

Title (en)

METHOD AND ACIDIZING TOOL FOR DEEP ACID STIMULATION USING ULTRASOUND

Title (de)

VERFAHREN UND ANSÄUERUNGSWERKZEUG FÜR TIEFE SÄURESTIMULATION MITTELS ULTRASCHALL

Title (fr)

PROCÉDÉ ET OUTIL D'ACIDIFICATION POUR STIMULATION PROFONDE À L'ACIDE UTILISANT DES ULTRASONS

Publication

EP 2788577 B1 20180228 (EN)

Application

EP 12806782 A 20121207

Priority

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- US 2012068379 W 20121207

Abstract (en)

[origin: US2013146281A1] A method of deep acid stimulation for a zone to be treated in an underground formation using an acidizing tool, the method including the steps of introducing the acidizing tool into the well bore, introducing the acid formulation onto the well bore wall at the treatment zone and introducing ultrasound energy into the underground formation at the treatment zone. The subsequent acid penetration depth is deeper than the initial acid penetration depth. A method of stress fracturing a portion of an underground formation includes the steps of introducing the acidizing tool into a well bore and introducing the acid formulation and the ultrasound energy at the focused treatment point. The weakened acidized spots in combination with the stress on the underground formation causes oriented stress-induced fractures to form that are fluidly coupled with the well bore. An acidizing tool includes an acid delivery system and an ultrasonic transmitter.

IPC 8 full level

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CPC (source: EP US)

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