

Title (en)

FLOW VELOCITY AND ACOUSTIC VELOCITY MEASUREMENT WITH DISTRIBUTED ACOUSTIC SENSING

Title (de)

STRÖMUNGSGESCHWINDIGKEITS- UND SCHALLGESCHWINDIGKEITSMESSUNG MIT VERTEILTER SCHALLMESSUNG

Title (fr)

MESURE DE VITESSE D'ÉCOULEMENT ET DE VITESSE ACOUSTIQUE PAR DÉTECTION ACOUSTIQUE DISTRIBUÉE

Publication

EP 2909440 A4 20160720 (EN)

Application

EP 14743240 A 20140108

Priority

- US 201313748720 A 20130124
- US 2014010682 W 20140108

Abstract (en)

[origin: US2014202240A1] A well flow velocity measurement method can include transmitting an acoustic signal through at least one fluid composition in a well, detecting velocities of the acoustic signal in both opposite directions along an optical waveguide in the well, the optical waveguide being included in a distributed acoustic sensing system, and determining an acoustic velocity in the fluid composition based on the velocities of the acoustic signal. Another well flow velocity measurement method can include propagating at least one pressure pulse through at least one fluid composition in a well, detecting a velocity of the pressure pulse along an optical waveguide in the well, the optical waveguide being included in a distributed acoustic sensing system, and determining an acoustic velocity in the fluid composition based on the velocity of the pressure pulse.

IPC 8 full level

E21B 47/10 (2012.01); **E21B 47/107** (2012.01)

CPC (source: EP US)

E21B 47/107 (2020.05 - EP US); **E21B 47/135** (2020.05 - EP US)

Citation (search report)

- [XY] US 2012152024 A1 20120621 - JOHANSEN ESPEN S [AE]
- [Y] WO 2012114067 A1 20120830 - OPTASENSE HOLDINGS LTD [GB], et al
- [Y] US 2011088462 A1 20110421 - SAMSON ETIENNE M [US], et al
- See references of WO 2014116424A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 2014202240 A1 20140724; CA 2891596 A1 20140731; EP 2909440 A1 20150826; EP 2909440 A4 20160720; EP 2909440 B1 20190626; WO 2014116424 A1 20140731

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