

Title (en)

INTEGRATED COMPUTATIONAL ELEMENT ANALYSIS OF PRODUCTION FLUID IN ARTIFICIAL LIFT OPERATIONS

Title (de)

INTEGRIERTE COMPUTERELEMENTANALYSE EINER PRODUKTIONSFLÜSSIGKEIT BEI KÜNSTLICHEN AUFZUGSOPERATIONEN

Title (fr)

ANALYSE D'ÉLÉMENTS DE CALCULS INTÉGRÉS DE PRODUCTION DE FLUIDE DANS DES OPÉRATIONS D'ASCENSIONS ARTIFICIELLES

Publication

EP 2971482 A4 20170208 (EN)

Application

EP 13886519 A 20130604

Priority

US 2013043996 W 20130604

Abstract (en)

[origin: WO2014196955A1] A downhole pump assembly for pumping production fluid to a surface of a well. The downhole pump assembly includes a fluid pump that is operable to pump the production fluid to the surface. An optical computing device having at least one integrated computational element and at least one detector. The at least one integrated computational element is configured to optically interact with the production fluid proximate the fluid pump and is configured to generate optically interacted light. The at least one detector is arranged to receive the optically interacted light and to generate an output signal corresponding to a characteristic of the production fluid.

IPC 8 full level

E21B 43/12 (2006.01); **E21B 43/20** (2006.01)

CPC (source: EP US)

E21B 43/128 (2013.01 - EP US); **E21B 47/008** (2020.05 - EP US); **E21B 47/113** (2020.05 - EP)

Citation (search report)

- [A] US 6176308 B1 20010123 - PEARSON DONALD R [US]
- [A] US 2013032736 A1 20130207 - TUNHEIM OLA [NO], et al
- See references of WO 2014196955A1

Cited by

US11371940B2

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

DOCDB simple family (publication)

WO 2014196955 A1 20141211; EP 2971482 A1 20160120; EP 2971482 A4 20170208

DOCDB simple family (application)

US 2013043996 W 20130604; EP 13886519 A 20130604