8/2013	Keyser
2007/0233007	A1	10/2007	Adams	2013/0218082	A1	8/2013	Hyer et al.
2007/0244438	A1	10/2007	Perez	2013/0304030	A1	11/2013	Gray et al.
2007/0255221	A1	11/2007	Nakajima	2013/0310764	A1	11/2013	Burkholz et al.
2007/0276288	A1	11/2007	Khaw	2013/0324930	A1	12/2013	Fuchs et al.
2008/0039796	A1	2/2008	Nakajima	2014/0012203	A1	1/2014	Woehr et al.
2008/0065011	A1	3/2008	Marchand et al.	2014/0031752	A1	1/2014	Blanchard et al.
2008/0082082	A1	4/2008	Carlyon et al.	2014/0039461	A1	2/2014	Anderson et al.
2008/0097330	A1	4/2008	King et al.	2014/0058329	A1	2/2014	Walker et al.
2008/0108911	A1	5/2008	Palmer et al.	2014/0058336	A1	2/2014	Burkholz et al.
2008/0108944	A1	5/2008	Woehr et al.	2014/0058357	A1	2/2014	Keyser et al.
2008/0108974	A1	5/2008	Yee Roth	2014/0073928	A1	3/2014	Yamashita et al.
2008/0125709	A1	5/2008	Chang et al.	2014/0074034	A1	3/2014	Tanabe et al.
2008/0131300	A1	6/2008	Junod et al.	2014/0088509	A1	3/2014	Sonderegger et al.
2008/0132846	A1	6/2008	Shue et al.	2014/0094774	A1	4/2014	Blanchard
2008/0147010	A1	6/2008	Nakajima et al.	2014/0094836	A1	4/2014	Feng et al.
2008/0243165	A1	10/2008	Mauch et al.	2014/0114239	A1	4/2014	Dib et al.
2008/0262430	A1	10/2008	Anderson et al.	2014/0128775	A1	5/2014	Andreae et al.
2008/0262431	A1	10/2008	Anderson et al.	2014/0135702	A1	5/2014	Woehr et al.
2008/0294111	A1	11/2008	Tal et al.	2014/0135703	A1	5/2014	Yeh et al.

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Page 9

WO	95/19193	A1	7/1995
WO	1995019193	A1	7/1995
WO	95/23003	A1	8/1995
WO	1995023003	A1	8/1995
WO	96/32981	A1	10/1996
WO	1996032981	A1	10/1996
WO	1996040359	A1	12/1996
WO	97/05912	A2	2/1997
WO	1997005912	A2	2/1997
WO	97/21458	A1	6/1997
WO	1997021458	A1	6/1997
WO	1997045151	A1	12/1997
WO	98/24494	A1	6/1998
WO	1998024494	A1	6/1998
WO	1998030268	A1	7/1998
WO	1998053875	A1	12/1998
WO	1999008742	A1	2/1999
WO	1999026682	A1	6/1999
WO	00/06226	A1	2/2000
WO	00/12160	A1	3/2000
WO	2000012167	A1	3/2000
WO	03/047675	A2	6/2000
WO	00/47256	A1	8/2000
WO	2001007103	A1	2/2001
WO	01/26725	A1	4/2001
WO	2002041932	A2	5/2002
WO	02/066093	A2	8/2002
WO	03/11381	A1	2/2003
WO	03/43686	A1	5/2003
WO	03/043686	A1	5/2003
WO	03/47675	A2	6/2003
WO	2004/018031	A2	3/2004
WO	2005002659	A1	1/2005
WO	2004106203	A3	3/2005
WO	2005/074412	A2	8/2005
WO	2005/087306	A1	9/2005
WO	2006062996	A2	6/2006
WO	2007006055	A2	1/2007
WO	2007/032343	A1	3/2007
WO	2007094841	A1	8/2007
WO	2007098355	A1	8/2007
WO	2007098359	A1	8/2007
WO	2008005618	A2	1/2008
WO	2008030999	A2	3/2008
WO	2008/131300	A2	10/2008
WO	2008137956	A2	11/2008
WO	2009/001309	A1	12/2008
WO	2008147600	A1	12/2008
WO	2009031161	A1	3/2009
WO	2009114837	A2	9/2009
WO	2009/124990	A1	10/2009
WO	2010015676	A1	2/2010
WO	2010/048449	A2	4/2010
WO	2010/132608	A2	11/2010
WO	2011036574	A1	3/2011
WO	2011143621	A1	11/2011
WO	2012106266	A1	8/2012
WO	2012154277	A1	11/2012
WO	2012174109	A1	12/2012
WO	2013119557	A1	8/2013
WO	2013126446	A1	8/2013
WO	2013187827	A1	12/2013
WO	2014006403	A1	1/2014
WO	2014029424	A1	2/2014
WO	2014074417	A2	5/2014
WO	2014081942	A1	5/2014
WO	2014/123848	A1	8/2014
WO	2014120741	A1	8/2014
WO	2014133617	A1	9/2014
WO	2014140257	A1	9/2014
WO	2014140265	A1	9/2014
WO	2014/165783	A1	10/2014
WO	2014158908	A1	10/2014
WO	2014182421	A1	11/2014
WO	2014197656	A1	12/2014
WO	2014204593	A1	12/2014
WO	2015017136	A1	2/2015
WO	2015024904	A1	2/2015
WO	2015035393	A1	3/2015

WO	2015058136	A1	4/2015
WO	15108913	A1	7/2015
WO	2015/168655	A2	11/2015
WO	15164912	A1	11/2015
WO	2016/037127	A1	3/2016
WO	16178974	A1	11/2016
WO	2018/049413	A1	3/2018
WO	2019173641	A1	9/2019

OTHER PUBLICATIONS

EP 12782187.4 filed Sep. 10, 2013 Office Action dated Nov. 28, 2018.

JP 2015-560173 filed Aug. 28, 2015 Office Action dated Aug. 2, 2018.

PCT/US2017/051214 filed Sep. 12, 2017 International Search Report and Written Opinion dated Nov. 13, 2017.

SG 11201709185X filed Nov. 8, 2017 Office Action dated Oct. 5, 2018.

SG 11201709193S filed Nov. 8, 2017 Office Action dated Oct. 5, 2018.

U.S. Appl. No. 14/846,387, filed Sep. 4, 2015 Notice of Allowance dated Oct. 29, 2018.

U.S. Appl. No. 14/866,441, filed Sep. 25, 2015 Notice of Allowance dated Oct. 17, 2018.

U.S. Appl. No. 15/154,808, filed May 13, 2016 Advisory Action dated Oct. 26, 2018.

U.S. Appl. No. 15/154,808, filed May 13, 2016 Final Office Action dated Aug. 16, 2018.

U.S. Appl. No. 15/377,880, filed Dec. 13, 2016 Final Office Action dated Oct. 19, 2018.

U.S. Appl. No. 15/481,773, filed Apr. 7, 2017 Final Office Action dated Jan. 10, 2019.

U.S. Appl. No. 15/481,773, filed Apr. 7, 2017 Non-Final Office Action dated Jun. 29, 2018.

U.S. Appl. No. 15/702,537, filed Sep. 12, 2017 Non-Final Office Action dated Nov. 29, 2018.

U.S. Appl. No. 15/154,384, filed May 13, 2016 Final Office Action dated Nov. 27, 2019.

U.S. Appl. No. 15/727,528, filed Oct. 6, 2017 Final Office Action dated Jan. 28, 2020.

U.S. Appl. No. 15/862,380, filed Jan. 4, 2018 Restriction Requirement dated Dec. 23, 2019.

U.S. Appl. No. 15/951,931, filed Apr. 12, 2018 Non-Final Office Action dated Nov. 19, 2019.

U.S. Appl. No. 15/951,931, filed Apr. 12, 2018 Notice of Allowance dated Feb. 20, 2020.

U.S. Appl. No. 15/951,954, filed Apr. 12, 2018 Notice of Allowance dated Feb. 23, 2020.

EP 16797029.2 filed Nov. 21, 2017 Office Action dated Mar. 27, 2020.

EP17849786.3 filed Apr. 12, 2019 Extended European Search Report dated May 13, 2020.

U.S. Appl. No. 14/250,093, filed Apr. 10, 2014 Patent Board Decision dated Jun. 8, 2020.

U.S. Appl. No. 15/727,528, filed Oct. 6, 2017 Notice of Allowance dated Mar. 27, 2020.

U.S. Appl. No. 15/869,872, filed Jan. 12, 2018 Non-Final Office Action dated Apr. 10, 2020.

U.S. Appl. No. 15/951,931, filed Apr. 12, 2018 Notice of Allowability dated Apr. 16, 2020.

U.S. Appl. No. 15/951,954, filed Apr. 12, 2018 Notice of Allowability dated Apr. 7, 2020.

U.S. Appl. No. 16/138,523, filed Sep. 21, 2018 Notice of Allowance dated Mar. 26, 2020.

U.S. Appl. No. 29/654,521, filed Jun. 25, 2018 Restriction Requirement dated Apr. 8, 2020.

U.S. Appl. No. 29/658,136, filed Jul. 27, 2018 Restriction Requirement dated May 11, 2020.

CN 201580022407.7 filed Nov. 2, 2016 Office Action dated Jan. 31, 2019.

EP 07783404.2 filed Jan. 19, 2009 Office Action dated Apr. 16, 2019.

- EP 16797047.4 filed Dec. 6, 2017 Supplemental European Search Report dated Jan. 9, 2019.
- JP 2016-563441 filed Oct. 19, 2016 Office Action dated Jan. 25, 2019.
- JP 2018-039302 filed Mar. 6, 2018 Office Action dated Feb. 20, 2019.
- U.S. Appl. No. 14/585,800, filed Dec. 30, 2014 Notice of Allowance dated Feb. 25, 2019.
- U.S. Appl. No. 15/154,384, filed May 13, 2016 Restriction Requirement dated Jan. 25, 2019.
- U.S. Appl. No. 15/154,808, filed May 13, 2016 Notice of Allowance dated Apr. 16, 2019.
- U.S. Appl. No. 15/702,537, filed Sep. 12, 2017 Final Office Action dated Mar. 8, 2019.
- Office action dated Mar. 10, 2011 for U.S. Appl. No. 12/307,519.
- Office action dated Mar. 15, 2011 for U.S. Appl. No. 11/577,491.
- Office action dated Mar. 27, 2013 for U.S. Appl. No. 13/358,099.
- Office action dated Aug. 2, 2010 for U.S. Appl. No. 11/577,491.
- Office action dated Aug. 18, 2014 for U.S. Appl. No. 11/577,491.
- Office action dated Oct. 25, 2010 for U.S. Appl. No. 12/307,519.
- Office action dated Nov. 4, 2013 for U.S. Appl. No. 12/307,519.
- Office action dated Mar. 12, 2015 for U.S. Appl. No. 11/577,491.
- PCT/CN2017/075370 filed Mar. 1, 2017 International Search Report and Written Opinion dated Nov. 30, 2017.
- PCT/US15/28950 filed May 1, 2015 International Search Report and Written Opinion dated Oct. 19, 2015.
- PCT/US2008/062954 filed May 7, 2008 International search report and written opinion dated Jan. 16, 2009.
- PCT/US2011/036530 filed May 13, 2011 International Search Report dated Oct. 6, 2011.
- PCT/US2011/036530 filed May 13, 2011 Written Opinion of the International Searching Authority dated Oct. 6, 2011.
- PCT/US2012/026618 International Preliminary Report on Patentability dated Aug. 27, 2013.
- PCT/US2012/026618 International Search Report and Written Opinion dated Jun. 25, 2012.
- PCT/US2013/073577 filed Dec. 6, 2013 International Search Report and Written Opinion dated Feb. 24, 2014.
- PCT/US2014/013557 filed Jan. 29, 2014 International search report and written opinion dated Apr. 14, 2014.
- PCT/US2015/048676 filed Sep. 4, 2015 International search report and written opinion dated Dec. 4, 2015.
- PCT/US2016/032449 filed May 13, 2016 International Search Report and Written Opinion dated Oct. 5, 2016.
- PCT/US2016/032534 filed May 13, 2016 International Search Report and Written Opinion dated Oct. 5, 2016.
- PR Newswire, Luther Medical Products, Inc. Receives Approval to Supply Improved Neonatal Product to Japan, Aug. 20, 1998.
- Razor, Julia S, Review of Catheter-related infection rates: comparison of conventional catheter materials with Aquavene®, JVAN vol. 1, No. 3, Spring 1991.
- RU 2017141812 filed Nov. 30, 2017 Office Action dated Jan. 31, 2018.
- U.S. Appl. No. 12/598,053, filed Apr. 20, 2010 Notice of allowance dated Jan. 16, 2014.
- U.S. Appl. No. 12/598,053, filed Apr. 20, 2010 Office action dated Aug. 28, 2013.
- U.S. Appl. No. 12/598,053, filed Apr. 20, 2010 Office action dated Dec. 4, 2012.
- U.S. Appl. No. 12/598,053, filed Apr. 20, 2010 Office action dated May 8, 2013.
- U.S. Appl. No. 12/598,053, filed Apr. 20, 2010 Office action dated Oct. 24, 2013.
- U.S. Appl. No. 13/107,781, filed May 13, 2011 Final Office Action dated Jul. 18, 2014.
- U.S. Appl. No. 13/107,781, filed May 13, 2011 Non-Final Office Action dated Dec. 30, 2013.
- U.S. Appl. No. 13/405,096, filed Feb. 24, 2012 Advisory Action dated Apr. 18, 2014.
- U.S. Appl. No. 13/405,096, filed Feb. 24, 2012 Final Office Action dated Jan. 31, 2014.
- U.S. Appl. No. 13/405,096, filed Feb. 24, 2012 Non-Final Office Action dated Aug. 20, 2013.
- U.S. Appl. No. 13/405,096, filed Feb. 24, 2012 Non-Final Office Action dated Nov. 18, 2014.
- U.S. Appl. No. 13/405,096, filed Feb. 24, 2012 Notice of Allowance dated Mar. 11, 2015.
- U.S. Appl. No. 14/044,623, filed Oct. 2, 2013 Notice of Allowance dated Nov. 6, 2014.
- U.S. Appl. No. 14/099,050, filed Dec. 6, 2013 Advisory Action dated Jun. 1, 2017.
- U.S. Appl. No. 14/099,050, filed Dec. 6, 2013 Final Office Action dated Jan. 30, 2017.
- U.S. Appl. No. 14/099,050, filed Dec. 6, 2013 Non-Final Office Action dated Dec. 22, 2015.
- U.S. Appl. No. 14/099,050, filed Dec. 6, 2013 Non-Final Office Action dated Jul. 19, 2016.
- U.S. Appl. No. 14/099,050, filed Dec. 6, 2013 Notice of Allowance dated Sep. 14, 2017.
- U.S. Appl. No. 14/099,050, filed Dec. 6, 2013 Notice of Panel Decision dated Aug. 1, 2017.
- U.S. Appl. No. 14/167,149, filed Jan. 29, 2014 Non-Final Office Action dated Oct. 21, 2015.
- U.S. Appl. No. 14/167,149, filed Jan. 29, 2014 Notice of Allowance dated Jul. 6, 2016.
- U.S. Appl. No. 14/174,071, filed Feb. 6, 2014 Final Office Action dated Dec. 2, 2016.
- U.S. Appl. No. 14/174,071, filed Feb. 6, 2014 Non-Final Office Action dated Jul. 29, 2016.
- U.S. Appl. No. 14/174,071, filed Feb. 6, 2014 Non-Final Office Action dated Mar. 31, 2016.
- U.S. Appl. No. 14/192,541, filed Feb. 27, 2014 Non-Final Office Action dated Jul. 20, 2016.
- U.S. Appl. No. 14/192,541, filed Feb. 27, 2014 Notice of Allowance dated Dec. 6, 2016.
- U.S. Appl. No. 14/192,541, filed Feb. 27, 2014 Notice of Corrected Allowability dated Mar. 8, 2017.
- Access Scientific, The PICC Wand® Product Data Sheet, Revision F, May 22, 2012.
- Access Scientific, The Powerwand® Extended Dwell Catheter Brochure (<http://accessscientific.com/media/4Fr-POWERWAND-Brochure.pdf>) last accessed Sep. 25, 2015.
- BD Angiocath™ Autoguard™ Shielded IV Catheter Brochure, © 2001.
- BD Medical Systems, I.V. Catheter Family Brochure (2006).
- BD Saf-T-Intima™ Integrated Safety IV Catheter Brochure, © 2001.
- Becton Dickinson, Insyte® AutoGuard™ Shielded I.V. Catheter Brochure, 1998.
- CA 2,799,360 filed May 13, 2011 Office Action dated Jun. 7, 2017.
- CN 201180029526.7 filed Dec. 14, 2012 First Office Action dated Apr. 21, 2014.
- CN 201280008866.6 filed Aug. 14, 2013 Second Office Action dated Aug. 17, 2015.
- CN 201280008866.6 filed Aug. 14, 2013 First Office Action dated Dec. 31, 2014.
- CN 201280008866.6 filed Aug. 14, 2013 Third Office Action dated Jan. 25, 2016.
- CN 201380073657.4 filed Aug. 21, 2015 Office Action dated Jun. 28, 2017.
- CN 201380073657.4 filed Aug. 21, 2015 Office Action dated Mar. 2, 2018.
- CN 201480019467.9 filed Sep. 29, 2015 Office Action dated Apr. 6, 2017.
- CN 201510079782.7 filed Feb. 13, 2015 Office Action dated Dec. 30, 2016.
- CN 2015100797821 filed Feb. 13, 2015 Office Action dated Feb. 5, 2018.
- CN 201510079782.7 filed Feb. 13, 2015 Office Action dated Sep. 19, 2017.
- Cook Medical “Lunderquist Extra-Stiff wire guide” (2012).
- Endovascular Today “Coiled Stainless Steel Guidewires” Buyer’s Guide pp. 13-20, (2012).
- EP 07783404.2 filed Jan. 19, 2009 Office Action dated Mar. 7, 2018.
- EP 10075422.5 filed Jul. 5, 2008 European search report and written opinion dated Dec. 1, 2010.

EP 11781384.0 filed Sep. 21, 2012 Extended European Search Report dated Oct. 31, 2017.

EP 12782187.4 filed Sep. 10, 2013 European search report and written opinion dated Aug. 30, 2016.

EP 12782187.4 filed Sep. 10, 2013 European search report and written opinion dated Dec. 17, 2015.

EP 12782187.4 filed Sep. 10, 2013 Office Action dated Apr. 24, 2018.

EP 13876666.2 filed Sep. 7, 2015 Extended European Search Report dated Sep. 20, 2016.

EP 15785819.2 filed Dec. 2, 2016 Extended European Search Report dated Dec. 4, 2017.

EP 16797029.2 filed Nov. 21, 2017 Extended European Search Report dated May 3, 2018.

European office action dated Apr. 21, 2008 for EP Application No. 06800027.2.

European office action dated Aug. 6, 2012 for EP Application No. 07783404.2.

European office action dated Oct. 5, 2010 for EP Application No. 07783404.2.

European search report and opinion dated Jul. 10, 2009 for EP Application No. 07783404.2.

Hadaway, Lynn C., A Midline Alternative to Central and Peripheral Venous Access, Caring Magazine, May 1990, pp. 45-50.

International search report and written opinion dated Apr. 2, 2012 for PCT/US2012/023192.

International search report and written opinion dated Jun. 1, 2007 for PCT/US2006/026671.

International search report and written opinion dated Oct. 23, 2008 for PCT/US2007/068393.

JP 2013-510353 filed Oct. 31, 2012 First Office Action dated Feb. 19, 2015.

JP 2013-510353 filed Oct. 31, 2012 Office Action dated Dec. 15, 2016.

JP 2013-510353 filed Oct. 31, 2012 Second Office Action dated Jan. 28, 2016.

JP 2015-560173 filed Aug. 28, 2015 Office Action dated Sep. 19, 2017.

JP 2016-107046 filed May 30, 2016 Office Action dated Apr. 26, 2017.

JP 2016-107046 filed May 30, 2016 Office Action dated Jul. 28, 2016.

JP 2016-107046 filed May 30, 2016 Office Action dated Nov. 7, 2017.

Menlo Care, Landmark™ Aquavene® Catheters Brochure, 1992.

Menlo Care, Landmark® Midline Catheter Maintenance and Reference Guide (1993).

Menlo Care, Landmark® Midline Catheters Brochure, 1991.

Menlo Care, Landmark® Venous Access Device Insertion Instructions (1992).

Menlo Care, Publications on Aquavene® Technology, Aug. 1992.

Notice of allowance dated Jan. 29, 2014 for U.S. Appl. No. 12/307,519.

Notice of allowance dated Jun. 10, 2015 for U.S. Appl. No. 11/577,491.

CN 201580022407.7 filed Nov. 2, 2016 Office Action dated Sep. 16, 2019.

EP 19181963.0 filed Jun. 24, 2019 Extended European Search Report dated Jul. 16, 2019.

U.S. Appl. No. 15/154,384, filed May 13, 2016 Non-Final Office Action dated Jun. 28, 2019.

U.S. Appl. No. 15/608,802, filed May 30, 2017 Non-Final Office Action dated Jun. 6, 2019.

U.S. Appl. No. 15/702,537, filed Sep. 12, 2017 Notice of Allowance dated Jul. 31, 2019.

U.S. Appl. No. 15/727,528, filed Oct. 6, 2017 Non-Final Office Action dated Sep. 20, 2019.

U.S. Appl. No. 15/727,528, filed Oct. 6, 2017 Restriction Requirement dated Aug. 7, 2019.

U.S. Appl. No. 15/951,954, filed Apr. 12, 2018 Non-Final Office Action dated Nov. 4, 2019.

U.S. Appl. No. 14/250,093, filed Apr. 10, 2014 Advisory Action dated May 19, 2017.

U.S. Appl. No. 14/250,093, filed Apr. 10, 2014 Examiner's Answer dated Jun. 20, 2018.

U.S. Appl. No. 14/250,093, filed Apr. 10, 2014 Final Office Action dated Mar. 9, 2017.

U.S. Appl. No. 14/250,093, filed Apr. 10, 2014 Final Office Action dated Nov. 6, 2017.

U.S. Appl. No. 14/250,093, filed Apr. 10, 2014 Non-Final Office Action dated Nov. 16, 2016.

U.S. Appl. No. 14/250,093, filed Apr. 10, 2014 Panel Decision dated Jul. 14, 2017.

U.S. Appl. No. 14/477,717, filed Sep. 4, 2014, Notice of allowance dated Feb. 17, 2015.

U.S. Appl. No. 14/477,717, filed Sep. 4, 2014, Office action dated Dec. 18, 2014.

U.S. Appl. No. 14/585,800, filed Dec. 30, 2014 Final Office Action dated May 11, 2018.

U.S. Appl. No. 14/585,800, filed Dec. 30, 2014 Non-Final Office Action dated May 16, 2016.

U.S. Appl. No. 14/585,800, filed Dec. 30, 2014 Non-Final Office Action dated Nov. 29, 2016.

U.S. Appl. No. 14/585,800, filed Dec. 30, 2014 Non-Final Office Action dated Nov. 3, 2017.

U.S. Appl. No. 14/585,800, filed Dec. 30, 2014 Non-Final Office Action dated Oct. 8, 2015.

U.S. Appl. No. 14/585,800, filed Dec. 30, 2014 Notice of Allowance dated Jul. 3, 2017.

U.S. Appl. No. 14/702,580, filed May 1, 2015 Advisory Action dated Nov. 13, 2017.

U.S. Appl. No. 14/702,580, filed May 1, 2015 Final Office Action dated Sep. 1, 2017.

U.S. Appl. No. 14/702,580, filed May 1, 2015 Non-Final Office Action dated May 3, 2017.

U.S. Appl. No. 14/702,580, filed May 1, 2015 Notice of Allowance dated Dec. 8, 2017.

U.S. Appl. No. 14/750,658, filed Jun. 25, 2016 Non-Final Office Action dated Mar. 9, 2017.

U.S. Appl. No. 14/750,658, filed Jun. 25, 2016 Notice of Allowance dated Jul. 20, 2017.

U.S. Appl. No. 14/846,387, filed Sep. 4, 2015 Advisory Action dated May 10, 2018.

U.S. Appl. No. 14/846,387, filed Sep. 4, 2015 Final Office Action dated Mar. 22, 2018.

U.S. Appl. No. 14/846,387, filed Sep. 4, 2015 Non-Final Office Action dated Sep. 22, 2017.

U.S. Appl. No. 14/866,441, filed Sep. 25, 2015 Advisory Action dated Dec. 22, 2016.

U.S. Appl. No. 14/866,441, filed Sep. 25, 2015 Final Office Action dated Jun. 5, 2018.

U.S. Appl. No. 14/866,441, filed Sep. 25, 2015 Final Office Action dated Sep. 23, 2016.

U.S. Appl. No. 14/866,441, filed Sep. 25, 2015 Non-Final Office Action dated Apr. 7, 2017.

U.S. Appl. No. 14/866,441, filed Sep. 25, 2015 Non-Final Office Action dated Mar. 14, 2016.

U.S. Appl. No. 14/866,738, filed Sep. 25, 2015 Final Office Action dated Feb. 24, 2017.

U.S. Appl. No. 14/866,738, filed Sep. 25, 2015 Non-Final Office Action dated Nov. 6, 2017.

U.S. Appl. No. 14/866,738, filed Sep. 25, 2015 Non-Final Office Action dated Oct. 31, 2016.

U.S. Appl. No. 14/866,738, filed Sep. 25, 2015 Notice of Panel Decision dated Jun. 23, 2017.

U.S. Appl. No. 14/876,735, filed Oct. 6, 2015 Non-Final Office Action dated Mar. 30, 2017.

U.S. Appl. No. 15/154,808, filed May 13, 2016 Non-Final Office Action dated Apr. 6, 2018.

U.S. Appl. No. 15/154,808, filed May 13, 2016 Restriction Requirement dated Jan. 3, 2018.

U.S. Appl. No. 15/377,880, filed Dec. 13, 2016 Non-Final Office Action dated May 14, 2018.

U.S. Appl. No. 15/692,915, filed Aug. 31, 2017 Non-Final Office Action dated Jan. 29, 2018.

U.S. Appl. No. 29/536,043, filed Aug. 12, 2015 Final Office Action dated Mar. 26, 2018.

U.S. Appl. No. 29/536,043, filed Aug. 12, 2015 Non-Final Office Action dated Aug. 31, 2017.

U.S. Appl. No. 29/545,436, filed Nov. 12, 2015 Final Office Action dated Mar. 26, 2018.

U.S. Appl. No. 29/545,436, filed Nov. 12, 2015 Non-Final Office Action dated Sep. 12, 2017.

Waltimire, B. and Rasor, J.S., Midline catheter: Virtually bloodless insertion technique and needle safety tube minimize potential for transmission of bloodborne disease. Sponsored by national Foundation for Infectious Diseases. 5th National forum on AIDS, Hepatitis, and other blood-borne diseases. Atlanta, GA, Mar. 1992.

U.S. Appl. No. 14/250,093, filed Apr. 10, 2014 Notice of Allowance dated Aug. 19, 2020.

U.S. Appl. No. 14/866,738, filed Sep. 25, 2015 Patent Board Decision dated Jul. 13, 2020.

U.S. Appl. No. 15/154,384, filed May 13, 2016 Non-Final Office Action dated Jun. 26, 2020.

U.S. Appl. No. 15/862,380, filed Jan. 4, 2018 Non-Final Office Action dated Jul. 9, 2020.

U.S. Appl. No. 15/869,872, filed Jan. 12, 2018 Final Office Action dated Jun. 25, 2020.

U.S. Appl. No. 16/292,076, filed Mar. 4, 2019 Non-Final Office Action dated Aug. 10, 2020.

U.S. Appl. No. 16/295,906, filed Mar. 7, 2019 Non-Final Office Action dated Sep. 4, 2020.

U.S. Appl. No. 29/654,521, filed Jun. 25, 2018 Notice of Allowance dated Aug. 17, 2020.

U.S. Appl. No. 29/658,136, filed Jul. 27, 2018 Non-Final Office Action dated Sep. 9, 2020.

* cited by examiner

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(57) **CLAIM**

The ornamental design for a catheter, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of a first embodiment of a catheter;

FIG. 2 is a bottom perspective view of the catheter illustrated in FIG. 1;

FIG. 3 is a first side view of the catheter illustrated in FIG. 1;

FIG. 4 is a second side view of the catheter illustrated in FIG. 1;

FIG. 5 is a third side view of the catheter illustrated in FIG. 1;

FIG. 6 is a fourth side view of the catheter illustrated in FIG. 1;

FIG. 7 is a rear view of the catheter illustrated in FIG. 1; and, FIG. 8 is a front view of the catheter illustrated in FIG. 1.

1 Claim, 4 Drawing Sheets

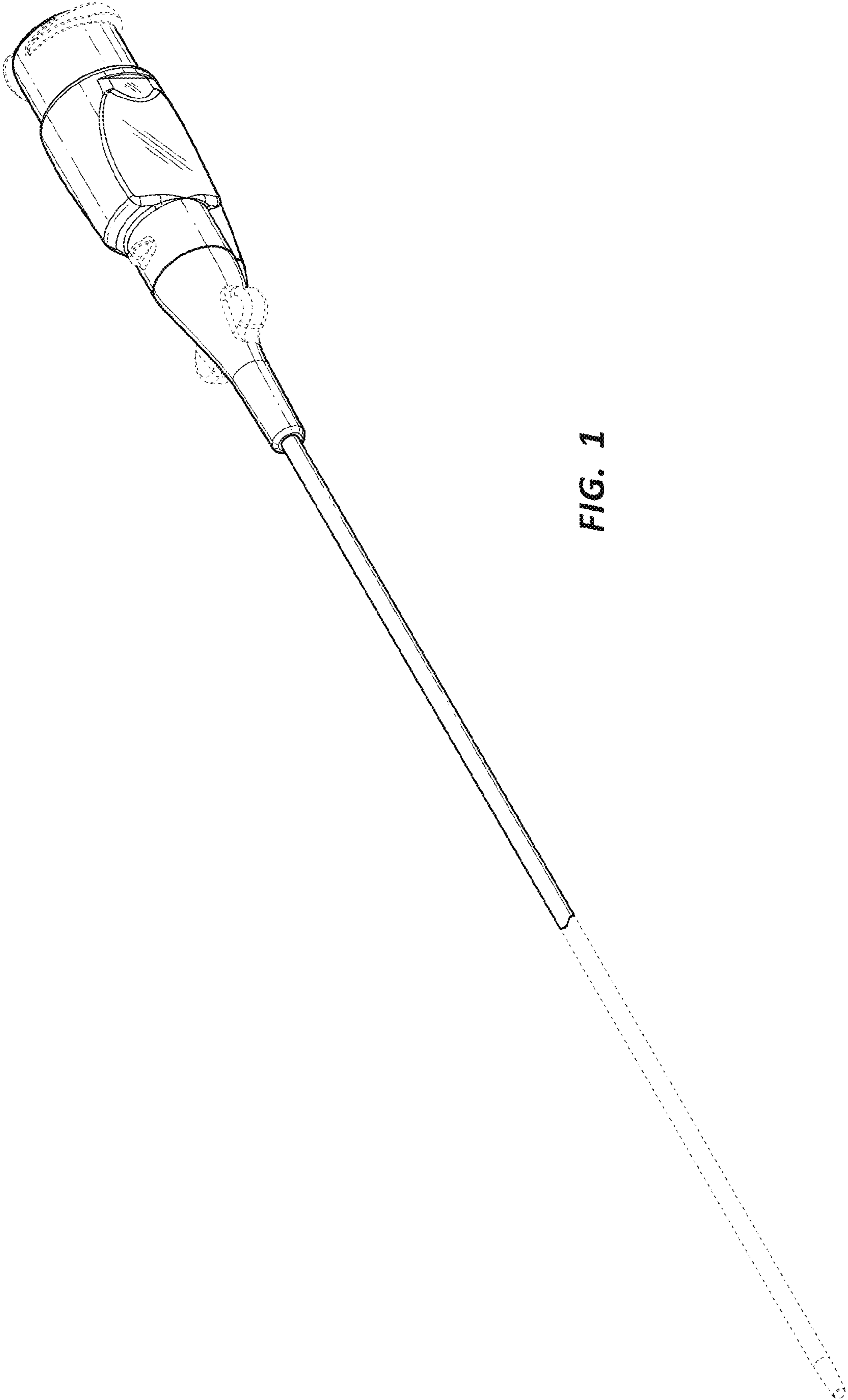


FIG. 1

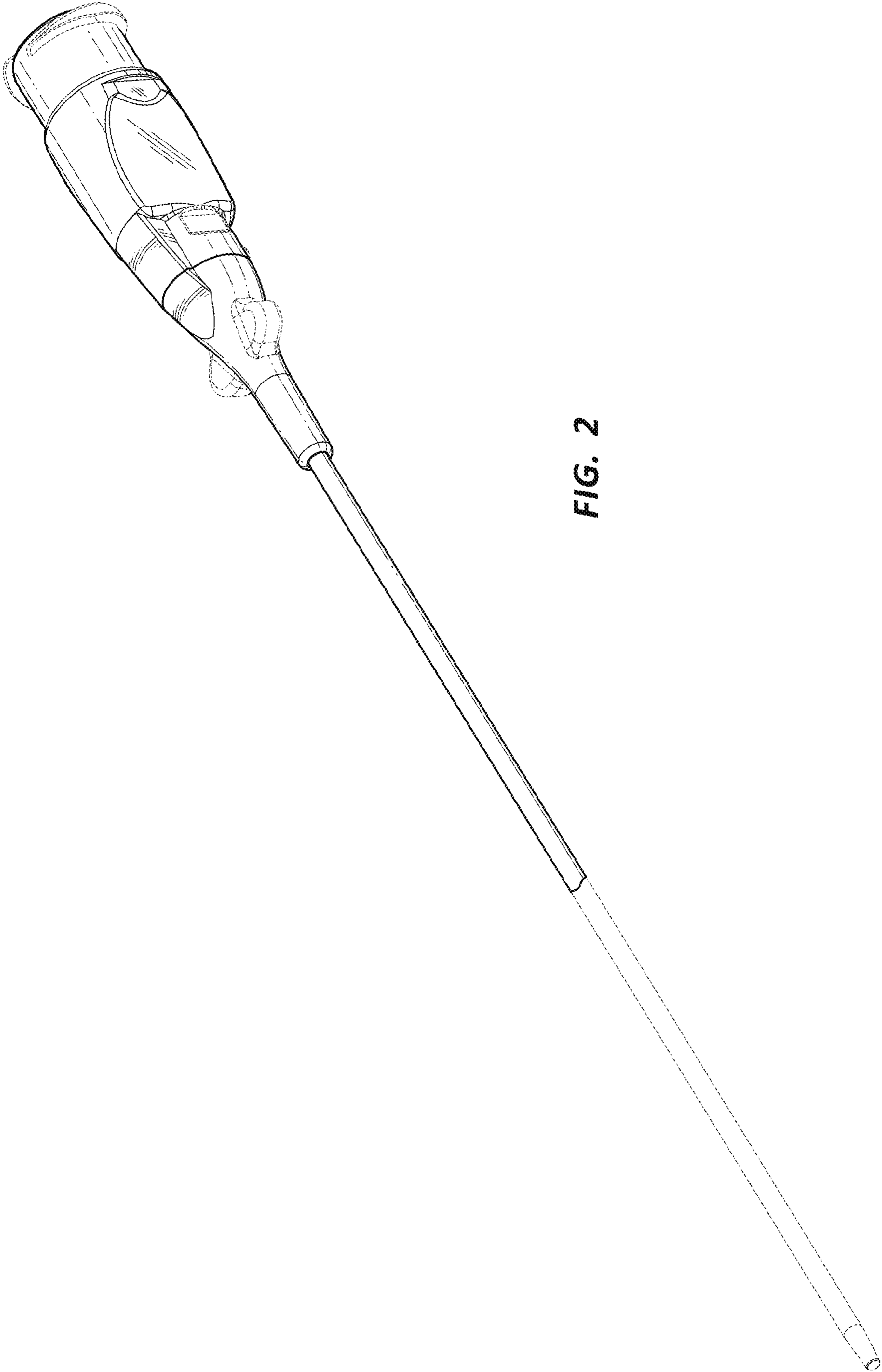


FIG. 2

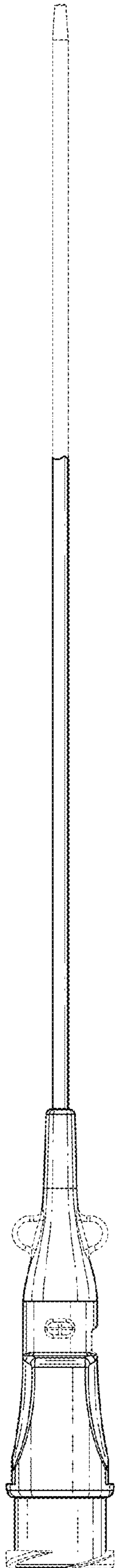


FIG. 3

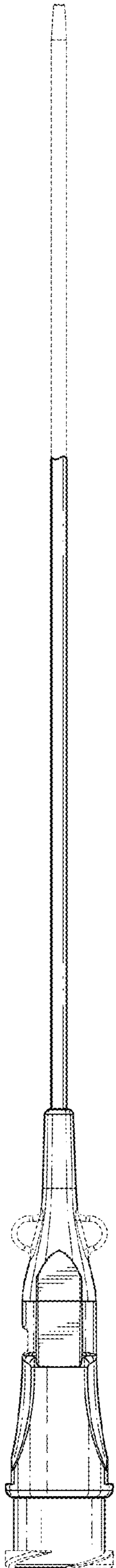


FIG. 4

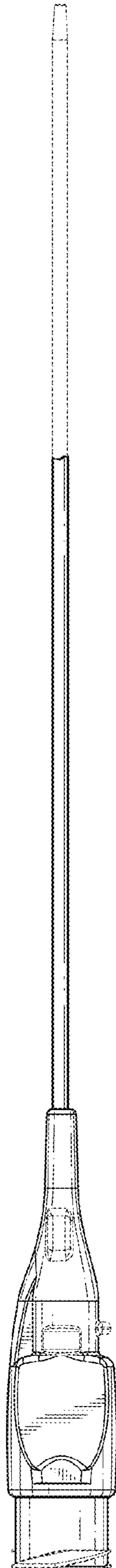


FIG. 5

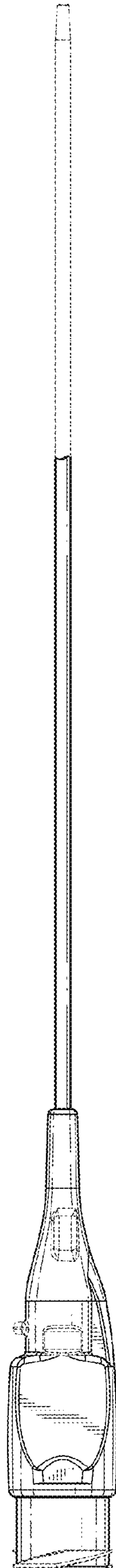


FIG. 6

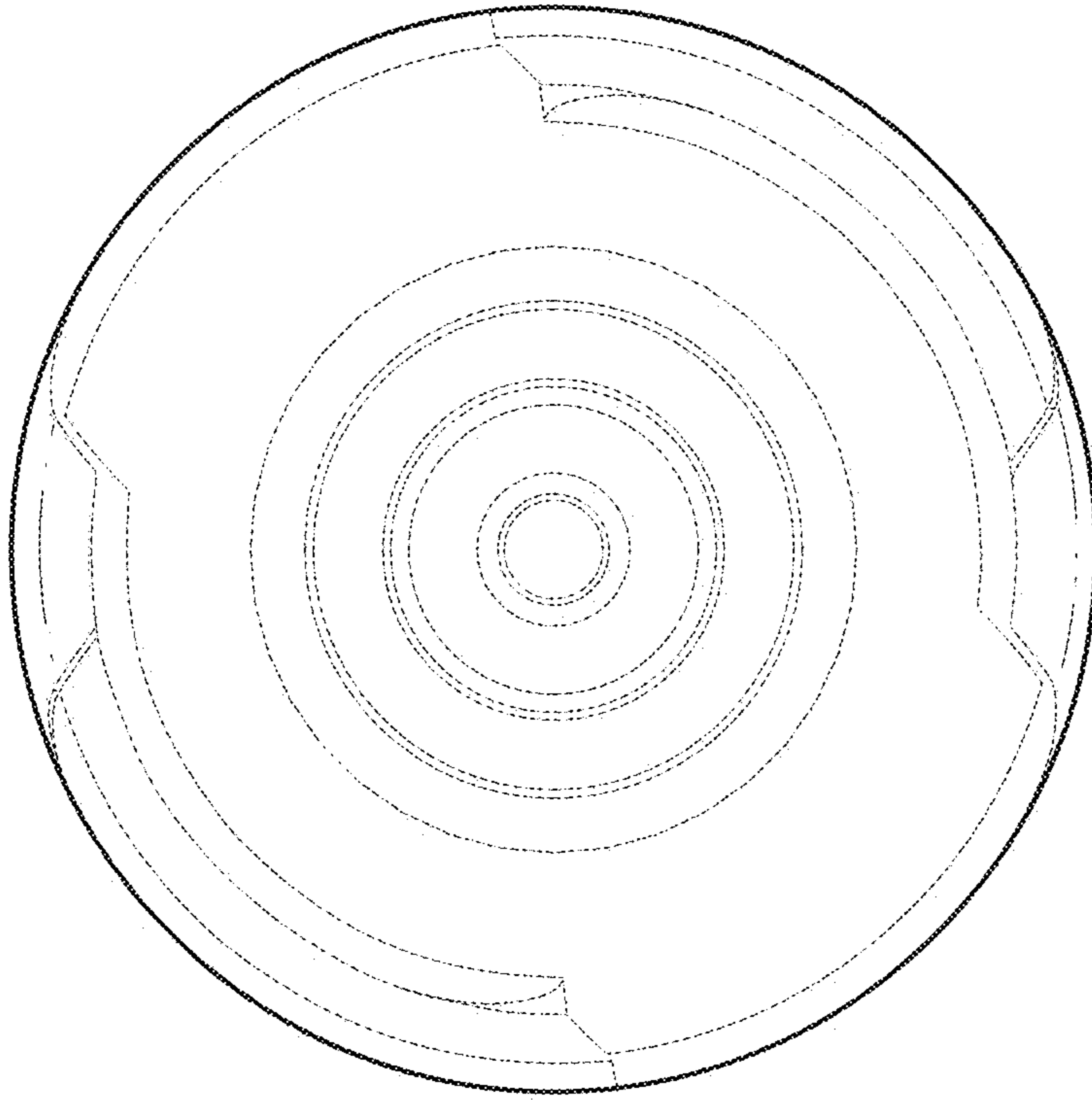


FIG. 8

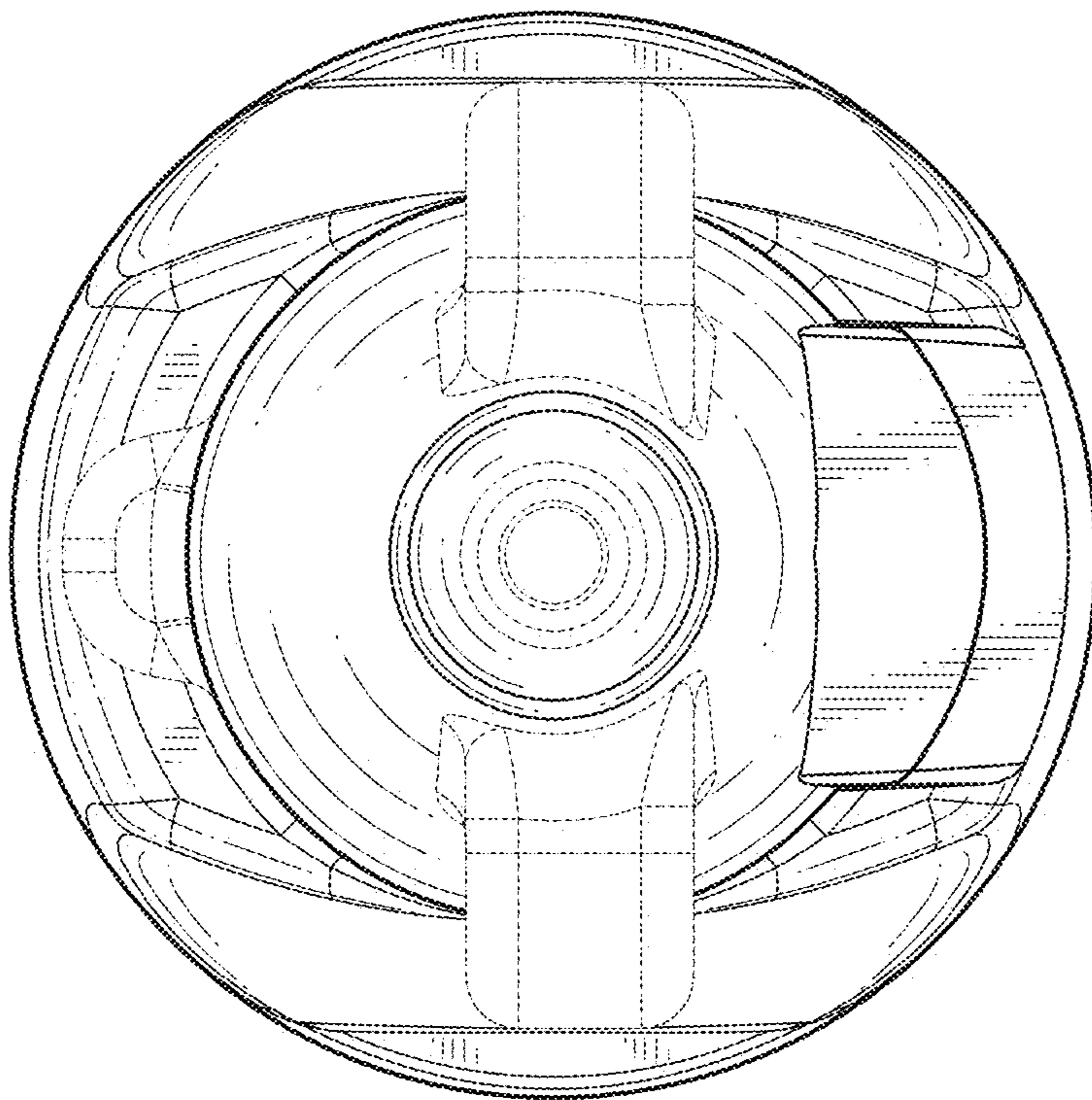


FIG. 7