Title (en)

Method of exploitation of a porous medium by modelling of fluid flows

Title (de)

Verfahren zur Förderung in einem porösen Medium mittels einer Modellierung der Flüssigkeitsströme

Title (fr)

Méthode d'exploitation de milieu poreux au moyen d'une modélisation d'écoulements de fluide

Publication

EP 2253797 B1 20200219 (FR)

Application

EP 10290174 A 20100401

Priority

FR 0902533 A 20090520

Abstract (en)

[origin: EP2253797A1] The method involves simulating flow of fluids within a porous medium using a simulator over a time interval defined between times, and deducing conditions at updated limits for another simulator. The flow of fluids is simulated near a well using the latter simulator over the same time interval by using the conditions at the updated limits, and updated digital productivity indices are deduced for the former simulator. The flow of fluids is modeled within the porous medium during a time period between the times by repeating simulations for successive time intervals between the times. An independent claim is also included for a method for exploiting a porous underground reservoir using a well.

IPC 8 full level

E21B 43/12 (2006.01)

CPC (source: EP US)

E21B 43/12 (2013.01 - EP US)

Citation (examination)

ED NENNIE ET AL: "SPE 110 316 - An Investigation into the need of a dynamic coupled well-reservoir simulator", COPYRIGHT, 1 November 2007 (2007-11-01), pages 11 - 14, XP055423977, Retrieved from the Internet <URL:https://www.onepetro.org/download/conference-paper/SPE-110316-MS?id=conference-paper/SPE-110316-MS> [retrieved on 20171110]

Cited by

EP2770162A1; FR3002270A1; FR2997721A1; CN104981585A; CN114839130A; EP2650471A1; FR2989200A1; CN117828732A; WO2014072627A1; WO2021118714A1; US9411915B2

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 MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

EP 2253797 A1 20101124; **EP 2253797 B1 20200219**; CA 2704060 A1 20101120; CA 2704060 C 20180227; FR 2945879 A1 20101126; FR 2945879 B1 20110624; US 2010299125 A1 20101125; US 8694297 B2 20140408

DOCDB simple family (application)

EP 10290174 A 20100401; CA 2704060 A 20100517; FR 0902533 A 20090520; US 76786610 A 20100427