

Title (en)

METHOD AND APPARATUS FOR SUBTERRANEAN FORMATION FLOW IMAGING

Title (de)

VORRICHTUNG UND VERFAHREN ZUR DURCHFLUSSBILDERZEUGUNG VON UNTERIRDISCHEN FORMATIONEN

Title (fr)

PROCEDE ET APPAREIL D'IMAGERIE POUR ECOULEMENTS DE FORMATIONS SOUTERRAINES

Publication

**EP 1442312 A1 20040804 (EN)**

Application

**EP 02787602 A 20021106**

Priority

- EP 0212484 W 20021106
- US 33293801 P 20011106

Abstract (en)

[origin: WO03040743A1] The present invention relates to a method and apparatus for measuring a property relating to fluid flow in an earth formation, more specifically to directly measuring formation permeability and other fluid characteristics. The present invention provides a method for determining the permeability of a hydrocarbon bearing earth formation, which method comprises the steps of: locating a tool at a selected position in a borehole penetrating the earth formation; including a flow of fluid within the earth formation to said tool; creating at least two MRI images of said fluid while flowing within the earth formation to said tool, said at least two images being created at different times; determining displacement of said fluid within the earth formation between said different times, using the at least two MRI images; and (e) determining the earth formation permeability from the displacement of said fluid.

IPC 1-7

**G01R 33/44**; **G01V 3/32**; **E21B 49/00**

IPC 8 full level

**G01V 3/32** (2006.01); **G01R 33/44** (2006.01)

CPC (source: EP)

**G01V 3/32** (2013.01)

Citation (search report)

See references of WO 03040743A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

**WO 03040743 A1 20030515**; AU 2002351916 B2 20070823; BR 0213902 A 20040928; CA 2465809 A1 20030515; CA 2465809 C 20160607; EA 006178 B1 20051027; EA 200400635 A1 20041028; EP 1442312 A1 20040804; NO 20042301 L 20040604; OA 12722 A 20060627

DOCDB simple family (application)

**EP 0212484 W 20021106**; AU 2002351916 A 20021106; BR 0213902 A 20021106; CA 2465809 A 20021106; EA 200400635 A 20021106; EP 02787602 A 20021106; NO 20042301 A 20040604; OA 1200400132 A 20021106