

Title (en)

METHODS TO REPAIR WORN OR ERODED PDC CUTTERS, CUTTERS SO REPAIRED, AND USE OF REPAIRED PDC CUTTERS IN DRILL BITS OR OTHER TOOLS

Title (de)

VERFAHREN ZUM REPARIEREN VON VERSCHLISSENEN ODER ERODIERTEN PCD-SCHNEIDERN, DAMIT REPARIERTE SCHNEIDER UND VERWENDUNG DER REPARIERTEN PDC-SCHNEIDER IN BOHRMEISSELN ODER ANDEREN WERKZEUGEN

Title (fr)

PROCÉDÉS DE RÉPARATION DE TRÉPANS PDC USÉS OU ÉRODÉS, TRÉPANS AINSI RÉPARÉS ET UTILISATION DE TRÉPANS PDC RÉPARÉS DANS DES OUTILS DE FORAGE OU D'AUTRES OUTILS

Publication

EP 3087245 A1 20161102 (EN)

Application

EP 14873434 A 20141217

Priority

- US 201314139302 A 20131223
- US 2014070952 W 20141217

Abstract (en)

[origin: WO2015100110A1] A repaired polycrystalline diamond cutter and method for fabricating the same. The cutter includes a damaged substrate that includes at least one void therein, a polycrystalline diamond table coupled to the damaged substrate, and a paste compound disposed within the voids formed about the damaged substrate. The damaged substrate and the paste compound collectively form a full circumference. The method includes obtaining a damaged cutter that includes a polycrystalline diamond table coupled to a damaged substrate having at least one void formed therein, applying a paste compound within the at least one void, melting the paste compound via induction heating, bonding the paste compound to the substrate and forming a processed PDC cutter, and grinding at least a portion of the paste compound from the processed PDC cutter to form the repaired cutter.

IPC 8 full level

E21B 10/46 (2006.01)

CPC (source: EP)

E21B 10/56 (2013.01)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2015100110 A1 20150702; EP 3087245 A1 20161102; EP 3087245 A4 20170809

DOCDB simple family (application)

US 2014070952 W 20141217; EP 14873434 A 20141217