

Title (en)

STRING OF DRILL PIPES FOR ROTARY PERCUSSION DRILLING, ESPECIALLY FOR SIMULTANEOUS DRILLING

Title (de)

BOHRGESTÄNGE ZUM DREH SchlagBOHREN, INSBESONDERE ZUM ÜBERLAGERUNGSBOHREN

Title (fr)

TRAIN DE SONDE POUR REALISER UN FORAGE PAR ROTATION-PERCUSSION, NOTAMMENT POUR FORAGE A TUBAGE DE SONDE SIMULTANE

Publication

EP 1117897 B1 20040512 (DE)

Application

EP 98954318 A 19981001

Priority

EP 9806264 W 19981001

Abstract (en)

[origin: WO0020720A1] The invention relates to a string of drill pipes for rotary percussion drilling, especially for simultaneous drilling. One of the ends of the individual pipes of the string of drill pipes has a male thread (1) and the other end has a female thread (2). Both threads have a larger, load-bearing flank and a smaller, non-load bearing flank. The aim of the invention is to reduce thread wear to a minimum for a string of drill pipes, especially the wear that occurs when the drill pipes are assembled. To this end, the pipe ends are provided with a non-threaded insertion section (3) which is followed by the male or female thread. The profile of the male thread (1) has a flat thread crest and a thread root in the shape of a circular arc while the profile of the female thread (2) has a thread crest in the shape of a circular arc and a flat thread root. The pipe end which is provided with the male thread (1) has a circumferential shoulder (5) which serves to transmit the impact effect to a subsequent drill pipe.

IPC 1-7

E21B 17/042

IPC 8 full level

E21B 17/042 (2006.01)

CPC (source: EP KR)

E21B 17/0426 (2013.01 - EP KR)

Cited by

EP2653706A1; WO2016018997A1; US1036461B2; US10570676B2; US11898404B2; US11230891B2

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 0020720 A1 20000413; AT E266796 T1 20040515; DE 59811400 D1 20040617; EP 1117897 A1 20010725; EP 1117897 B1 20040512; JP 2002526701 A 20020820; JP 3961769 B2 20070822; KR 100556271 B1 20060303; KR 20010106500 A 20011129

DOCDB simple family (application)

EP 9806264 W 19981001; AT 98954318 T 19981001; DE 59811400 T 19981001; EP 98954318 A 19981001; JP 2000574804 A 19981001; KR 20017004213 A 20010402