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

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- (54) **COATED ABRASIVE DISC**
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- (**) Term: **15 Years**
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- (51) **LOC (11) Cl.** **15-09**
- (52) **U.S. Cl.**
USPC **D15/126**
- (58) **Field of Classification Search**
USPC D15/123, 124, 126, 138, 139, 140
CPC B24D 3/28; B24D 11/00; B24D 11/02;
B24D 2203/00; B32B 5/26; Y10T 428/21
See application file for complete search history.

- (56) **References Cited**
U.S. PATENT DOCUMENTS
3,377,264 A * 4/1968 Duke B23H 5/08
204/212
3,808,753 A * 5/1974 Maran B24D 9/085
451/490
3,883,998 A * 5/1975 Dosser B24D 9/085
451/508

- 3,991,527 A * 11/1976 Maran B24D 7/06
451/529
- 4,439,907 A * 4/1984 Block B24D 13/20
29/432.1
- 4,525,177 A * 6/1985 Grimes B24D 18/00
51/295
- 4,653,236 A * 3/1987 Grimes B24D 13/20
451/490
- 5,014,468 A 5/1991 Ravipati et al.
- 5,578,095 A * 11/1996 Bland B24D 3/002
51/295
- 5,580,647 A * 12/1996 Larson B24D 3/28
442/417
- 5,667,542 A * 9/1997 Law B24D 3/28
51/293

(Continued)

OTHER PUBLICATIONS

Design U.S. Appl. No. 29/629,295, "Design Application for Coated Abrasive Discs", filed Dec. 12, 2017.
(Continued)

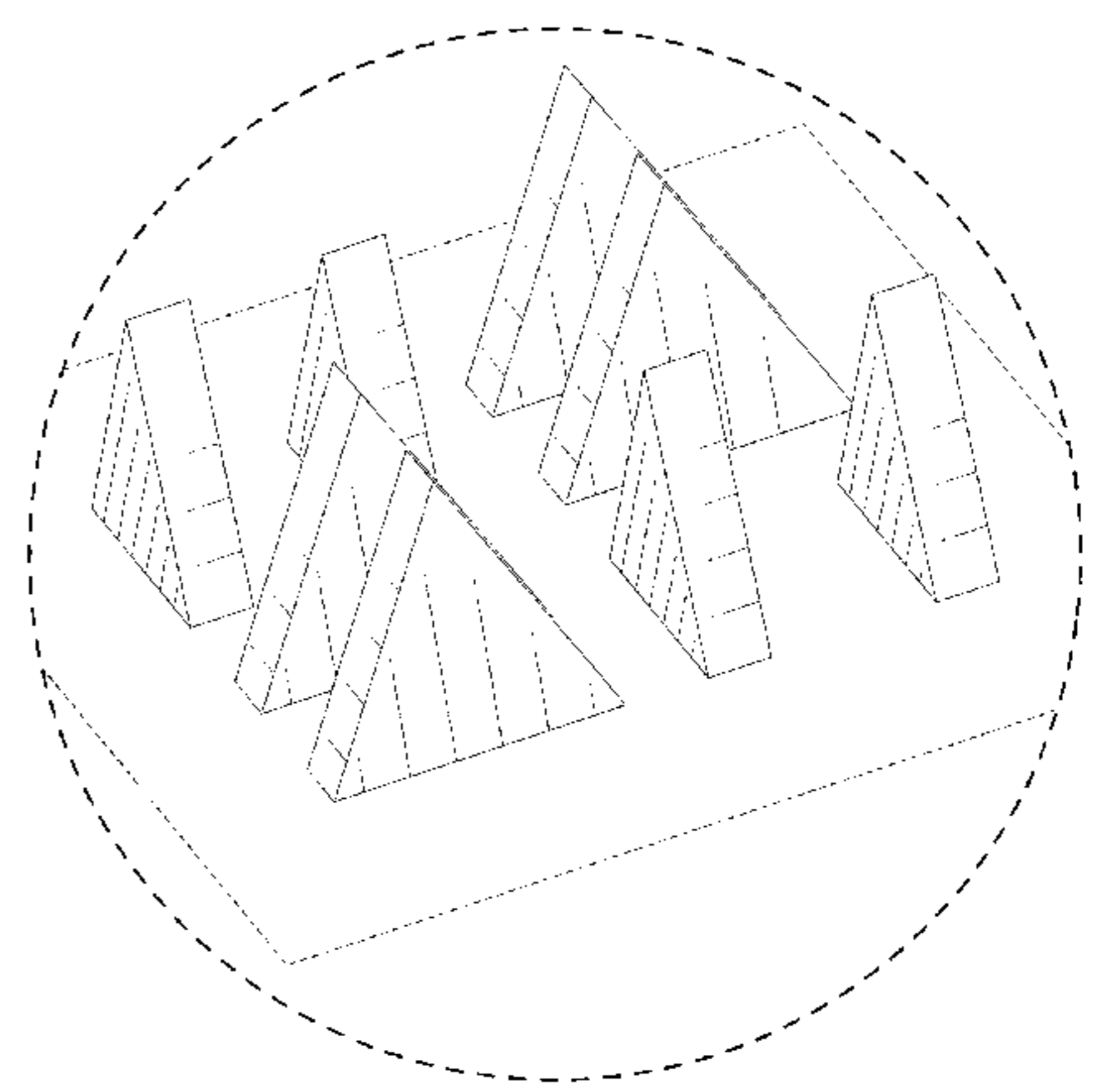
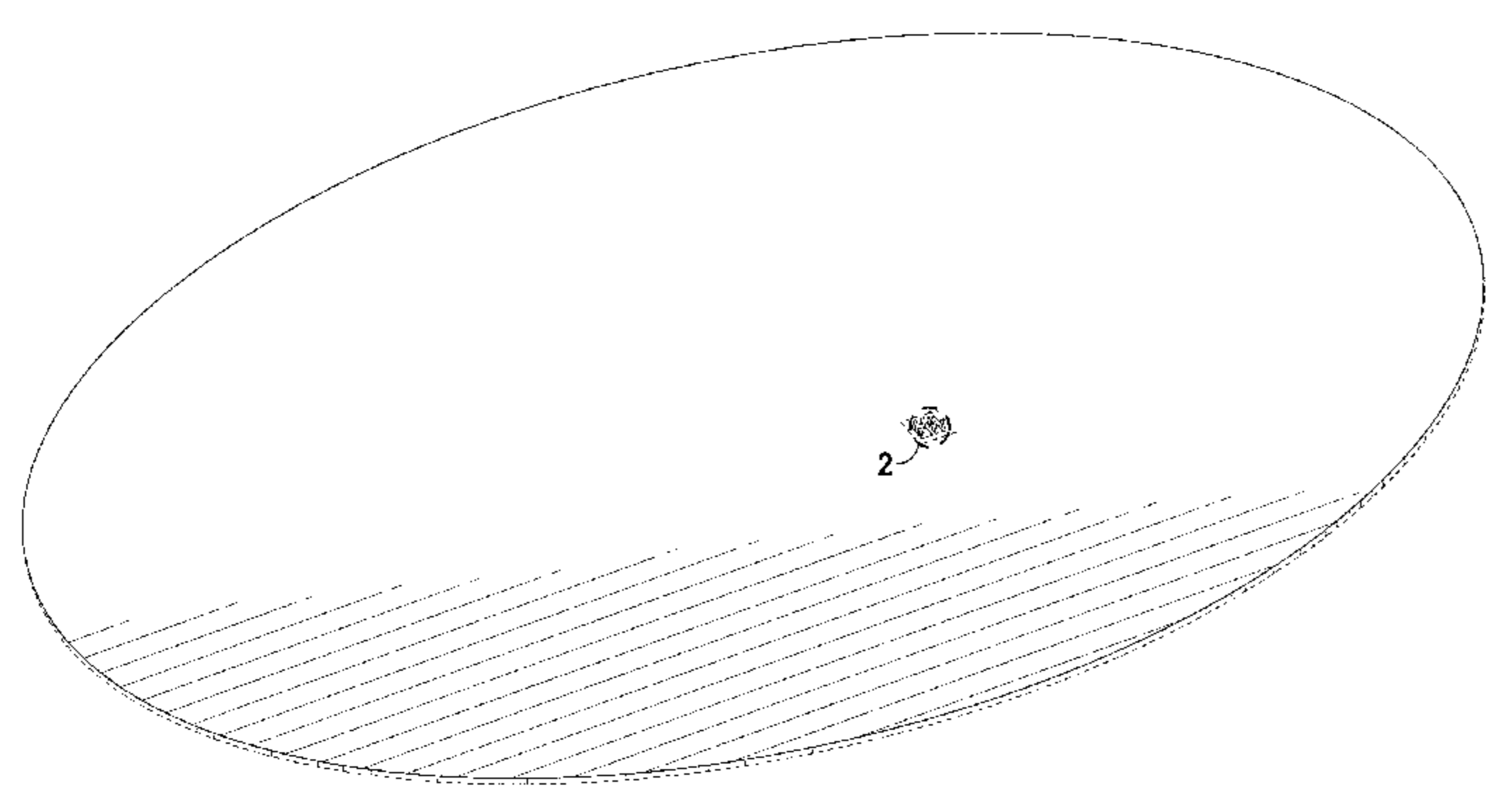
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(57) **CLAIM**
The ornamental design for a coated abrasive disc, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a coated abrasive disc showing the new design for a coated abrasive disc. As shown, the coated abrasive disc is oriented with the top surface shown uppermost on the disc;
FIG. 2 is an enlarged view of region 2 in FIG. 1;
FIG. 3 is a top view of the coated abrasive disc;
FIG. 4 is a left side view of the coated abrasive disc;
FIG. 5 is a right side view of the coated abrasive disc;
FIG. 6 is a front side view of the coated abrasive disc; and,
FIG. 7 is a back side view of the coated abrasive disc.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,667,842 A * 9/1997 Larson B24D 3/28
427/258
5,672,097 A * 9/1997 Hoopman B24D 3/28
451/526
6,121,143 A * 9/2000 Messner B24B 37/04
438/692
6,217,432 B1 * 4/2001 Woo B24D 3/004
451/534
6,312,484 B1 * 11/2001 Chou B24D 3/002
51/295
6,413,286 B1 * 7/2002 Swei B24D 3/28
51/293
6,524,681 B1 * 2/2003 Seitz D06N 7/00
104/18
6,773,475 B2 * 8/2004 Ohishi B24B 19/226
451/28
6,945,857 B1 * 9/2005 Doan B24B 53/017
451/443
7,410,413 B2 * 8/2008 Woo B24D 11/001
451/527
8,152,549 B1 * 4/2012 Werner H01R 12/732
439/291
8,776,677 B1 * 7/2014 Jackson, Jr. A23N 5/006
99/574
8,951,099 B2 * 2/2015 Wu B24B 53/007
451/443
9,776,302 B2 10/2017 Keipert
2002/0026752 A1 * 3/2002 Culler B24D 3/28
51/298
2002/0090901 A1 * 7/2002 Schutz B24D 3/004
451/526
2003/0022604 A1 * 1/2003 Annen B24D 3/26
451/59
2004/0003895 A1 * 1/2004 Amano B24B 37/245
156/345.12
2004/0020133 A1 * 2/2004 Paxton B24D 11/02
51/307

2005/0060941 A1 3/2005 Provow et al.
2005/0060947 A1 * 3/2005 McArdle B24D 3/002
51/298
2006/0156634 A1 * 7/2006 Welygan B24D 3/002
51/298
2008/0233837 A1 * 9/2008 Annen B24B 1/00
451/37
2009/0205259 A1 * 8/2009 Burzynski C09K 3/1409
51/295
2010/0003904 A1 * 1/2010 Duescher B24B 37/14
451/259
2012/0122383 A1 * 5/2012 Woo B24D 11/02
451/540
2013/0070478 A1 * 3/2013 Edamitsu G02B 5/0231
362/608
2015/0004889 A1 1/2015 Anuj
2016/0311084 A1 10/2016 Culler et al.

OTHER PUBLICATIONS

Design U.S. Appl. No. 29/629,305, "Design Application for Coated Abrasive Discs", filed Dec. 12, 2017.
Design U.S. Appl. No. 29/629,307, "Design Application for Coated Abrasive Discs", filed Dec. 12, 2017.
Design U.S. Appl. No. 29/629,311, "Design Application for Coated Abrasive Discs", filed Dec. 12, 2017.
U.S. Appl. No. 62/589,193, "Coated Abrasive Disc and Methods of Making and Using the Same", filed Nov. 21, 2017.
U.S. Appl. No. 62/589,186, "Coated Abrasive Disc and Methods of Making and Using the Same", filed Nov. 21, 2017.
U.S. Appl. No. 62/589,164, "Coated Abrasive Disc and Methods of Making and Using the Same", filed Nov. 21, 2017.
U.S. Appl. No. 62/589,248, "Coated Abrasive Disc and Methods of Making and Using the Same", filed Nov. 21, 2017.
U.S. Appl. No. 62/589,140, "Coated Abrasive Disc and Methods of Making and Using the Same", filed Nov. 21, 2017.

* cited by examiner

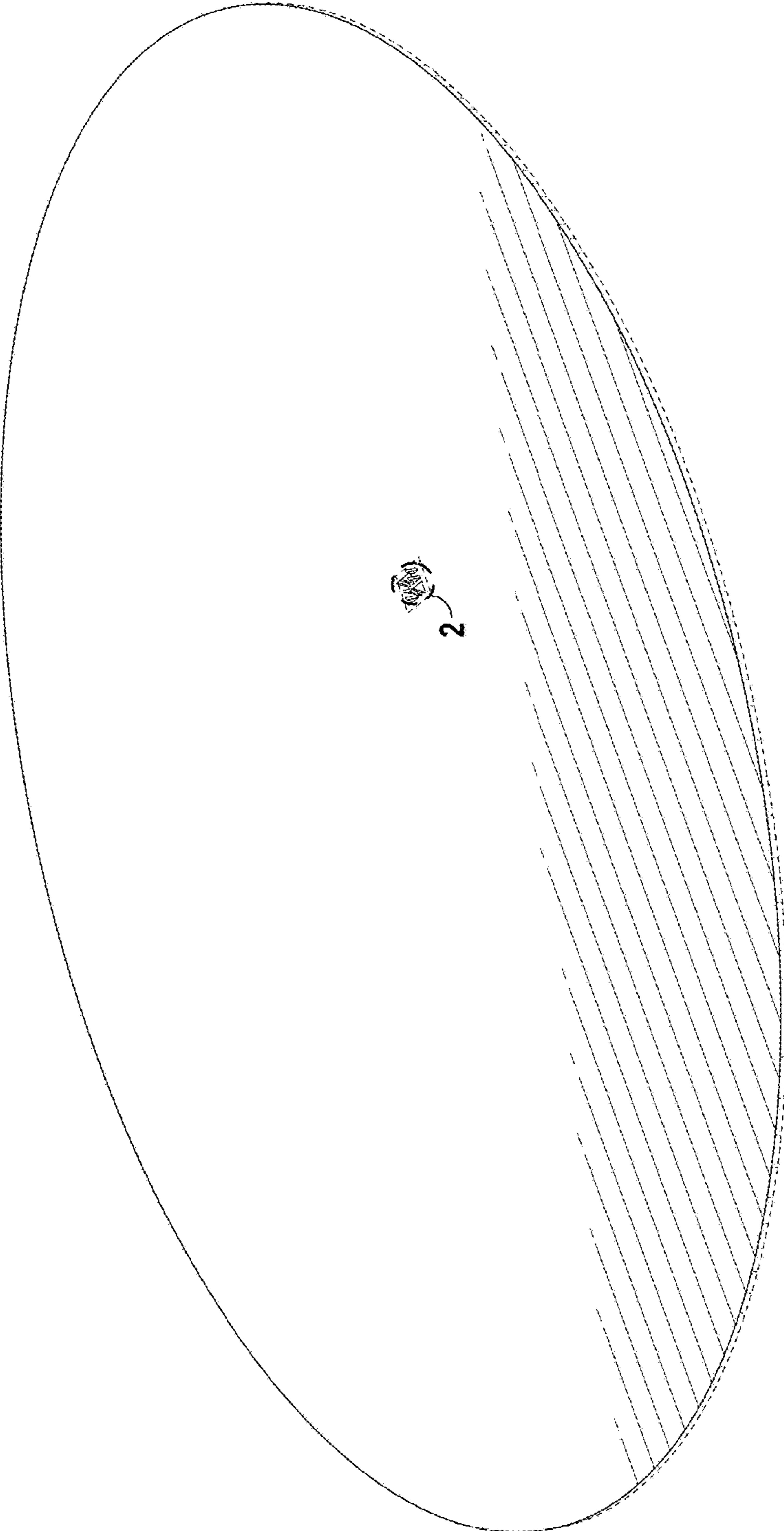


FIG. 1

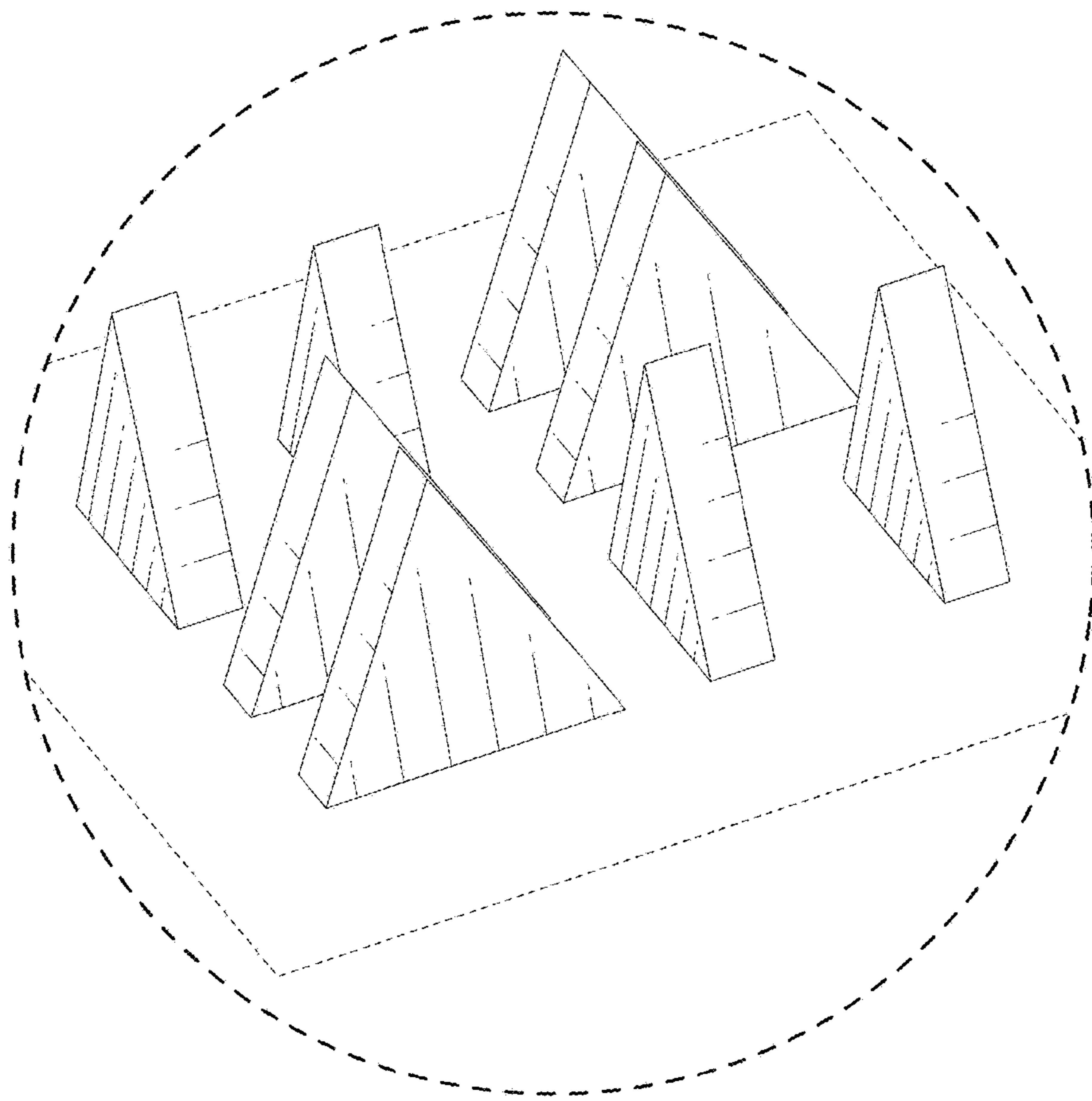


FIG. 2

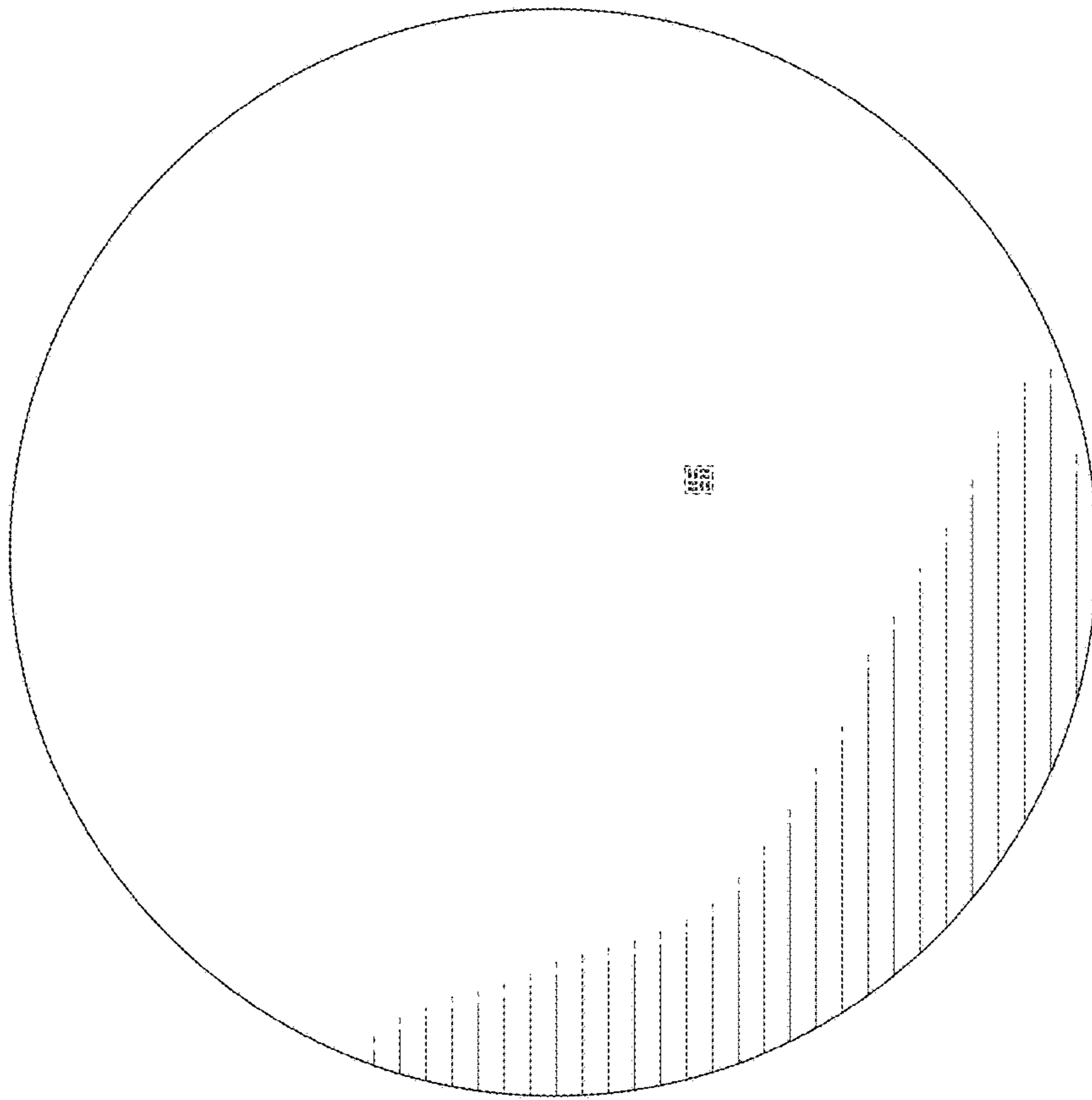


FIG. 3

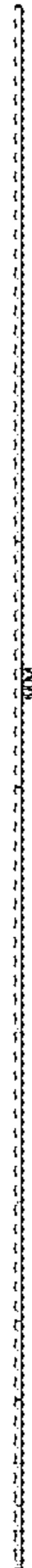


FIG. 4

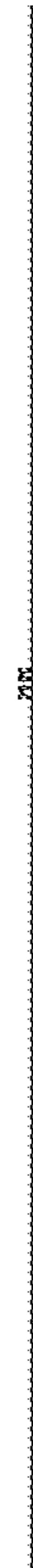


FIG. 5

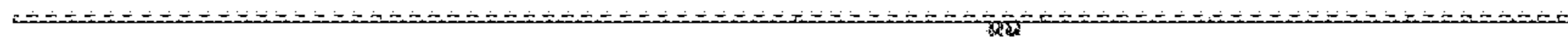


FIG. 6

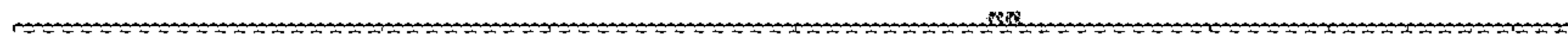


FIG. 7