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**Dittmann et al.**

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(54) **SINTERING TRAY**

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(51) **LOC (9) Cl.** ..... **23-01**

(52) **U.S. Cl.** ..... **D23/209; D23/365; D23/499;**  
D34/38

(58) **Field of Classification Search** ..... D23/207,  
D23/209, 365, 499; 428/408, 688, 698;  
55/499; D34/38; D7/388; 108/51.11; 264/605  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D221,745 S *	9/1971	Holdredge	.....	D34/38
4,184,840 A	1/1980	Gamberg et al.		
D256,273 S *	8/1980	Townsend et al.	.....	D23/336
4,348,176 A	9/1982	Gamble et al.		
D307,462 S *	4/1990	Merkouris	.....	D23/209
4,925,561 A *	5/1990	Ishii et al.	.....	210/493.3
5,993,970 A	11/1999	Oscarsson et al.		
D476,725 S *	7/2003	Dushek et al.	.....	D23/365
6,709,694 B1	3/2004	Suttor et al.		
6,756,421 B1	6/2004	Todo et al.		
D544,949 S *	6/2007	Winters et al.	.....	D23/365
D571,608 S *	6/2008	Yeung	.....	D7/388
7,624,688 B2 *	12/2009	Kulbeth et al.	.....	108/51.11
2002/0184922 A1	12/2002	Dick et al.		

2006/0018780 A1	1/2006	Hosamani et al.
2006/0082033 A1	4/2006	Hauptmann et al.
2006/0117989 A1	6/2006	Hauptmann et al.
2008/0199823 A1	8/2008	Miller
2008/0286718 A1	11/2008	Franke et al.

FOREIGN PATENT DOCUMENTS

DE	10052203 A1	4/2001
JP	3-296006	12/1991
SU	1699982 A1	12/1991
WO	97/07078	2/1997
WO	2008/098157 A1	8/2008

OTHER PUBLICATIONS

U.S. Appl. No. 29/342,964, published Sep. 3, 2009, Dittmann et al.

(Continued)

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(57) **CLAIM**

The ornamental design for a sintering tray, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view showing the new design for a sintering tray;

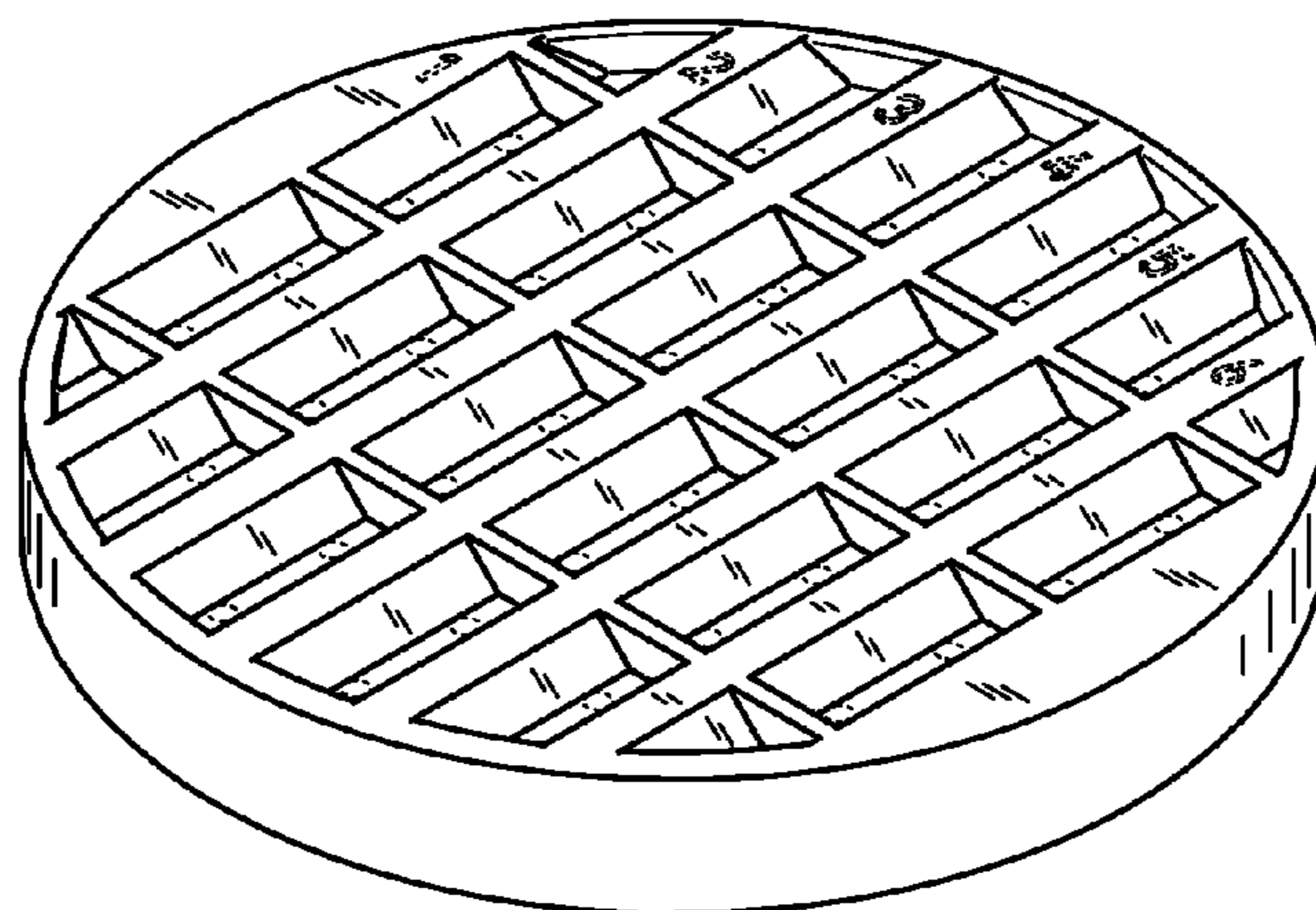
FIG. 2 is a top plan view thereof;

FIG. 3 is a bottom plan view thereof; and,

FIG. 4 is a front side view thereof.

The broken lines are included for the purpose of illustrating the environment only and form no part of the claimed design.

**1 Claim, 2 Drawing Sheets**



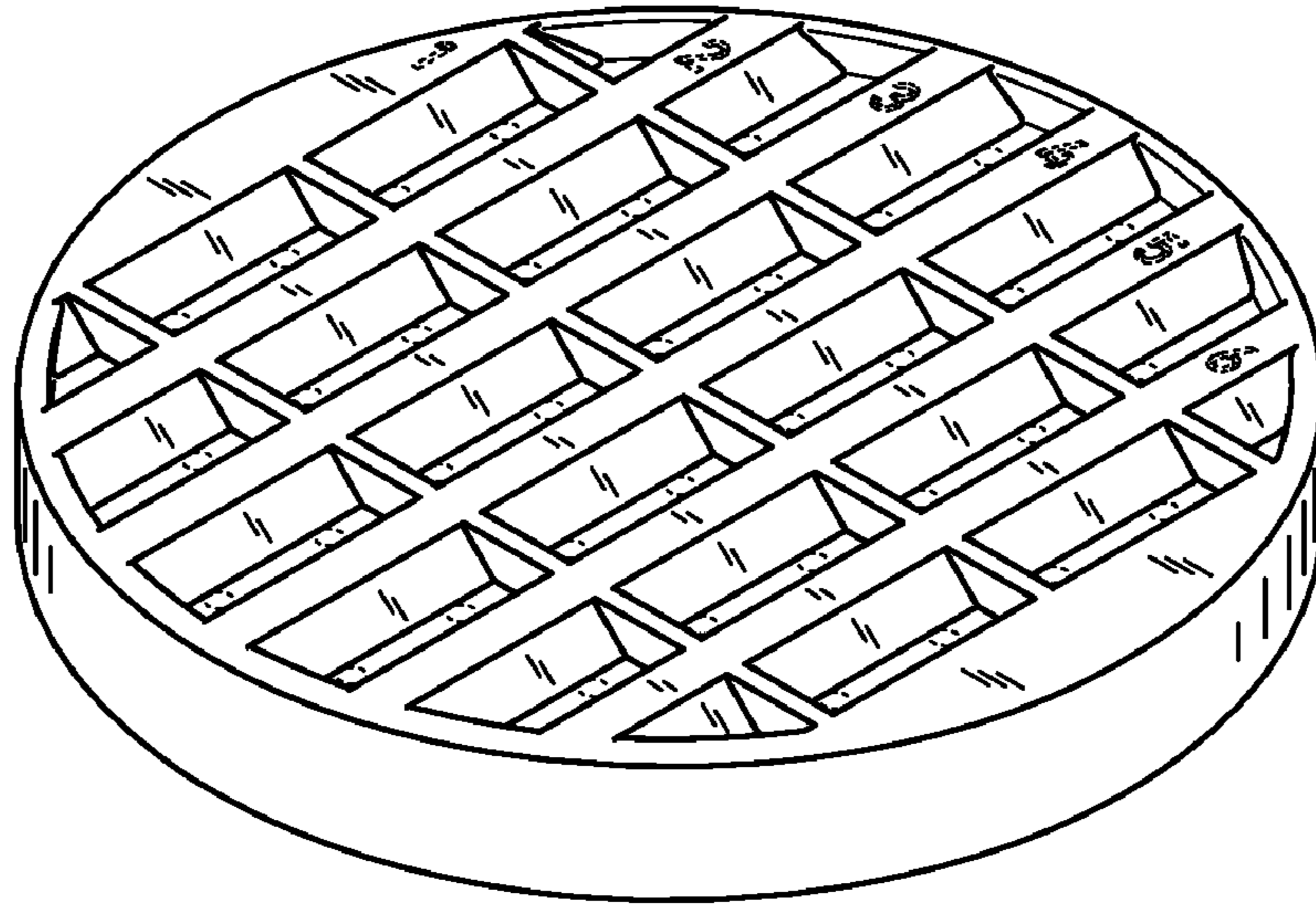
OTHER PUBLICATIONS

U.S. Appl. No. 29/342,968, published Sep. 3, 2009, Dittmann et al.  
U.S. Appl. No. 29/342,969, published Sep. 3, 2009, Dittmann et al.  
U.S. Appl. No. 29/342,971, published Sep. 3, 2009, Dittmann et al.  
U.S. Appl. No. 29/342,976, published Sep. 3, 2009, Dittmann et al.  
International Search Report dated May 13, 2010, for PCT/US2010/  
26745, 3 pages.  
“Lava 200™ Furnace 200, Faster sintering made easy”, 3M ESPE, St.  
Paul, MN, USA [on line], retrieved from the internet prior to Mar. 12,  
2009. URL <[http://solutions.3m.com/wps/portal/3M/en\\_US/3M-ESPE/dental-professionals/products/category/cad-cam/lava-furnace-200/](http://solutions.3m.com/wps/portal/3M/en_US/3M-ESPE/dental-professionals/products/category/cad-cam/lava-furnace-200/)>, pp. 12.

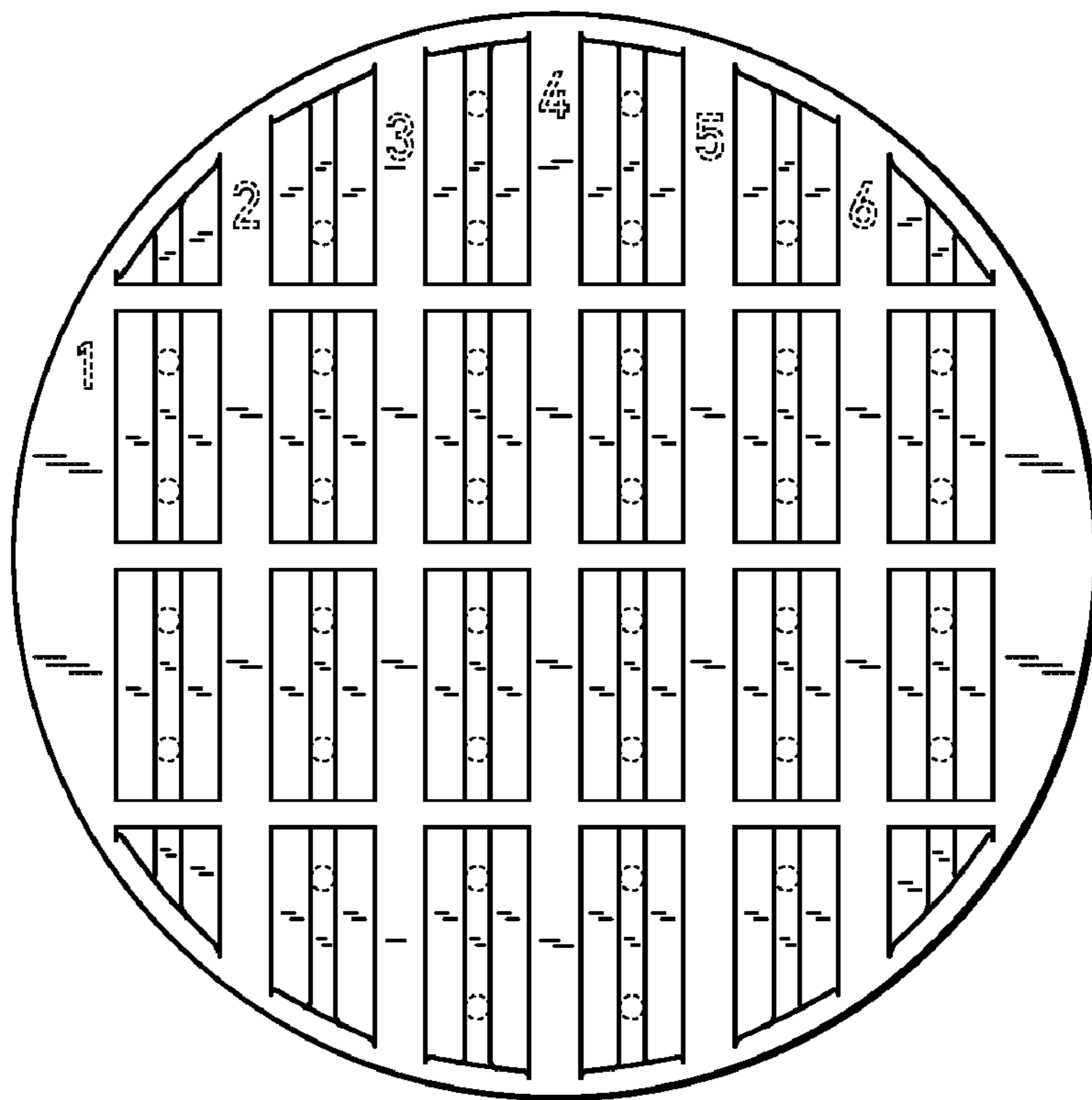
“Fabrication of Kiln Furniture with Variable Geometry Especially for  
Technical Ceramics”, Kollenberg, Wolfgang and Nikolay, Dieter;  
Werkstoffzentrum Rheinbach GmbH, Lise-Meitner-Straße 1, 53359  
Rheinbach, [on line], retrieved from the internet prior to Mar. 12,  
2009. URL <<http://www.werkstoffzentrum.de>>, pp. 5.

“Realisierung Keramischer Prototyping mittels 3D-Druck and  
Heißgießen”, Kindtner et al., Werkstoffzentrum Rheinbach GmbH,  
Lise-Meitner-Str. 1, 53359 Rheinbach [on line]. retrieved from the  
internet prior to Mar. 12, 2009. URL <http://www.werkstoffzentrum.de>, pp. 9.

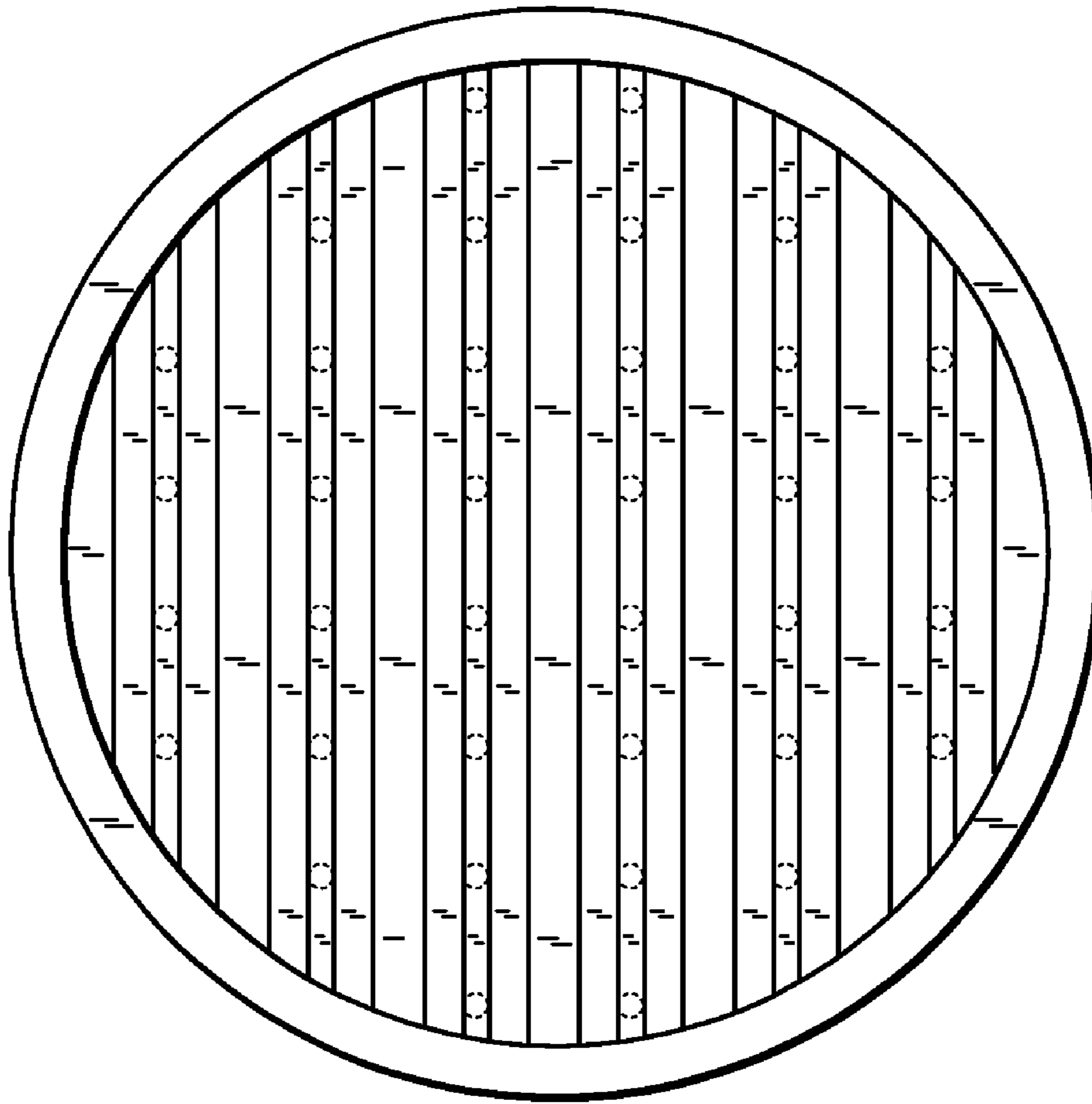
\* cited by examiner



*FIG. 1*



*FIG. 2*



*FIG. 3*



*FIG. 4*