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# United States Patent [19]

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Arfele et al.

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[54] SIX BLADE DRILL BIT

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[73] Assignee: Dresser Industries, Inc., Dallas, Tex.

[\*\*] Term: 14 Years

[21] Appl. No.: 80,107

[22] Filed: Dec. 1, 1997

[51] LOC (6) Cl. .... 15-09

[52] U.S. Cl. .... D15/139

[58] Field of Search ..... D15/139; 175/379, 175/385, 393, 418, 420.1, 421, 430, 427, 431, 432; 299/29

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

D. 340,248	10/1993	Brady	.....	D15/139
D. 351,174	10/1994	Brady	.....	D15/139
4,373,593	2/1983	Phaal et al.	.	
5,007,493	4/1991	Coolidge et al.	.....	175/421 X
5,111,895	5/1992	Griffin	.	
5,159,857	11/1992	Jurewicz	.	
5,443,565	8/1995	Strange, Jr.	.	
5,549,171	8/1996	Mensa-Wilmot et al.	.	
5,551,522	9/1996	Keith et al.	.....	175/420.2
5,582,261	12/1996	Keith et al.	.....	175/431
5,651,421	7/1997	Newton et al.	.	

**OTHER PUBLICATIONS**

Catalogue/Brochure pages: "TD 2000 Series Drill Bits; TD Drill Bits; PD Steel Body Drill Bits." Diamond Boart Stratabit. Admitted prior art.

Catalogue/Brochure pages: "Diamond Compact Bits (R-Series)." Norton Christensen Drilling Products. Admitted prior art.

Catalogue/Brochure pages: "Bit Description" Admitted prior art.

Catalogue/Brochure page: "Put the Best on the Bottom." BiTech. Admitted prior art.

Catalogue/Brochure pages: 8 1/2 in Hornet 4, et al. Reed Tool Company. Admitted prior art.

Catalogue/Brochure pages: "Diamond Compact Bits (R-Series)," pp. 11-12. Eastman Christensen. Admitted prior art.

Catalogue/Brochure page: "Smith Diamond's New S-95: The Right Direction in Soft Formations." Smith International. Admitted prior art.

Catalogue/Brochure pages: "Drilling Bits." Petroleum Diamond Products. Admitted prior art.

Catalogue/Brochure page: "Diataq DS." Admitted prior art.

Catalogue/Brochure page: "Hycalog Introduces the Hybrid-Fishtail." Hycalog. Admitted prior art.

Catalogue/Brochure page: "Longer Bit Life and Superior Downhole Performance." Hycalog. Admitted Prior Art.

Catalogue/Brochure pages: 6 3/4 in. DS42H, et al. Hycalog. Admitted prior art.

Catalogue/Brochure pages: "Nortrak Navigation Drilling Systems," pp. 4-5. Nortrak. Admitted prior art.

Catalogue/Brochure pages: "VIII. Diamond Drilling & Coring Bits," pp. 47-48. Eastman Christensen. Admitted prior art.

Catalogue/Brochure pages: "Technical Data." Eastman Christensen. Admitted prior art.

Catalogue/Brochure pages: Rock Digger 15, et al. Admitted prior art.

(List continued on next page.)

*Primary Examiner*—Antoine Duval Davis  
*Attorney, Agent, or Firm*—Browning Bushman

[57] **CLAIM**

The ornamental design for a six blade drill bit, as shown and described.

**DESCRIPTION**

FIG. 1 is a top plan view of a six blade drill bit showing our new design;

FIG. 2 is a front elevational view thereof;

FIG. 3 is a right side elevational view thereof;

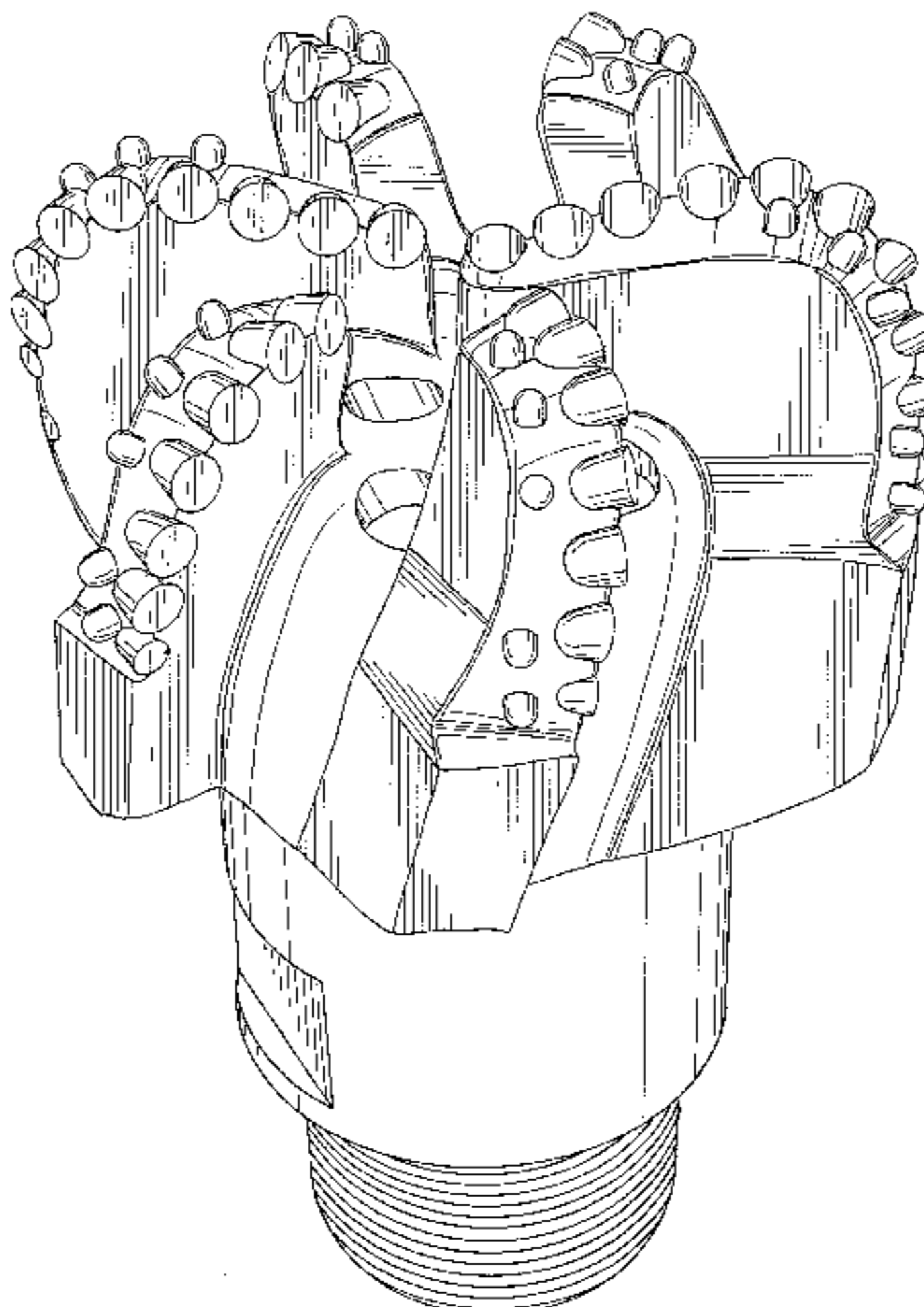
FIG. 4 is a left side elevational view thereof;

FIG. 5 is a rear elevational view thereof;

FIG. 6 is a bottom plan view thereof; and,

FIG. 7 is a top, front, left side perspective view thereof.

**1 Claim, 7 Drawing Sheets**



OTHER PUBLICATIONS

Catalogue/Brochure pages: "Diamond Products." Smith International, pp. 12-13. Admitted prior art.

Catalogue/Brochure page: "PD-7 Rotary and Motor Bit; PD-11 Rotary Bit; PD-11X2 Rotary Bit." Admitted prior art.

Catalogue/Brochure page: "Strata-Cut Drilling-Bits." Admitted prior art.

Catalogue/Brochure pages: "DP6 PDC Drill Bit." Admitted prior art.

Catalogue/Brochure pages: "Diamond Drill Bits." Cristal Profor. Tarbes, France. Admitted prior art.

Catalogue/Brochure pages: "A Strong Line of Natural Diamond and PDC Bits." Smith Diamond. Admitted prior art.

Catalogue/Brochure pages: IADC S946, et al. Smith Diamond. Admitted prior art.

Catalogue/Brochure pages: "Cut Drilling Costs 40 Percent or More with a Strata Bit PDC Bit Tailored to the Formation." Strata Bit. Admitted prior art.

Catalogue/Brochure page: "The Fast Track to the Bottom Line," p. 8. Strata Bit. Admitted prior art.

Catalogue/Brochure pages: "Standard PDC Bits; Standard Ringcutter PDC Bits; Gold Series Bit." Admitted prior art.

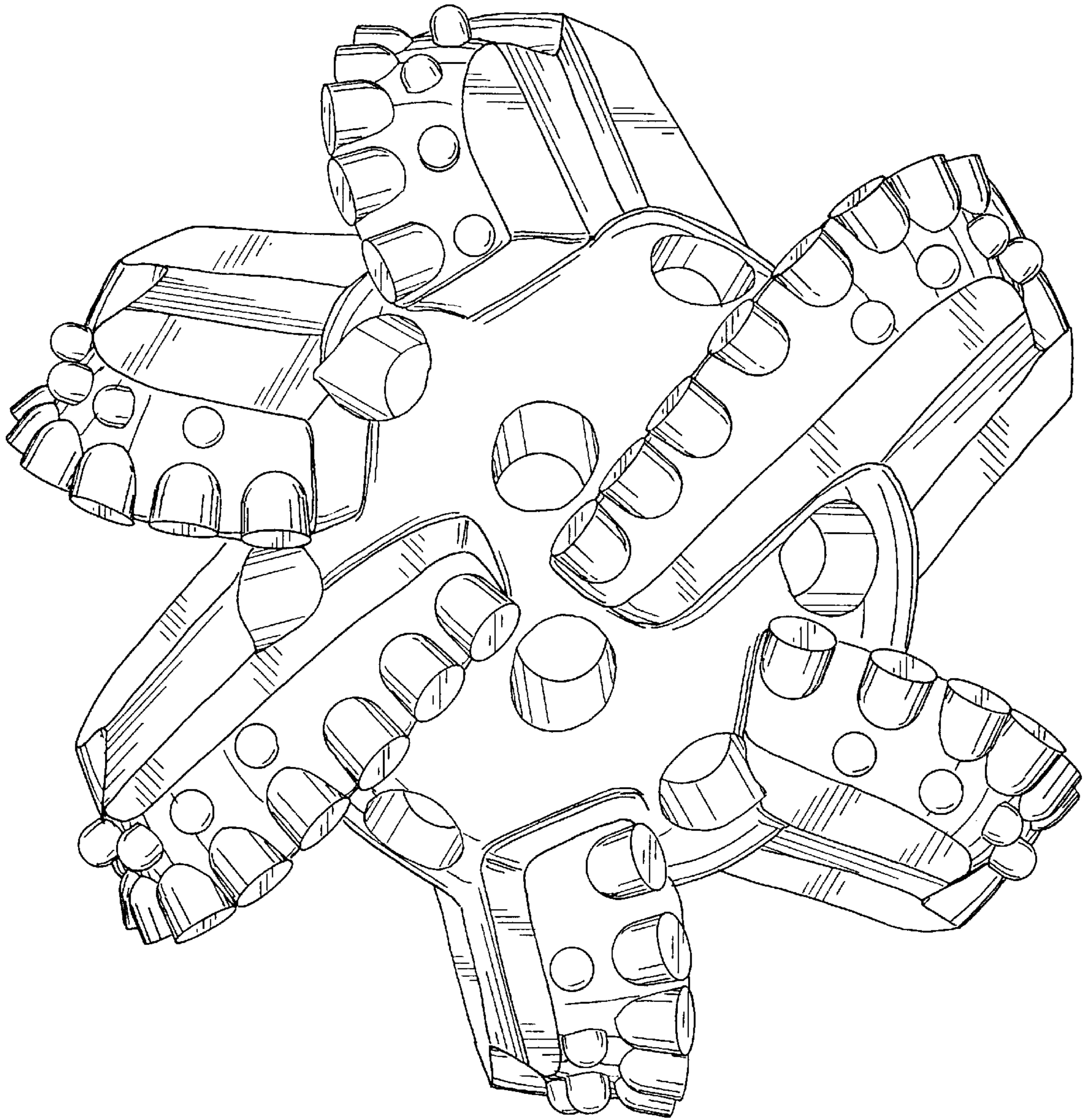


FIG. 1

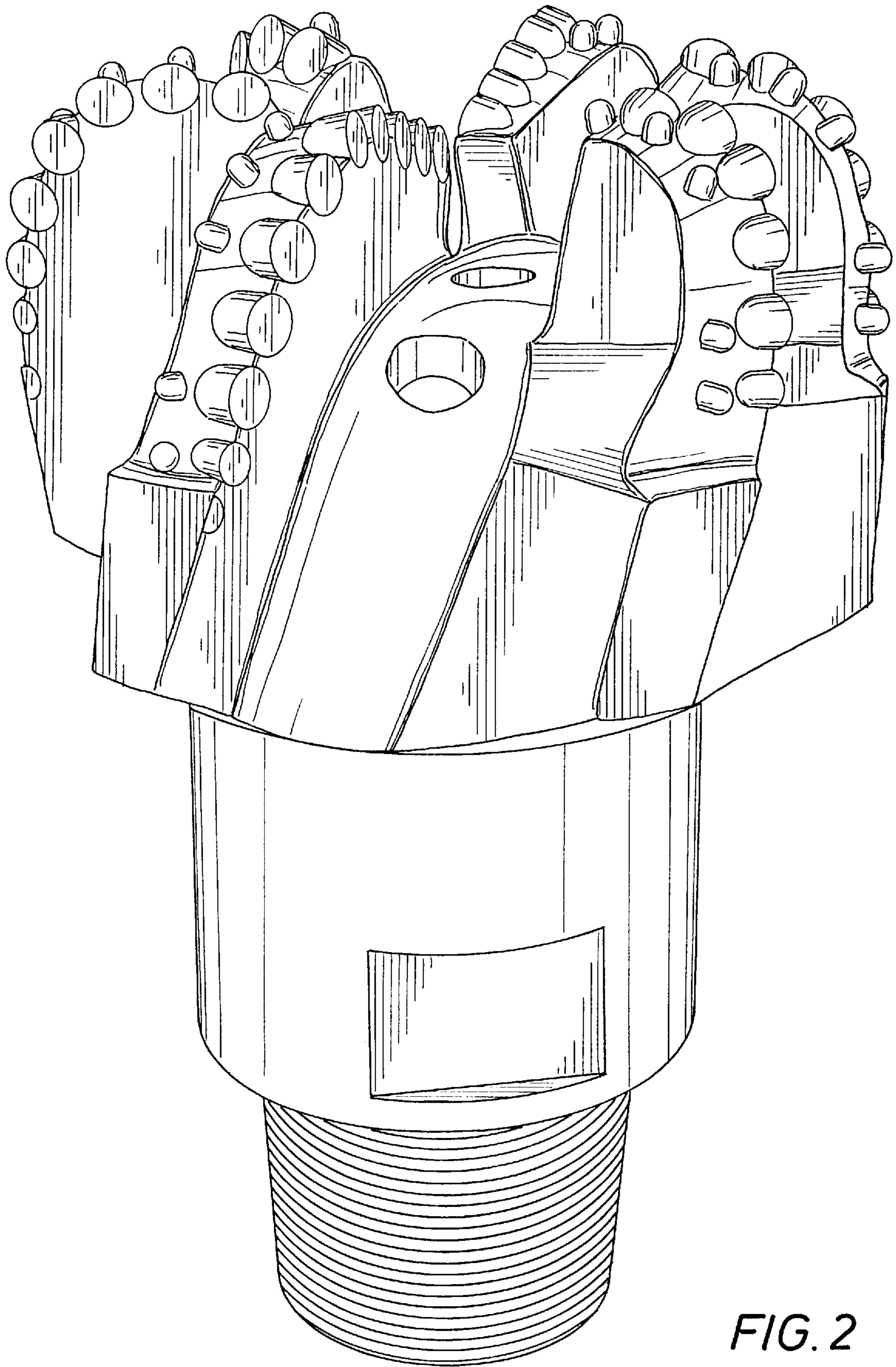


FIG. 2

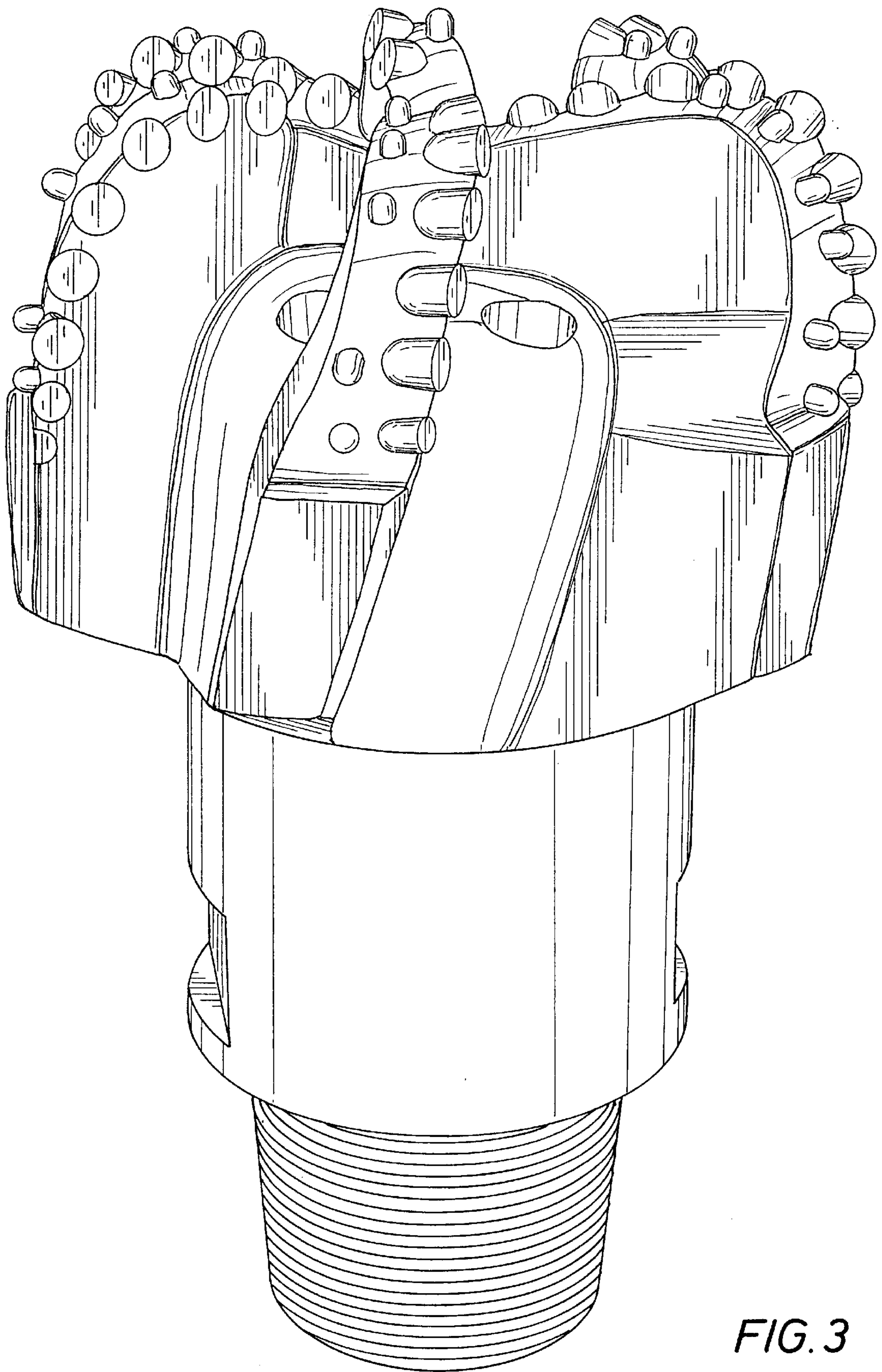


FIG. 3

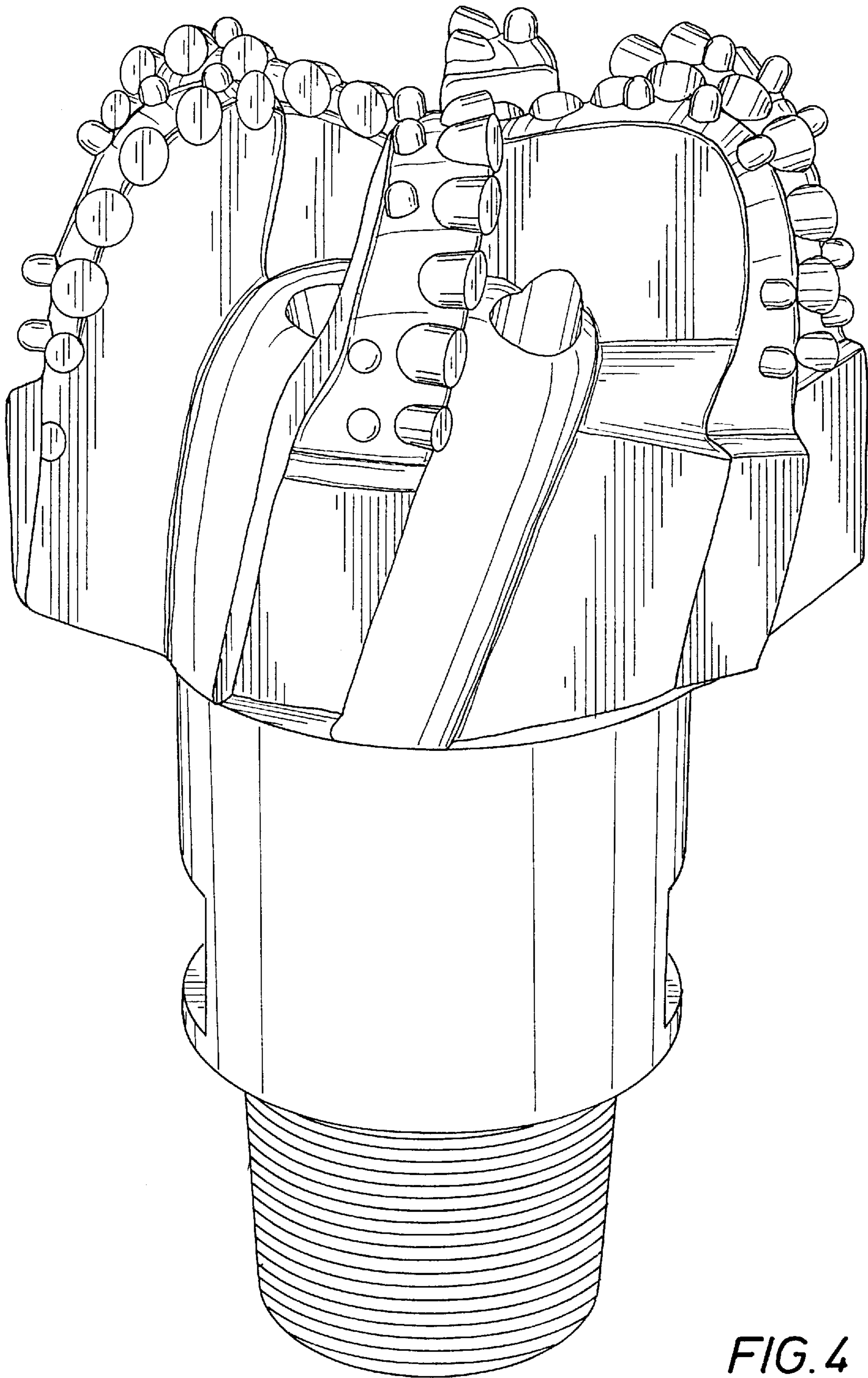


FIG. 4

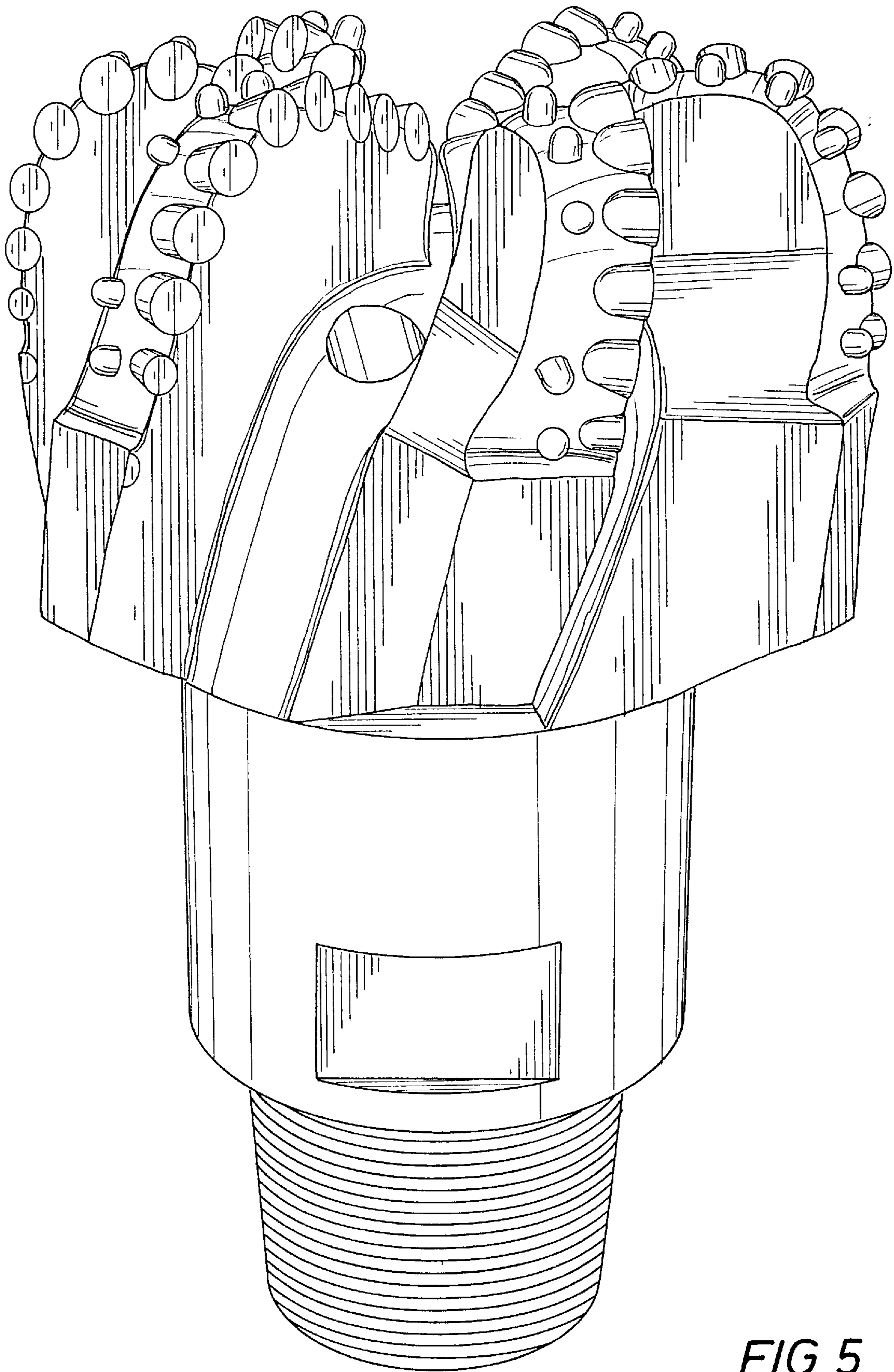


FIG. 5

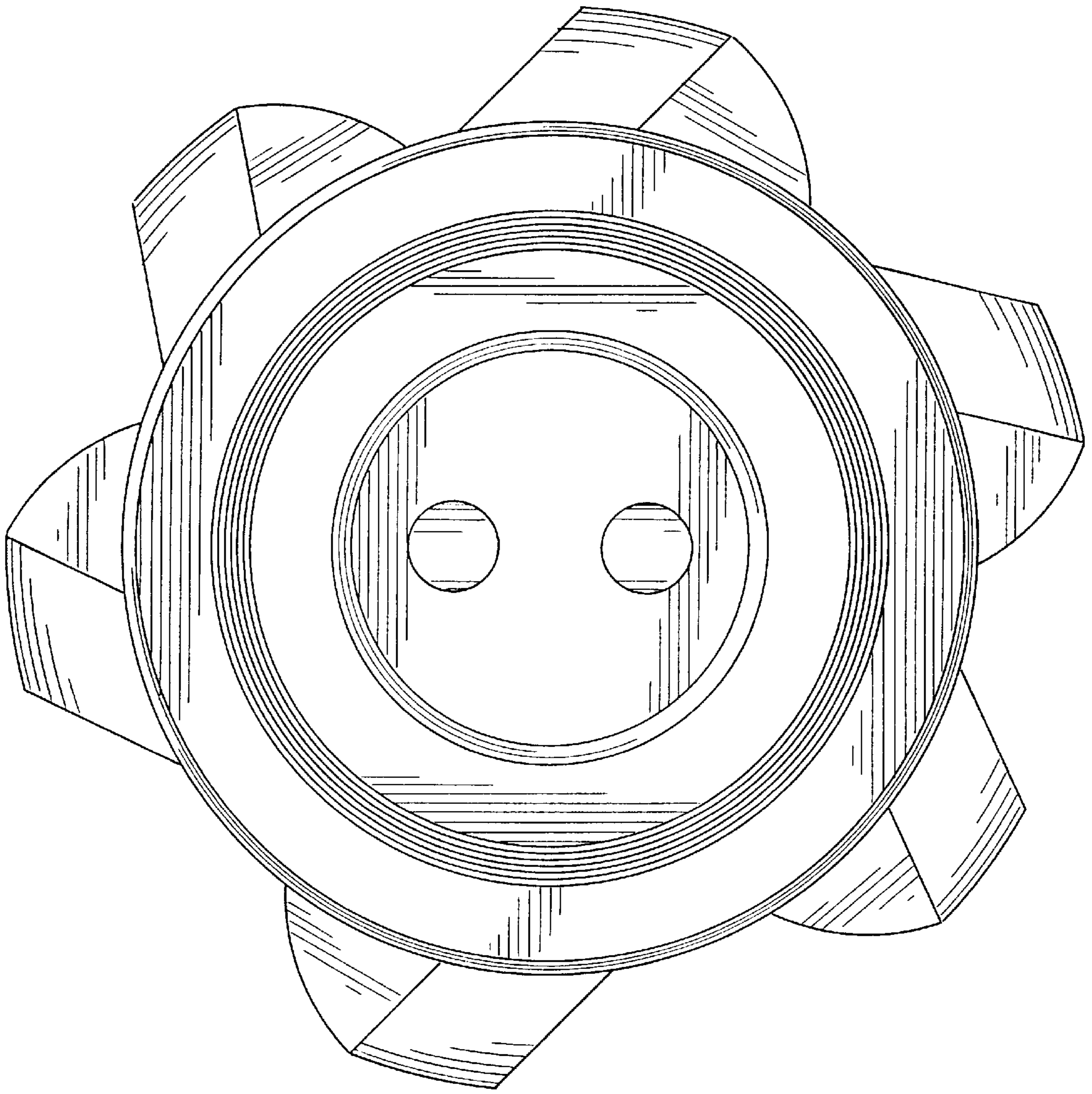


FIG. 6



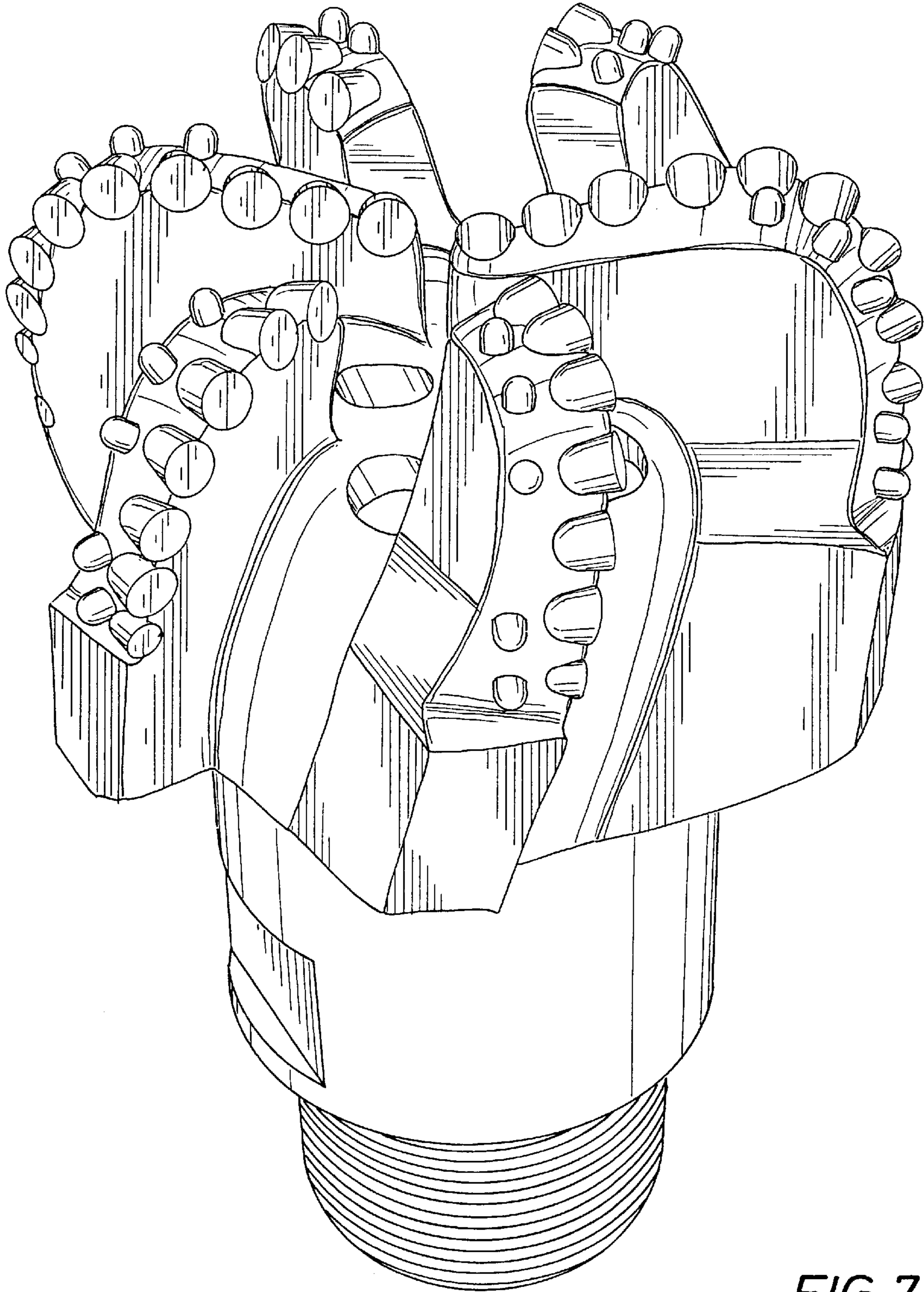


FIG. 7