



US00D720509S

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

(10) **Patent No.:** **US D720,509 S**
(45) **Date of Patent:** **** Dec. 30, 2014**

(54) **DISC SPRAYER FOR A DISHWASHER**

Primary Examiner — T. Chase Nelson

(75) Inventors: **Mark W. Baldwin**, Saint Joseph, MI (US); **Brian L. Greenhaw**, Berrien Center, MI (US); **Praveen Poojary**, Saint Joseph, MI (US); **Barry E. Tuller**, Stevensville, MI (US); **Chad T. Vanderroest**, Covert, MI (US); **Ameresh B. Viswanathan**, Saint Joseph, MI (US); **Rodney M. Welch**, Eau Claire, MI (US)

(73) Assignee: **Whirlpool Corporation**, Benton Harbor, MI (US)

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

(21) Appl. No.: **29/431,649**

(22) Filed: **Sep. 10, 2012**

(51) **LOC (10) Cl.** **15-05**

(52) **U.S. Cl.**
USPC **D32/3**

(58) **Field of Classification Search**
USPC D32/1-3, 25; D23/213, 218, 221;
134/56 D, 56 R, 57 D, 58 R, 88, 94.1,
134/95.3, 172, 176-179, 198, 200;
239/227, 243, 256
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,726,666 A 12/1955 Oxford
3,064,664 A 11/1962 Warhus
3,344,836 A * 10/1967 Kopczynski 159/3

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0524102 B1 4/1997
EP 1277430 A1 1/2003

(Continued)

(57) **CLAIM**

The ornamental design for a disc sprayer for a dishwasher, as shown and described.

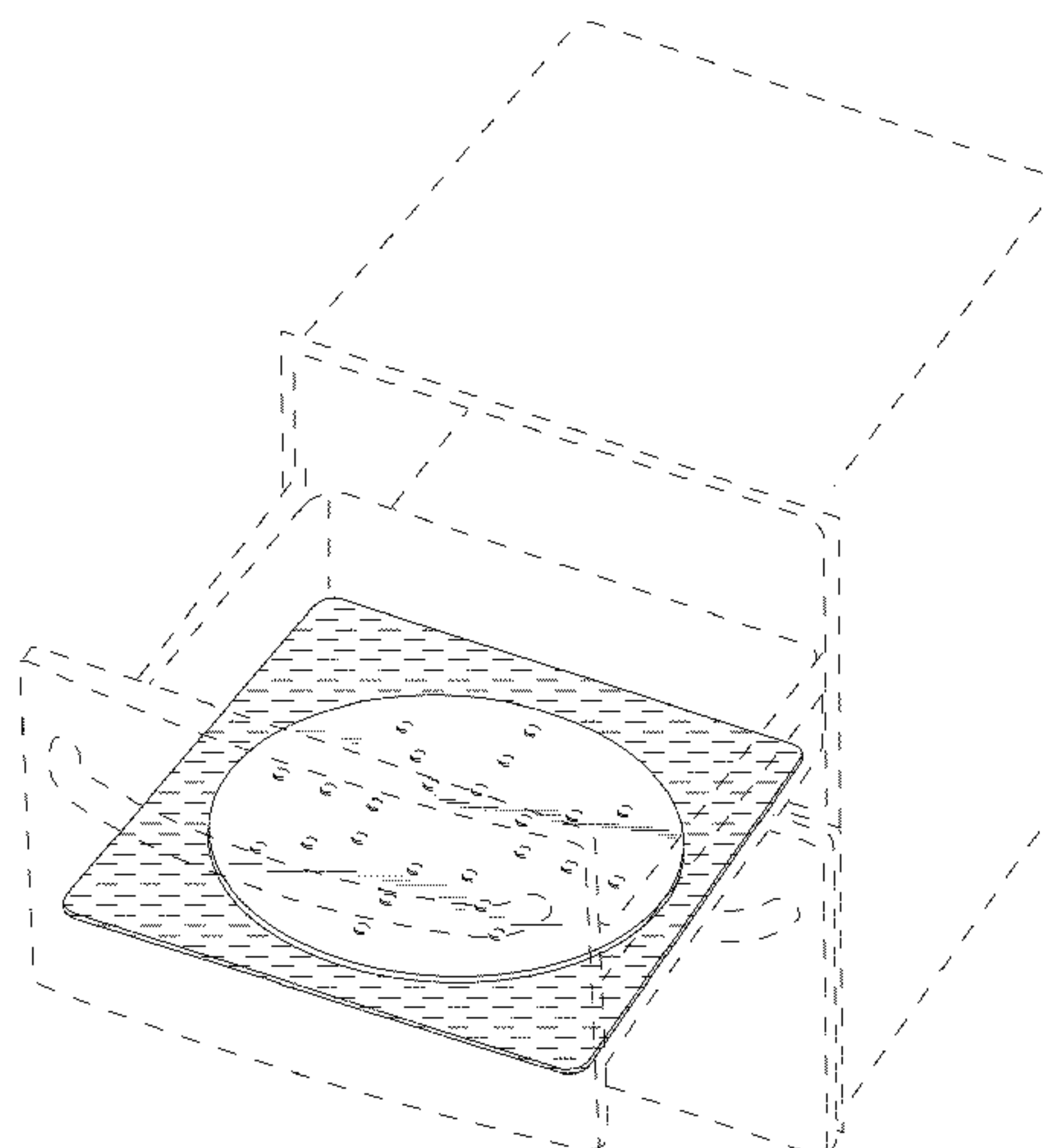
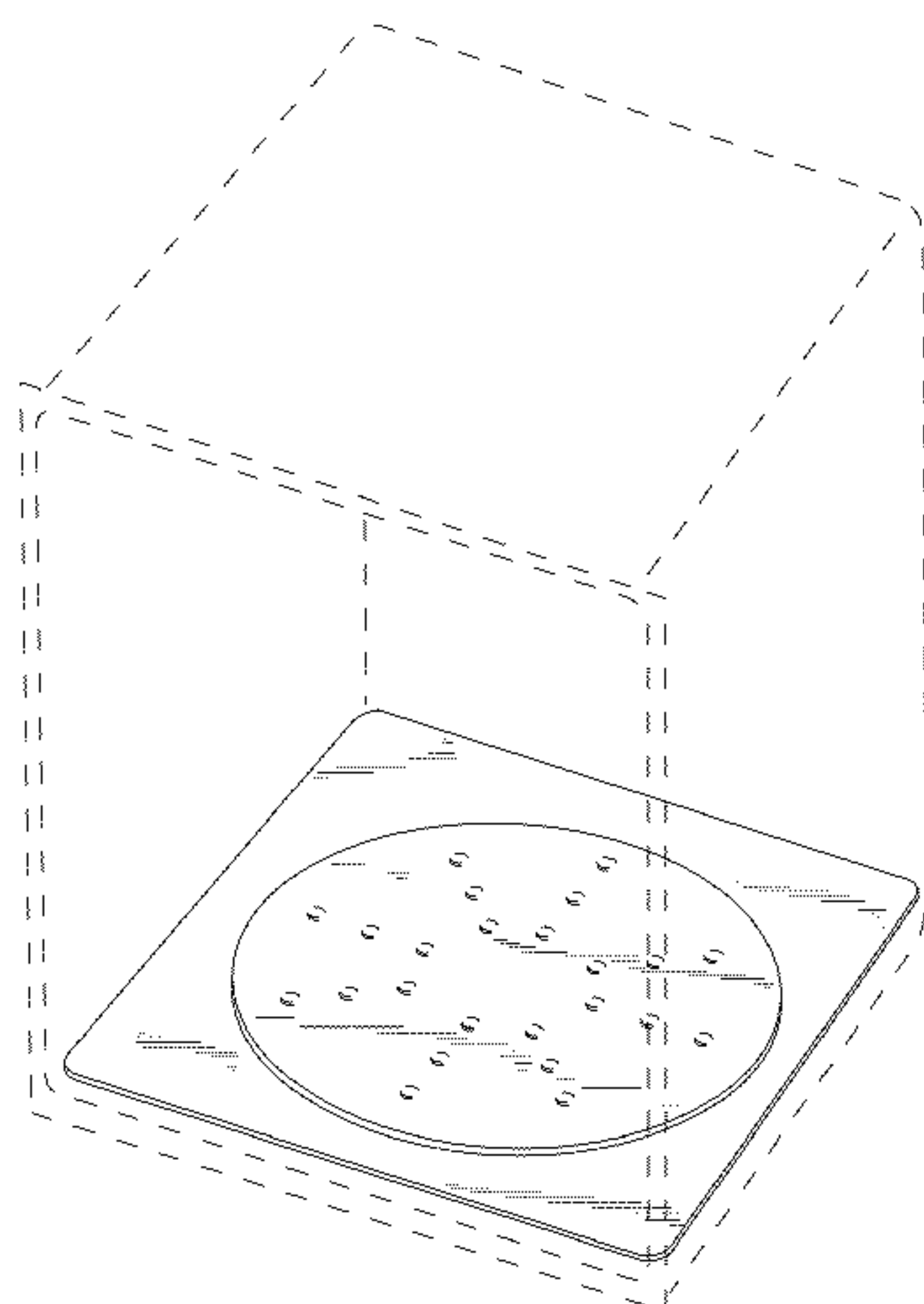
DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of a disc sprayer for a dishwasher showing our new design;
FIG. 2 is a perspective view thereof showing the disc sprayer for a dishwasher drawer-type dishwasher;
FIG. 3 is an enlarged top view of the disc sprayer for a dishwasher;
FIG. 4 is an enlarged side view thereof;
FIG. 5 is a perspective view of a second embodiment of a disc sprayer for a dishwasher;
FIG. 6 is a perspective view thereof showing the disc sprayer for a dishwasher drawer-type dishwasher;
FIG. 7 is an enlarged top view of the disc sprayer for a dishwasher;
FIG. 8 is an enlarged side view thereof;
FIG. 9 is a perspective view of a third embodiment of a disc sprayer for a dishwasher;
FIG. 10 is a perspective view thereof showing the disc sprayer for a dishwasher drawer-type dishwasher;
FIG. 11 is an enlarged top view of the disc sprayer for a dishwasher; and,
FIG. 12 is an enlarged side view thereof.

The broken line showing of a dishwasher housing and of spray outlets in the disc sprayer in the figures are included for illustrative purposes only and form no part of the claimed design.

The drafting symbols used in FIGS. 5-12 represent the use of a gray or silver color for the disc sprayer and wall of the dishwasher. The color shading used in FIGS. 9-12 is drawn in different scales to clearly show the differences in the ornamental features of the disc sprayer and the wall of the dishwasher.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

3,496,949 A * 2/1970 Mercer 134/179
3,709,236 A 1/1973 Field et al.
3,771,725 A * 11/1973 Jenkins et al. 239/243
4,712,738 A * 12/1987 Gill 239/74
5,331,986 A 7/1994 Lim et al.
5,427,129 A 6/1995 Young, Jr. et al.
5,546,968 A 8/1996 Jeon et al.
5,579,789 A * 12/1996 Spiegel 134/104.1
5,601,100 A 2/1997 Kawakami et al.
5,673,714 A 10/1997 Campagnolo et al.
5,704,380 A * 1/1998 Zelniker et al. 134/95.3
6,053,185 A 4/2000 Beevers
D440,276 S * 4/2001 Slothower D23/213
6,550,693 B2 * 4/2003 Lohkamp 239/223
D533,200 S * 12/2006 Braunschweig et al. D15/126
7,150,414 B2 * 12/2006 Goldin 239/223
D538,313 S * 3/2007 Braunschweig et al. D15/126
7,331,356 B2 2/2008 VanderRoest et al.
7,445,013 B2 11/2008 VanderRoest et al.
7,475,696 B2 1/2009 Vanderroest et al.

7,523,758 B2 4/2009 Vanderroest et al.
7,594,513 B2 9/2009 VanderRoest et al.
7,810,512 B2 10/2010 Pyo et al.
D643,509 S * 8/2011 O'Brien et al. D23/213
8,137,479 B2 3/2012 Vanderroest et al.
D658,270 S * 4/2012 O'Brien et al. D23/213
8,187,390 B2 5/2012 Vanderroest et al.
8,444,064 B2 * 5/2013 Bulling et al. 239/222.11
2009/0101182 A1 4/2009 Buesing et al.
2010/0326478 A1 * 12/2010 Pyo et al. 134/94.1
2011/0030742 A1 2/2011 Dalsing et al.

FOREIGN PATENT DOCUMENTS

EP 0943281 B1 9/2006
JP 5184514 A 7/1993
JP 9164107 A 6/1997
JP 10243910 A 9/1998
JP 11076127 A 3/1999
JP 2004113683 A 4/2004
KR 20060029567 A 4/2006

* cited by examiner

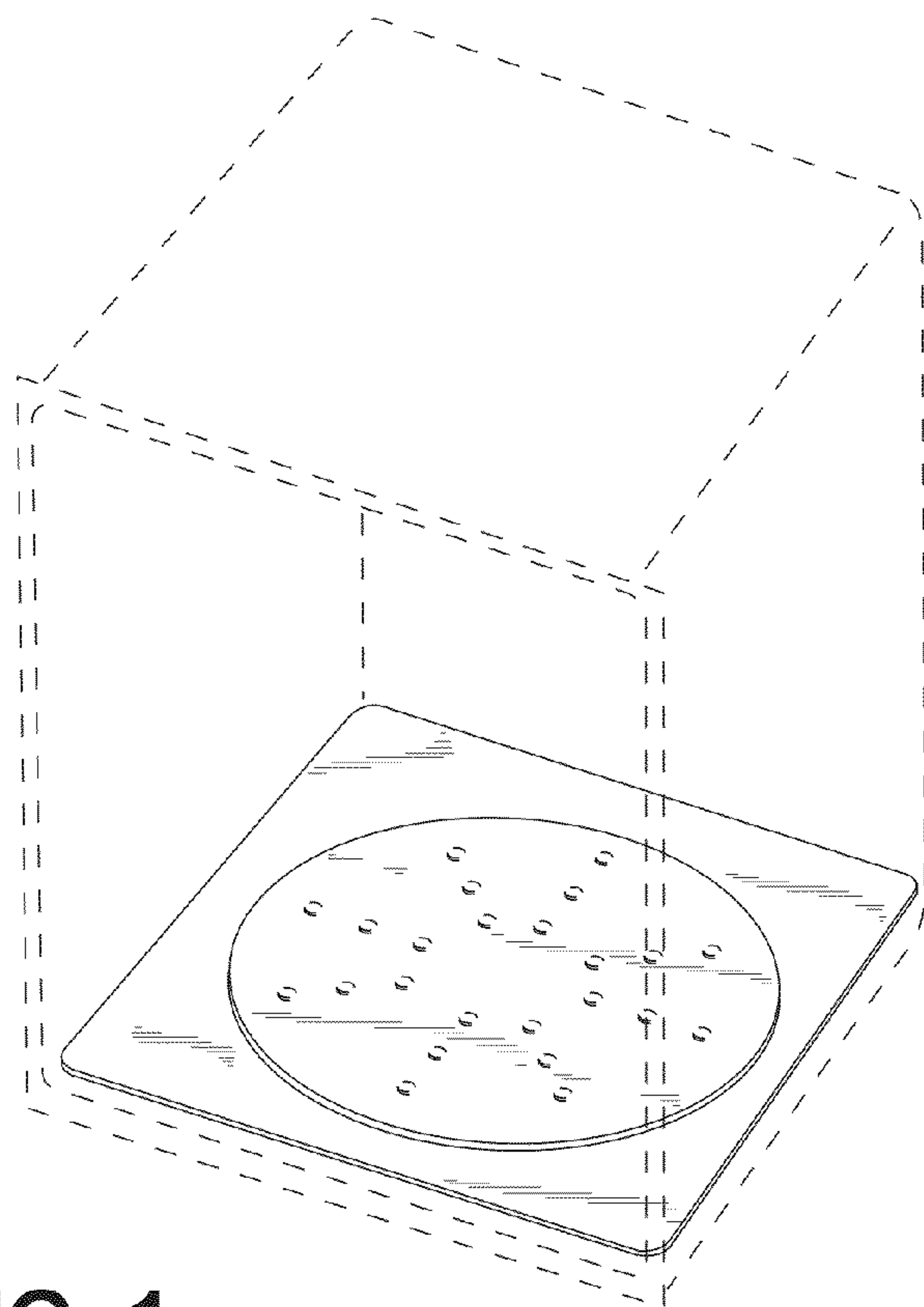


FIG. 1

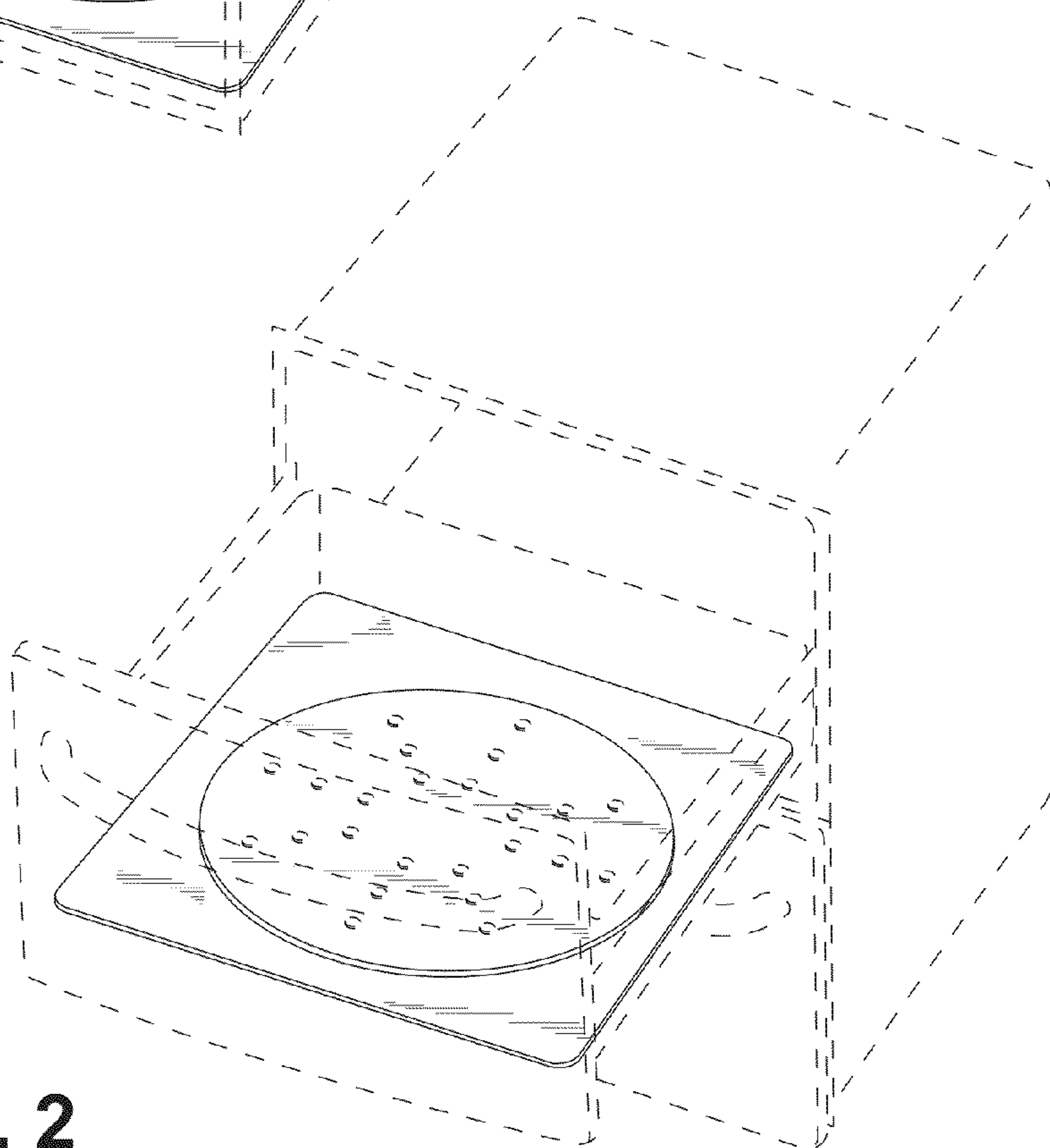


FIG. 2

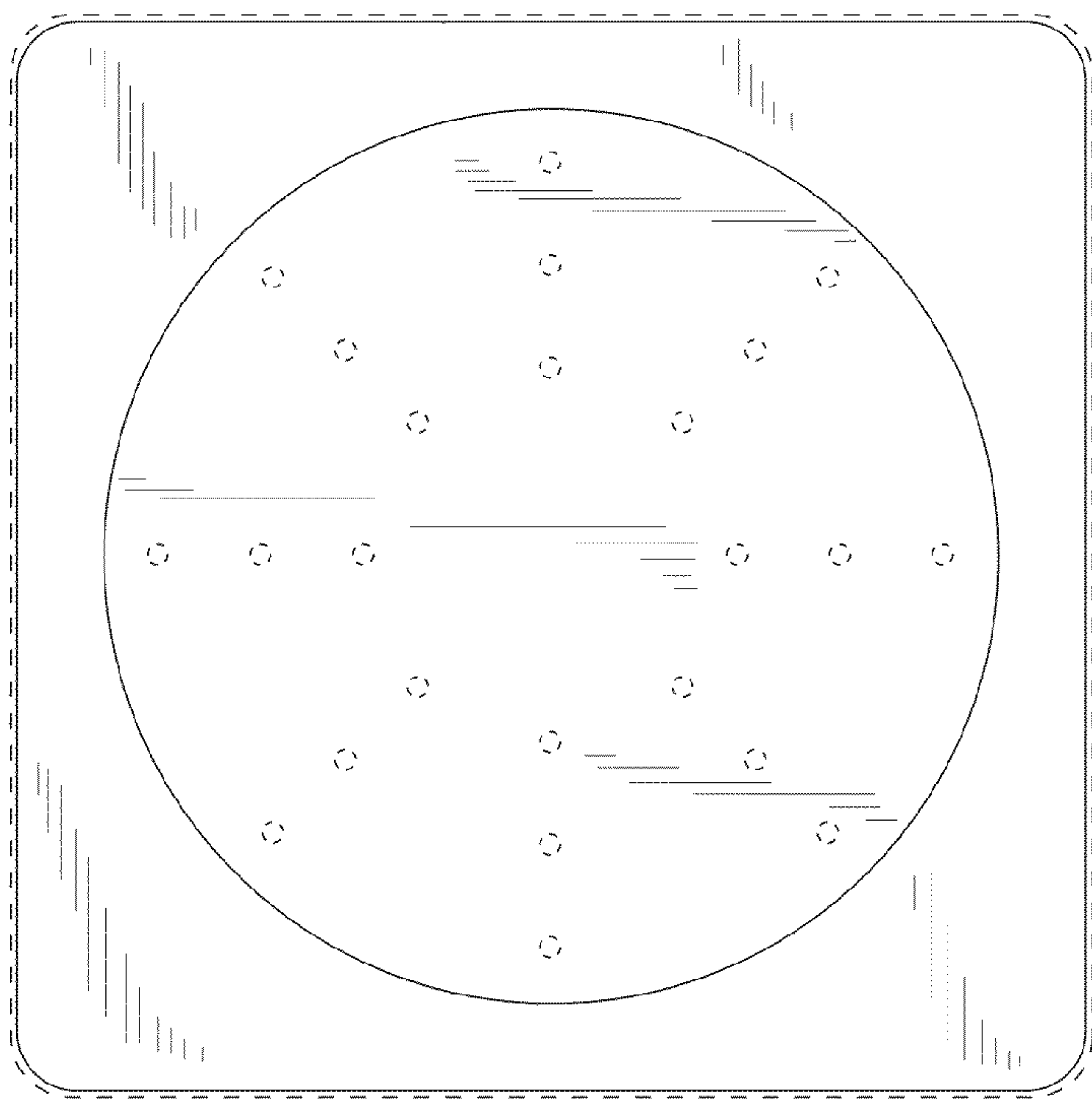


FIG. 3



FIG. 4

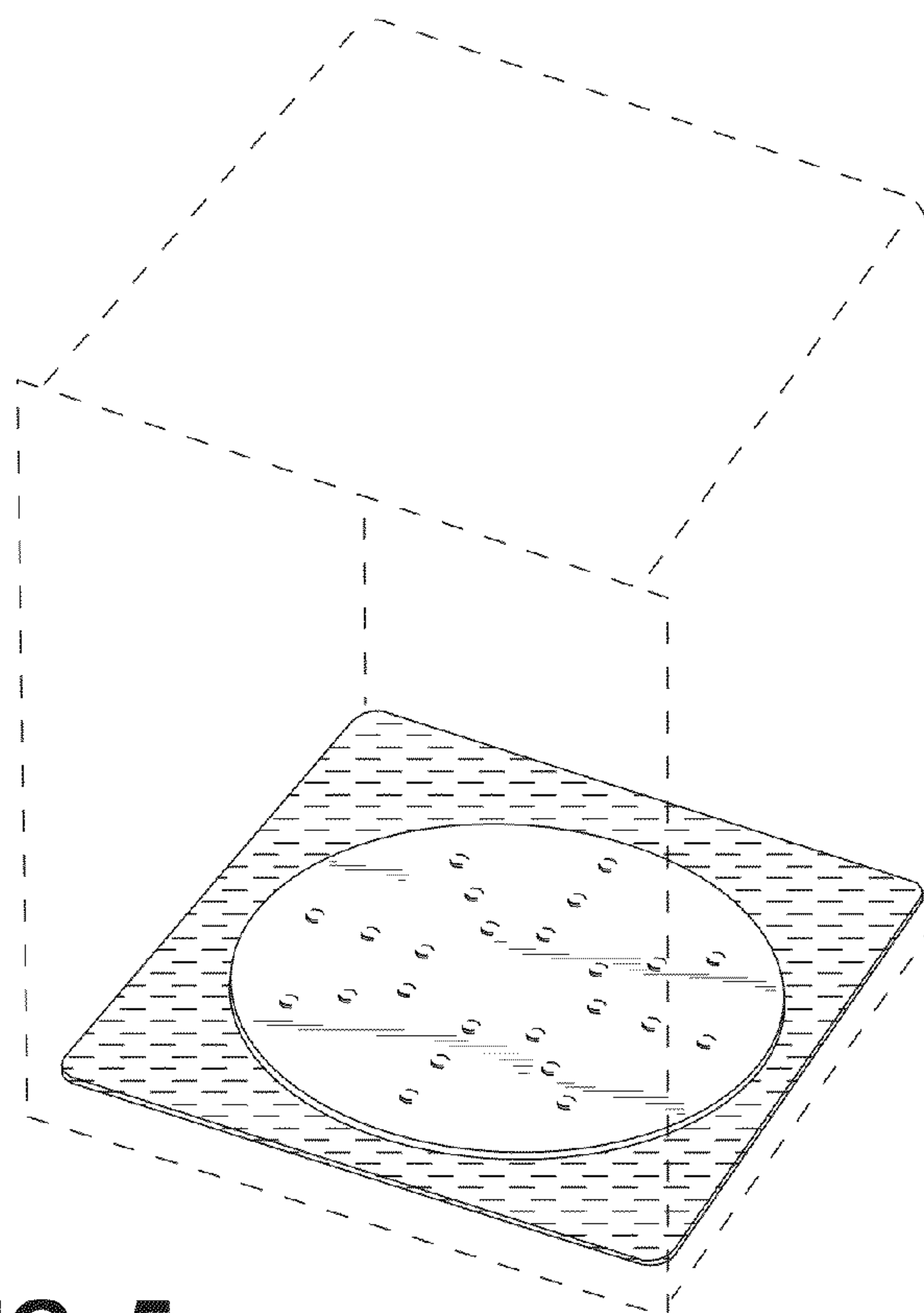


FIG. 5

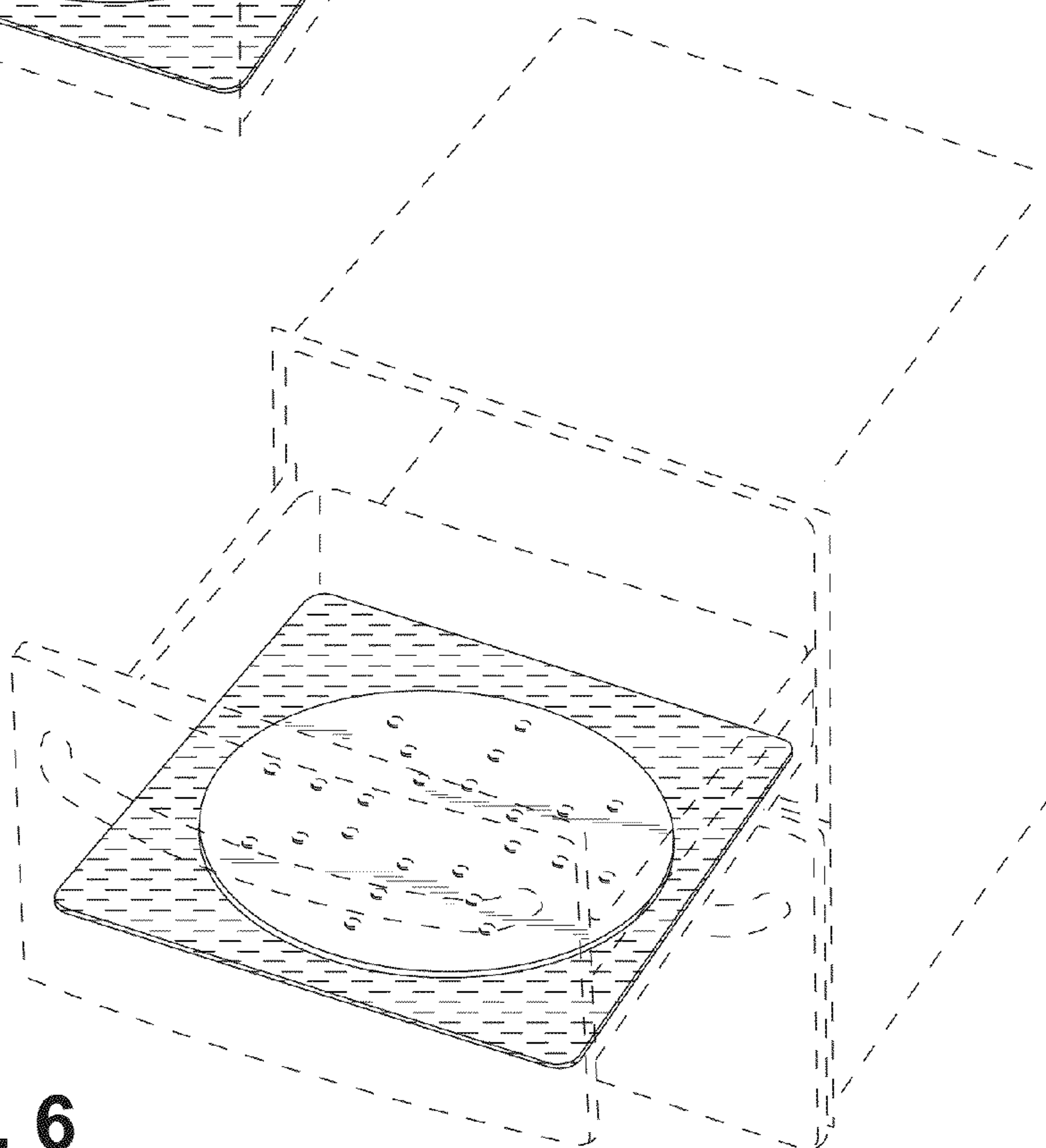


FIG. 6

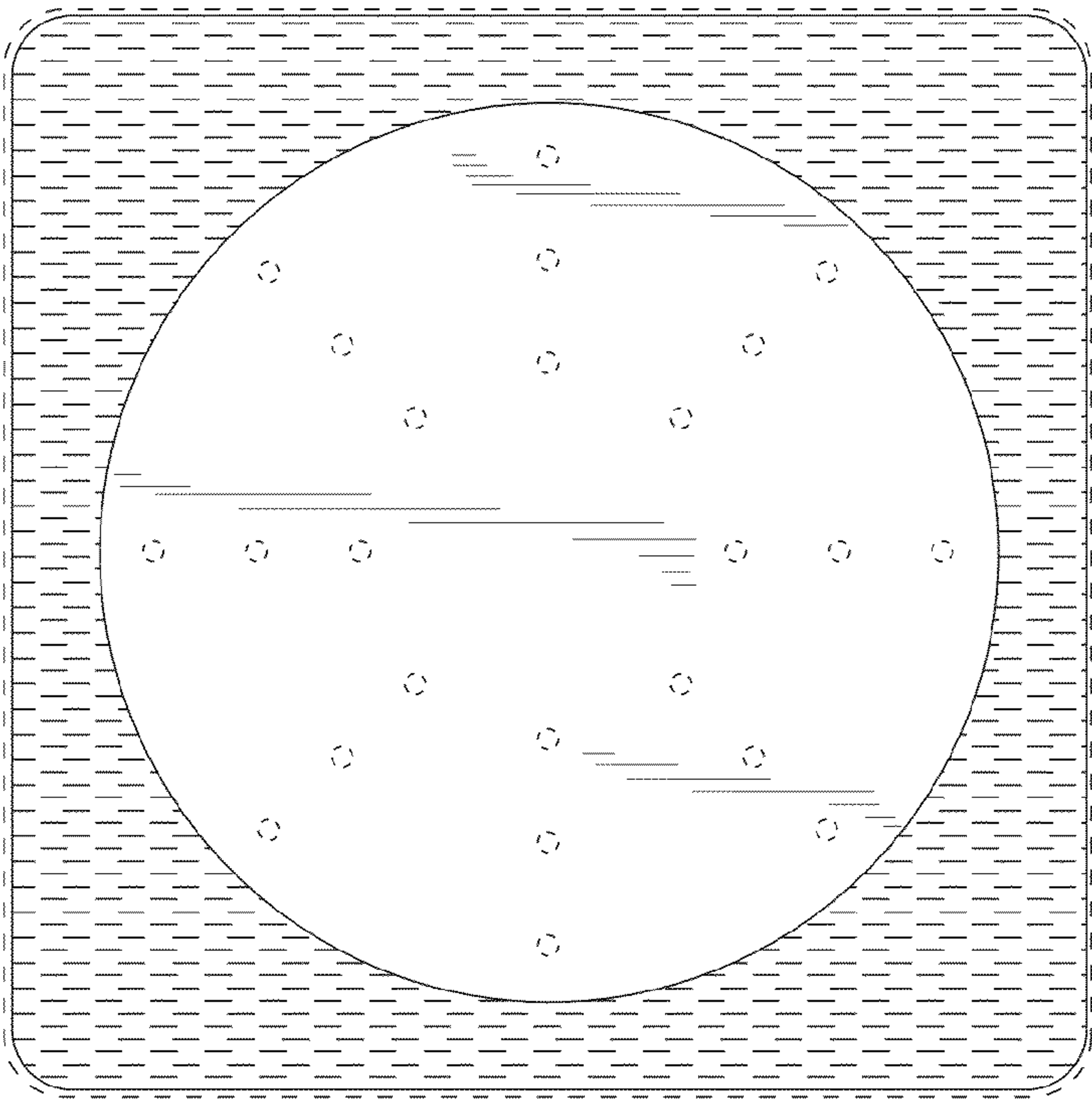


FIG. 7



FIG. 8

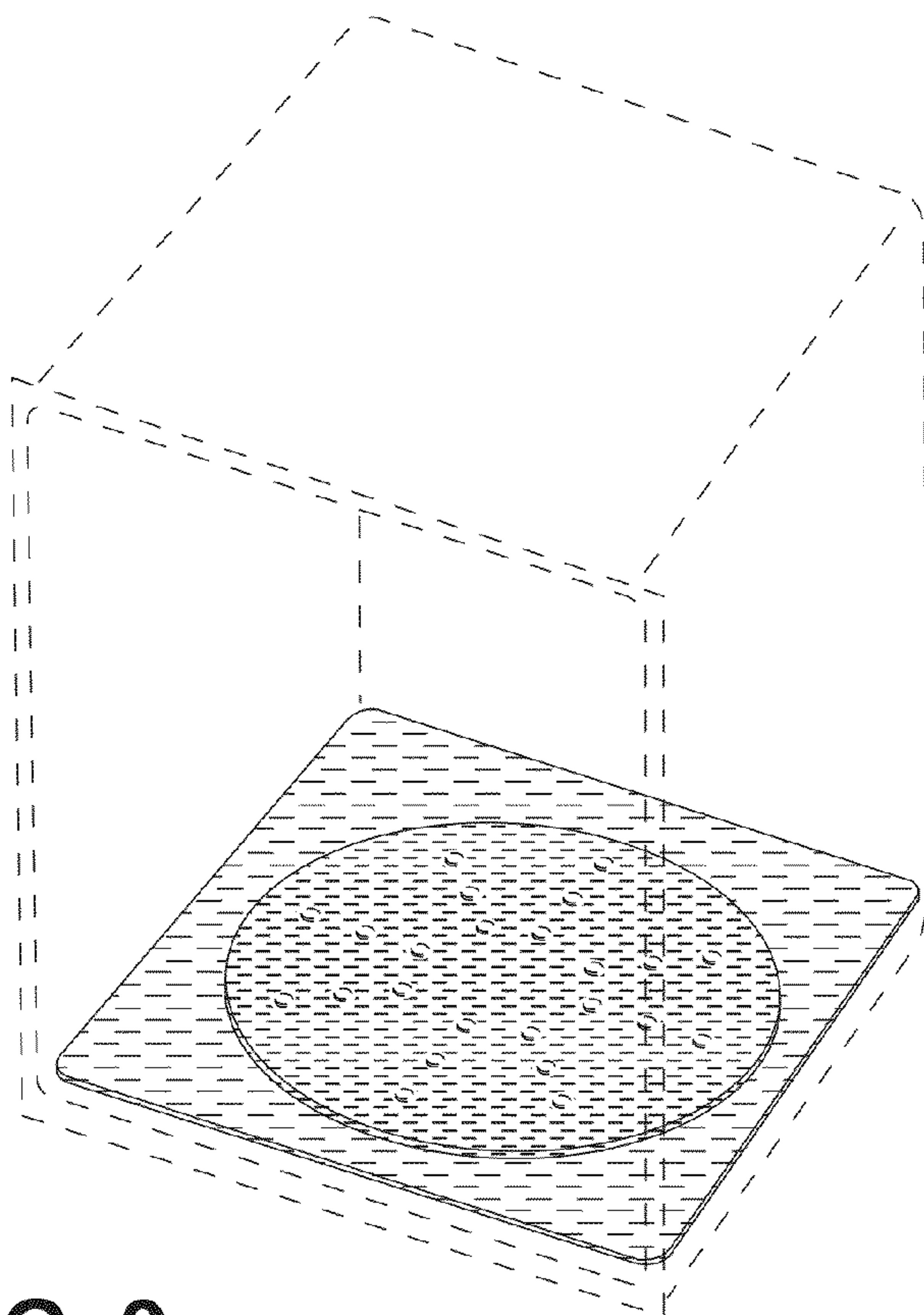


FIG. 9

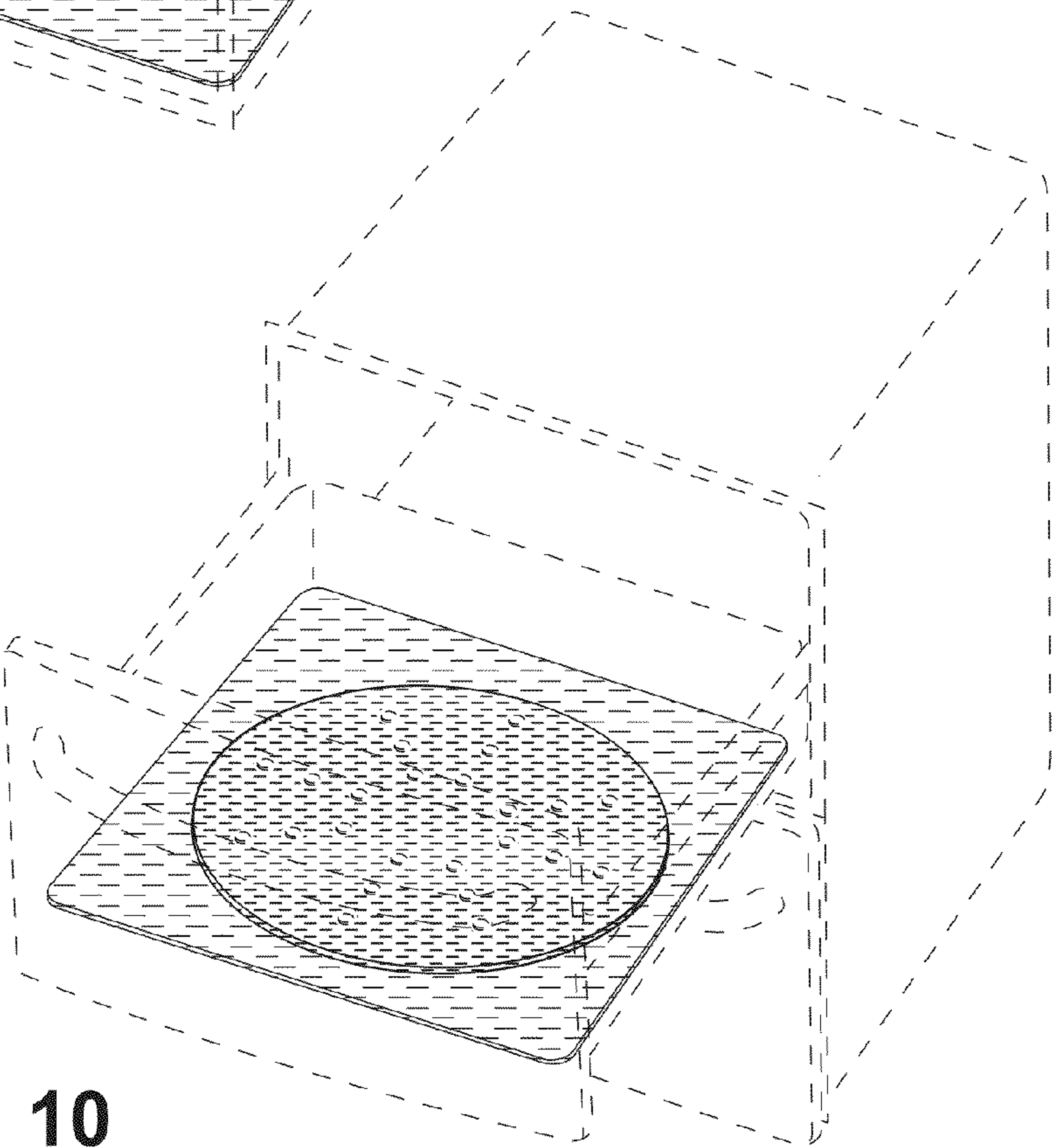


FIG. 10

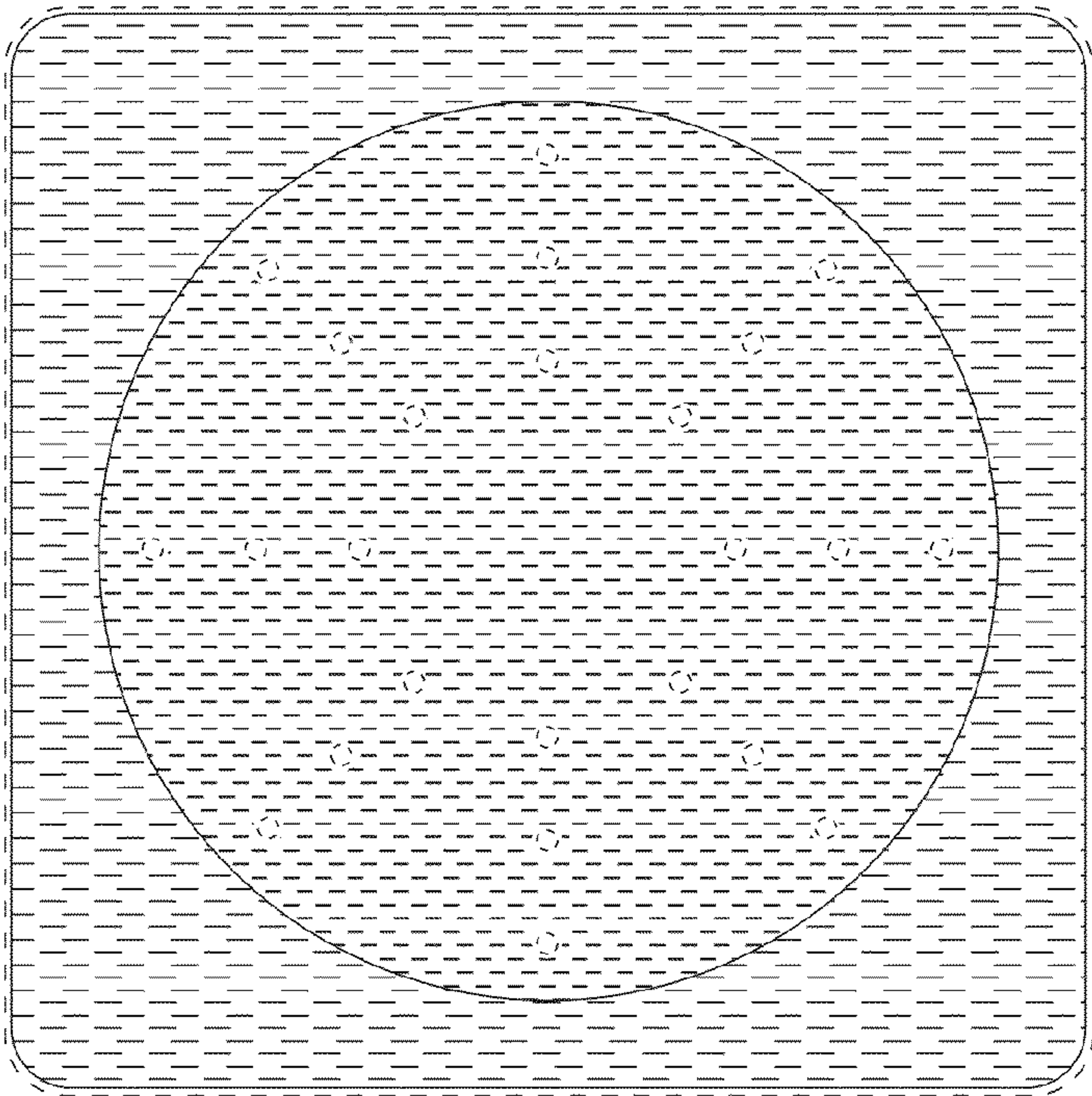


FIG. 11

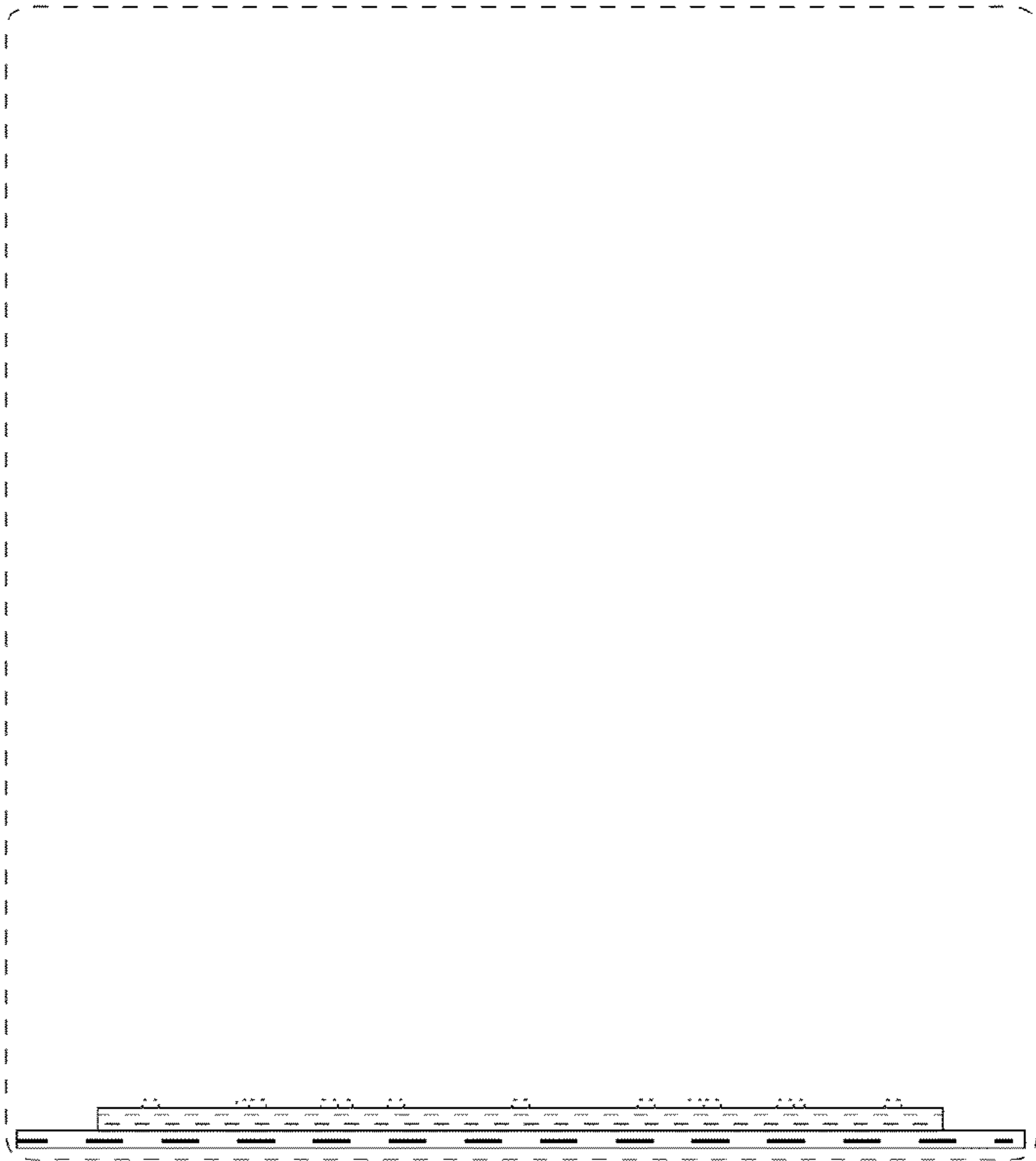


FIG. 12