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(54) **EVQ PRESSURE SENSOR FILTER OF AN EXHALATION MODULE**

(71) Applicant: **Covidien LP**, Boulder, CO (US)

(72) Inventor: **David Phillip Winter**, Encinitas, CA (US)

(73) Assignee: **Covidien LP**, Mansfield, MA (US)

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

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(51) **LOC (10) Cl.** **29-02**

(52) **U.S. Cl.**
USPC **D24/162; D24/110**

(58) **Field of Classification Search**
USPC D24/107, 110, 110.6, 129, 127, 162, D24/164, 108, 121; 600/529, 538, 543, 532
CPC A61B 5/08; A61B 5/4818; A61B 5/097; A61B 5/091; A61B 5/087; A61M 16/10; A61M 16/20

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,444,857 A	5/1969	Godel	
3,481,333 A	12/1969	Garrison	
3,485,243 A	12/1969	Bird et al.	
3,688,794 A	9/1972	Bird et al.	
3,815,754 A *	6/1974	Rosenberg	210/445
4,241,756 A *	12/1980	Bennett et al.	137/496
D260,175 S *	8/1981	Hein et al.	D24/162
D262,484 S *	12/1981	Ward et al.	D23/209
D266,190 S	9/1982	Herman	
4,527,557 A	7/1985	DeVries et al.	
4,608,976 A	9/1986	Suchy	
4,699,137 A	10/1987	Schroeder	
RE32,553 E	12/1987	Bennett et al.	
4,712,580 A	12/1987	Gilman et al.	

4,727,871 A	3/1988	Smargiassi et al.
4,747,403 A	5/1988	Gluck et al.
4,752,089 A	6/1988	Carter
4,880,411 A	11/1989	Fangrow et al.
4,921,642 A	5/1990	LaTorraca
4,954,799 A	9/1990	Kumar
4,956,148 A	9/1990	Grandone
4,957,107 A	9/1990	Sipin
4,991,576 A	2/1991	Henkin et al.
4,993,269 A	2/1991	Guillaume et al.
5,000,173 A	3/1991	Zalkin et al.

(Continued)

FOREIGN PATENT DOCUMENTS

WO WO 2007/102866 9/2007

OTHER PUBLICATIONS

7200 Series Ventilator, Options, and Accessories: Operator's Manual. Nellcor Puritan Bennett, Part No. 22300 A, Sep. 1990, pp. 1-196.

(Continued)

Primary Examiner — Deanna L Pratt

Assistant Examiner — Lilyana Bekic

(57) **CLAIM**

The ornamental design for an EVQ pressure sensor filter of an exhalation module, as shown and described.

DESCRIPTION

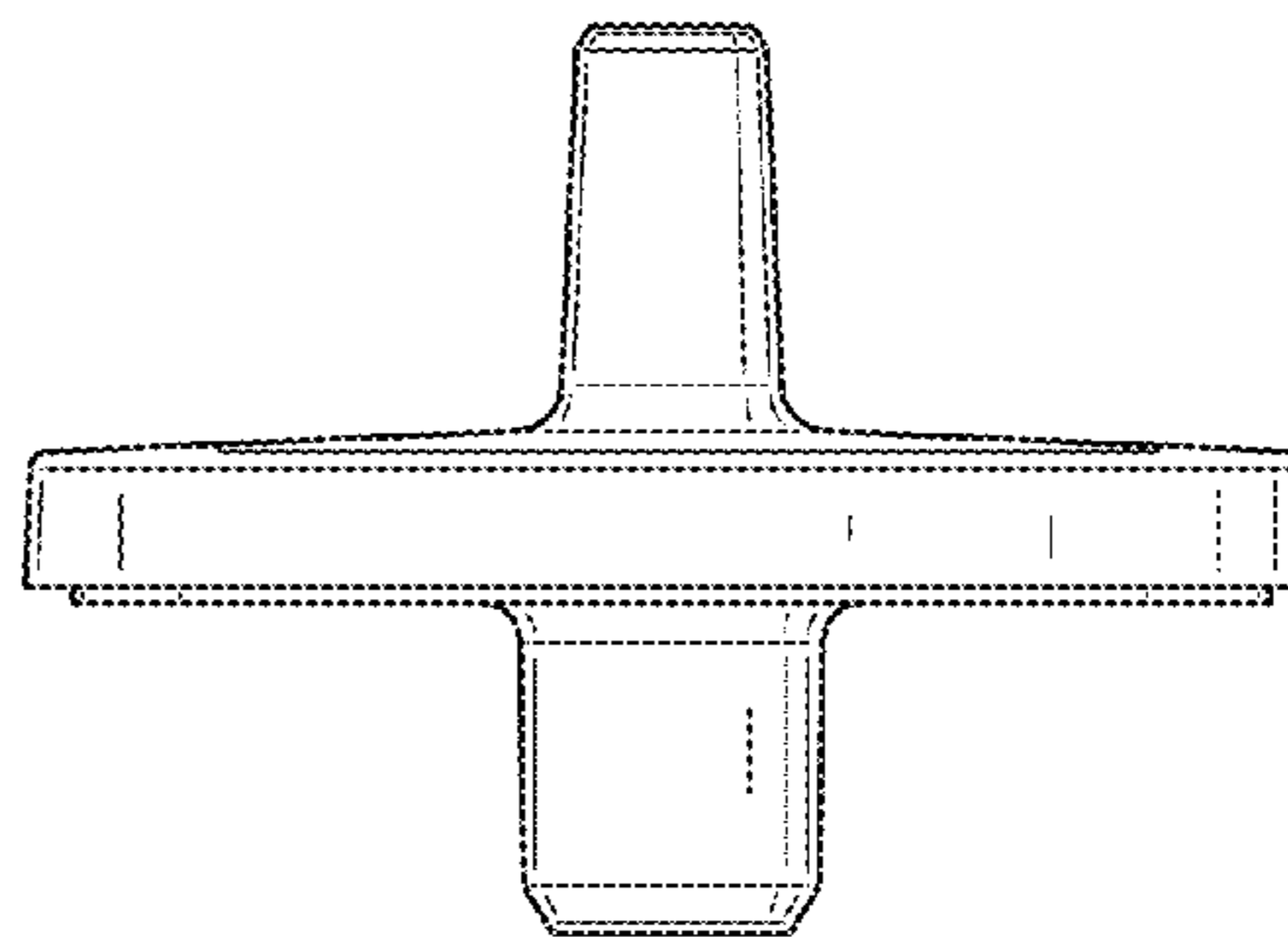
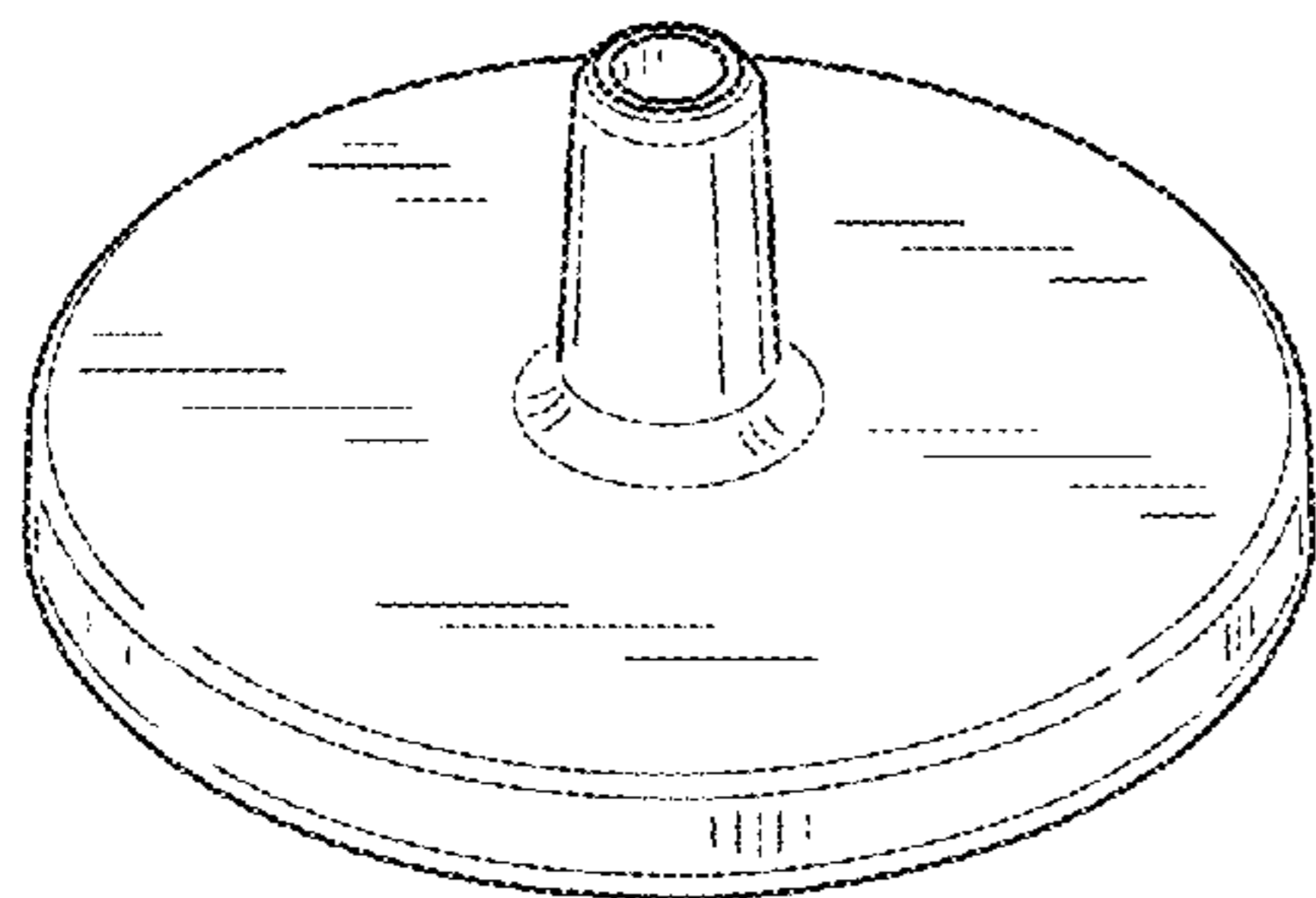
FIG. 1 is a perspective view of an EVQ pressure sensor filter of an exhalation module showing a new design.

FIG. 2 is a side view of an EVQ pressure sensor filter of an exhalation module showing a new design.

FIG. 3 is a top view of an EVQ pressure sensor filter of an exhalation module showing a new design; and,

FIG. 4 is a bottom view of an EVQ pressure sensor filter of an exhalation module showing a new design.

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

7,891,354 B2	2/2011	Farbarik	2008/0053438 A1	3/2008	DeVries et al.
7,893,560 B2	2/2011	Carter	2008/0053441 A1	3/2008	Gottlib et al.
7,900,626 B2	3/2011	Daly	2008/0060646 A1	3/2008	Isaza
7,913,690 B2	3/2011	Fisher et al.	2008/0060656 A1	3/2008	Isaza
D636,878 S *	4/2011	Lee D24/162	2008/0072896 A1	3/2008	Setzer et al.
D638,852 S	5/2011	Skidmore et al.	2008/0072902 A1	3/2008	Setzer et al.
7,984,714 B2	7/2011	Hausmann et al.	2008/0078390 A1	4/2008	Milne et al.
D643,535 S	8/2011	Ross et al.	2008/0083644 A1	4/2008	Janbakhsh et al.
7,992,557 B2	8/2011	Nadjafizadeh et al.	2008/0092894 A1	4/2008	Nicolazzi et al.
8,001,967 B2	8/2011	Wallace et al.	2008/0097234 A1	4/2008	Nicolazzi et al.
D645,158 S	9/2011	Sanchez et al.	2008/0135044 A1	6/2008	Freitag et al.
8,021,310 B2	9/2011	Sanborn et al.	2008/0183094 A1	7/2008	Schonfuss et al.
D649,157 S	11/2011	Skidmore et al.	2008/0196720 A1	8/2008	Kollmeyer et al.
D652,521 S	1/2012	Ross et al.	2008/0202517 A1	8/2008	Mitton et al.
D652,936 S	1/2012	Ross et al.	2008/0202518 A1	8/2008	Mitton et al.
D653,749 S	2/2012	Winter et al.	2008/0214947 A1	9/2008	Hunt et al.
8,113,062 B2	2/2012	Graboi et al.	2008/0230062 A1	9/2008	Tham
D655,405 S	3/2012	Winter et al.	2008/0257349 A1	10/2008	Hedner et al.
D655,809 S	3/2012	Winter et al.	2008/0276939 A1	11/2008	Tiedje
D656,237 S	3/2012	Sanchez et al.	2009/0000621 A1	1/2009	Haggblom et al.
D659,254 S	5/2012	Miyashita et al.	2009/0007914 A1	1/2009	Bateman
8,176,916 B2 *	5/2012	Pedarzini et al. 128/205.12	2009/0050153 A1	2/2009	Brunner
8,181,648 B2	5/2012	Perine et al.	2009/0056708 A1	3/2009	Stenzler et al.
8,210,173 B2	7/2012	Vandine	2009/0056719 A1	3/2009	Newman, Jr.
8,210,174 B2	7/2012	Farbarik	2009/0071478 A1	3/2009	Kalfon
8,240,684 B2	8/2012	Ross et al.	2009/0078251 A1	3/2009	Zucchi et al.
8,267,085 B2	9/2012	Jafari et al.	2009/0084381 A1	4/2009	DeVries et al.
8,272,379 B2	9/2012	Jafari et al.	2009/0090359 A1	4/2009	Daviet et al.
8,272,380 B2	9/2012	Jafari et al.	2009/0114223 A1	5/2009	Bonassa
8,302,600 B2	11/2012	Andrieux et al.	2009/0133695 A1	5/2009	Rao et al.
8,302,602 B2	11/2012	Andrieux et al.	2009/0137919 A1	5/2009	Bar-Lavie et al.
D692,556 S	10/2013	Winter	2009/0165795 A1	5/2009	Nadjafizadeh et al.
D693,001 S	11/2013	Winter	2009/0171176 A1	7/2009	Andersohn
D693,923 S *	11/2013	Hernandez et al. D24/129	2009/0188502 A1	7/2009	Tiedje
D701,601 S	3/2014	Winter	2009/0205661 A1	8/2009	Stephenson et al.
2002/0026941 A1	3/2002	Biondi et al.	2009/0205663 A1	8/2009	Vandine et al.
2002/0138213 A1	9/2002	Mault	2009/0217923 A1	9/2009	Boehm et al.
2003/0062045 A1	4/2003	Woodring et al.	2009/0221926 A1	9/2009	Younes
2004/0094149 A1 *	5/2004	Natale 128/201.13	2009/0229612 A1	9/2009	Levi et al.
2004/0138577 A1	7/2004	Kline	2009/0235935 A1	9/2009	Pacey
2004/0261793 A1	12/2004	Stromberg et al.	2009/0241948 A1	10/2009	Clancy et al.
2005/0039748 A1	2/2005	Andrieux	2009/0241951 A1	10/2009	Jafari et al.
2005/0098177 A1	5/2005	Haj-Yahya et al.	2009/0241952 A1	10/2009	Nicolazzi et al.
2005/0139211 A1	6/2005	Alston et al.	2009/0241953 A1	10/2009	Vandine et al.
2005/0139212 A1	6/2005	Bourdon	2009/0241955 A1	10/2009	Jafari et al.
2005/0150494 A1	7/2005	DeVries et al.	2009/0241956 A1	10/2009	Baker, Jr. et al.
2005/0217671 A1	10/2005	Fisher et al.	2009/0241957 A1	10/2009	Baker, Jr.
2006/0032499 A1	2/2006	Halsnes	2009/0241958 A1	10/2009	Baker, Jr.
2006/0129054 A1	6/2006	Orr et al.	2009/0241962 A1	10/2009	Jafari et al.
2006/0130839 A1	6/2006	Bassovitch	2009/0241964 A1	10/2009	Aljuri et al.
2006/0201507 A1	9/2006	Breen	2009/0247891 A1	10/2009	Wood
2006/0249148 A1	11/2006	Younes	2009/0250054 A1	10/2009	Loncar et al.
2006/0249153 A1	11/2006	DeVries et al.	2009/0250059 A1	10/2009	Allum et al.
2007/0000494 A1	1/2007	Banner et al.	2009/0255533 A1	10/2009	Freitag et al.
2007/0017515 A1	1/2007	Wallace et al.	2009/0260625 A1	10/2009	Wondka
2007/0028921 A1	2/2007	Banner et al.	2009/0263279 A1	10/2009	Kline et al.
2007/0062531 A1	3/2007	Fisher et al.	2009/0270752 A1	10/2009	Coifman
2007/0068530 A1	3/2007	Pacey	2009/0277448 A1	11/2009	Ahlmén et al.
2007/0073183 A1	3/2007	Kline	2009/0293877 A1	12/2009	Blanch et al.
2007/0077200 A1	4/2007	Baker	2009/0299430 A1	12/2009	Davies et al.
2007/0095347 A1	5/2007	Lampotang et al.	2009/0301486 A1	12/2009	Masic
2007/0101999 A1 *	5/2007	Duquette et al. 128/207.14	2009/0301487 A1	12/2009	Masic
2007/0113854 A1	5/2007	Mcauliffe	2009/0301490 A1	12/2009	Masic
2007/0125377 A1	6/2007	Heinonen et al.	2009/0301491 A1	12/2009	Masic et al.
2007/0144521 A1	6/2007	DeVries et al.	2010/0011307 A1	1/2010	Desfossez et al.
2007/0144523 A1	6/2007	Bolam et al.	2010/0012126 A1	1/2010	Gandini
2007/0157930 A1	7/2007	Soliman et al.	2010/0024820 A1	2/2010	Bourdon
2007/0157931 A1	7/2007	Parker et al.	2010/0031961 A1	2/2010	Schmidt
2007/0163579 A1	7/2007	Li et al.	2010/0051026 A1	3/2010	Graboi
2007/0225612 A1	9/2007	Mace et al.	2010/0051029 A1	3/2010	Jafari et al.
2007/0227537 A1	10/2007	Bemister et al.	2010/0059058 A1	3/2010	Kuo
2007/0232952 A1	10/2007	Baddour	2010/0069761 A1	3/2010	Karst et al.
2007/0255160 A1	11/2007	Daly	2010/0071689 A1	3/2010	Thiessen
2007/0284361 A1	12/2007	Nadjafizadeh et al.	2010/0071692 A1	3/2010	Porges
2008/0045825 A1	2/2008	Melker et al.	2010/0071695 A1	3/2010	Thiessen
			2010/0071696 A1	3/2010	Jafari
			2010/0071697 A1	3/2010	Jafari et al.
			2010/0078017 A1	4/2010	Andrieux et al.
			2010/0078026 A1	4/2010	Andrieux et al.

(56)

References Cited

OTHER PUBLICATIONS

U.S. Appl. No. 29/447,977, Notice of Allowance mailed Sep. 30, 2013, 2 pgs.
U.S. Appl. No. 29/448,065, Notice of Allowance mailed Sep. 12, 2013, 2 pgs.
U.S. Appl. No. 29/448,065, Notice of Allowance mailed Sep. 30, 2013, 2 pgs.
U.S. Appl. No. 29/448,082, Notice of Allowance mailed Sep. 17, 2013, 2 pgs.

U.S. Appl. No. 29/448,082, Notice of Allowance mailed Sep. 30, 2013, 2 pgs.
U.S. Appl. No. 29/447,977, Notice of Allowance mailed Sep. 3, 2013, 2 pgs.
U.S. Appl. No. 29/448,065, Notice of Allowance mailed Jul. 10, 2013, 9 pgs.
U.S. Appl. No. 29/448,082, Notice of Allowance mailed Jul. 9, 2013, 9 pgs.
U.S. Appl. No. 29/447,977, Notice of Allowance mailed Jul. 31, 2013, 10 pgs.

* cited by examiner

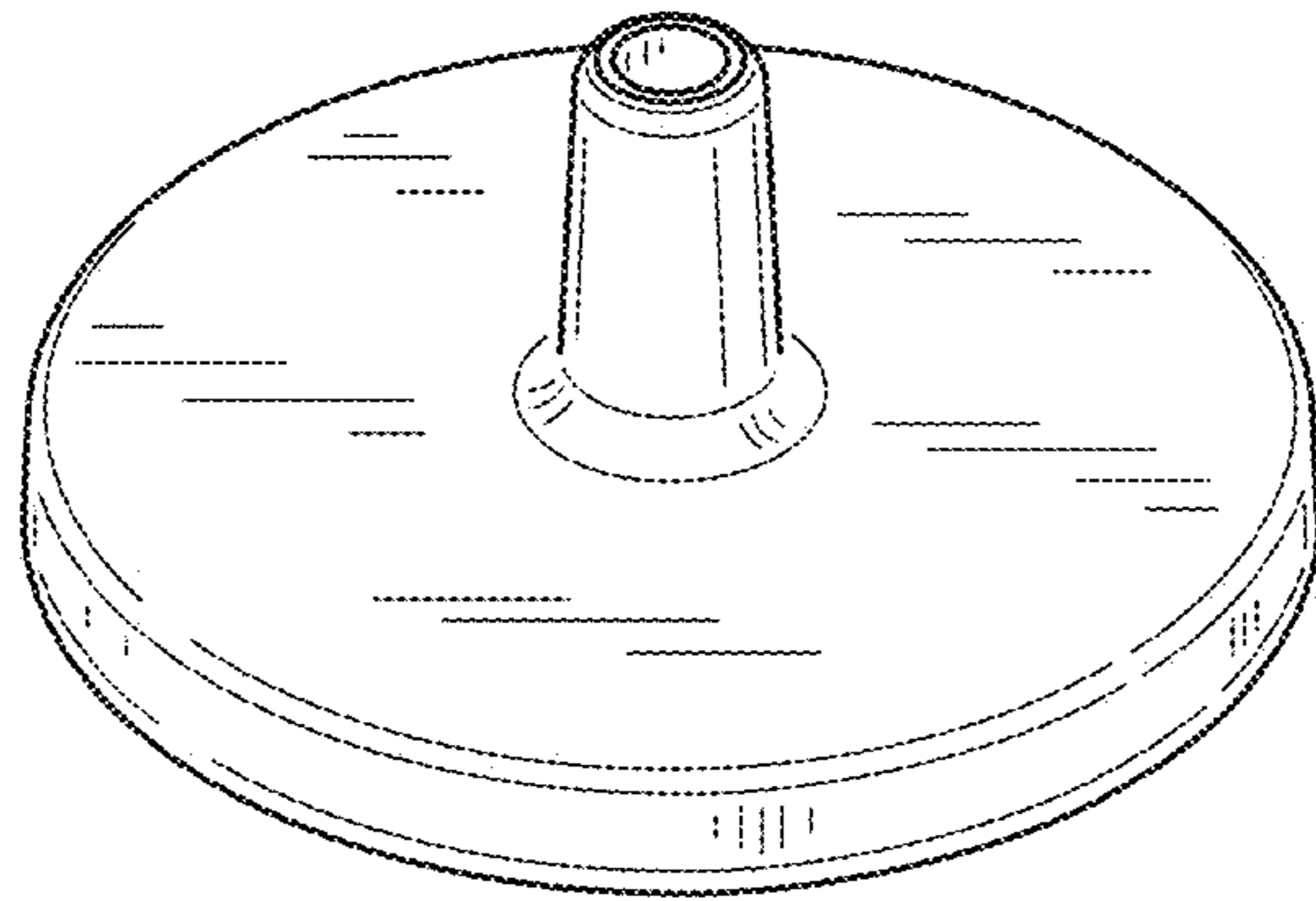


FIG. 1

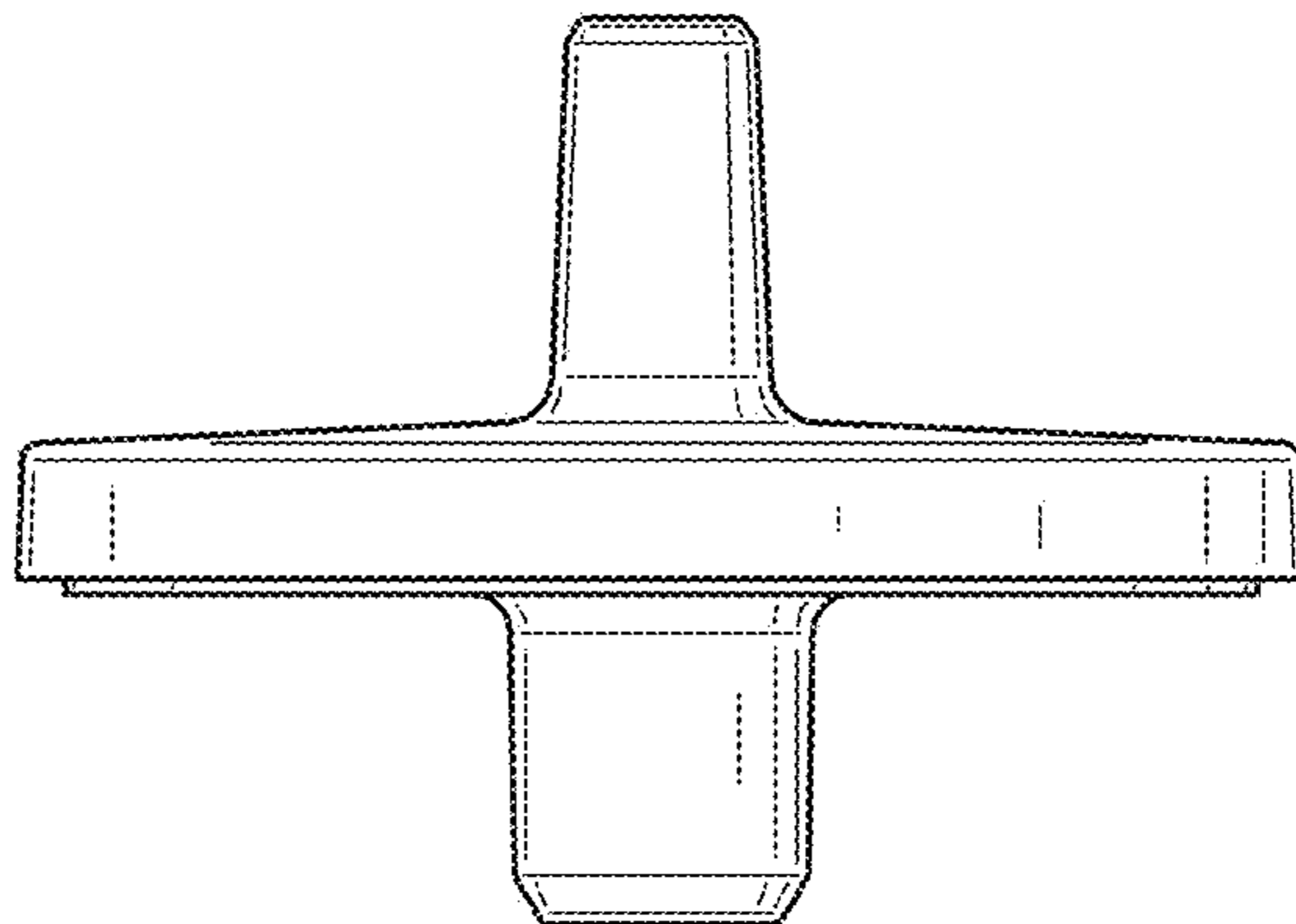


FIG. 2

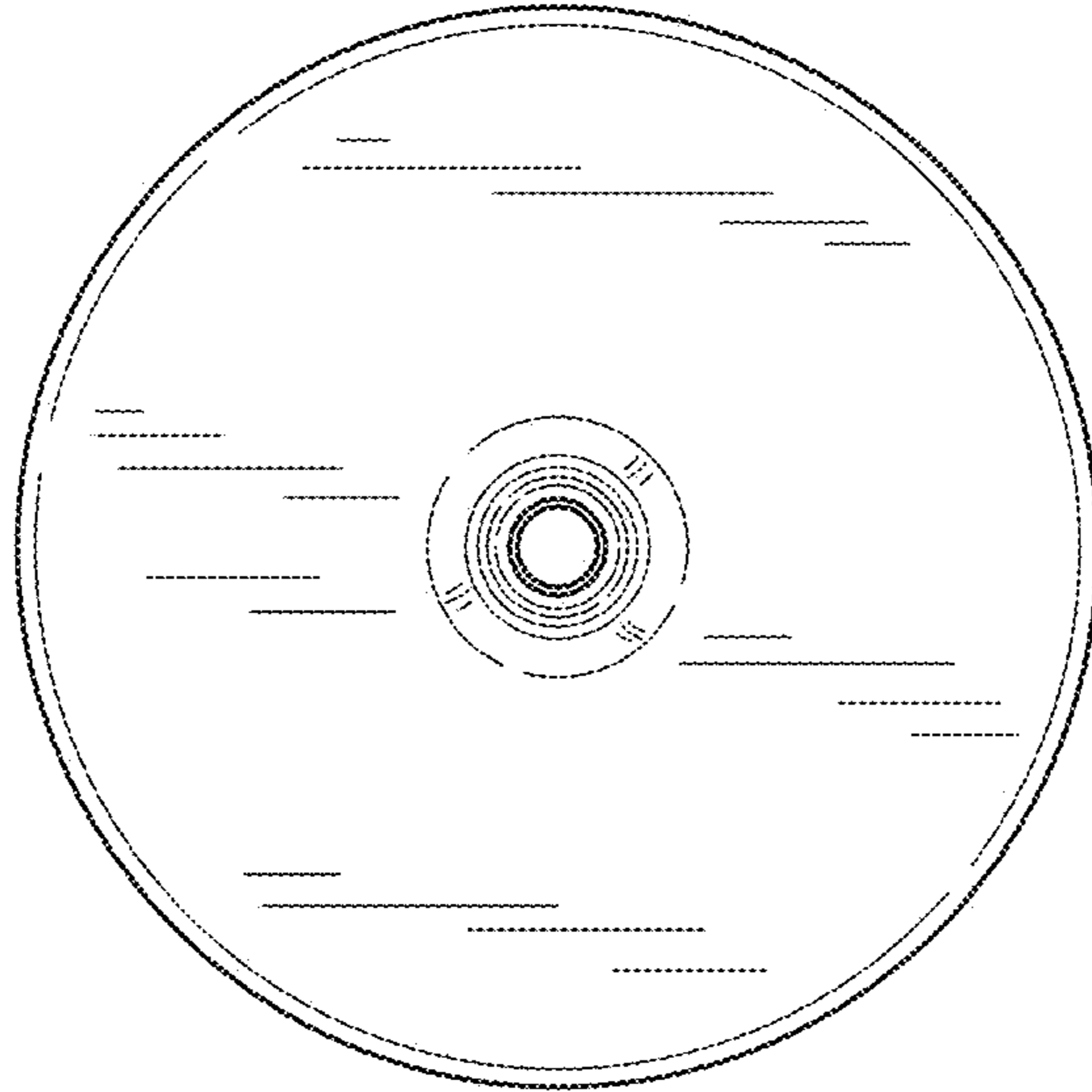


FIG.3

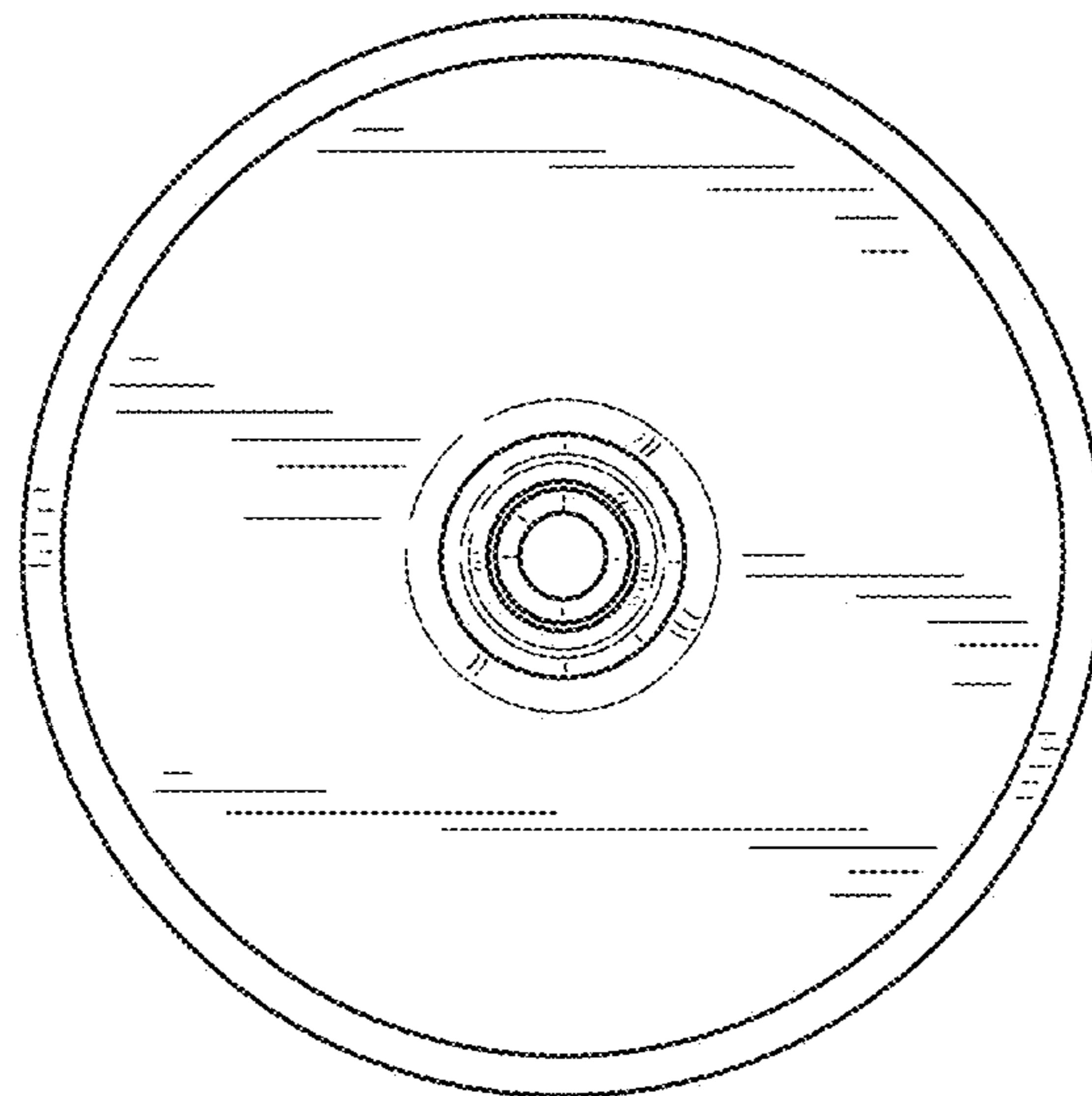


FIG.4