Title (en)

Indexing sleeve for single-trip, multi-stage fracing

Title (de)

Indexiersleeve für Mehrstufen-Spaltenbildung in einem einzigen Arbeitsgang

Title (fr)

Manche d'indexation pour fracturation multi-niveaux en une seule manoeuvre

Publication

EP 2484862 B1 20180411 (EN)

Application

EP 12151459 A 20120117

Priority

US 201113022504 A 20110207

Abstract (en)

[origin: EP2484862A2] A flow tool has a sensor that detects plugs (darts, balls, etc.) passing through the tool. An actuator moves an insert in the tool once a preset number of plugs have passed through the tool. Movement of this insert reveals a catch on a sleeve in the tool. Once the next plug is deployed, the catch engages the plug on the sleeve so that fluid pressure applied against the seated plug through the tubing string can move the sleeve. Once moved, the sleeve reveals ports in the tool communicating the tool's bore with the surrounding annulus so an adjacent wellbore interval can be stimulated. The actuator can use a sensor detecting passage of the plugs through the tool. A spring disposed in the tool can flex near the sensor when a plug passes through the tool, and a counter can count the number of plugs that have passed.

IPC 8 full level

E21B 34/14 (2006.01)

CPC (source: EP US)

E21B 34/142 (2020.05 - EP US); E21B 2200/06 (2020.05 - EP)

Cited by

CN103969062A; CN106030026A; EP3018285A3; CN109441419A; CN111997563A; GB2555254A; GB2555254B; EP2708694A1; AU2013314271B2; CN114427418A; GB2497678B; US9926773B2; US10337288B2; US10221653B2; US10392899B2; WO2014041123A1; WO2016200819A1; WO2014133739A3; WO2018050418A1; US10815754B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2484862 A2 20120808; **EP 2484862 A3 20140226**; **EP 2484862 B1 20180411**; AU 2012200380 A1 20120216; AU 2012200380 B2 20131121; CA 2764764 A1 20120807; CA 2764764 C 20160112; RU 2012103975 A 20130820; RU 2495994 C1 20131020

DOCDB simple family (application)

EP 12151459 A 20120117; AU 2012200380 A 20120123; CA 2764764 A 20120119; RU 2012103975 A 20120206