

Title (en)

CONTROLLED FULL FLOW PRESSURE PULSER FOR MEASUREMENT WHILE DRILLING (MWD) DEVICE

Title (de)

DRUCKIMPULSGEBER MIT VOLLSTÄNDIG GESTEUERTER STRÖMUNG FÜR EINE VORRICHTUNG FÜR MESSUNGEN WÄHREND BOHRVORGÄNGEN

Title (fr)

GÉNÉRATEUR D'IMPULSIONS DE PRESSION D'ÉCOULEMENT COMPLET RÉGULÉ POUR DISPOSITIF DE MESURE EN FORAGE (« MEASURE WHILE DRILLING » OU MWD)

Publication

EP 2815063 A1 20141224 (EN)

Application

EP 13769354 A 20130208

Priority

- US 201113336981 A 20111223
- US 201213368997 A 20120821
- US 2013025323 W 20130208

Abstract (en)

[origin: WO2013148005A1] An apparatus, method, and system is described for generating pressure pulses in a drilling fluid utilizing a flow throttling device longitudinally and axially positioned within the center of a main valve actuator assembly which includes a controllable pulser that operates sequentially within a downhole assembly within a drill string of a drill pipe, that enhances operational efficiency in the removal of hydrocarbon deposits, the system includes a drilling fluid, fluid flow, and a fluid drilling pump which when combined creates fluid flow into a bore pipe annulus within said downhole assembly such that a base line bore pipe pressure is created wherein the bore pipe pressure is sensed via a sensor sensing a pressure increase when said the pump is operating such that the sensor sends information to a Digital Signal Processor (DSP) that interprets the information and said the DSP also receives information from an annulus pressure sensor that senses drilling fluid (mud) pressure as it returns to the pump in an annular outside portion of the drill pipe such said the DSP recognizes pressure variation input obtained from the annulus pressure sensor and the bore pipe pressure sensor and detects pressure variation exhibited between pulsing pressures and a pump base line pressure thereby providing signals that are sent as data information to said the DSP such that said DSP determines required action to properly adjust pulser operation settings.

IPC 8 full level

E21B 21/10 (2006.01); **E21B 47/06** (2012.01); **E21B 47/18** (2012.01)

CPC (source: EP)

E21B 21/10 (2013.01); **E21B 47/06** (2013.01); **E21B 47/18** (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 2013148005 A1 20131003; CA 2896287 A1 20131003; CA 2896287 C 20200324; EP 2815063 A1 20141224; EP 2815063 A4 20160323; EP 2815063 B1 20190109; EP 3492691 A1 20190605

DOCDB simple family (application)

US 2013025323 W 20130208; CA 2896287 A 20130208; EP 13769354 A 20130208; EP 19150555 A 20130208