

Title (en)  
POSTERIOR FUSION SYSTEM OF PEDICLE SCREW-ROD-CONNECTOR

Title (de)  
HINTERES FUSIONSSYSTEM, PEDIKELSCHRAUBE-STAB-VERBINDUNGSGLIED

Title (fr)  
SYSTEME DE FUSION POSTERIEURE, CONNECTEUR-TIGE-VIS DE PEDICULE VERTEBRAL

Publication  
**EP 1603469 A1 20051214 (EN)**

Application  
**EP 01970040 A 20010924**

Priority  
• GR 0100036 W 20010924  
• GR 2000100319 A 20000922

Abstract (en)  
[origin: WO0224087A1] Posterior fusion system, screw-rod-connector, whose screw the body that is screwed in the bones is characterized by clockwise threads, helical attached to an anti-clockwise rotating central spring consisting of a core and anti-clockwise wings. The screw functions as an implant, since it is incorporated in the surrounding spongiosa bone completely, with the two rotated at 180 degrees helical compartments that allow communication and contact in a 360 degrees direction. Its front section is hollow and slightly pointed. Its connection is accomplished with a joint and divisible rod with free movement before the nut's final tightening, separately for each vertebra, thanks to two receptions of the joint and the rod's spherical heads. This eases the placement and also the rod's application without any tension and after tightening the nut it immobilizes it in any position and allows all reduction handling, before the final tightening. The whole system assembled in this way and with a flexible screw, which withstands more fatigue than the solid one, is incorporated much faster because the screw acts as an implant and thus withstands more fatigue. Finally, it increases the construction's longevity, reducing loosening danger from the implantation site.

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**A61B 17/70**; **A61B 17/86**

IPC 8 full level  
**A61B 17/70** (2006.01); **A61B 17/86** (2006.01)

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**A61B 17/7005** (2013.01); **A61B 17/7041** (2013.01); **A61B 17/7011** (2013.01); **A61B 17/8625** (2013.01); **A61B 17/8635** (2013.01); **A61B 17/869** (2013.01)

Citation (search report)  
See references of WO 0224087A1

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