



US00D816726S

(12) **United States Design Patent** (10) **Patent No.:** **US D816,726 S**
Cloutier Boily et al. (45) **Date of Patent:** **** May 1, 2018**

(54) **METER ROLLER FOR AN AGRICULTURAL METERING SYSTEM**

4,254,897 A 3/1981 Stocks
4,264,023 A 4/1981 Stocks et al.
4,379,664 A 4/1983 Klein et al.
4,408,704 A * 10/1983 Steilen A01C 7/123
111/177

(71) Applicant: **CNH Industrial Canada, Ltd.**,
Saskatoon (CA)

4,453,866 A 6/1984 Ryan
4,500,017 A 2/1985 Machnee
4,537,333 A 8/1985 Bjerregaard
4,600,122 A 7/1986 Lundie et al.
4,896,616 A 1/1990 Wintersteiger et al.

(72) Inventors: **Guillaume Cloutier Boily**, Martensville
(CA); **Ethan Curtis Stephen Bent**,
Saskatoon (CA)

(Continued)

(73) Assignee: **CNH Industrial Canada, Ltd.**,
Saskatoon, Saskatchewan (CA)

FOREIGN PATENT DOCUMENTS

(**) Term: **15 Years**

AU 2007201262 4/2007
WO 2016135174 9/2016
WO WO2016135174 9/2016

(21) Appl. No.: **29/596,652**

(22) Filed: **Mar. 9, 2017**

OTHER PUBLICATIONS

(51) **LOC (11) Cl.** **15-03**

1910 Tow-Behind Air Commodity Cart, Deere & Company, https://www.deere.com/en_US/products/equipment/planting_and_seeding_equipment/air_seeding/1910_commodity_air_cart/1910_commodity_air_cart.page, 2017, 3pgs.

(52) **U.S. Cl.**
USPC **D15/28**

(58) **Field of Classification Search**
USPC D15/10, 13, 21, 28; 222/312, 314, 317;
406/68

CPC A01C 15/16; A01C 15/14; A01C 15/005;
A01C 7/00; A01C 7/06; A01C 7/12;
A01C 7/08; A01C 7/04; A01C 7/16;
A01C 7/123; A01C 7/087; A01C 7/20;
B02C 13/09; B02C 13/095; B02C 13/20;
B65G 65/4881; B65G 65/00; B65G
65/48; B65G 53/4633; Y10S 111/90;
Y10S 111/922

See application file for complete search history.

(Continued)

Primary Examiner — Mark Goodwin
(74) *Attorney, Agent, or Firm* — Rebecca L. Henkel;
Rickard K. DeMille

(57) **CLAIM**

The ornamental design for a meter roller for an agricultural metering system, substantially as shown and described.

DESCRIPTION

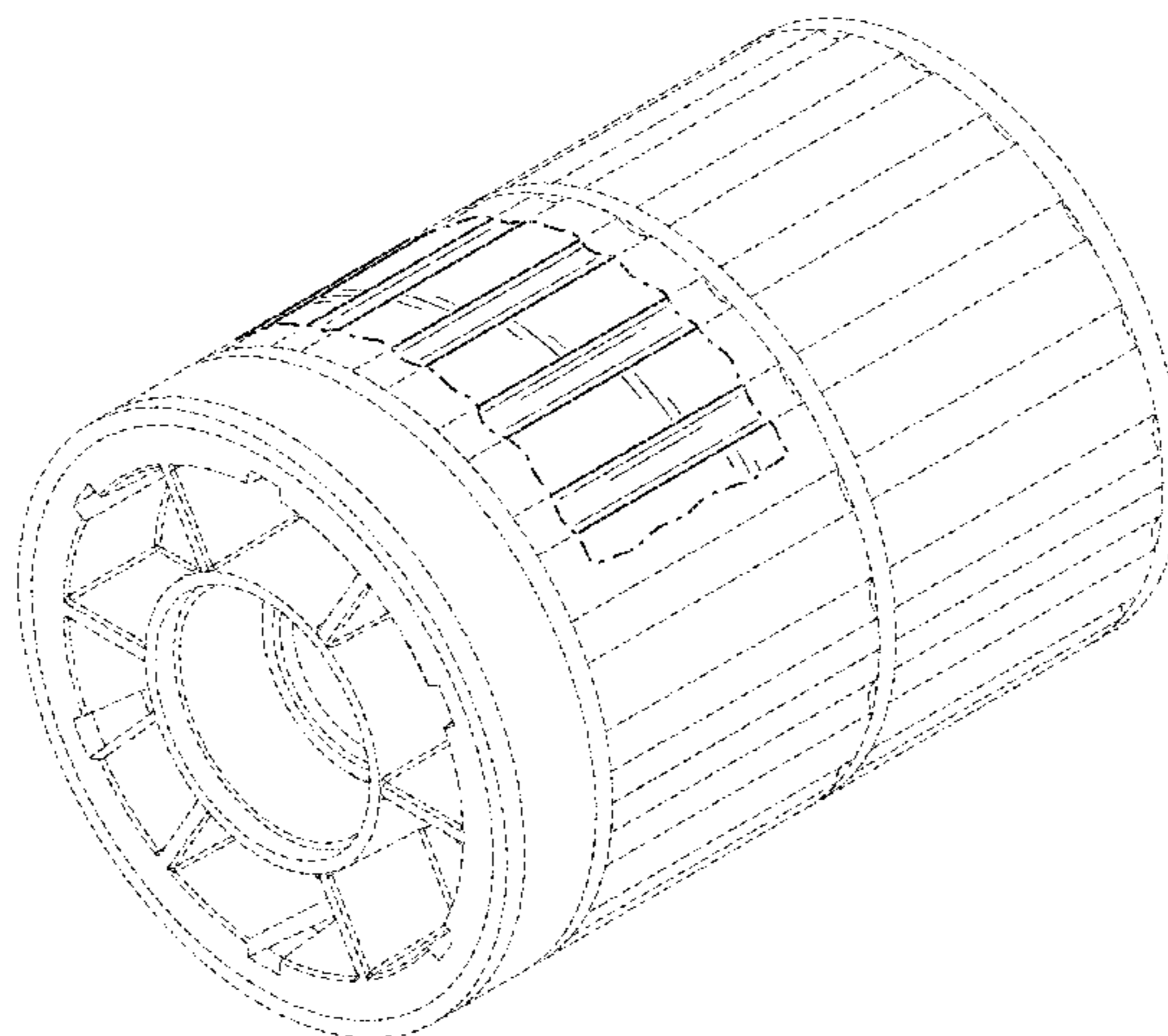
FIG. 1 is a perspective view of a meter roller for an agricultural metering system;
FIG. 2 is a top view of the meter roller; and,
FIG. 3 is a cross-sectional view of the meter roller, taken along line 3-3 of FIG. 2.
Phantom lines, where utilized, are for illustrative purposes only and form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,447,758 A 6/1969 Oznobichine
3,606,965 A 9/1971 Cortelou et al.
3,954,204 A 5/1976 Becker
3,982,670 A 9/1976 Brass
4,023,511 A 5/1977 Newman
4,053,088 A 10/1977 Grataloup

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,928,858 A * 5/1990 Tite A01C 7/123
111/34
4,948,017 A * 8/1990 Heep B65G 53/4633
222/368
5,003,894 A 4/1991 Lafferty
5,037,014 A 8/1991 Bliss
5,170,909 A 12/1992 Lundie et al.
5,314,090 A 5/1994 Alexander
5,549,060 A 8/1996 Schick et al.
D377,356 S * 1/1997 Bruns D15/28
5,601,209 A 2/1997 Barsi et al.
D386,191 S * 11/1997 Bruns D15/28
D396,863 S * 8/1998 Bruns D15/28
5,826,523 A * 10/1998 Gregor A01C 7/081
111/181
5,845,818 A * 12/1998 Gregor A01C 7/081
222/273
5,924,370 A 7/1999 Gregor et al.
5,944,233 A 8/1999 Bourne
5,947,040 A * 9/1999 Gregor A01C 7/081
111/174
5,996,515 A 12/1999 Gregor et al.
6,158,630 A * 12/2000 Mayerle G01F 13/001
222/413
6,240,861 B1 * 6/2001 Memory A01C 19/00
111/178
6,564,730 B2 5/2003 Crabb et al.
6,581,535 B2 6/2003 Barry et al.
6,598,548 B2 7/2003 Lempriere
6,928,940 B2 * 8/2005 Soun A01C 7/06
111/178
7,083,069 B2 8/2006 Wysong et al.
7,100,522 B2 * 9/2006 Mayerle A01C 7/12
111/177
D529,519 S * 10/2006 Fisher D15/13
7,305,925 B2 * 12/2007 Pleyer A01C 7/081
111/175
7,380,733 B2 6/2008 Owenby et al.
7,428,874 B2 9/2008 Jones et al.
7,810,580 B2 10/2010 Swanson
7,849,806 B2 12/2010 Wendte
7,854,206 B2 12/2010 Horsch
D652,060 S * 1/2012 Elliot D15/13
8,166,895 B2 5/2012 Dean et al.
8,196,534 B2 * 6/2012 Meyer A01C 7/081
111/182
8,434,416 B2 5/2013 Kowalchuk et al.
8,511,242 B2 8/2013 Applegate et al.
8,617,630 B2 12/2013 Swenson et al.
8,671,857 B2 3/2014 Kowalchuk et al.
8,701,576 B2 4/2014 Friggstad
8,925,471 B2 1/2015 Adams et al.
8,985,396 B2 3/2015 Jersey et al.
9,144,190 B2 * 9/2015 Henry A01C 7/082
9,254,052 B2 2/2016 Villarreal
9,265,188 B2 2/2016 Thompson et al.
9,392,741 B2 7/2016 Kowalchuk et al.
9,420,738 B2 8/2016 Walter
9,516,805 B2 12/2016 Henry et al.

9,801,330 B2 * 10/2017 Bent A01C 7/046
2011/0132244 A1 * 6/2011 Meyer A01C 7/081
111/130
2012/0031315 A1 2/2012 Beaujot
2012/0211508 A1 * 8/2012 Barsi A01C 7/081
221/13
2012/0325131 A1 * 12/2012 Thompson A01C 7/08
111/178
2015/0163990 A1 6/2015 Audigie et al.
2015/0216109 A1 * 8/2015 Meyer A01C 7/081
222/334
2016/0120107 A1 * 5/2016 Chahley A01C 7/107
406/29
2016/0120108 A1 * 5/2016 Gervais A01C 7/127
111/178
2016/0120109 A1 * 5/2016 Henry G01F 13/001
111/178
2016/0120111 A1 5/2016 Gervais et al.
2016/0120112 A1 * 5/2016 Gervais G01F 11/24
222/173
2016/0120113 A1 * 5/2016 Kowalchuk G01F 11/24
222/1
2017/0086356 A1 * 3/2017 Schweitzer A01C 5/062
2017/0118905 A1 * 5/2017 Bent A01C 7/046

OTHER PUBLICATIONS

Case IH Announces Revolutionary, New 2000 Series Early Riser® Planter, Nov. 23, 2015, 4 pgs.
Abati Titanium, Abati Agriculture Machinery, <https://www.caseih.com/apac/en-int/products/planting-seeding/precision-air-carts>, accessed Feb. 14, 2017, 5pgs.
How to Change Meter Rollers, John Deere, OMA85532: 1910 Commodity Air Cart, http://manuals.deere.com/omview/OMA85332_19/OUO6076_0000203_19_08JUN07_1.htm, Jun. 8, 2007, 6 pgs.
Chapter 6 Seeders for 2 and 4-Wheel Tractors, tcp/cpr/2907-3101; chap6a, http://www.fao.org/Ag/agp/agpc/doc/tibetmanual/06A.2_rotary_seeddrill.htm, last visited Feb. 9, 2017, 10 pgs.
U.S. Appl. No. 15/454,982, filed Mar. 9, 2017, Guillaume Cloutier Boily.
U.S. Appl. No. 15/456,290, filed Mar. 10, 2017, Guillaume Cloutier Boily.
U.S. Appl. No. 15/455,002, filed Mar. 9, 2017, Guillaume Cloutier Boily.
U.S. Appl. No. 15/455,019, filed Mar. 9, 2017, Guillaume Cloutier Boily.
U.S. Appl. No. 15/458,607, filed Mar. 14, 2017, Guillaume Cloutier Boily.
U.S. Appl. No. 15/458,659, filed Mar. 14, 2017, Guillaume Cloutier Boily.
U.S. Appl. No. 29/596,843, filed Mar. 10, 2017, Guillaume Cloutier Boily.
U.S. Appl. No. 29/596,846, filed Mar. 10, 2017, Guillaume Cloutier Boily.
“Air-Seeding Equipment,” John Deere, 2015, 40 pgs (see, e.g., p. 31).

* cited by examiner

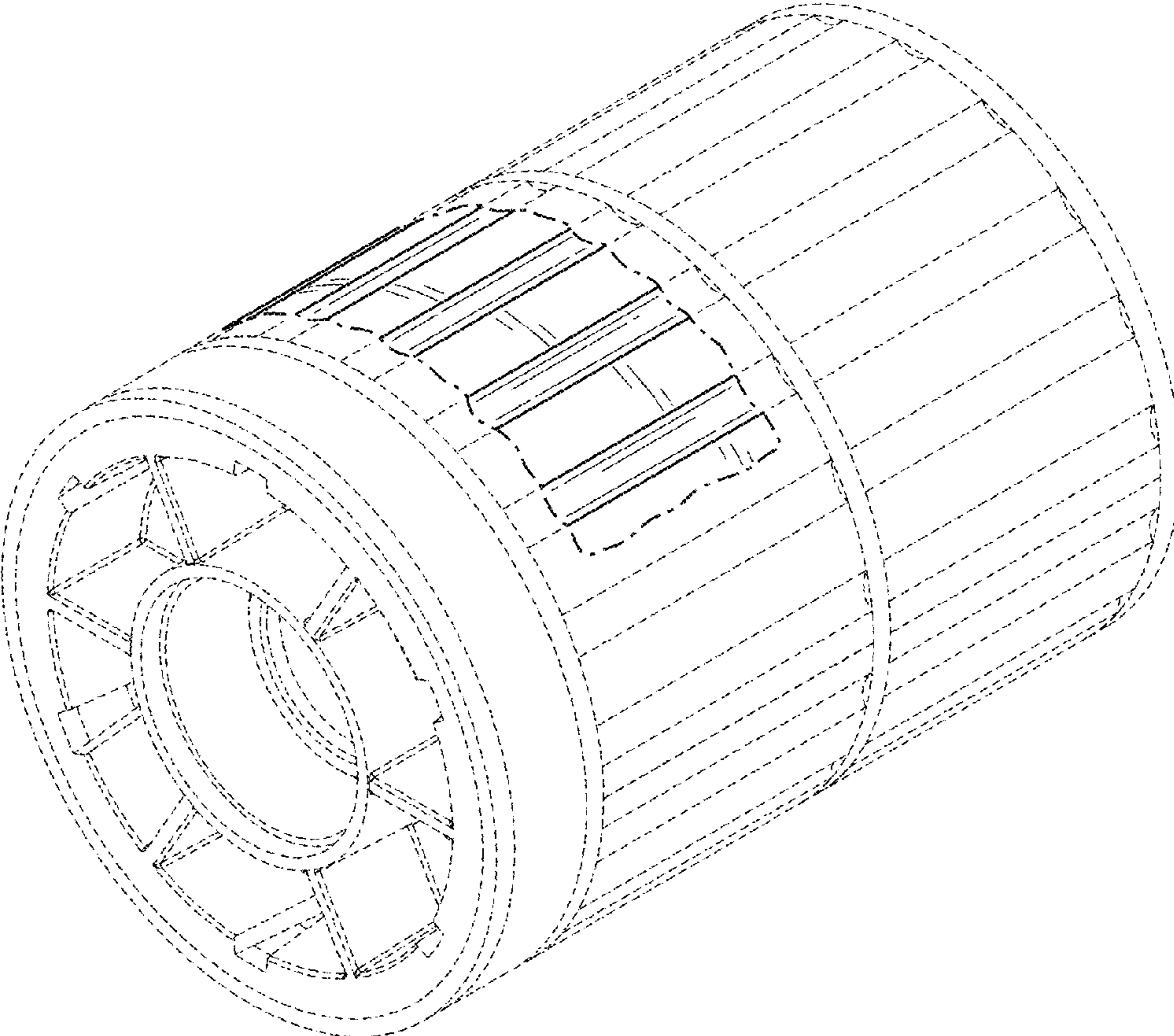


FIG. 1

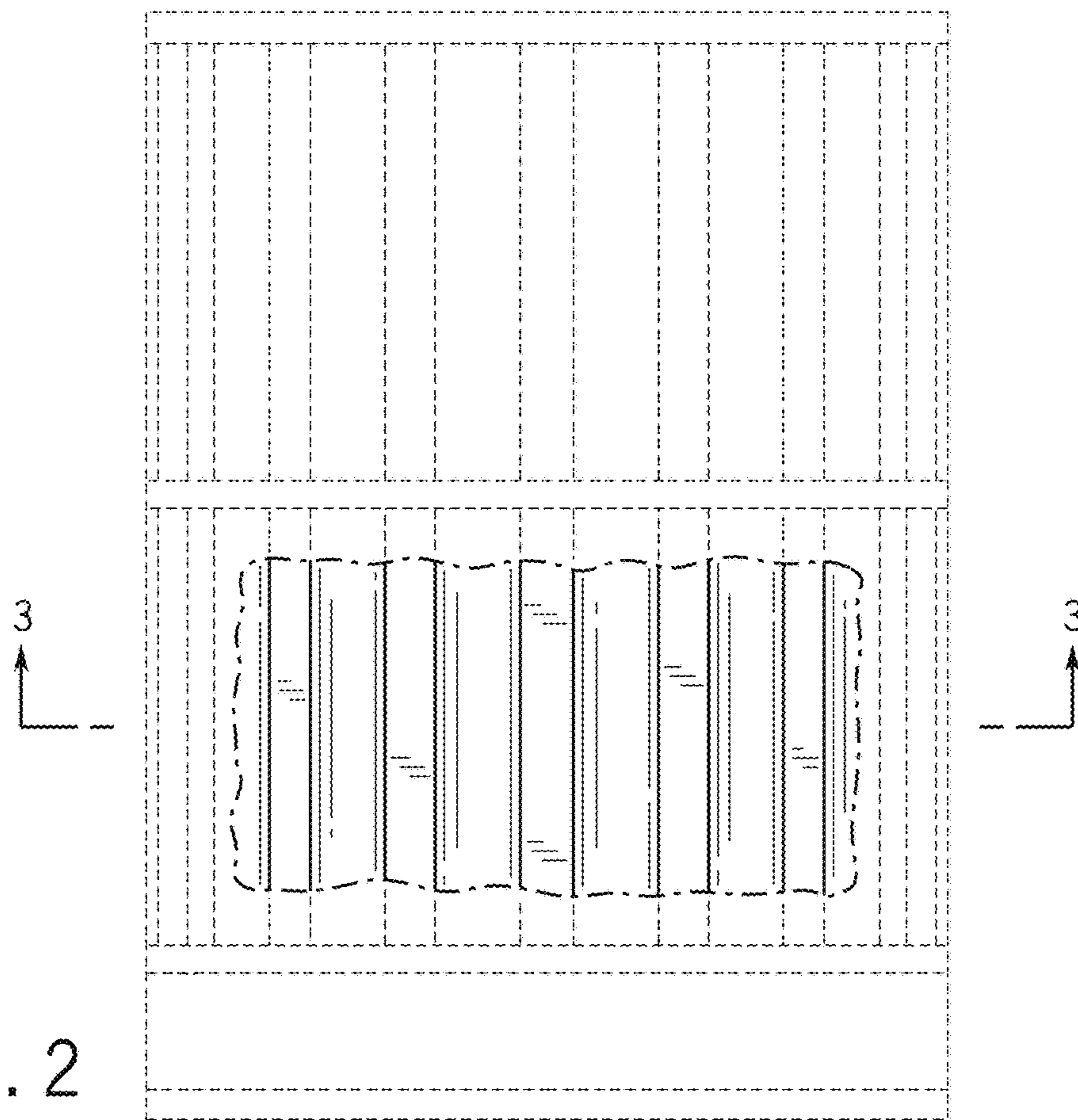


FIG. 2

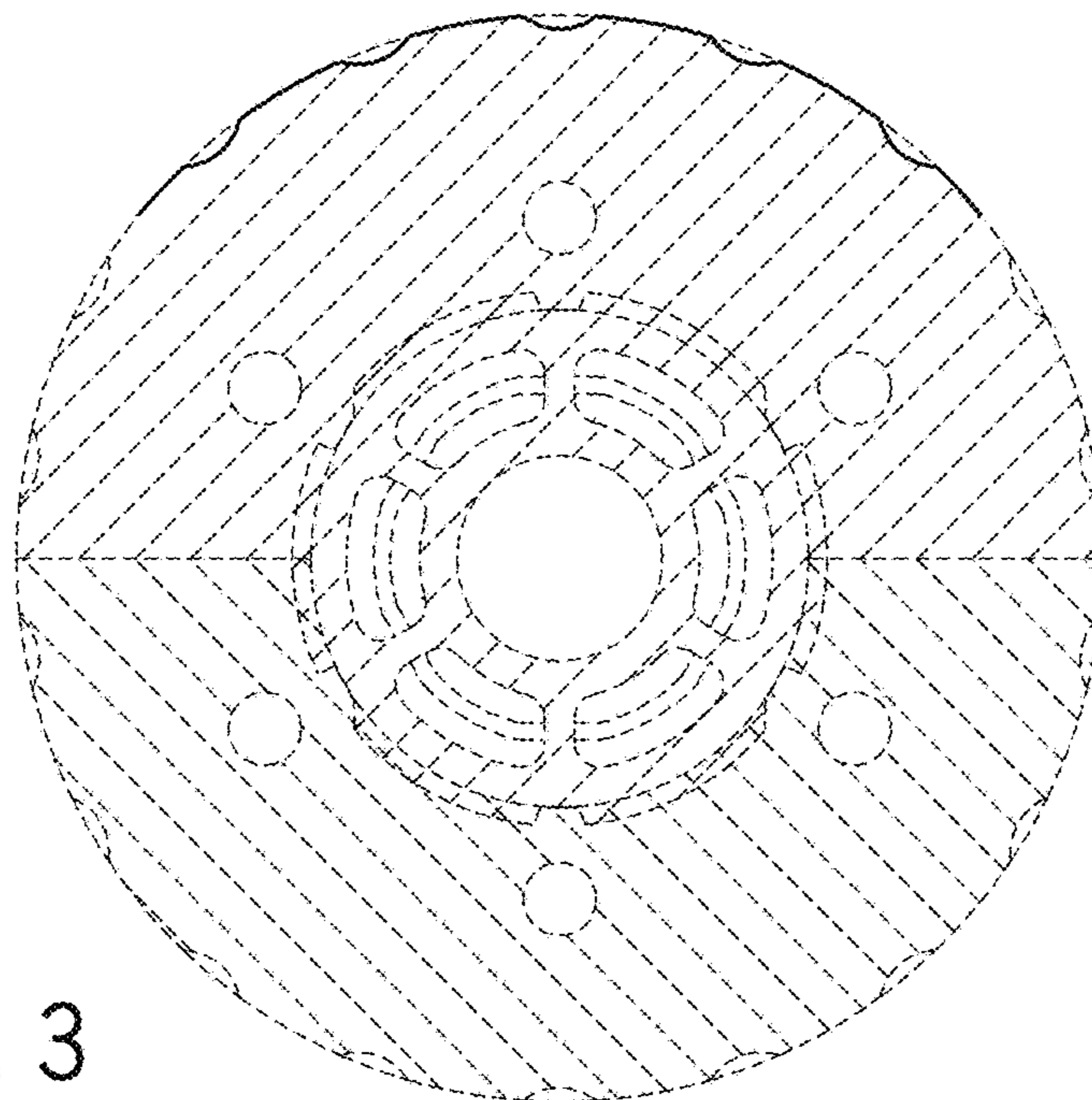


FIG. 3