

Title (en)

METHOD FOR EXPANDING A STEEL TUBING AND WELL WITH SUCH AS TUBING

Title (de)

VERFAHREN ZUM AUFWEITEN EINES STAHLROHRES SOWIE MIT EINEM SOLCHEN ROHR AUSGESTATTETES BOHRLOCH

Title (fr)

PROCEDE POUR DILATER UNE COLONNE DE PRODUCTION EN ACIER ET PUITS AVEC LADITE COLONNE

Publication

EP 0907822 A1 19990414 (EN)

Application

EP 97930490 A 19970630

Priority

- EP 97930490 A 19970630
- EP 9703489 W 19970630
- EP 96201809 A 19960701

Abstract (en)

[origin: WO9800626A1] A tubing (4) made of a formable steel grade which is subject to strain hardening without incurring any necking or ductile fracturing as a result of the expansion process is expanded by moving an expansion mandrel (5) having a non-metallic tapering outer surface through the tubing, thereby increasing the strength of the tubing while expansion forces remains low.

IPC 1-7

E21B 43/10; E21B 29/10; E21B 17/00; C21D 7/12; B21D 39/20

IPC 8 full level

B21D 39/20 (2006.01); **C21D 7/12** (2006.01); **E21B 17/00** (2006.01); **E21B 23/04** (2006.01); **E21B 29/10** (2006.01); **E21B 43/10** (2006.01)

CPC (source: EP)

C21D 7/12 (2013.01); **E21B 17/00** (2013.01); **E21B 43/105** (2013.01)

Citation (search report)

See references of WO 9800626A1

Cited by

US10316627B2; US9296165B1

Designated contracting state (EPC)

DE DK FR GB IT NL

DOCDB simple family (publication)

WO 9800626 A1 19980108; AU 3442097 A 19980121; AU 723337 B2 20000824; BR 9710016 A 19990810; CA 2260191 A1 19980108; CA 2260191 C 20071127; DE 69739166 D1 20090129; DK 0907822 T3 20090302; EA 000543 B1 19991028; EA 199900072 A1 19990624; EP 0907822 A1 19990414; EP 0907822 B1 20081217; ID 17661 A 19980115; JP 2001508144 A 20010619; JP 4289686 B2 20090701; MY 116920 A 20040430; NO 317755 B1 20041213; NO 986171 D0 19981229; NO 986171 L 19990222; NZ 333945 A 20000327; OA 10949 A 20030227

DOCDB simple family (application)

EP 9703489 W 19970630; AU 3442097 A 19970630; BR 9710016 A 19970630; CA 2260191 A 19970630; DE 69739166 T 19970630; DK 97930490 T 19970630; EA 199900072 A 19970630; EP 97930490 A 19970630; ID 972266 A 19970630; JP 50385298 A 19970630; MY PI9702927 A 19970627; NO 986171 A 19981229; NZ 33394597 A 19970630; OA 9800252 A 19981231