

Title (en)

RELEASE ASSEMBLY AND METHOD OF FORMING A DRILLING TOOL

Title (de)

FREISETZUNGSANORDNUNG UND VERFAHREN ZUR HERSTELLUNG EINES BOHRWERKZEUGS

Title (fr)

ENSEMBLE DE LIBÉRATION ET PROCÉDÉ DE FORMATION D'UN OUTIL DE FORAGE

Publication

EP 2868861 A1 20150506 (EN)

Application

EP 13190766 A 20131030

Priority

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Abstract (en)

The invention relates to a release assembly and a method of forming a drilling tool for rock or overburden drilling. The release assembly (18) is arranged axially between two drilling tool components (14a, 14b). The release assembly comprises a release mechanism allowing an initial axial length (L1) to shorten (Ls) when a joint (15) of the drilling tool components (14) provided with connecting threads (20, 21) is turned in an opening direction (Ro). Then the release assembly has a decreased second axial length (L2) and friction forces in the joint decrease.

IPC 8 full level

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CPC (source: CN EP KR US)

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E21B 17/06 (2013.01 - CN EP US)

Citation (search report)

- [XAI] US 3248129 A 19660426 - BROWN JOE R
- [A] US 2937854 A 19600524 - KINLEY MYRON M, et al
- [A] US 2067377 A 19370112 - ERWIN BURNS, et al
- [A] US 2819877 A 19580114 - ERNEST KOPPL

Cited by

CN107299827A; WO2017182586A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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DOCDB simple family (publication)

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CL 2014002931 A1 20150612; CN 104594820 A 20150506; ES 2706378 T3 20190328; JP 2015086693 A 20150507; JP 5932942 B2 20160608;
KR 101659658 B1 20160926; KR 20150050417 A 20150508; US 2015117940 A1 20150430

DOCDB simple family (application)

EP 13190766 A 20131030; AU 2014253519 A 20141023; CA 2864379 A 20140922; CL 2014002931 A 20141029;
CN 201410599071 A 20141030; ES 13190766 T 20131030; JP 2014220155 A 20141029; KR 20140147242 A 20141028;
US 201414526968 A 20141029