

Title (en)

A cooling apparatus of a downhole tool

Title (de)

Kühlvorrichtung eines Bohrwerkzeugs

Title (fr)

Appareil de refroidissement pour outil d'extraction

Publication

EP 2246523 B1 20110907 (EN)

Application

EP 09159162 A 20090430

Priority

EP 09159162 A 20090430

Abstract (en)

[origin: EP2246523A1] A cooling apparatus (12) of a downhole tool (9, 11) comprises a turbine (13) driven by a drilling fluid (10) circulating in the downhole tool (9, 11), and a thermodynamic cooler (18). The cooling apparatus (12) further comprises a mechanical arrangement (19) driven by the turbine (13). The mechanical arrangement (19) couples the turbine (13) and the thermodynamic cooler (18) such that the thermodynamic cooler (18) is mechanically driven by the turbine (13).

IPC 8 full level

E21B 36/00 (2006.01)

CPC (source: EP)

E21B 36/001 (2013.01)

Cited by

EP3361042A1; JPWO2016079793A1; US11371338B2; US10358908B2; WO2021247484A1; WO2021223379A1

Designated contracting state (EPC)

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 SE SI SK TR

DOCDB simple family (publication)

EP 2246523 A1 20101103; EP 2246523 B1 20110907; AT E523656 T1 20110915

DOCDB simple family (application)

EP 09159162 A 20090430; AT 09159162 T 20090430