

Title (en)
RESERVOIR SIMULATIONS WITH FRACTURE NETWORKS

Title (de)
RESERVOIRSIMULATIONEN MIT FRAKTURNETZWERKEN

Title (fr)
SIMULATIONS DE RÉSERVOIR INCLUANT DES RÉSEAUX DE FRACTURE

Publication
EP 3338115 A1 20180627 (EN)

Application
EP 16837462 A 20160720

Priority
• US 201562206408 P 20150818
• US 2016043037 W 20160720

Abstract (en)
[origin: WO2017030725A1] Systems and methods are described for performing a reservoir simulation for a subterranean formation with a fracture network by receiving data representing the subterranean formation, obtaining a matrix grid based on the data, where the matrix grid includes matrix grid control volumes, generating a fracture network based on the data, identifying a location of a fracture-fracture intersection within the fracture network, discretizing the fracture network into fracture network control volumes, where the fracture network is discretized independently of the matrix grid, identifying a location of a matrix-fracture intersection between the matrix grid control volumes and fracture network control volumes, calculating a transmissibility for the fracture-fracture intersection and the matrix-fracture intersection, and performing the reservoir simulation based on the transmissibility for the fracture-fracture intersection and the matrix-fracture intersection.

IPC 8 full level
G01V 99/00 (2009.01)

CPC (source: EP US)
E21B 43/00 (2013.01 - EP US); **G01V 20/00** (2024.01 - EP US); **G06F 30/20** (2020.01 - US); **E21B 49/00** (2013.01 - US);
G01V 2210/646 (2013.01 - EP US); **G06F 30/20** (2020.01 - EP)

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 2017030725 A1 20170223; EP 3338115 A1 20180627; EP 3338115 A4 20190424

DOCDB simple family (application)
US 2016043037 W 20160720; EP 16837462 A 20160720