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

(10) **Patent No.:** **US D674,817 S**

(45) **Date of Patent:** **** Jan. 22, 2013**

- (54) **CASING CENTRALIZER**
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Alfredo Sanchez, Tomball, TX (US)
- (73) Assignee: **Top-Co Cementing Products Inc.**,
Weatherford, TX (US)
- (**) Term: **14 Years**
- (21) Appl. No.: **29/405,122**
- (22) Filed: **Oct. 28, 2011**
- (51) **LOC (9) Cl.** **15-03**
- (52) **U.S. Cl.** **D15/21**
- (58) **Field of Classification Search** D15/10,
D15/21; 166/384, 241.1-241.7, 213, 173,
166/208, 382; 175/325.5, 325.1, 325.2, 325.3;
138/108, 112; 228/155; 72/393
See application file for complete search history.

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(57) **CLAIM**

The ornamental design for a casing centralizer, as shown and described.

DESCRIPTION

This application is related to (1) U.S. Design application Ser. No. 29/405,113, filed Oct. 28, 2011; (2) U.S. Design application Ser. No. 29/405,117, filed Oct. 28, 2011; (3) U.S.

Design application Ser. No. 29/405,121, filed Oct. 28, 2011; (4) U.S. Design application Ser. No. 29/405,124, filed Oct. 28, 2011; (5) U.S. Design application Ser. No. 29/405,130, filed Oct. 28, 2011; (6) U.S. Design application Ser. No. 29/405,133, filed Oct. 28, 2011, the entire disclosures of which are incorporated herein by reference.

FIG. 1 is a perspective view of a casing centralizer showing our new design according to a first embodiment;

FIG. 2 is an elevational view of the first embodiment;

FIG. 3 is a top plan view of the first embodiment, the bottom plan view of the first embodiment being identical to the top plan view of the first embodiment;

FIG. 4 is a sectional view of the first embodiment taken along line 4-4 of FIG. 3;

FIG. 5 is an elevational view of the casing centralizer according to a second embodiment, the second embodiment being identical to the first embodiment except that the second embodiment has one indeterminate length as indicated in FIG. 5;

FIG. 6 is a top plan view of the casing centralizer according to a third embodiment, the third embodiment being identical to the first embodiment except that the third embodiment has six indeterminate lengths as indicated in FIG. 6;

FIG. 7 is a perspective view of a casing centralizer showing our new design according to a fourth embodiment;

FIG. 8 is an elevational view of the fourth embodiment;

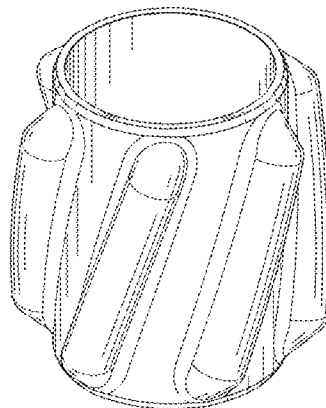
FIG. 9 is a top plan view of the fourth embodiment, the bottom plan view of the fourth embodiment being identical to the top plan view of the fourth embodiment;

FIG. 10 is a sectional view of the fourth embodiment taken along line 10-10 of FIG. 9;

FIG. 11 is an elevational view of the casing centralizer according to a fifth embodiment, the fifth embodiment being identical to the fourth embodiment except that the fifth embodiment has one indeterminate length as indicated in FIG. 11; and,

FIG. 12 is a perspective view of the casing centralizer showing our new design according to a sixth embodiment, the sixth embodiment being identical to the fourth embodiment except that the sixth embodiment has six indeterminate lengths as indicated in FIG. 12.

1 Claim, 8 Drawing Sheets



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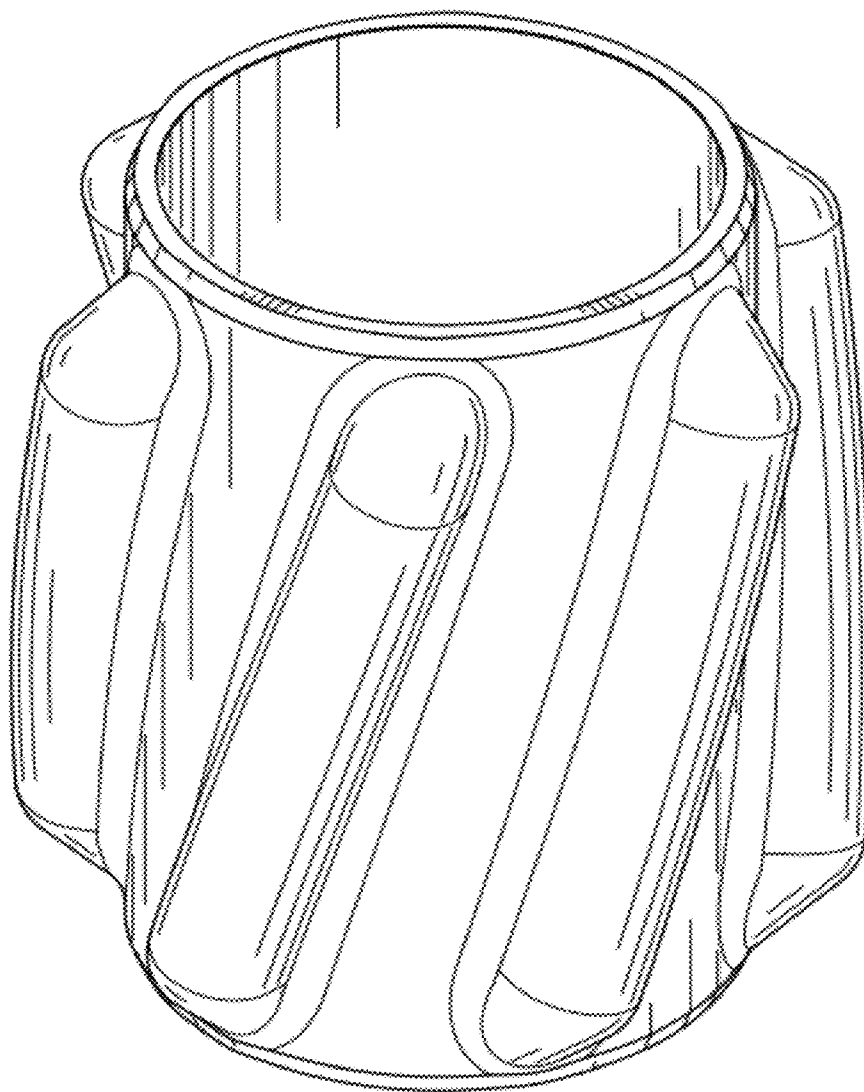


Fig. 1

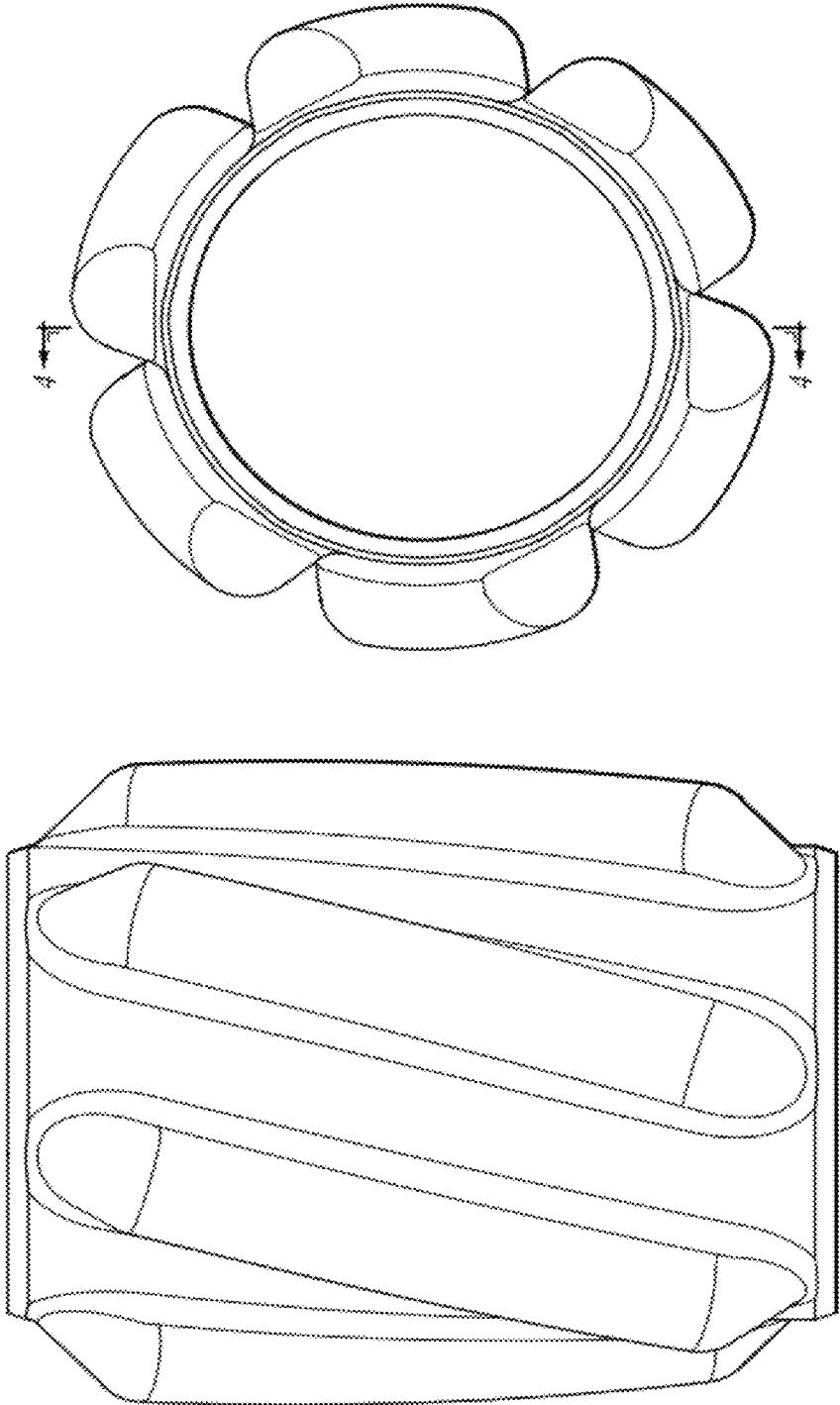


Fig. 3

Fig. 2

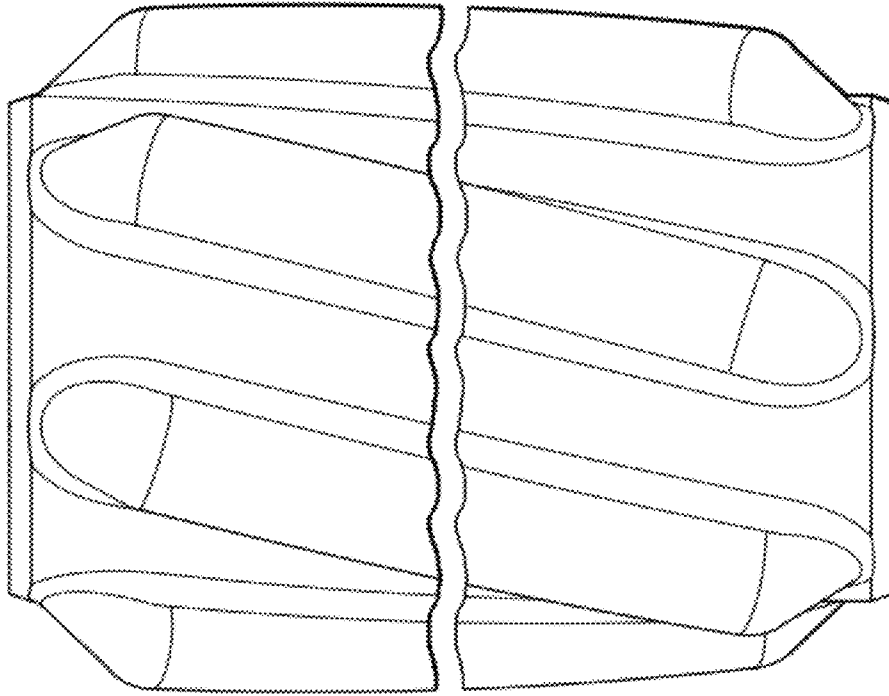


Fig. 5

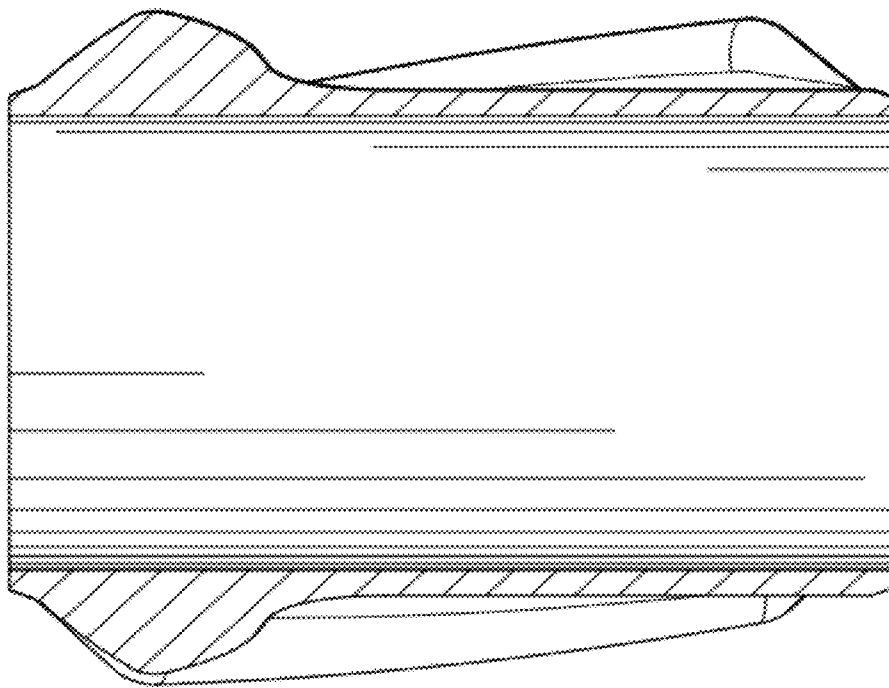


Fig. 4

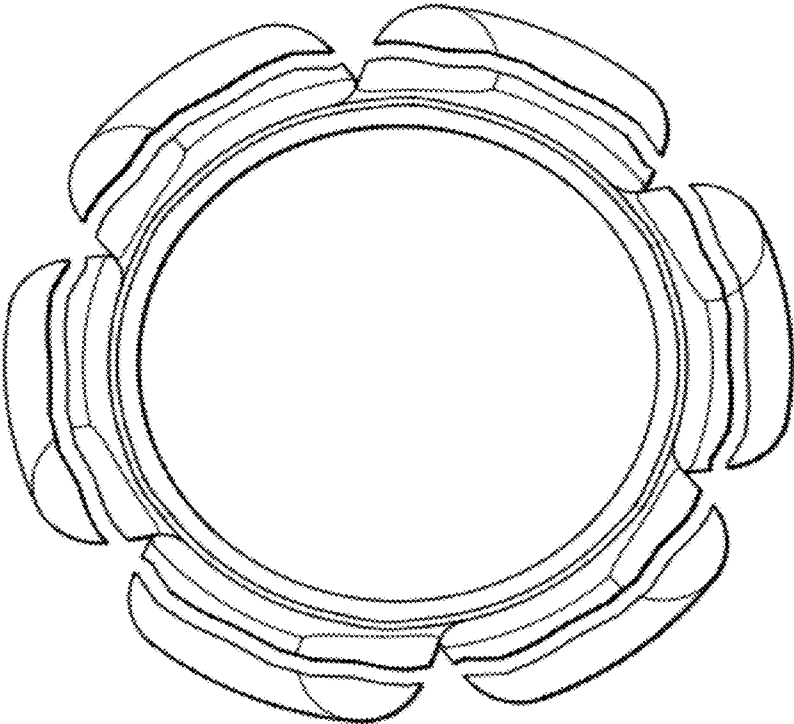


Fig. 6

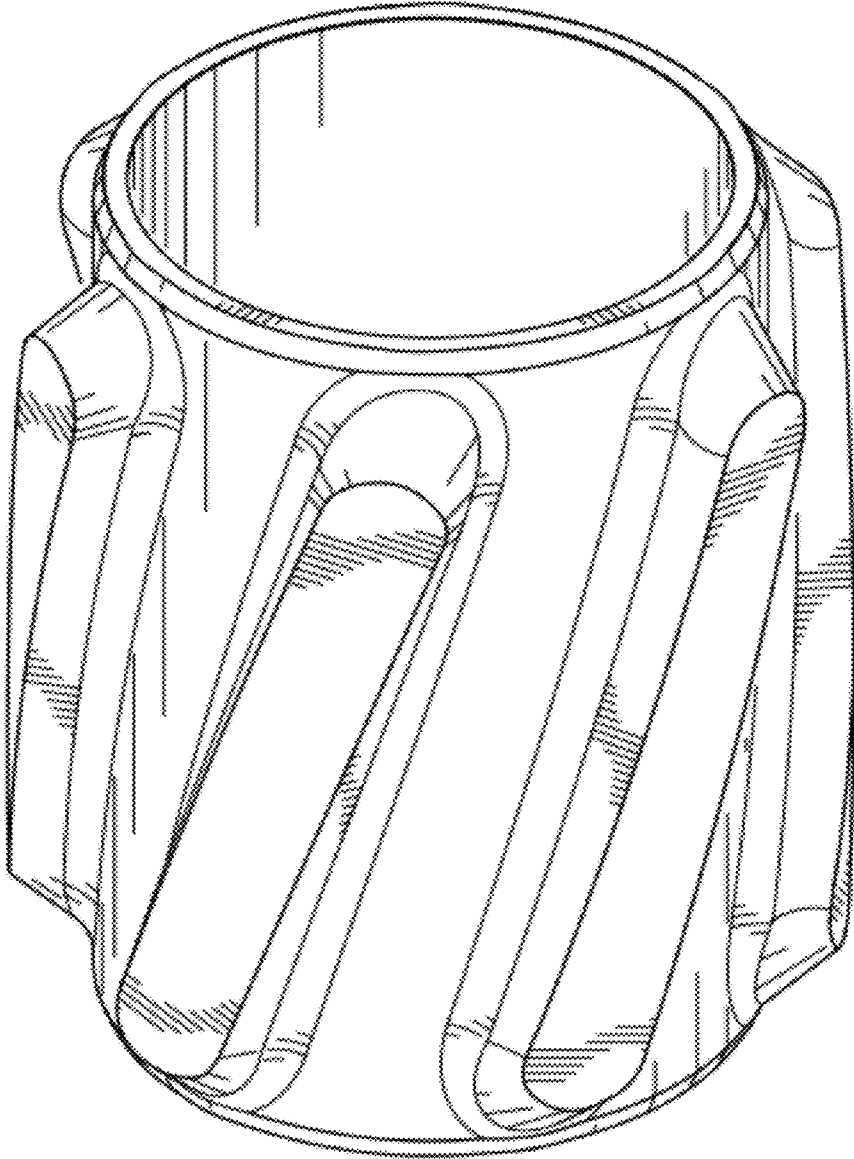


Fig. 7

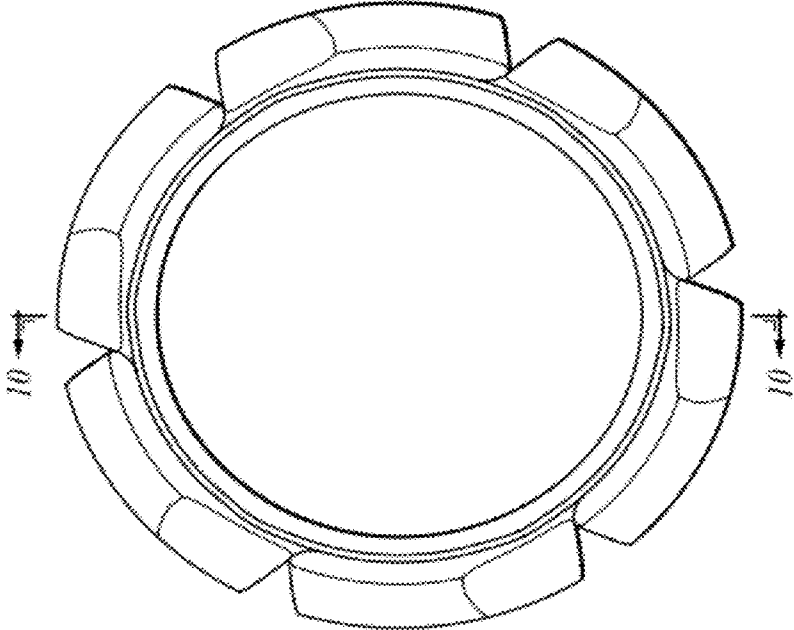


Fig. 9

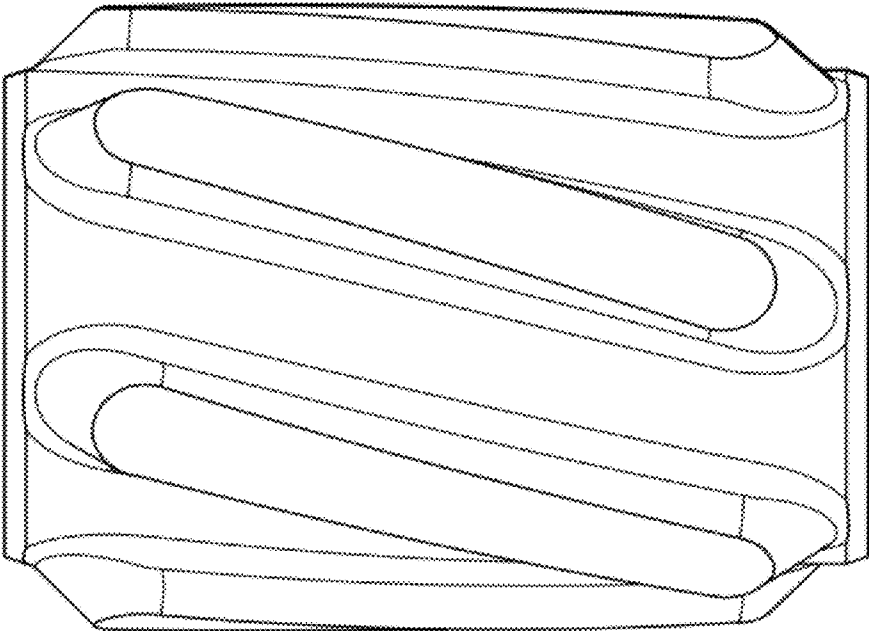


Fig. 8

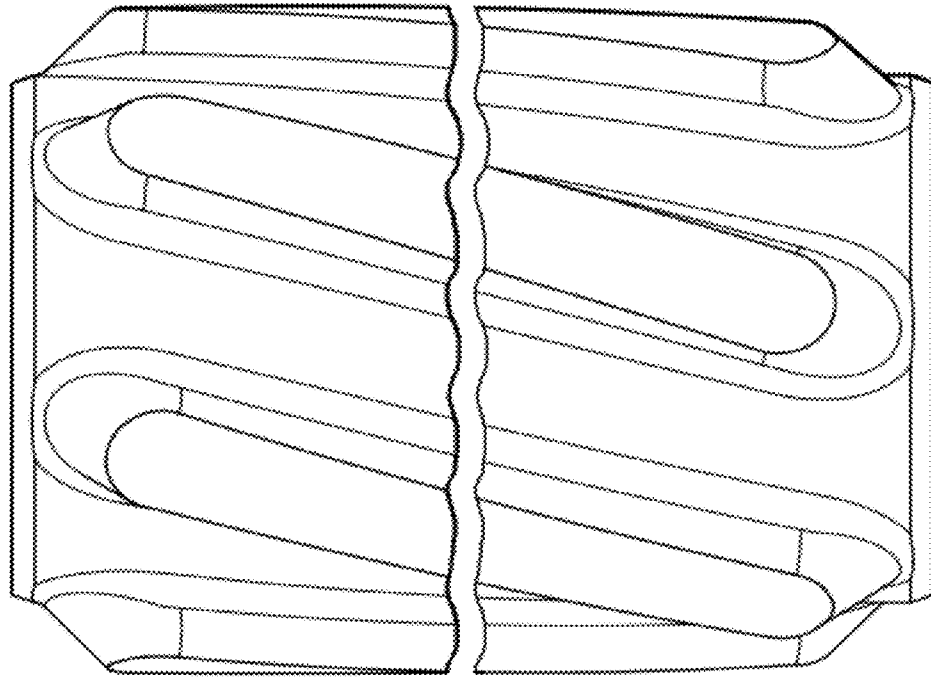


Fig. 11

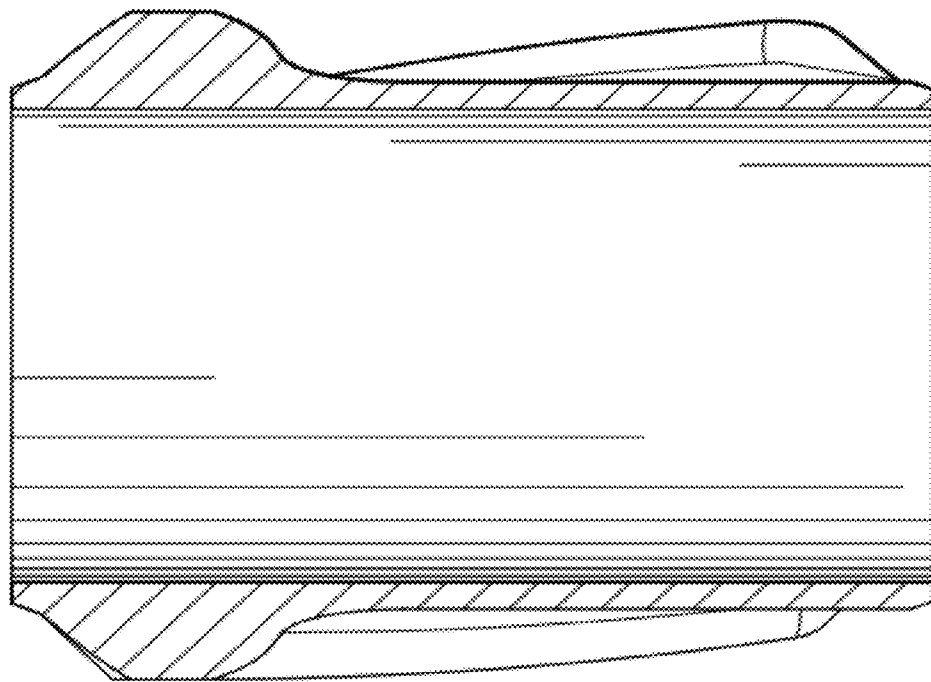


Fig. 10

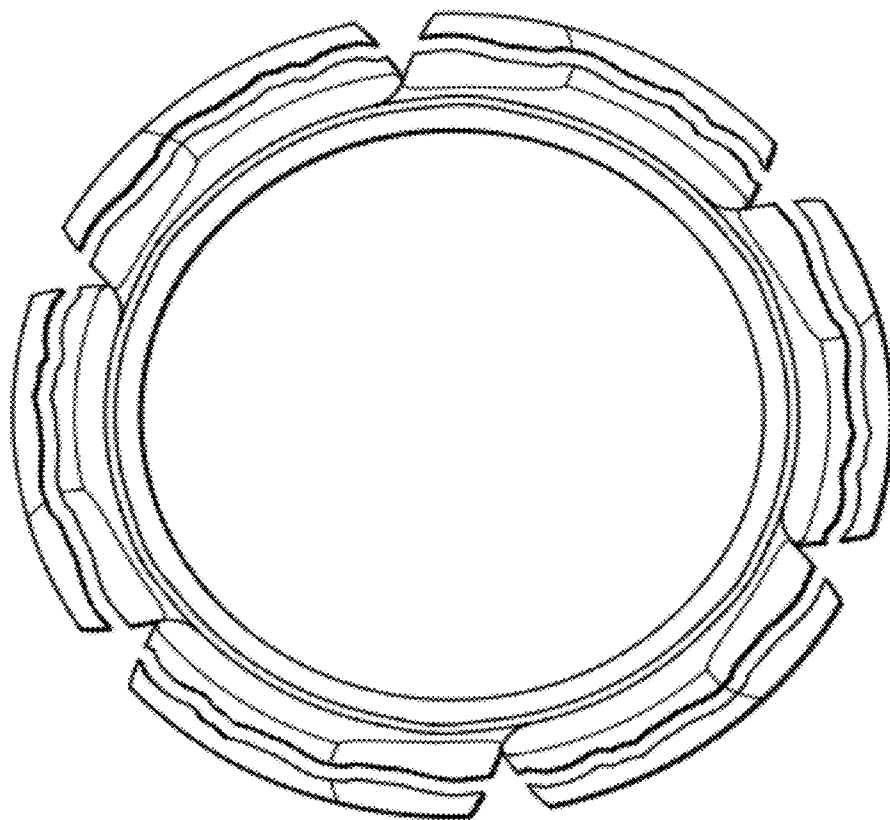


Fig. 12