

Title (en)

Position sensor for determining operational condition of downhole tool

Title (de)

Positionssensor zur Bestimmung des Betriebszustands eines Bohrlochwerkzeugs

Title (fr)

Capteur de position pour déterminer la condition opérationnelle d'un outil de fond de puits

Publication

EP 1998002 A2 20081203 (EN)

Application

EP 08250636 A 20080225

Priority

US 90861607 P 20070328

Abstract (en)

Downhole tools, such as a sliding sleeve or an openhole type packer, include position indicators. The position indicators can include one or more magnets disposed in predetermined positions in the outer housing and the insert of the sliding sleeve. A casing collar locator (CCL) can be used to detect the magnets and determine the relative positions of the housing magnets and insert magnets. The relative positions of the magnets can be used to determine the operational condition of the downhole tool, i.e., whether a sliding sleeve is open or closed or how much a sealing element of an openhole type packer had to expand to seal an annulus.

IPC 8 full level

E21B 33/12 (2006.01); **E21B 47/09** (2006.01)

CPC (source: EP US)

E21B 33/128 (2013.01 - EP US); **E21B 47/092** (2020.05 - EP US); **E21B 2200/06** (2020.05 - EP US)

Cited by

US11111779B2; GB2561606A; GB2561606B; EA039863B1; WO2018193265A1; US11073010B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

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DOCDB simple family (application)

US 3003608 A 20080212; CA 2622044 A 20080221; EP 08250636 A 20080225