

Title (en)

SYSTEM AND METHOD FOR ASSESSING THE PRESENCE OF HYDROCARBONS IN A SUBTERRANEAN RESERVOIR BASED ON SEISMIC INVERSIONS

Title (de)

SYSTEM UND VERFAHREN ZUR BEURTEILUNG DES VORHANDENSEINS VON KOHLENWASSERSTOFFEN IN EINEM UNTERIRDISCHEN RESERVOIR AUF DER GRUNDLAGE SEISMISCHER INVERSIONEN

Title (fr)

SYSTÈME ET PROCÉDÉ D'ÉVALUATION DE LA PRÉSENCE D'HYDROCARBURES DANS UN RÉSERVOIR SOUTERRAIN D'APRÈS DES INVERSIONS SISMIQUES

Publication

EP 3769126 A1 20210127 (EN)

Application

EP 19721762 A 20190322

Priority

- US 201815928130 A 20180322
- IB 2019052331 W 20190322

Abstract (en)

[origin: WO2019180669A1] A computer-implemented method is described for a manner of geologic analysis using time-lapse seismic data. The method includes steps of receiving a first seismic attribute volume inverted from a seismic dataset recorded at a first time, a second digital seismic attribute volume inverted from a seismic dataset recorded at a second time, and a range of geological and geophysical parameters possible in the subsurface volume of interest; identifying a layer and area of interest; computing an attribute difference volume from the seismic attribute volumes; performing probabilistic attribute analysis of at least two of the first digital seismic attribute volume, the second digital seismic attribute volume, and the attribute difference volume using the range of geological and geophysical parameters; estimating time-lapse reservoir properties based on the probabilistic attribute analysis; and outputting visual information depicting the time-lapse reservoir properties via a user interface.

IPC 8 full level

G01V 1/30 (2006.01); **G01V 1/28** (2006.01)

CPC (source: EP)

G01V 1/282 (2013.01); **G01V 1/307** (2013.01); **G01V 1/308** (2013.01); **G01V 2210/612** (2013.01); **G01V 2210/614** (2013.01);
G01V 2210/63 (2013.01); **G01V 2210/632** (2013.01)

Citation (search report)

See references of WO 2019180669A1

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 2019180669 A1 20190926; AU 2019237361 B2 20210225; CA 3092287 A1 20190926; EP 3769126 A1 20210127

DOCDB simple family (application)

IB 2019052331 W 20190322; AU 2019237361 A 20190322; CA 3092287 A 20190322; EP 19721762 A 20190322