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(71) Applicant: **ADVENTIST HEALTH SYSTEM/SUNBELT, INC.** [US/US]; 900 Hope Way, Altamonte Springs, FL 32714 (US).

(72) Inventor: **BAUMGARTNER, James, Edmund**; 100 Stirling Avenue, Winter Park, FL 32789 (US).

(74) Agents: **VAN EMAN, Matthew** et al.; McCarter & English, LLP, 265 Franklin Street, Boston, MA 02110 (US).

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(54) Title: INTRA-OPERATIVE FIDUCIAL SYSTEM AND METHOD FOR NEURONAVIGATION

(57) Abstract: An imageable fiducial marker includes a base formed from a material transparent to radiation from an imaging source and a pair of fiducial elements fixed to the base at a preselected separation. A bracket temporarily secures the marker to a skull of a human for intra-operative scanning in neurosurgery procedures, wherein only three fiducial pairs provide for reliable surgical navigation.

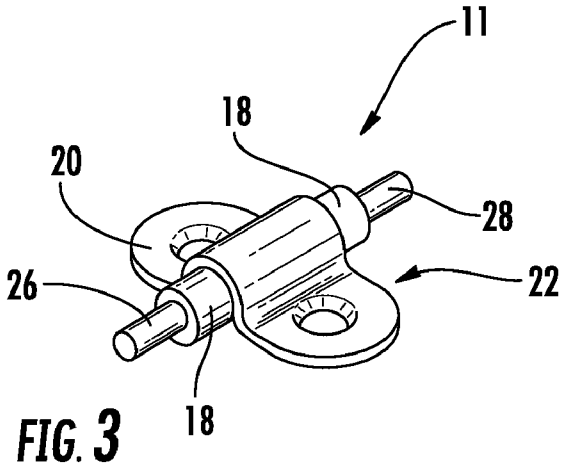


FIG. 3

WO 2014/201119 A3

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US14/41913

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A61B 5/055 (2014.01)
CPC - A61B 2019/5416, 2019/5454, 2019/5483
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8): A61B 5/055 (2014.01)
CPC: A61B 2019/5416, 2019/5454, 2019/5483; USPC: 600/414, 426; 606/130

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); Google; Google Scholar; Google Patent; ProQuest; PubMed/Medline; Search terms used: fiducia*, markers, translucent, "non-opaque", transparent, support, base, platform, cranium, skull, screws, gold, titanium

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	US 6546277 B1 (FRANCK, JI et al.) April 08, 2003; figures 3-4; column 7, lines 53-54, 60-67; column 8, lines 1-15; column 13, lines 10-12	1-3, 5, 11, 17-18 --- 4, 6-10, 12-16, 19-21
X -- Y	US 7139418 B2 (ABOVITZ, RA et al.) November 21, 2006; figure 1; column 1, lines 37-52; column 2, lines 14-16; claims 1-2, 4, 12	1, 5 --- 12, 13
X -- Y	US 2003/0153850 A1 (DAVIS, BJ et al.) August 14, 2003; figures 2, 4b; paragraphs [0028], [0030]	1, 7-9 --- 10
Y	US 5314432 A (PAUL, KS) May 24, 1994; figures 3-4; column 3, lines 44-46	4, 16
Y	US 8073530 B2 (SOLAR, MS et al.) December 06, 2011; column 5, lines 15-17, 32-38	6, 14-15
Y	US 2008/0033286 A1 (WHITMORE, WF et al.) February 07, 2008; figures 1-2; paragraph [0021]	19, 21
Y	US 7828809 B2 (SKAKOON, JG et al.) November 09, 2010; figures 2-3; column 4, lines 37-40	20-21

☐ Further documents are listed in the continuation of Box C. ☐

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
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Date of the actual completion of the international search	Date of mailing of the international search report
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