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(12) **United States Design Patent**
Chen

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- (54) **SELF DRILLING TAPPING SCREW**
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- (**) Term: **15 Years**
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- (51) **LOC (12) Cl.** **08-08**
- (52) **U.S. Cl.**
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- (58) **Field of Classification Search**
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F16B 23/0007; F16B 23/0023; F16B 23/0015; F16B 23/0038; F16B 23/0046;
F16B 25/00; F16B 25/0036; F16B 25/103; F16B 25/0015; F16B 25/10;
F16B 25/0042; F16B 25/0052; F16B 25/0057; F16B 25/0063; F16B 25/0068;
F16B 25/0084; F16B 25/0026; F16B 25/0047; F16B 33/02; F16B 2033/025;
F16B 35/04; F16B 35/06; F16B 35/041; F16B 35/065; F16B 35/048; F16B 35/044; Y10S 411/919
See application file for complete search history.

- (56) **References Cited**
U.S. PATENT DOCUMENTS
3,079,831 A * 3/1963 Gutshall F16B 25/103 411/418
4,599,024 A * 7/1986 Sano F16B 25/0021 408/228

- 4,948,306 A * 8/1990 Wiedner B23B 51/00 408/227
- 5,074,729 A * 12/1991 Oba F16B 25/0021 408/230
- 5,171,186 A * 12/1992 Lukes B21H 3/027 411/387.8
- 5,382,195 A * 1/1995 Hiler F16B 25/0084 409/211
- 2002/0090278 A1 * 7/2002 Lai F16B 25/0021 411/387.8
- 2002/0127085 A1 * 9/2002 Field F16B 25/0021 411/387.6
- 2007/0065252 A1 * 3/2007 Su F16B 25/0084 411/387.1
- 2008/0124188 A1 * 5/2008 Chang F16B 25/0026 411/387.8
- 2009/0097941 A1 * 4/2009 Loichinger F16B 25/0031 411/387.5

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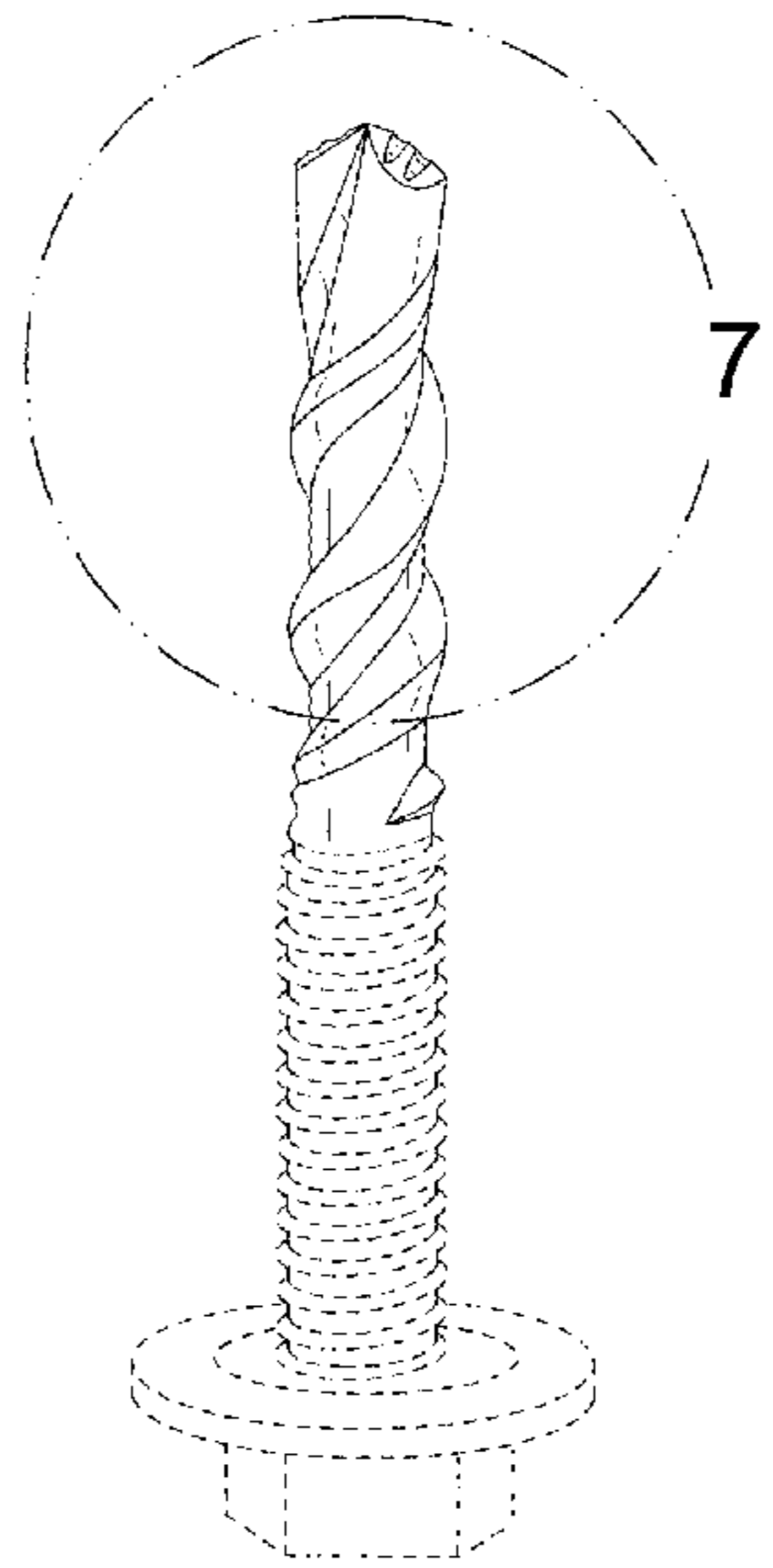
(57) **CLAIM**

The ornamental design for a self drilling tapping screw, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a self drilling tapping screw showing my new design.
FIG. 2 is a front view thereof.
FIG. 3 is a rear view thereof.
FIG. 4 is a side view thereof.
FIG. 5 is a bottom view thereof.
FIG. 6 is a top view thereof; and,
FIG. 7 is an enlarged view of the self drilling tapping screw taken from the indication circle of FIG. 1.
The broken lines in the drawings illustrate portions of the self drilling tapping screw and form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2009/0214321	A1 *	8/2009	Wang	B21F 7/00 411/387.6
2009/0232619	A1 *	9/2009	Baumgartner	F16B 25/103 411/387.8
2009/0269163	A1 *	10/2009	Huang	F16B 25/0084 411/387.8
2011/0103917	A1 *	5/2011	Ernst	F16B 25/0031 411/387.2
2011/0116894	A1 *	5/2011	Huang	F16B 25/0084 411/387.4
2013/0089389	A1 *	4/2013	Gong	F16B 25/103 411/371.2
2014/0023455	A1 *	1/2014	Park	F16B 25/0057 411/387.7
2015/0316088	A1 *	11/2015	Pearce	F16B 25/103 411/387.7

* cited by examiner

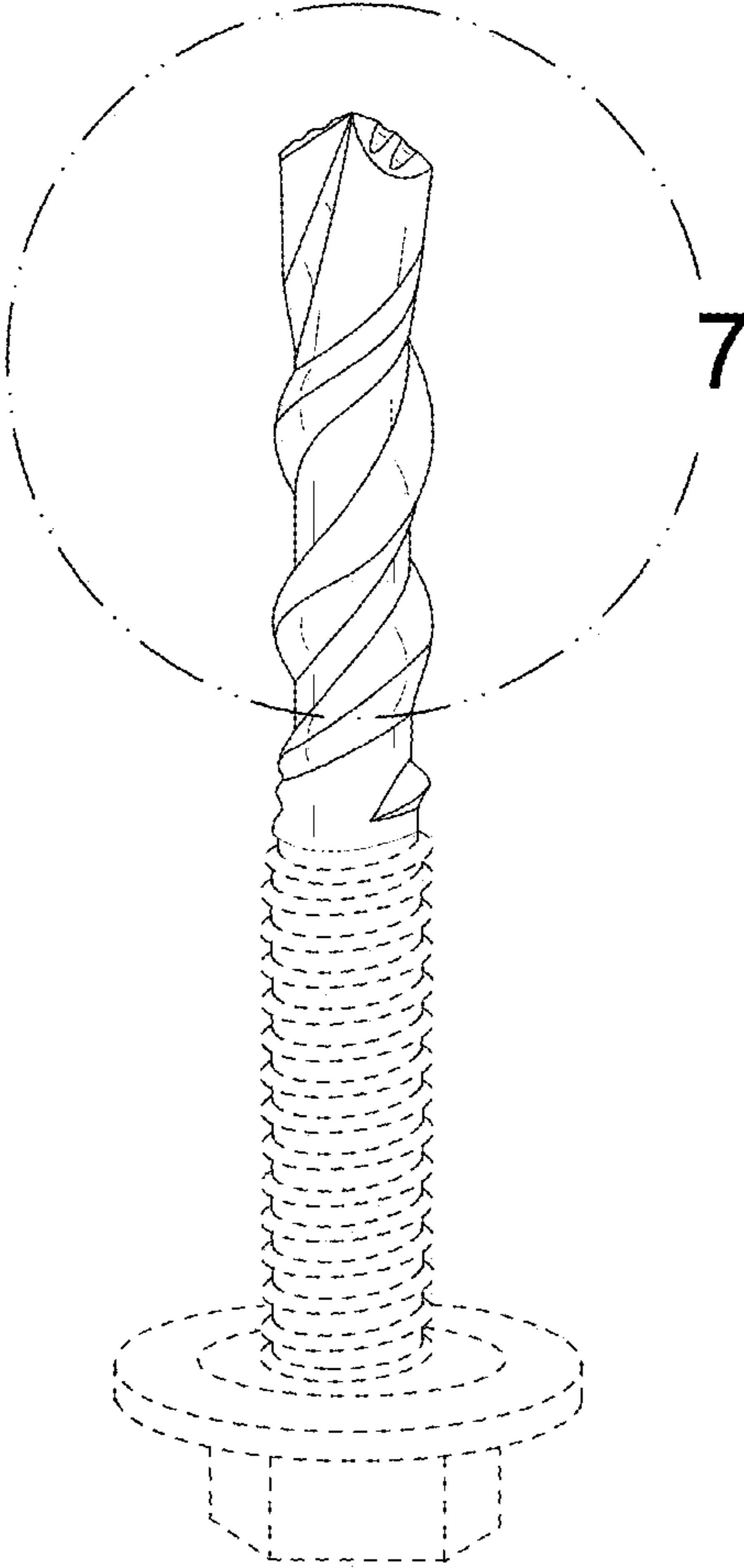


FIG.1

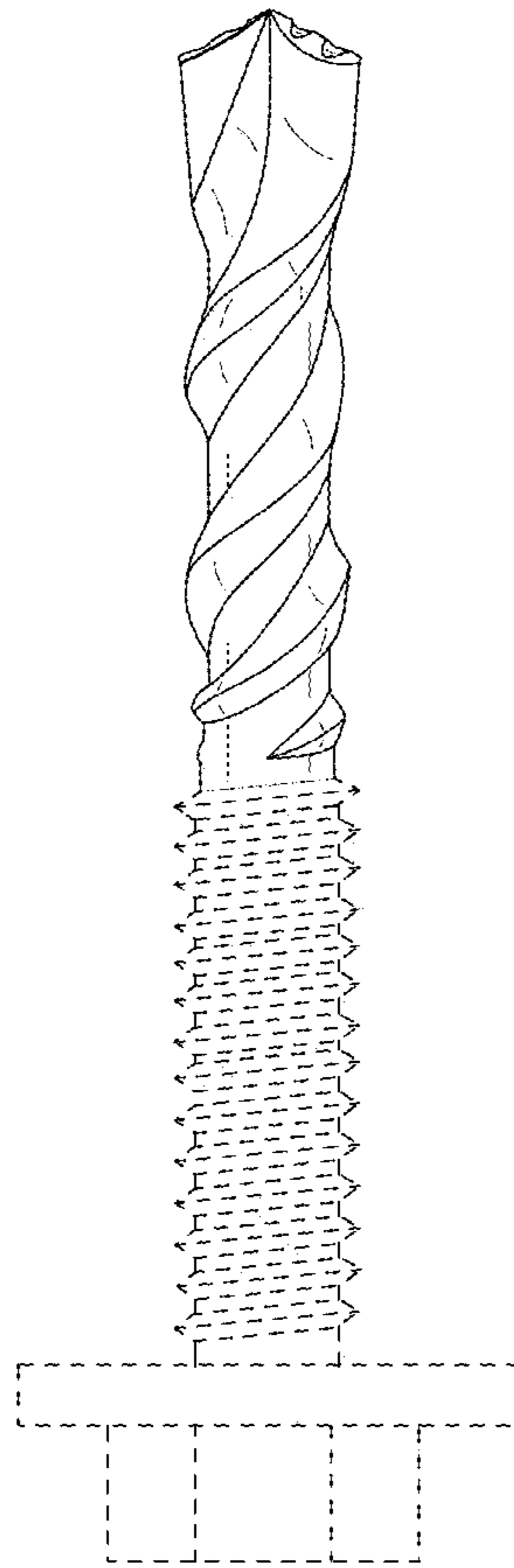


FIG.2

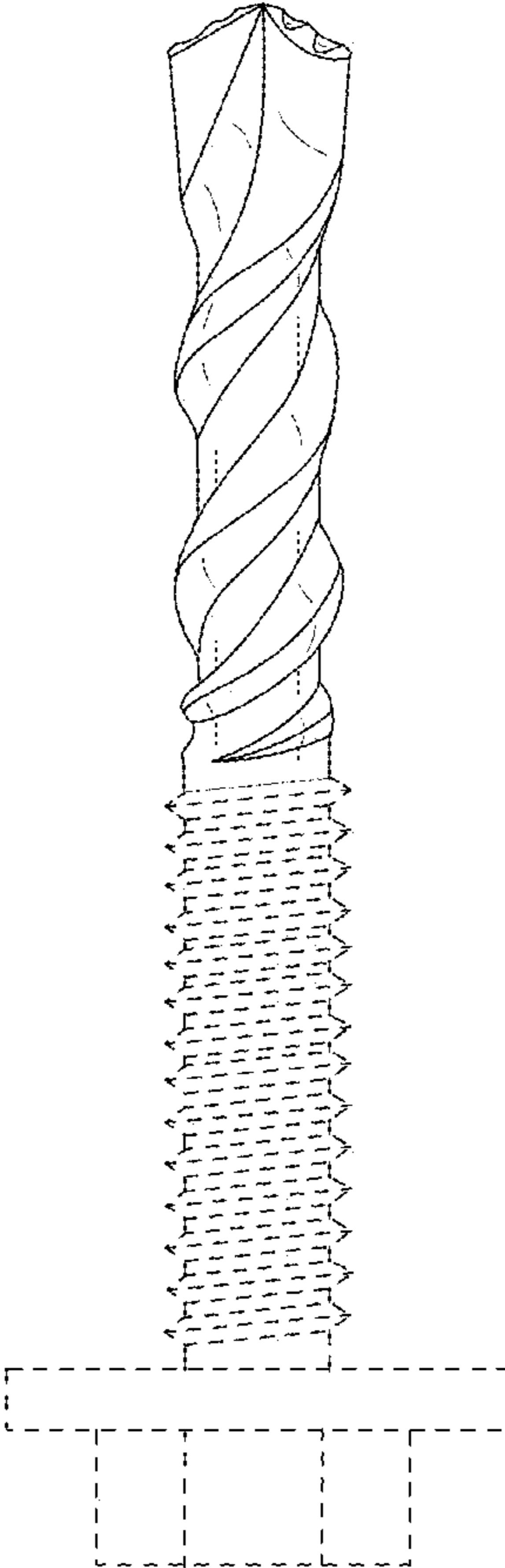


FIG.3

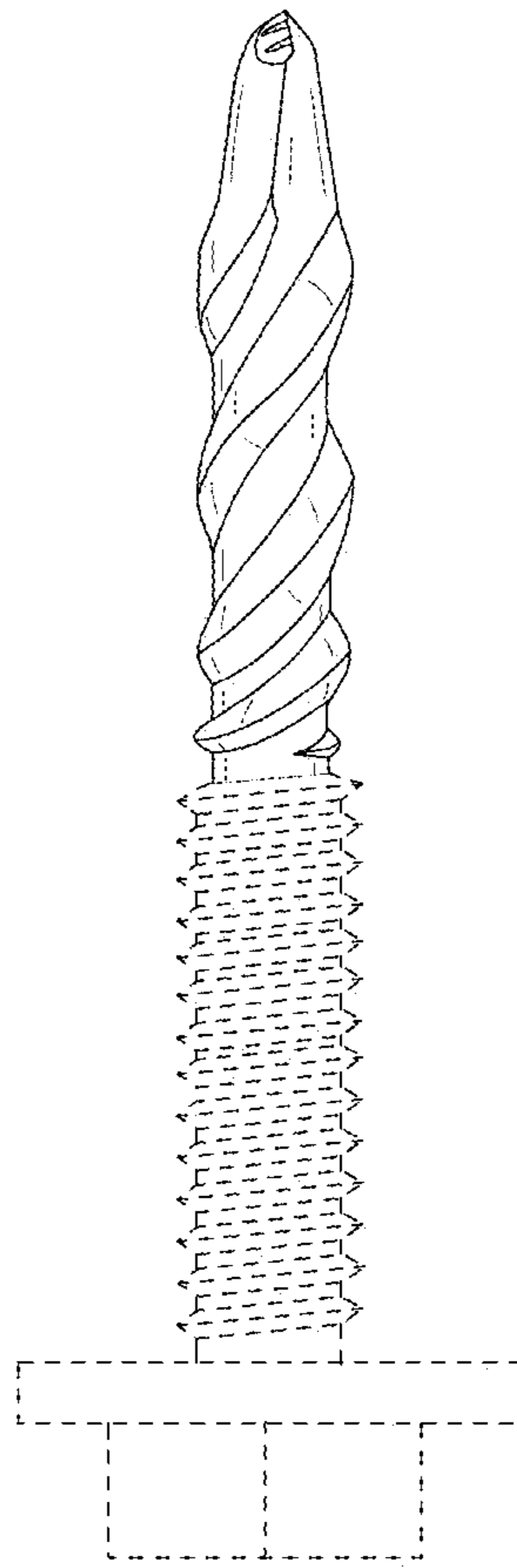


FIG.4

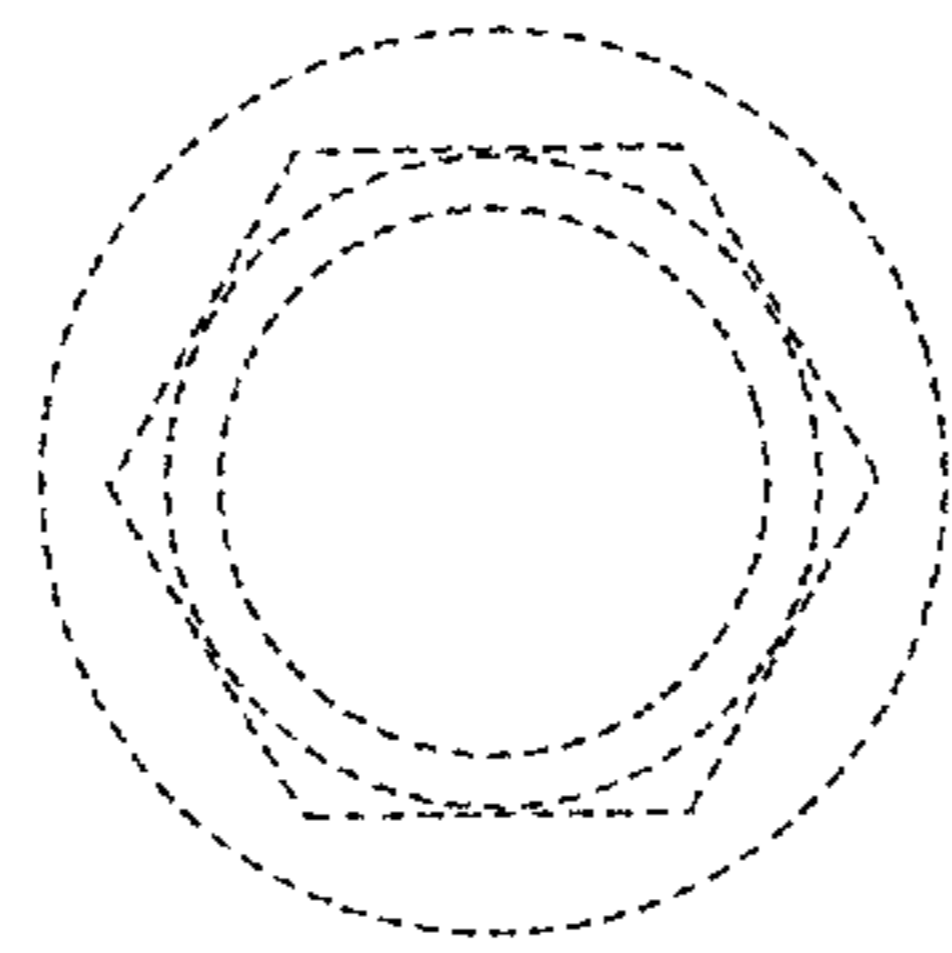


FIG 5

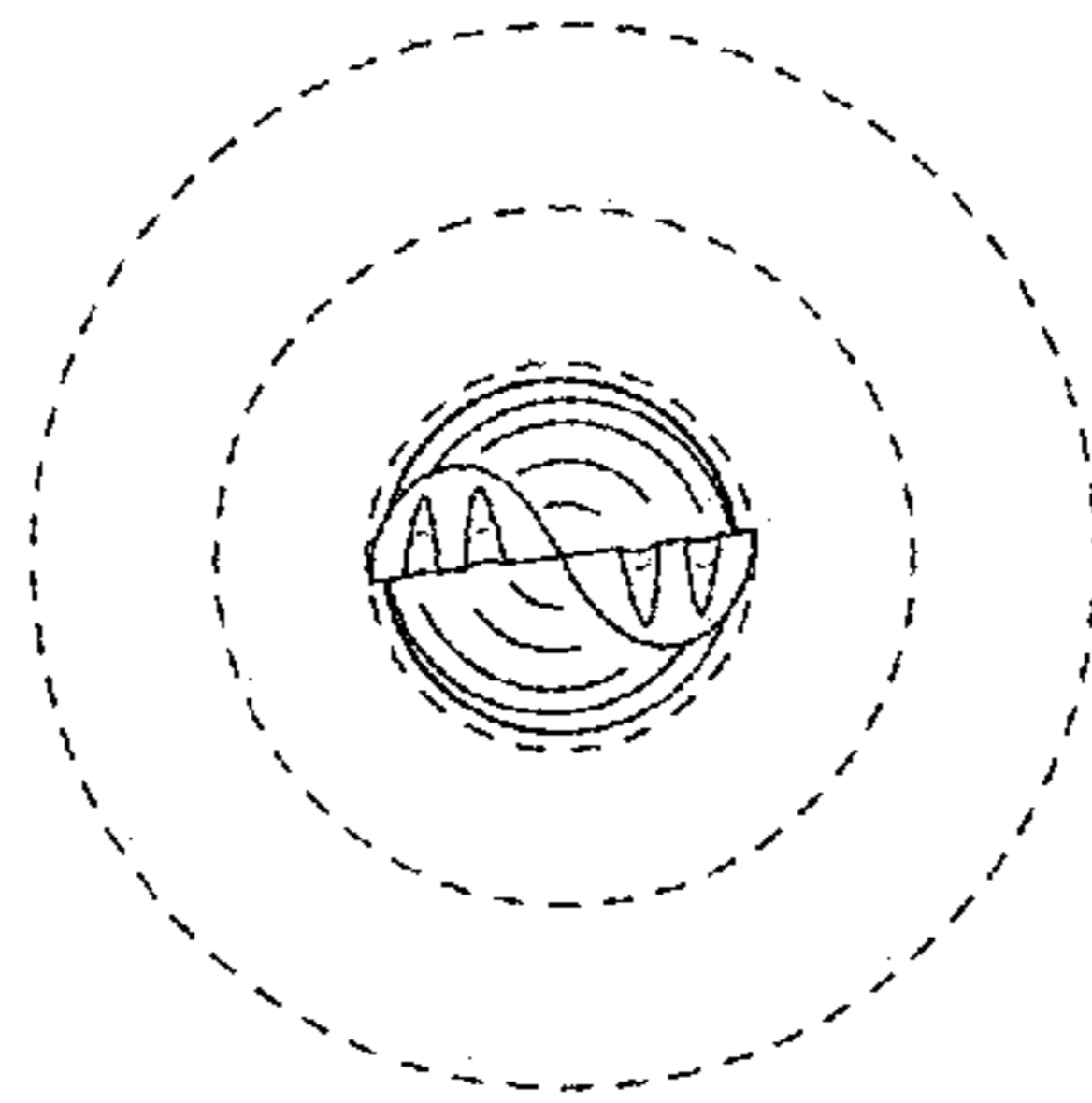


FIG.6

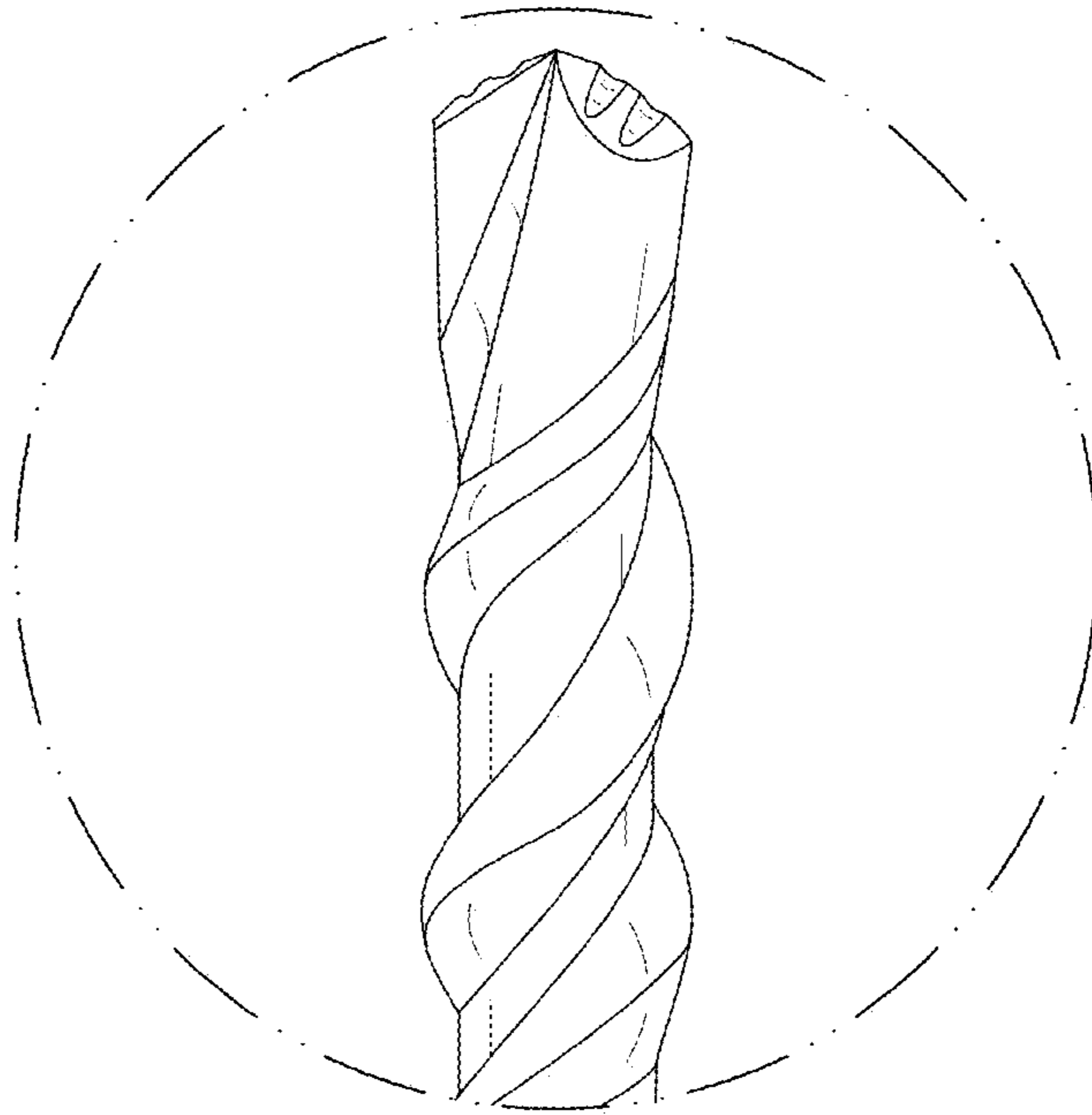


FIG.7