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(12) **United States Design Patent** (10) **Patent No.:** **US D511,833 S**  
**Wöhrle** (45) **Date of Patent:** **\*\* \*Nov. 22, 2005**

(54) **DENTAL IMPLANT**

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(\*) **Notice:** This patent is subject to a terminal disclaimer.

(\*\*) **Term:** **14 Years**

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(51) **LOC (8) Cl.** ..... **24-03**

(52) **U.S. Cl.** ..... **D24/156**

(58) **Field of Search** ..... D24/155-157;  
D8/387; 606/73, 232, 121.1; 623/28, 26,  
32-36, 38

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,112,007	A	3/1938	Adams	
3,849,887	A	11/1974	Brainin	
D263,878	S	* 4/1982	Edwardson	..... D24/156
4,416,629	A	11/1983	Mozxary et al.	
4,468,200	A	8/1984	Munch	
4,624,673	A	11/1986	Meyer	

(Continued)

**FOREIGN PATENT DOCUMENTS**

DE	43 39 060	A1	9/1993
WO	WO 00/32134		6/2000
WO	WO 01/49199	A2	7/2001
WO	WO 01/50972	A2	7/2001
WO	WO 01/049199	A3	7/2001
WO	WO 03/000909		11/2003

**OTHER PUBLICATIONS**

Strub et al., "The Re Implant® System for Immediate Implant Placement". Journal of Esthetic Dentistry 1997, vol. 9, pp. 187-196.

Kohal et al., "Custom-made root analogue titanium implants placed into extraction sockets". Clinical Oral Implants Research 1997, vol. 8, pp. 386-392.

(Continued)

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(57) **CLAIM**

The ornamental design for a dental implant, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a dental implant showing my new design;

FIG. 2 is a side elevation thereof the side opposite being a mirror image;

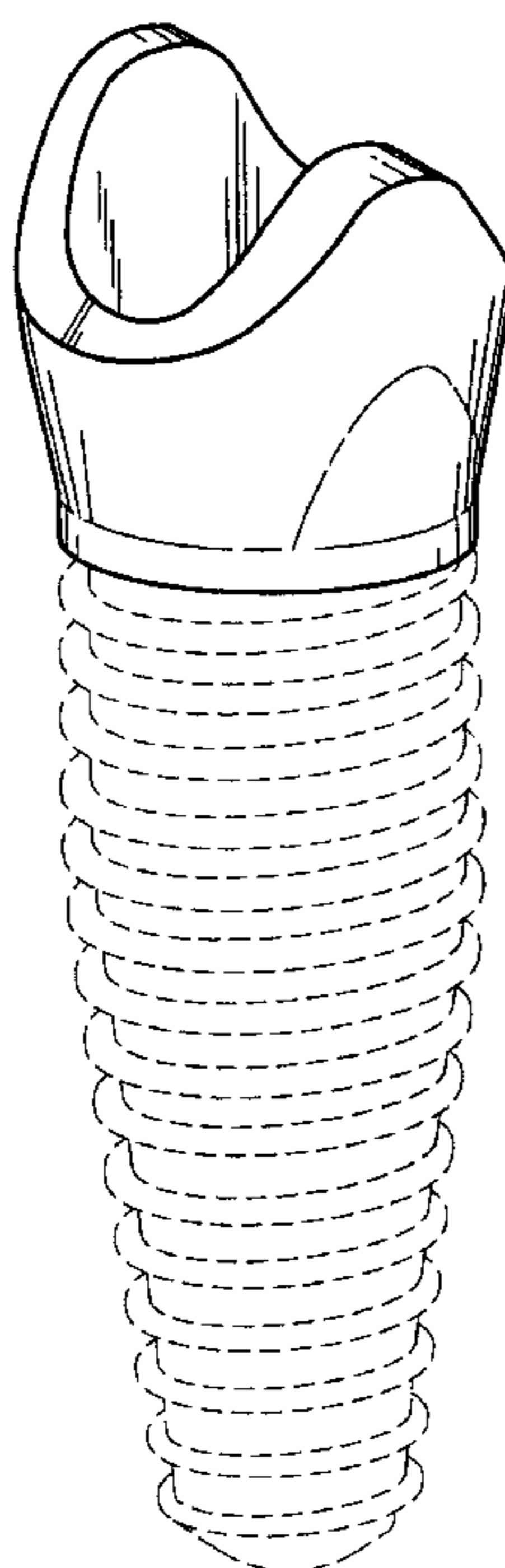
FIG. 3 is an end elevation thereof, the end opposite being a mirror image;

FIG. 4 is a bottom plan view thereof; and,

FIG. 5 is a top plan view thereof.

The broken lines shown in the drawings represent environment only and are not part of the ornamental design claimed. Phantom lining, where utilized, is for illustrative purposes only and is not intended to limit the claimed design to the features shown in phantom.

**1 Claim, 2 Drawing Sheets**



U.S. PATENT DOCUMENTS

D296,362	S	*	6/1988	Branemark	.....	D24/156
4,960,381	A		10/1990	Niznick		
5,004,422	A		4/1991	Propper		
5,035,619	A		7/1991	Daftary		
5,246,370	A		9/1993	Coatoam		
5,282,746	A		2/1994	Sellers et al.		
5,282,747	A		2/1994	Nordin		
5,310,343	A		5/1994	Hasegawa et al.		
5,417,568	A		5/1995	Giglio		
5,417,569	A		5/1995	Perisse		
5,431,567	A		7/1995	Daftary		
5,584,693	A		12/1996	Nishihara		
5,636,989	A		6/1997	Somborac et al.		
5,674,069	A		10/1997	Osorio		
5,759,034	A		6/1998	Daftary		
5,779,480	A		7/1998	Groll et al.		
D401,694	S	*	11/1998	Daftary	.....	D24/155
5,931,675	A		8/1999	Callan		
5,989,027	A		11/1999	Wagner et al.		
5,989,029	A		11/1999	Osorio et al.		
6,024,567	A		2/2000	Callan		
6,123,710	A	*	9/2000	Pinczewski et al.	.....	606/73
6,162,054	A		12/2000	Takacs		
6,164,969	A		12/2000	Dinkelacker		
6,174,167	B1		1/2001	Wöhrle		
6,217,331	B1		4/2001	Rogers et al.		
6,217,333	B1		4/2001	Ercoli		
6,227,858	B1		5/2001	Lundgren		
6,231,342	B1		5/2001	Osorio et al.		
D446,859	S	*	8/2001	Hurson	.....	D24/156
6,280,195	B1		8/2001	Broberg et al.		
6,283,754	B1		9/2001	Wöhrle		
6,312,260	B1		11/2001	Kumar et al.		
6,350,126	B1		2/2002	Levisman		
D470,939	S	*	2/2003	Daftary	.....	D24/156
D486,914	S	*	2/2004	Schulter et al.	.....	D24/156
D487,153	S	*	2/2004	Schulter et al.	.....	D24/156
D489,824	S	*	5/2004	Schulter et al.	.....	D24/156
D493,535	S	*	7/2004	Whitehead	.....	D24/156

OTHER PUBLICATIONS

Heydecke et al., "Optimal Esthetics in Single Tooth Replacement with the Re-implant System: A Case Report". *The International Journal of Prosthodontics* 1999, vol. 12, pp. 184-189.

Gieloff et al., "Bio-Design-Implantable Soforimplantate mit dem Re Implant System", *ZWR*, 104. Jahrg. 1995, Nr. 4, pp. 252-256 (with translation).

Kohal et al., "Wurzelanaloge Titanimplantate (Bio-Design-Implantate) für die Sofortimplantation-Das Re-ImplantSystem". *Implantologie* 1996, vol. 2, pp. 99-115.

Baier, et al., "Future Directions in Surface Preparation of Dental Implants", *Journal of Dental Education*, 52:788-791.

Bengazi, et al., 1996, "Recession of the soft tissue margin at oral implants", *Clinical Oral Implants Research*, 7:303-310.

Brunski, John B., 1988, Biomechanics of Oral Implants: Future Research Directions, *Journal of Dental Education*, 52:775-787.

Buser, et al., 1991, "Tissue Integration of One-Stage ITI Implants: 3 year Results of a Longitudinal Study With Hollow-Cylinder and Hollow-Screw Implants.", *The International Journal of Oral & Maxillofacial Implants*, 6:405-412.

Weber, et al., 1996 "Comparison of healed tissues adjacent to submerged and non-submerged unloaded titanium dental implants", *Clinical Oral Implants Research*, 7:11-19.

Chiche, et al., 1998, "Multidisciplinary Implant Dentistry for Improved Aesthetics and Function", *Pract Periodont. Aesthet. Dent.*, 10:177-186.

Gomez-Roman, et al., 1997, "The Frialit-2 Implant System: Five-Year Clinical Experience in Single-Tooth and Immediately Postextraction Applications", *The International Journal of Oral & Maxillofacial Implant*, 12:299-309.

Jansen, et al., 1997, "Microbial Leakage and Marginal Fit of the Implant-Abutment Interface", *The International Journal of Oral & Maxillofacial Implants*, 12:527-540.

Kirsch, et al., 1989, "The IMZ Osteointegrated Implant System", *Dental Clinics of North America*, 33:733-791.

Krauser, 1989. "Hydroxylapatite-Coated Dental Implants. Biological Rational and Surgical Techniques". *Dental Clinics of North America*, vol. 33, No. 4, pp. 879-903.

Langer, et al., 1993, "The Wide Fixture: A Solution for special Bone Situations and a Rescue for the Compromised Implant. Part 1", *the International Journal of Oral & Maxillofacial Implants*, 8:400-408.

Meffert, Roland M., DDS, 1988, "The Soft Tissue Interface in Dental Implantology", *Journal of Dental Education*, 52:810-878.

Niznick, Gerald A., Oct. 1989, "A Multimodal Approach to Implant Prosthodontics", *Dental Clinics of North America*, 33:869-878.

Olsson, et al., 1995, "MkII-A Modified Self-Tapping Branemark Implant: 3-Year Results of a Controlled Prospective Pilot Study", *The International Journal of Oral & Maxillofacial Implant*, 10:15-21.

Prestipino, et al., Jan./Feb. 1993, "esthetic High-Strength Implant Abutments. Part 1", *Journal of Esthetic Dentistry*, p. 29-35.

W. Eugene Roberts, DDS, Ph.D., 1998, "Bone Tissue Interface", *Journal of Dental Education*, 52:804-809.

Saadoun, et al., 1998, "Periodontal Implications in Implant Treatment Planning of Aesthtic Results", *Pract. Periodont. Asthet. Dent.*, 10:655-664.

Schnitman, et al., 1988, Implants for Partial Edentulism, *Journal of Dental Education*, 52:725-736.

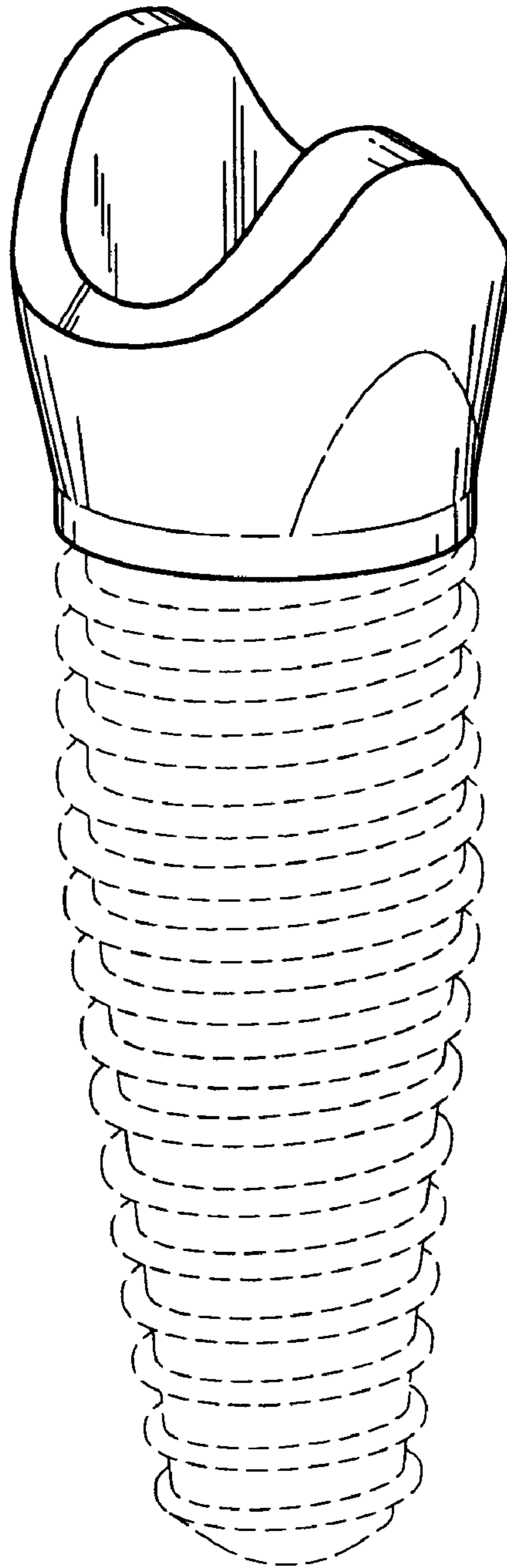
Siegele, et al., 1989, "Numerical Investigations of the Influence of Implant Shape on Stress Distribution in the Jaw Bone", *the International Journal of Oral & maxillofacial Implants*, 4:333-340.

Sullivan, et al., May/Jun. 1993, "Considerations for Successful Single tooth Implant Restorations", *Journal of Esthetic Dentistry*, 5:119-124.

Wennerberg, et al., "Design and Surface Characteristics of 13 Commercially Available Oral Implant Systems", *International Journal of Oral & Maxillofacial Implants*, 8:622-633.

F.A. Young, D.Sc., 1988, "Future Directions in Dental Implants Materials Research", *Journal of Dental Education* 52:770-774.

\* cited by examiner



*FIG. 1*

FIG. 3

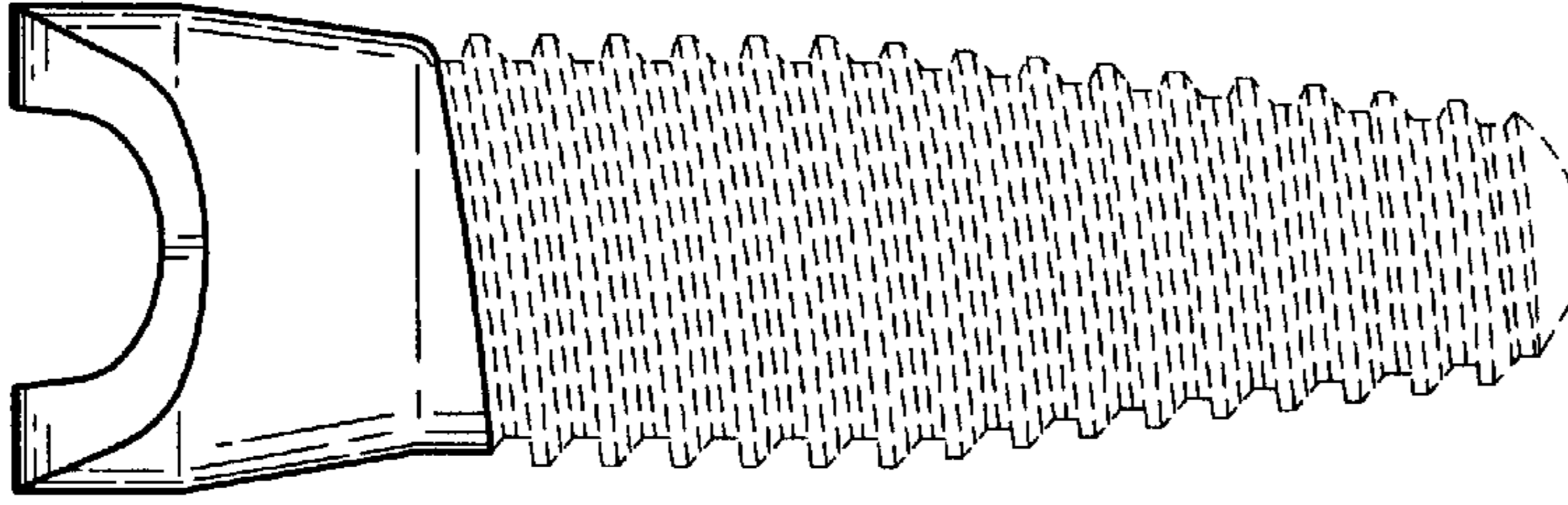


FIG. 5

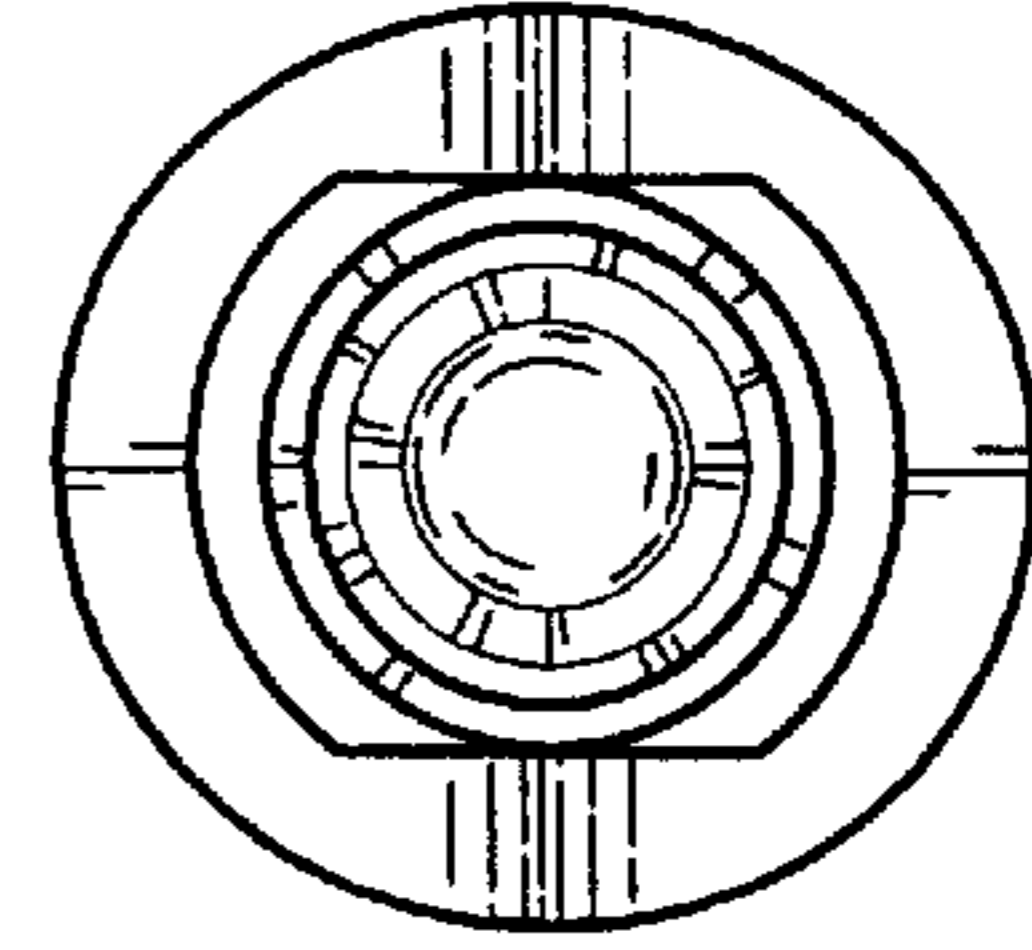


FIG. 2

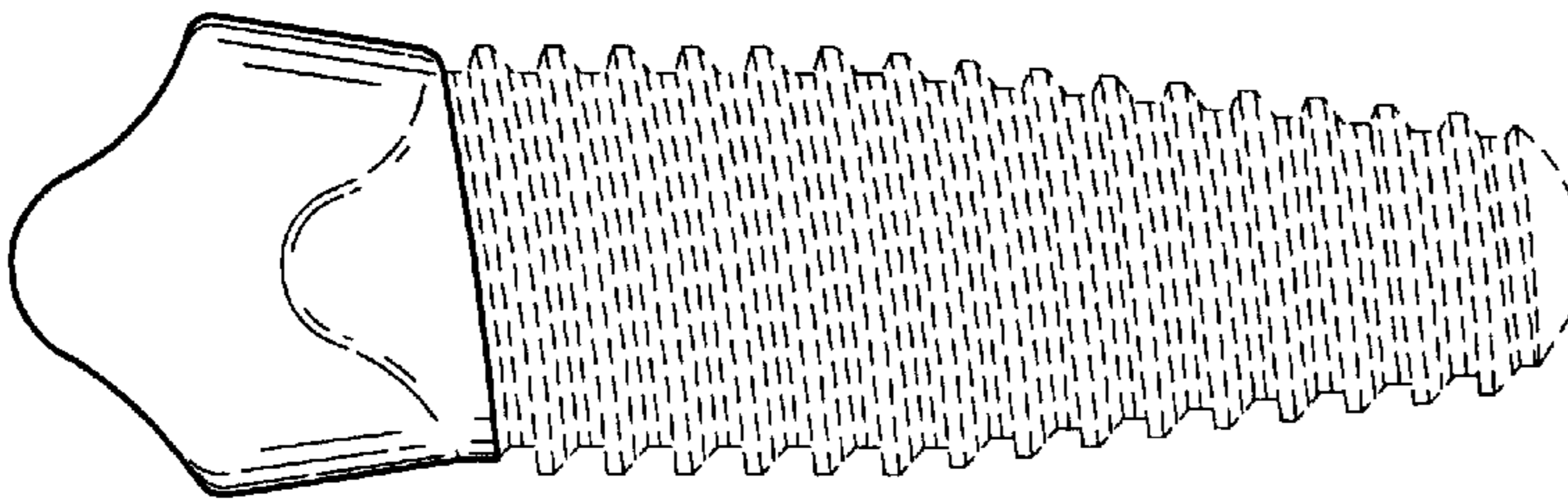


FIG. 4

