

Title (en)
SYSTEMS AND METHODS FOR MONITORING THE QUALITY OF A FLUID

Title (de)
SYSTEME UND VERFAHREN ZUR ÜBERWACHUNG DER QUALITÄT EINES FLUIDS

Title (fr)
SYSTÈMES ET PROCÉDÉS DE SURVEILLANCE DE LA QUALITÉ D'UN FLUIDE

Publication
EP 2895787 A4 20160615 (EN)

Application
EP 13836274 A 20130909

Priority
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Abstract (en)
[origin: WO2014043010A1] Systems and methods for monitoring a fluid having one or more adulterants therein. One method of monitoring the fluid includes containing the fluid within a flow path, the fluid including at least one adulterant present therein, optically interacting at least one integrated computational element with the fluid, thereby generating optically interacted light, receiving with at least one detector the optically interacted light, and generating with the at least one detector an output signal corresponding to a characteristic of the at least one adulterant in the fluid.

IPC 8 full level
F17D 1/08 (2006.01); **F17D 3/01** (2006.01); **G01N 21/31** (2006.01); **G01N 21/85** (2006.01); **C12M 1/34** (2006.01); **G01J 3/12** (2006.01); **G01J 3/36** (2006.01); **G01N 21/3577** (2014.01); **G06E 3/00** (2006.01)

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Citation (search report)
• [X] WO 2008121692 A1 20081009 - UNIV SOUTH CAROLINA [US], et al
• [X] US 2007095528 A1 20070503 - ZIAUDDIN MURTAZA [US], et al
• [X] WO 2011063086 A1 20110526 - HALLIBURTON ENERGY SERV INC [US], et al
• [E] WO 2013162860 A1 20131031 - HALLIBURTON ENERGY SERV INC [US]
• [XP] WO 2013022570 A2 20130214 - HALLIBURTON ENERGY SERVICES INC [US], et al
• [AD] SULLIVAN B T ET AL: "IMPLEMENTATION OF A NUMERICAL NEEDLE METHOD FOR THIN-FILM DESIGN", APPLIED OPTICS, OPTICAL SOCIETY OF AMERICA, WASHINGTON, DC; US, vol. 35, no. 28, 1 October 1996 (1996-10-01), pages 5484 - 5492, XP000885005, ISSN: 0003-6935, DOI: 10.1364/AO.35.005484
• See references of WO 2014043010A1

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