

US00D667561S

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

(10) **Patent No.:** **US D667,561 S**
(45) **Date of Patent:** **** Sep. 18, 2012**

(54) **SAMPLE PROCESSING DISK COVER**

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(73) Assignee: **3M Innovative Properties Company**, St. Paul, MN (US)

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

(21) Appl. No.: **29/384,821**

(22) Filed: **Feb. 4, 2011**

Related U.S. Application Data

(63) Continuation-in-part of application No. 29/350,262, filed on Nov. 13, 2009, now Pat. No. Des. 638,550, and a continuation-in-part of application No. 12/617,905, filed on Nov. 13, 2009.

(51) **LOC (9) Cl.** **24-01**

(52) **U.S. Cl.** **D24/216**

(58) **Field of Classification Search** D24/216, D24/217, 219, 231, 232, 107, 169, 186; D10/81; 422/500, 547, 62-65, 67, 72; 435/287.1, 435/287.3; 436/43, 45, 47; 356/246; 494/16
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,555,284 A	1/1971	Anderson
3,713,124 A	1/1973	Durland et al.
3,795,451 A	3/1974	Mailen
3,798,459 A	3/1974	Anderson et al.
3,856,470 A	12/1974	Cullis et al.
3,873,217 A	3/1975	Anderson et al.
3,912,799 A	10/1975	Chisholm
3,964,867 A	6/1976	Berry
4,030,834 A	6/1977	Bauer et al.
4,046,511 A	9/1977	Stabile

4,111,304 A	9/1978	Lucas
4,123,173 A	10/1978	Bullock et al.
4,244,916 A	1/1981	Guigan
4,252,538 A	2/1981	Barr
4,256,696 A	3/1981	Soodak
4,298,570 A	11/1981	Lillig
4,384,193 A	5/1983	Kledzik et al.
4,390,499 A	6/1983	Curtis et al.
4,396,579 A	8/1983	Schroeder et al.
D271,993 S	12/1983	Swartz

(Continued)

FOREIGN PATENT DOCUMENTS

CA 0169306 5/1990

(Continued)

OTHER PUBLICATIONS

Handbook of Pressure Sensitive Adhesive Technology, Donatas Satas (Ed.) 2nd Edition, Title page, Publication page, Table of Contents, and p. 172, and Fig. 8-16 on p. 173, Van Nostrand Reinhold, New York, NY 1989.

(Continued)

Primary Examiner — Anhdao Doan

(74) *Attorney, Agent, or Firm* — Nicole J. Einerson

(57) **CLAIM**

The ornamental design for a sample processing disk cover, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of a sample processing disk cover, showing the new design.

FIG. 2 is a bottom perspective view thereof;

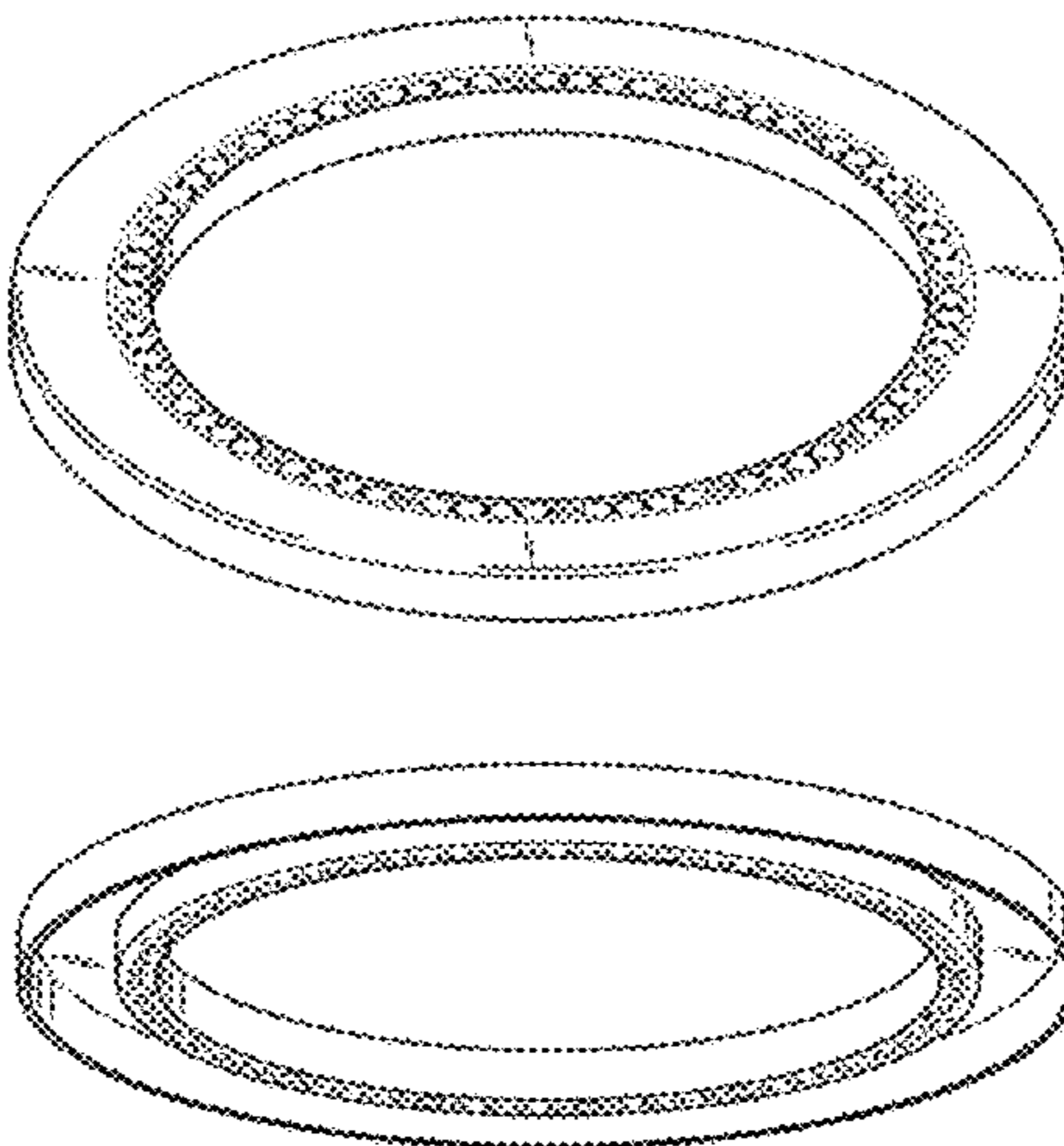
FIG. 3 is a top plan view thereof;

FIG. 4 is a side elevational view thereof; and,

FIG. 5 is a bottom plan view thereof.

The broken lines in the drawings are included for the purpose of illustrating portions of the sample processing disk cover that form no part of the claimed design.

1 Claim, 3 Drawing Sheets



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U.S. PATENT DOCUMENTS							
4,456,581	A	6/1984	Edelmann et al.	5,819,842	A	10/1998	Potter et al.
D274,553	S	7/1984	Perry	5,822,903	A	10/1998	Davis, Sr.
4,476,733	A	10/1984	Chlosta et al.	5,833,923	A	11/1998	McClintock et al.
4,488,810	A	12/1984	Hatanaka et al.	5,856,194	A	1/1999	Arnquist
4,498,896	A	2/1985	Leis	5,863,502	A	1/1999	Southgate et al.
D277,891	S	3/1985	Uffenheimer et al.	5,863,801	A	1/1999	Southgate et al.
4,554,436	A	11/1985	Chlosta et al.	5,869,002	A	2/1999	Limon et al.
4,580,896	A	4/1986	Brickus et al.	5,876,675	A	3/1999	Kennedy
4,632,908	A	12/1986	Schultz	5,886,863	A	3/1999	Nagasaki et al.
D288,124	S	2/1987	Brickus et al.	5,922,617	A	7/1999	Wang et al.
4,673,657	A	6/1987	Christian	5,925,455	A	7/1999	Bruzzzone et al.
4,695,430	A	9/1987	Coville et al.	5,948,227	A	9/1999	Dubrow
4,766,078	A	* 8/1988	Gang 435/287.3	5,976,468	A	11/1999	Godec et al.
4,814,279	A	3/1989	Sugaya	5,997,818	A	12/1999	Hacker et al.
4,839,296	A	6/1989	Kennedy et al.	6,001,643	A	12/1999	Spaulding
4,906,432	A	3/1990	Geiselman	6,007,690	A	12/1999	Nelson et al.
4,933,146	A	6/1990	Meyer et al.	6,007,914	A	12/1999	Joseph et al.
4,981,801	A	1/1991	Suzuki et al.	6,013,513	A	1/2000	Reber et al.
4,990,075	A	2/1991	Wogoman	6,030,581	A	2/2000	Virtanen
5,049,591	A	9/1991	Hayashi et al.	6,048,457	A	4/2000	Kopaciewicz et al.
5,079,155	A	1/1992	Cox et al.	6,063,589	A	5/2000	Kellogg et al.
5,086,337	A	2/1992	Noro et al.	6,068,751	A	5/2000	Neukermans
5,128,197	A	7/1992	Kobayashi et al.	6,074,827	A	6/2000	Nelson et al.
5,135,786	A	8/1992	Hayashi et al.	6,093,370	A	7/2000	Yasuda et al.
5,139,832	A	8/1992	Hayashi et al.	6,103,199	A	8/2000	Bjornson et al.
D329,024	S	9/1992	Marks	6,143,247	A	11/2000	Sheppard, Jr. et al.
5,145,935	A	9/1992	Hayashi	6,143,248	A	11/2000	Kellogg et al.
5,149,505	A	9/1992	English	6,153,012	A	11/2000	Rupp et al.
5,154,888	A	10/1992	Zander et al.	6,168,759	B1	1/2001	Green et al.
5,182,083	A	1/1993	Barker et al.	6,168,948	B1	1/2001	Anderson et al.
5,207,987	A	5/1993	Kureshy et al.	6,183,693	B1	2/2001	Bogen et al.
5,219,526	A	6/1993	Long	6,184,029	B1	2/2001	Wilding et al.
5,229,297	A	7/1993	Schnipelsky et al.	6,190,617	B1	2/2001	Clark et al.
5,242,370	A	9/1993	Silver	6,197,595	B1	3/2001	Anderson et al.
5,254,479	A	10/1993	Chemelli	6,200,474	B1	3/2001	Kopaciewicz et al.
5,258,163	A	11/1993	Krause et al.	D441,873	S	5/2001	Köhler
5,264,184	A	11/1993	Aysta et al.	6,265,168	B1	7/2001	Gjerde et al.
5,278,377	A	1/1994	Tsai	6,284,113	B1	9/2001	Bjornson et al.
5,281,516	A	1/1994	Stapleton et al.	6,296,809	B1	10/2001	Richards et al.
5,288,463	A	2/1994	Chemelli	6,302,134	B1	10/2001	Kellogg et al.
5,310,523	A	5/1994	Smethers et al.	6,306,273	B1	10/2001	Wainright et al.
5,336,467	A	8/1994	Heidt et al.	6,319,469	B1	11/2001	Mian et al.
5,411,065	A	5/1995	Meador et al.	6,344,326	B1	2/2002	Nelson et al.
5,415,839	A	5/1995	Zaun et al.	6,375,898	B1	4/2002	Ulrich et al.
5,422,271	A	6/1995	Chen et al.	6,391,264	B2	5/2002	Hammer et al.
5,429,810	A	7/1995	Knaepler et al.	6,399,025	B1	6/2002	Chow
5,438,128	A	8/1995	Nieuwkerk et al.	6,413,782	B1	7/2002	Parce et al.
5,439,649	A	8/1995	Tseung et al.	6,432,365	B1	8/2002	Levin et al.
5,446,270	A	8/1995	Chamberlain et al.	6,440,725	B1	8/2002	Pourahmadi et al.
5,460,780	A	10/1995	Devaney, Jr. et al.	6,450,047	B2	9/2002	Swedberg et al.
5,461,134	A	10/1995	Leir et al.	6,451,260	B1	9/2002	Düsterhöft et al.
5,464,541	A	11/1995	Aysta et al.	6,461,287	B1	10/2002	Glater
5,496,518	A	3/1996	Arai et al.	6,465,225	B1	10/2002	Fuhr et al.
5,496,520	A	3/1996	Kelton et al.	6,467,275	B1	10/2002	Ghoshal
5,525,514	A	6/1996	Jacobs et al.	6,479,300	B1	11/2002	Jiang et al.
5,527,931	A	6/1996	Rich et al.	6,527,432	B2	3/2003	Kellogg et al.
5,529,708	A	6/1996	Palmgren et al.	6,532,997	B1	3/2003	Bedingham et al.
5,571,410	A	11/1996	Swedberg et al.	6,548,788	B2	4/2003	Kellogg et al.
5,578,270	A	11/1996	Reichler et al.	6,558,947	B1	5/2003	Lund et al.
5,587,128	A	12/1996	Wilding et al.	6,565,808	B2	5/2003	Hudak et al.
5,593,838	A	1/1997	Zanzucchi et al.	6,566,637	B1	5/2003	Revesz et al.
5,599,501	A	2/1997	Carey et al.	6,572,830	B1	6/2003	Burdon et al.
5,601,141	A	2/1997	Gordon et al.	6,582,662	B1	6/2003	Kellogg et al.
5,604,130	A	2/1997	Warner et al.	6,593,143	B1	7/2003	Gordon
5,616,301	A	4/1997	Moser et al.	6,617,136	B2	9/2003	Parthasarathy et al.
5,637,469	A	6/1997	Wilding et al.	6,627,159	B1	9/2003	Bedingham et al.
5,639,428	A	6/1997	Cottingham	6,632,399	B1	10/2003	Kellogg et al.
5,639,810	A	6/1997	Smith, III et al.	6,645,758	B1	11/2003	Schnipelsky et al.
5,691,208	A	11/1997	Miltenyi et al.	6,648,853	B1	11/2003	McEntee
RE35,716	E	1/1998	Stapleton et al.	6,660,147	B1	12/2003	Woudenberg et al.
5,720,923	A	2/1998	Haff et al.	6,664,104	B2	12/2003	Pourahmadi et al.
5,721,123	A	2/1998	Hayes et al.	6,692,596	B2	2/2004	Moll et al.
5,726,026	A	3/1998	Wilding et al.	6,706,519	B1	3/2004	Kellogg et al.
5,792,372	A	8/1998	Brown et al.	6,720,187	B2	4/2004	Bedingham et al.
5,795,547	A	8/1998	Moser et al.	6,723,236	B2	4/2004	Fisk et al.
5,800,785	A	9/1998	Bochner	6,730,516	B2	5/2004	Jedrzejewski et al.
5,804,141	A	9/1998	Chianese	6,734,401	B2	5/2004	Bedingham et al.
5,811,296	A	9/1998	Chemelli et al.	6,780,818	B2	8/2004	Gundel et al.
				6,814,935	B2	11/2004	Harms et al.

US D667,561 S

6,824,738	B1	11/2004	Neeper et al.	EP	0 281 368	9/1988
6,889,468	B2	5/2005	Bedingham et al.	EP	0693560	1/1996
6,987,253	B2	1/2006	Bedingham et al.	EP	0807486	11/1997
7,026,168	B2	4/2006	Bedingham et al.	EP	0 965 388	12/1999
7,144,726	B2	12/2006	Takagi	EP	0810030	3/2003
7,164,107	B2	1/2007	Bedingham et al.	EP	1 010 979	10/2003
7,192,560	B2	3/2007	Parthasarathy et al.	JP	60-57259	4/1985
7,273,591	B2	9/2007	Sellers et al.	JP	3712624	11/1988
D557,425	S	12/2007	Nakamura	JP	9-72912	3/1997
D559,993	S	1/2008	Nagakubo	JP	11124419	5/1999
D559,994	S	1/2008	Nagakubo	JP	0 807 468	12/2001
D560,284	S	1/2008	Nagakubo	JP	2003-504637	2/2003
7,322,254	B2	1/2008	Bedingham et al.	JP	2003-180331	7/2003
7,323,660	B2	1/2008	Bedingham et al.	JP	2004-525339	8/2004
7,332,326	B1	2/2008	Kellogg et al.	JP	2005-514014	5/2005
D564,667	S	3/2008	Bedingham	JP	2005-274241	10/2005
7,396,508	B1	7/2008	Richards et al.	JP	2009-216395	9/2009
7,435,933	B2	10/2008	Bedingham et al.	WO	WO 91/19567	12/1991
7,569,186	B2	8/2009	Bedingham et al.	WO	WO 94/26414	11/1994
D600,722	S	9/2009	Yabe	WO	WO 94/29400	12/1994
D605,206	S	12/2009	Yabe	WO	WO 95/18676	7/1995
7,628,954	B2	12/2009	Gomm et al.	WO	WO 95/19781	7/1995
7,754,474	B2	7/2010	Aysta et al.	WO	WO 96/15576	5/1996
7,763,210	B2	7/2010	Bedingham et al.	WO	WO 96/34028	10/1996
7,767,937	B2	8/2010	Bedingham et al.	WO	WO 96/34029	10/1996
2001/0045000	A1	11/2001	Gundel et al.	WO	WO 96/35458	11/1996
2002/0047003	A1	4/2002	Bedingham et al.	WO	WO 96/41864	12/1996
2002/0048533	A1	4/2002	Harms et al.	WO	WO 97/00230	1/1997
2002/0064885	A1	5/2002	Bedingham et al.	WO	WO 97/21090	6/1997
2003/0013203	A1	1/2003	Jedrzejewski et al.	WO	WO 97/46707	12/1997
2003/0017567	A1	1/2003	Parthasarathy et al.	WO	WO 98/04909	2/1998
2003/0044322	A1	3/2003	Andersson et al.	WO	WO 98/07019	2/1998
2003/0053934	A1	3/2003	Andersson et al.	WO	WO 98/49340	11/1998
2003/0118804	A1	6/2003	Bedingham et al.	WO	WO 98/50147	11/1998
2003/0120062	A1	6/2003	Parthasarathy et al.	WO	WO 98/53311	11/1998
2003/0124506	A1	7/2003	Bedingham et al.	WO	WO 99/09394	2/1999
2003/0138779	A1	7/2003	Parthasarathy et al.	WO	WO 99/15876	4/1999
2003/0139550	A1	7/2003	Savu et al.	WO	WO 99/15888	4/1999
2003/0152491	A1	8/2003	Kellogg et al.	WO	WO 99/40174	8/1999
2003/0152994	A1	8/2003	Woudenberg et al.	WO	WO 99/44740	9/1999
2003/0155034	A1	8/2003	De Beukeleer et al.	WO	WO 99/46591	9/1999
2003/0228706	A1	12/2003	Ramstad et al.	WO	WO 99/55827	11/1999
2003/0231878	A1	12/2003	Shigeura	WO	WO 99/58245	11/1999
2004/0016702	A1	1/2004	Hennessy et al.	WO	WO 99/67639	12/1999
2004/0016898	A1	1/2004	Cox et al.	WO	WO 00/05582	2/2000
2004/0018116	A1	1/2004	Desmond et al.	WO	WO 00/40750	7/2000
2004/0018117	A1	1/2004	Desmond et al.	WO	WO 00/45180	8/2000
2004/0023371	A1	2/2004	Fawcett	WO	WO 00/50172	8/2000
2004/0121471	A1	6/2004	Dufresne et al.	WO	WO 00/50642	8/2000
2004/0179974	A1	9/2004	Bedingham et al.	WO	WO 00/62051	10/2000
2004/0209258	A1	10/2004	Parthasarathy et al.	WO	WO 00/68336	11/2000
2005/0036911	A1	2/2005	Sellers et al.	WO	WO 00/69560	11/2000
2005/0130177	A1	6/2005	Bedingham et al.	WO	WO 00/78455	12/2000
2005/0142563	A1	6/2005	Haddad et al.	WO	WO 00/79285	12/2000
2005/0142570	A1	6/2005	Parthasarathy et al.	WO	WO 01/06228	1/2001
2005/0142571	A1	6/2005	Parthasarathy et al.	WO	WO 01/07892	2/2001
2005/0142663	A1	6/2005	Parthasarathy et al.	WO	WO 01/12327	2/2001
2005/0180890	A1	8/2005	Bedingham et al.	WO	WO 01/30995	5/2001
2005/0282290	A1	12/2005	Fujimoto	WO	WO 01/38865	5/2001
2006/0013732	A1	1/2006	Parthasarathy et al.	WO	WO 02/00347	1/2002
2007/0007270	A1	1/2007	Bedingham et al.	WO	WO 03/054509	7/2003
2007/0009391	A1	1/2007	Bedingham et al.	WO	WO 03/054510	7/2003
2007/0010007	A1	1/2007	Aysta et al.	WO	WO 03/058224	7/2003
2007/0132723	A1	6/2007	Lurz et al.	WO	WO 03/058253	7/2003
2007/0142780	A1	6/2007	Van Lue	WO	WO 03/093836	11/2003
2008/0050276	A1	2/2008	Bedingham et al.	WO	WO 03/104783	12/2003
2008/0058991	A1*	3/2008	Lee et al. 422/72	WO	WO 2004/010760	2/2004
2008/0152546	A1	6/2008	Bedingham et al.	WO	WO 2004/011142	2/2004
2009/0068062	A1	3/2009	Jafari et al.	WO	WO 2004/011143	2/2004
2009/0143250	A1*	6/2009	Lee et al. 506/39	WO	WO 2004/011147	2/2004
2009/0263280	A1	10/2009	Bedingham et al.	WO	WO 2004/011148	2/2004
2010/0050751	A1*	3/2010	Lee 73/64.56	WO	WO 2004/011149	2/2004
2010/0281961	A1	11/2010	Saiki	WO	WO 2004/011365	2/2004
2011/0124132	A1*	5/2011	Kim et al. 422/69	WO	WO 2004/011592	2/2004
				WO	WO 2004/011681	2/2004
				WO	WO 2004/094672	11/2004
CA	0402994	11/1994		WO	WO 2005/005045	1/2005
CA	2130013	3/1999		WO	WO 2005/016532	2/2005
EM	001213136	6/2010		WO	WO 2007/005810	1/2007

FOREIGN PATENT DOCUMENTS

WO	WO 2007/005853	1/2007
WO	WO 2008/134470	11/2008
WO	WO 2009/057267	5/2009

OTHER PUBLICATIONS

Handbook of Pressure Sensitive Adhesive Technology, 3rd Edition, Title page, Publication page, Table of Contents, and pp. 508-517.

Litton Product Brochure; Poly Scientific EC3848 High Speed Slip Ring Capsule; Blacksburg, VA; 2 pgs (Oct. 1999).

Meridian Laboratory Datasheet [online]; Rotocon high performance rotary electrical contacts; 5 pgs [retrieved on Jun. 18, 2002]. Retrieved from the Internet: <<http://www.meridianlab.com/>>.

Meridian Laboratory Datasheet [online]: Model MM Micro-Minature; 5 pgs. [retrieved on Jul. 19, 2001]. Retrieved from the Internet: <<http://www.meridianlab.com/mm.htm>>.

Motion Technology Product Guide; Commercial and Military/Aerospace Applications; Blacksburg, VA; 8 pgs. (Jul. 1999).

NIST Grant, Project Brief [online]; A Tools for DNA Diagnostics (Oct. 1998) Integrated, Micro-Sample Preparation System for Genetic Analysis,@ [retrieved on Aug. 5, 2002] 2 pgs. Retrieved from the internet at <<http://jazz.nist.gov/atpcf/prjbriefs/prjbrief.cfm?ProjectNumber=98-08-0031>>.

Test Methods for Pressure Sensitive Adhesive Tapes, Pressure Sensitive Tape Council, (1996) (4 pgs).

Sambrook et al., *Molecular Cloning, A laboratory Manual*, 2nd Edition, Cold Spring Harbor Laboratory, 1989 (30 pgs) includes Title and copyright pages and Table to Contents.

Emmer, A. et al.; "Wall deactivation with fluorosurfactants for capillary electrophoretic analysis of biomolecules"; *Electrophoresis* 2001, 22; pp. 660-665.

Garcia, A. et al.; "Comparison of Two Leukocyte Extraction Methods for Cytomegalovirus Antigenemia Assay"; *Journal of Clinical Microbiology*, Jan. 1996; vol. 34, No. 1; pp. 182-184.

U.S. Appl. No. 60/237,151, filed Oct. 2, 2000.

* cited by examiner

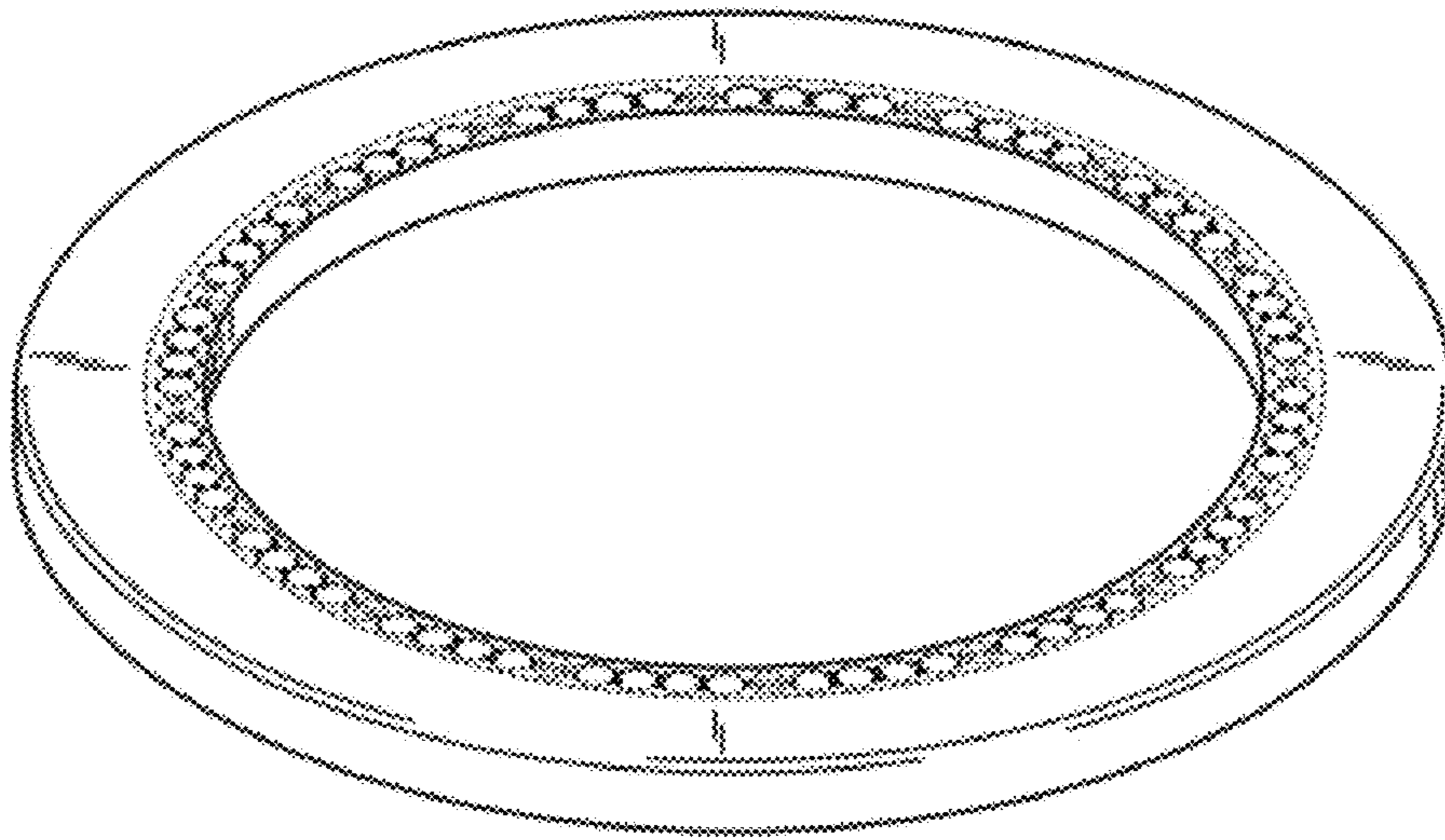


FIG. 1

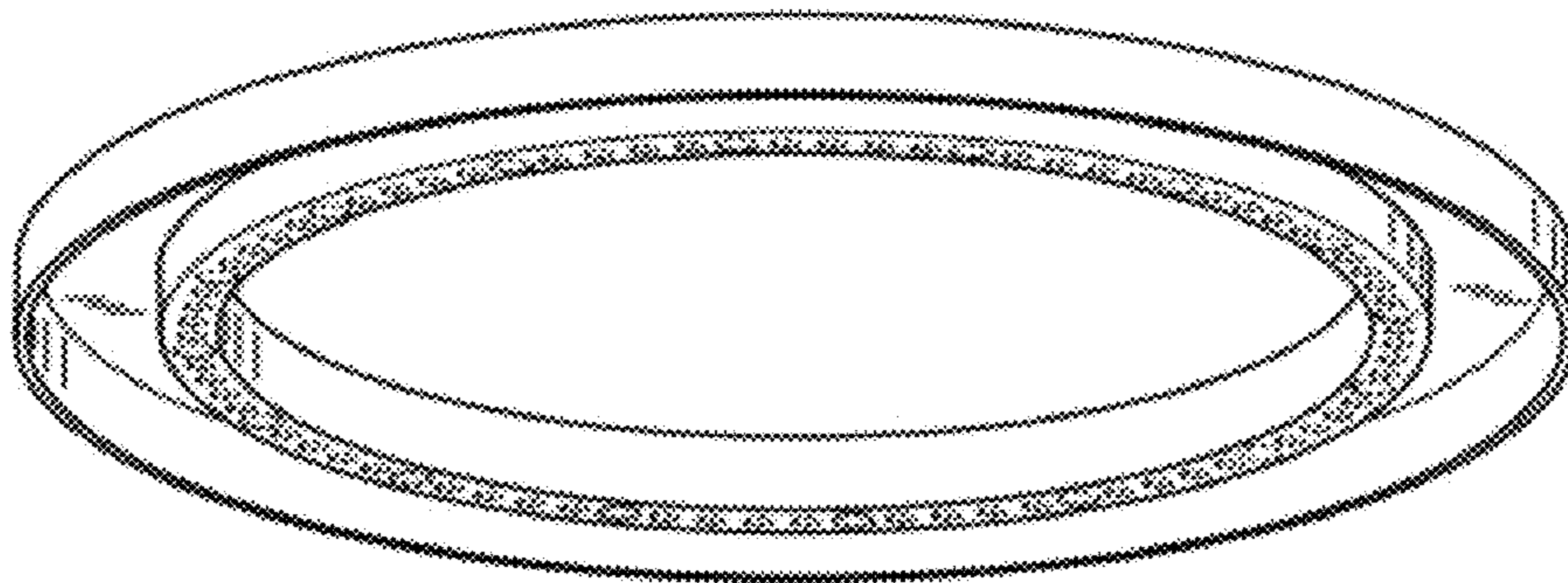


FIG. 2

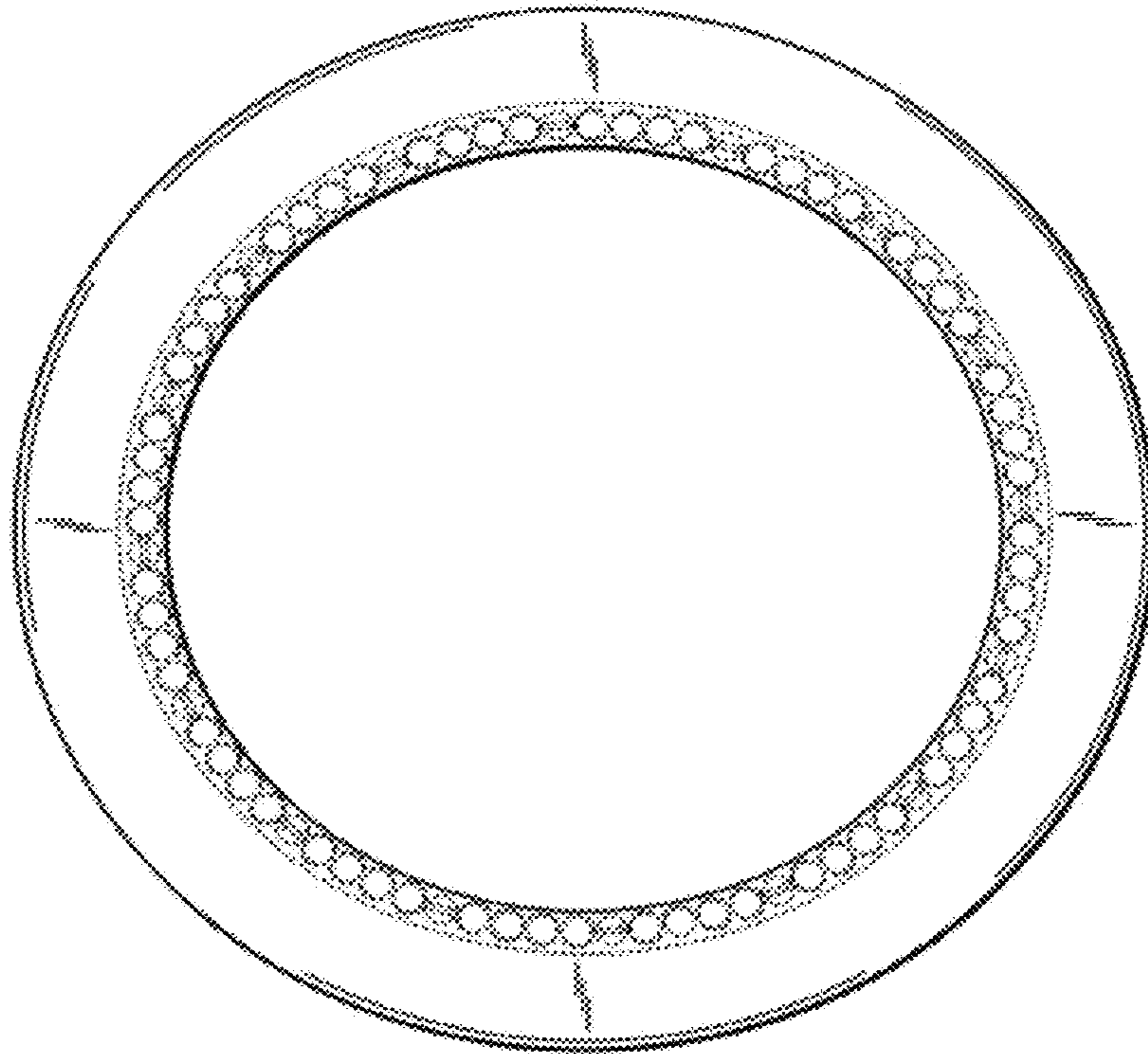


FIG. 3



FIG. 4

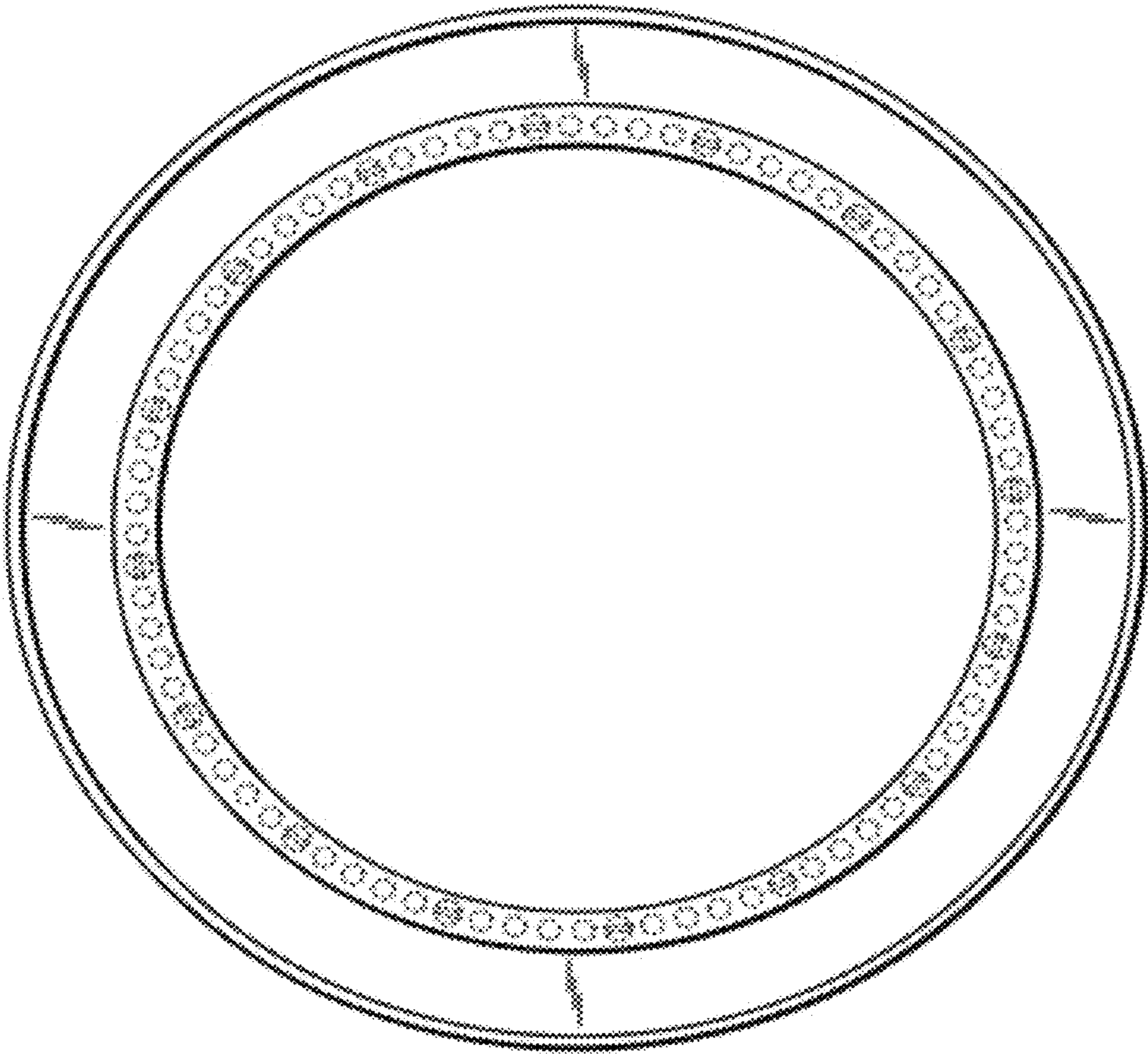


FIG. 5

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : D667,561 S
APPLICATION NO. : 29/384821
DATED : September 18, 2012
INVENTOR(S) : William Bedingham et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page, Column 2 (Foreign Patent Documents)

Line 1, Delete "CA" and insert -- EP --, therefor.

Title Page 3, Column 1 (U.S. Patent Documents)

Line 16, Delete "Bedingham" and insert -- Bedingham et al. --, therefor.

Title Page 3, Column 1 (Foreign Patent Documents)

Line 1, Delete "CA" and insert -- EP --, therefor.

Title Page 3, Column 2 (Foreign Patent Documents)

Line 8, Delete "JP" and insert -- DE --, therefor.

Line 11, Delete "JP" and insert -- EP --, therefor.

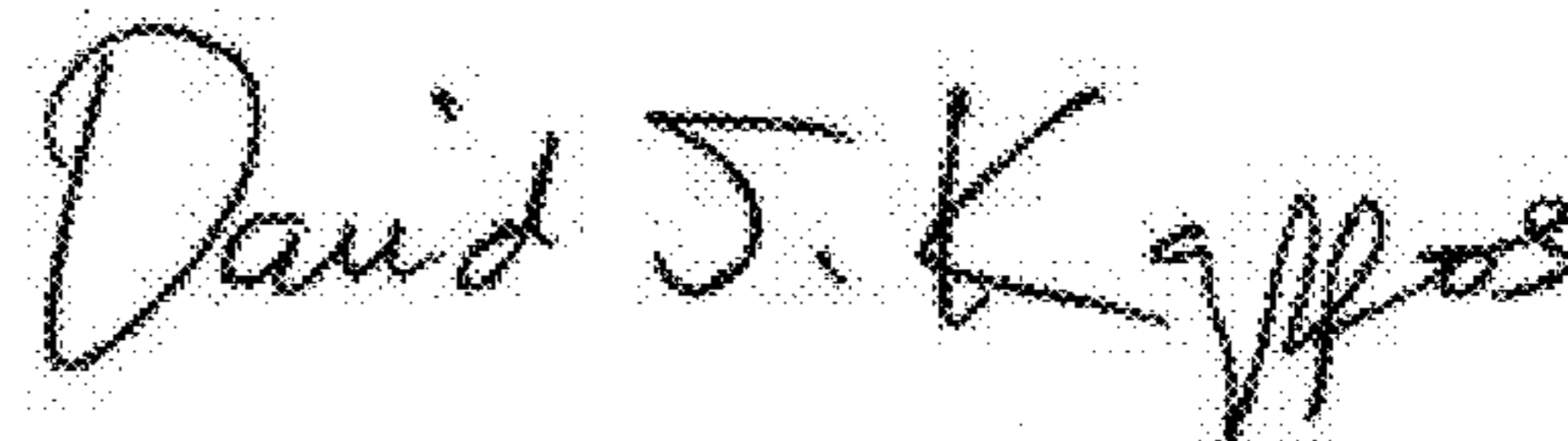
Title Page 4, Column 1 (Other Publications)

Line 9, Delete "Minature;" and insert -- Miniature; --, therefor.

Title Page 4, Column 2 (Other Publications)

Line 3, Delete "form" and insert -- from --, therefor.

Signed and Sealed this
Eighth Day of January, 2013



David J. Kappos
Director of the United States Patent and Trademark Office