

Title (en)

FASTENING SYSTEM WITH DEFORMABLE SET SCREW

Title (de)

FIXIERUNGSSYSTEM MIT DEFORMIERBARER FIXATIONSSCHRAUBE

Title (fr)

SYSTEME DE FIXATION A VIS SANS TETE DEFORMABLE

Publication

**EP 1124496 A4 20030205 (EN)**

Application

**EP 99971292 A 19991029**

Priority

- US 9925368 W 19991029
- US 10613098 P 19981029

Abstract (en)

[origin: WO0025689A1] An implanted anchoring assembly (12) includes an anchor (13) with a hook (18) for fixing the anchor (13) to a vertebra or other osseous body, and a recess (19) with a cylindrical profile for receiving an elongate cylindrical stabilizing rod (11). The anchoring assembly (12) further includes a set screw (14) with external threads corresponding to internal threads (22) in the anchor (13). Rotating the set screw (14) within the anchor (13) while the rod (11) is nested within the recess advances the screw (14) toward the rod (11). A leading edge region of the set screw includes a thin wall (27) that extends generally transversely across the set screw (14) and forms a convex/concave dome (27) convex in the direction toward the stabilizing rod (11). After the dome (27) contacts the rod (11), further turning of the set screw (14) deforms the dome (27), whereby the outer surface of the dome (27) tends to conform to the rod (11) to more securely retain the rod (11) within the anchor recess (19).

IPC 1-7

**A61B 17/70**

IPC 8 full level

**A61B 17/58** (2006.01); **A61B 17/70** (2006.01); **A61B 17/86** (2006.01); **A61B 17/88** (2006.01)

CPC (source: EP)

**A61B 17/7032** (2013.01); **A61B 17/7091** (2013.01); **A61B 17/701** (2013.01); **A61B 17/7056** (2013.01); **A61B 2017/868** (2013.01)

Citation (search report)

- [A] WO 9830161 A1 19980716 - JACKSON ROGER P [US]
- [A] US 5716356 A 19980210 - BIEDERMANN LUTZ [DE], et al
- See references of WO 0025689A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 0025689 A1 20000511**; **WO 0025689 A9 20010104**; EP 1124496 A1 20010822; EP 1124496 A4 20030205; JP 2002528218 A 20020903

DOCDB simple family (application)

**US 9925368 W 19991029**; EP 99971292 A 19991029; JP 2000579138 A 19991029