

Title (en)
FULLY INFILTRATED ROTARY DRILL BIT

Title (de)
VOLLSTÄNDIG INFILTRIERTER DREHBOHRMEISSEL

Title (fr)
TRÉPAN ROTATIF ENTIÈREMENT INFILTRÉ

Publication
EP 3143236 A1 20170322 (EN)

Application
EP 15793275 A 20150513

Priority
• US 201461992654 P 20140513
• US 2015030535 W 20150513

Abstract (en)
[origin: WO2015175641A1] A fully infiltrated rotary drill bit having a bit body that includes at least one particle-matrix composite material having a particle material composition and a binder material having a binder material composition that differs from the particle material composition. The particle material composition has a particle material melting temperature and the binder material composition has a binder melting temperature that is lower than the particle material melting temperature.

IPC 8 full level
E21B 10/42 (2006.01); **E21B 10/02** (2006.01); **E21B 10/46** (2006.01)

CPC (source: EP US)
E21B 10/48 (2013.01 - EP US); **E21B 10/54** (2013.01 - US); **E21B 10/62** (2013.01 - US)

Citation (search report)
See references of WO 2015175641A1

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 2015175641 A1 20151119; AU 2015259190 A1 20161117; CA 2948825 A1 20151119; CL 2016002889 A1 20170505; CN 106471207 A 20170301; EP 3143236 A1 20170322; PE 20170018 A1 20170304; US 2015330154 A1 20151119

DOCDB simple family (application)
US 2015030535 W 20150513; AU 2015259190 A 20150513; CA 2948825 A 20150513; CL 2016002889 A 20161114; CN 201580024457 A 20150513; EP 15793275 A 20150513; PE 2016002188 A 20150513; US 201514710997 A 20150513