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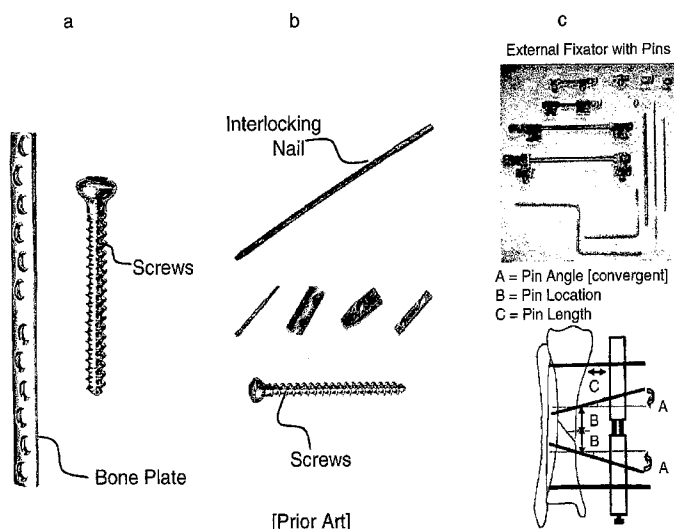
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(54) Title: INTERLOCKING NAIL GEOMETRY AND METHOD OF USE



(57) Abstract: An interlocking nail having an hour-glass geometry is used for repair of bone fractures. The hour-glass interlocking nail includes a proximal section, a mid section, and a distal section. Each section of the hour-glass interlocking nail has a diameter. The proximal and distal sections each have a diameter larger than the mid section so that the interlocking nail has an hour-glass geometry. The hour-glass interlocking nail comprises at least one fixation aperture located within either the proximal or distal section of the hour-glass interlocking nail. Preferably, the fixation aperture has a tapered locking design adapted to receive a screw-cone peg. The hour-glass geometry utilized by the interlocking nail is better suited to address a larger population of bone canal geometries, stressing the fracture site with known values within the healing process and preventing inadvertent perforation of the nail through the cortex of the bone. Hour-glass nail geometry more appropriately distributes stresses and promotes better healing at the bone fracture.

WO 2008/039405 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2007/020568

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61B 17/72 (2008.01)

USPC - 606/62

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 17/58, A61B 17/68, A61B 17/72, A61F 2/30 (2008.01)

USPC - 606/62

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/0084997 A1 (DEJARDIN) 20 April 2006 (20.04.2006) entire document	1-16, 18-23
Y		17, 24
Y	US 4,630,601 A (HARDER et al) 23 December 1986 (23.12.1986) entire document	17, 24

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

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"A" document defining the general state of the art which is not considered to be of particular relevance

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