

Title (en)
THREAD-FORMING METHOD AND TUBULAR BODY PROVIDED WITH A THREAD

Publication
EP 0274719 A3 19891220 (DE)

Application
EP 87118889 A 19871219

Priority
DE 3700758 A 19870113

Abstract (en)
[origin: EP0274719A2] The production of the internal thread of a connection sleeve (4), which is used as a coupling element for parts of a rock support or of a drill rod, by machine-forming, in particular by thread-cutting, entails great effort since, in the round thread used here, a considerable amount of machining work is required. Furthermore, it is disadvantageous in this application in the machining of the thread that the long-term strength of the connection sleeve is considerably impaired due to the notch effect in the base region of the thread turns. A connection sleeve and a method for its production are proposed, in which the internal thread is produced without machining by shaping the outside of the connection sleeve (4) in the manner of a thread so that the image of this shaping forms the internal thread to be produced on the inside. Apart from the increase in strength caused by the non-cutting shaping, which is usually cold shaping, due to material reinforcement, the further advantage results that the shaping required here can be applied in a single operation so that the production costs of connection sleeves (4) of this type can be reduced. Furthermore, it is advantageous that the external thread, interacting with the internal thread of the connection sleeve, of the components to be connected to one another can have a basic shape which corresponds to the outside thread-type shaping of the connection sleeve (4). <IMAGE>

IPC 1-7
B21D 15/04

IPC 8 full level
B21H 3/00 (2006.01); **B21D 11/06** (2006.01); **B21D 15/04** (2006.01); **B21D 53/24** (2006.01); **E21B 17/042** (2006.01); **E21B 17/08** (2006.01); **E21B 17/22** (2006.01); **E21D 21/00** (2006.01); **F16L 15/06** (2006.01)

CPC (source: EP)
B21D 15/04 (2013.01); **E21B 17/0426** (2013.01); **E21B 17/22** (2013.01)

Citation (search report)
• [X] FR 1373178 A 19640925 - M A G MATERIELS AGRA, et al
• [X] DE 8528705 U1 19851121
• [X] DE 3335163 A1 19850404 - HILTI AG [LI]
• [X] DE 1014064 B 19570822 - RAINER ISOLIERROHR DROSSBACH
• [X] NL 1511 C 19160915 - GENERAL INDUSTRIES CO [US]
• [X] EP 0102407 A1 19840314 - WIELAND WERKE AG [DE]
• [X] EP 0092010 A1 19831026 - MAURY MARC [FR], et al
• [X] EP 0099737 A2 19840201 - HEAT TRANSFER PTY LTD [AU]
• [Y] DE 2242035 A1 19740228 - EIBES KERB KONUS GMBH
• [X] PATENT ABSTRACTS OF JAPAN, Band 10, Nr. 326 (M-532)[2382], 6. November 1986; & JP-A-61 132 230 (HITACHI CABLE LTD) 19-06-1986
• [Y] ROTARY SUBS, 1983, Seiten 2573-2574, Info Chance Collar Co.
• [Y] DUBBEL: TASCHENBUCH FÜR DEN MASCHINENBAU, Auflage 14, 1980, Seite 1050, Herausgegeben von W. Beitz et al., Springer-Verlag, Berlin

Cited by
CN113000746A; DE4114336A1; US5350024A; EP0541942A1; US5388655A; DE102007049606A1; DE102007049606B4; WO9304257A3

Designated contracting state (EPC)
AT ES FR GB

DOCDB simple family (publication)
EP 0274719 A2 19880720; EP 0274719 A3 19891220; EP 0274719 B1 19930623; AT E90891 T1 19930715; AU 1024688 A 19880714; AU 600070 B2 19900802; CA 1333652 C 19941227; DE 3700758 A1 19880721; DE 3700758 C2 19881124; ES 2041259 T3 19931116; JP H069719 B2 19940209; JP S63180334 A 19880725

DOCDB simple family (application)
EP 87118889 A 19871219; AT 87118889 T 19871219; AU 1024688 A 19880113; CA 556034 A 19880107; DE 3700758 A 19870113; ES 87118889 T 19871219; JP 32661187 A 19871223