

Title (en)

WELLBORE DRILL BIT HAVING SHEAR CUTTERS AND GOUGING CUTTERS

Title (de)

BOHRLOCHFRÄSEINSATZ MIT SCHERMESSERN UND SCHNEIDERSTRUKTUR

Title (fr)

FRAISE DE FORAGE AYANT DES COUTEAUX DE CISAILLEMENT ET DES COUTEAUX DE GOUGEAGE

Publication

EP 3085881 A1 20161026 (EN)

Application

EP 16166331 A 20160421

Priority

US 201514691604 A 20150421

Abstract (en)

A fixed cutter (10) drill bit includes a bit body (12) and at least one primary blade (14) formed in the bit body (12) and defining a surface profile on the bit body. The at least one primary blade (14) extends from a first selected radial distance (D) from a center of rotation (C) of the bit body (12) to a gage portion (14A). At least one shear cutter (20) affixed to the at least one blade (14). At least one gouging cutter (16) affixed to the bit body (12) rotationally ahead of the at least one blade (14). At least one nozzle (18) is disposed in the bit body (12) in a rotational position between the at least one primary blade (14) and the at least one gouging cutter (16).

IPC 8 full level

E21B 10/43 (2006.01); **E21B 10/54** (2006.01)

CPC (source: EP US)

E21B 10/12 (2013.01 - US); **E21B 10/54** (2013.01 - EP US)

Citation (applicant)

US 8505634 B2 20130813 - LYONS NICHOLAS J [US], et al

Citation (search report)

- [XII] US 5099929 A 19920331 - KEITH CARL W [US], et al
- [A] US 2015060149 A1 20150305 - HERMAN JOHN JAMES [CA], et al
- [A] US 2011155472 A1 20110630 - LYONS NICHOLAS J [US], et al

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)

EP 3085881 A1 20161026; CA 2927375 A1 20161021; US 2016312538 A1 20161027

DOCDB simple family (application)

EP 16166331 A 20160421; CA 2927375 A 20160420; US 201514691604 A 20150421