



US00D528211S

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

(10) **Patent No.:** **US D528,211 S**

(45) **Date of Patent:** **** *Sep. 12, 2006**

(54) **FIDUCIAL MARKER**

4,991,579 A 2/1991 Allen 128/653 R

(Continued)

(75) Inventors: **Matthew S. Solar**, Indialantic, FL (US); **Thomas L. Bridges**, Melbourne Beach, FL (US); **David M. Lee**, Melbourne Beach, FL (US); **Mark Stephen Freas**, Indialantic, FL (US); **Rudy A. Mazzocchi**, Indian Harbor Beach, FL (US)

FOREIGN PATENT DOCUMENTS

EP 1033113 A1 9/2000
EP 1249207 A2 10/2002
WO WO 2004075768 A3 9/2004

OTHER PUBLICATIONS

(73) Assignee: **Image-Guided Neurologics, Inc.**, Melbourne, FL (US)

“Acustar”, *Z-KAT, Inc.*, <http://www.z-kat.com/acustar.htm>, (2002), 5 pages.

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

“Multi-Modality Radiographic Markers”, *IZI Medical Products*, <http://www.izimed.com>, (2002), pp. 1–12.

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

Leibinger, “Summary Of Safety and Effectiveness”, *Marker System for Stereotaxic Navigation*, (Mar. 1996), pp. 38–46.

(21) Appl. No.: **29/199,249**

Solar, M. S., et al., “Fiducial Marker”, *U.S. Appl. No. 29/199,266*, filed Feb. 12, 2004, 17 pages.

(22) Filed: **Feb. 12, 2004**

“Bone Anchor”, *U.S. Appl. No.: 10/405,881*; filed Apr. 2, 2003.

Related U.S. Application Data

Primary Examiner—Louis S. Zarfaz

Assistant Examiner—Daniel Yu

(63) Continuation-in-part of application No. 10/374,677, filed on Feb. 25, 2003, and a continuation-in-part of application No. 10/454,786, filed on Jun. 4, 2003, and a continuation-in-part of application No. 10/688,801, filed on Oct. 17, 2003.

(74) *Attorney, Agent, or Firm*—Schwegman, Lundberg, Woessner & Kluth, P.A.

(51) **LOC (8) Cl.** **24-02**

(57) **CLAIM**

The ornamental design for the fiducial marker, as shown and described.

(52) **U.S. Cl.** **D24/158**

(58) **Field of Classification Search** D24/158, D24/155, 146, 140; D21/498, 385, 386, 389; 346/23; 378/162, 163, 204, 205, 164, 170; 600/414, 426, 407, 429; 623/23.26, 23.11; 606/130

DESCRIPTION

See application file for complete search history.

FIG. 1 is a perspective view of the fiducial marker, incorporating the new design.

FIG. 2 is a side elevational view of the fiducial marker of FIG. 1.

FIG. 3 is a top view of the fiducial marker of FIG. 1.

FIG. 4 is a bottom view of the fiducial marker of FIG. 1; and

FIG. 5 is a sectional view of the fiducial marker of FIG. 1, illustrating the divot shown in FIGS. 1 and 3.

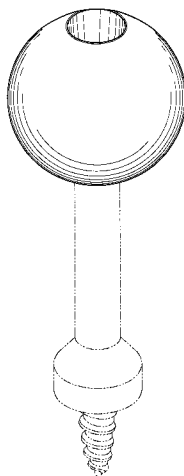
The broken lines shown in the Figures are for illustrative purposes only and form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,650,588 A * 9/1953 Drew 623/23.11
D274,117 S 6/1984 Lapps
D306,190 S * 2/1990 Poulsen D21/498
4,945,914 A 8/1990 Allen 128/653 R

1 Claim, 4 Drawing Sheets



US D528,211 S

Page 2

U.S. PATENT DOCUMENTS

5,016,639 A	5/1991	Allen	128/653 R	6,168,780 B1	1/2001	Andra	424/9.32
5,094,241 A	3/1992	Allen	128/653.1	6,206,890 B1 *	3/2001	Truwit	606/130
5,119,817 A	6/1992	Allen	128/653.1	6,236,875 B1	5/2001	Bucholz et al.	600/407
5,178,164 A	1/1993	Allen	128/898	6,333,971 B1 *	12/2001	McCrory et al.	378/162
5,211,164 A	5/1993	Allen	128/653.1	6,382,815 B1 *	5/2002	Klearman et al.	362/253
5,222,499 A	6/1993	Allen et al.	128/653.1	6,694,168 B1	2/2004	Traxel et al.	600/426
5,230,338 A	7/1993	Allen et al.	128/653	D493,198 S *	7/2004	Starkel	D21/389
5,394,457 A *	2/1995	Leibinger et al.	378/162	6,865,907 B1	3/2005	Andrews et al.	
5,397,329 A	3/1995	Allen	606/73	2003/0187351 A1 *	10/2003	Franck et al.	600/429
5,551,429 A	9/1996	Fitzpatrick et al.	128/653.1	2004/0019265 A1	1/2004	Mazzocchi	600/407
5,636,255 A	6/1997	Ellis	378/20	2004/0030236 A1	2/2004	Mazzocchi et al.	600/414
5,730,130 A	3/1998	Fitzpatrick et al.	128/653.1	2004/0030237 A1 *	2/2004	Lee et al.	600/414
5,807,252 A	9/1998	Hassfeld et al.	600/407	2004/0078084 A1 *	4/2004	Albertorio	623/23.26
5,916,164 A	6/1999	Fitzpatrick et al.	600/426	2004/0122305 A1 *	6/2004	Grimm et al.	600/407
5,957,934 A	9/1999	Rapoport	606/130	2004/0167391 A1	8/2004	Solar et al.	600/411
6,011,987 A	1/2000	Barnett	600/414	2004/0167393 A1	8/2004	Solar et al.	600/414
6,073,044 A	6/2000	Fitzpatrick et al.	600/426	2005/0015032 A1 *	1/2005	Stein	601/131

* cited by examiner

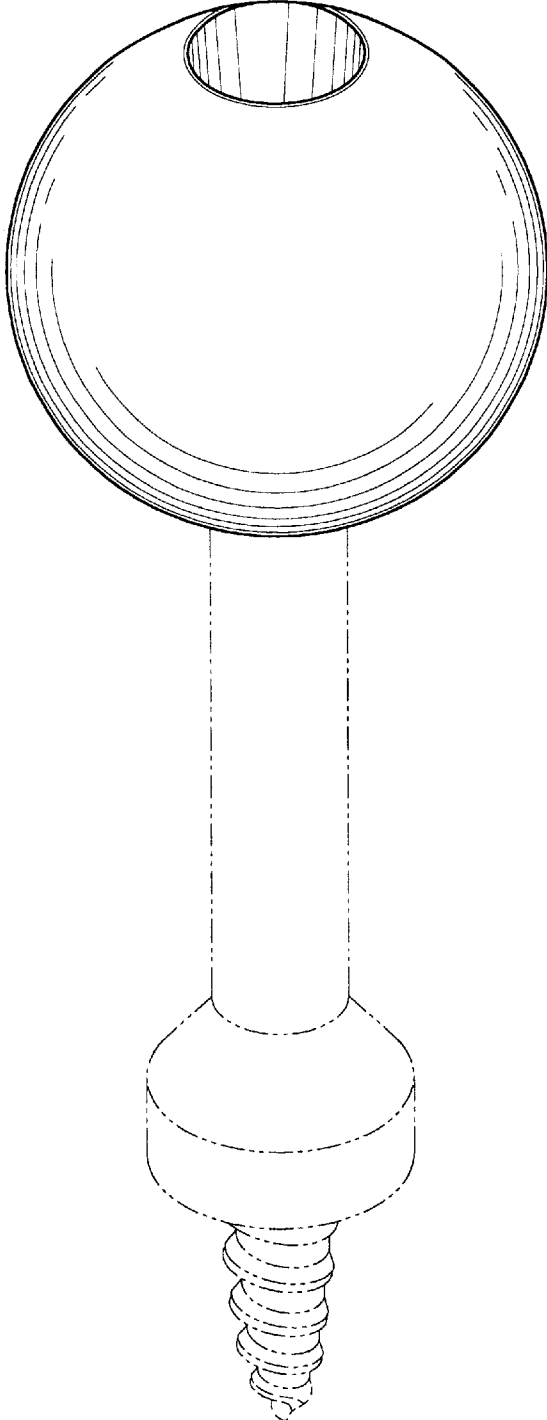


FIG. 1

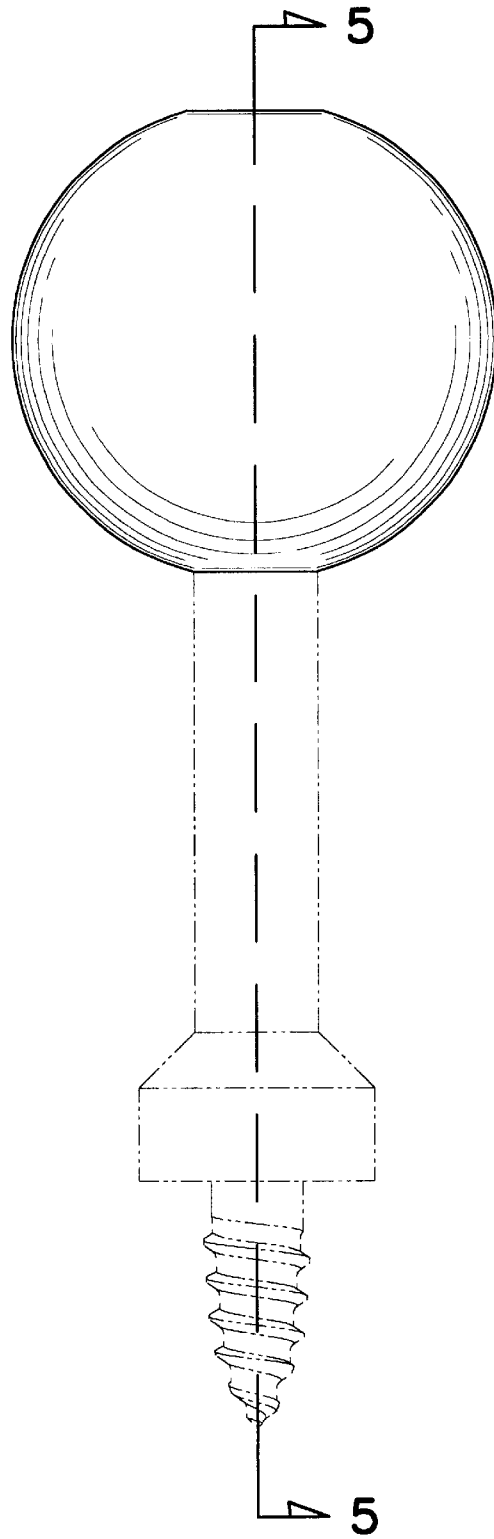


FIG. 2

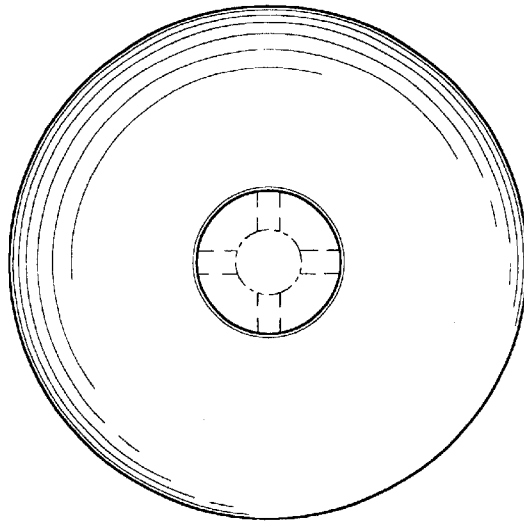


FIG. 3

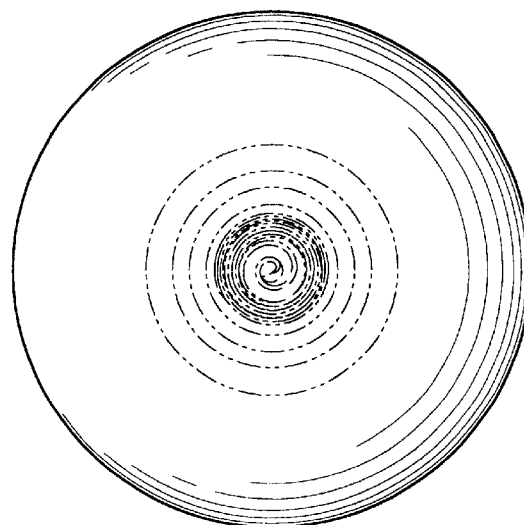


FIG. 4

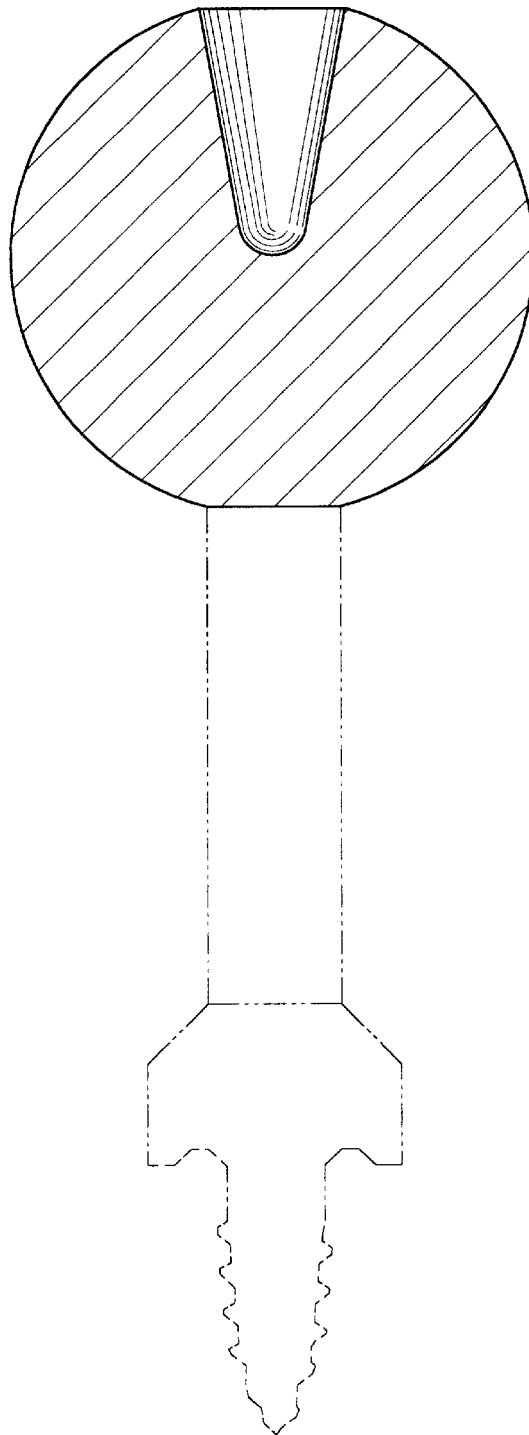


FIG. 5