

Title (en)

Blow out preventer (bop) corroborator

Title (de)

Bestätigungsvorrichtung für einen Ausblasverhinderer (BOP)

Title (fr)

Dispositif de corroboration de blocs obturateurs de puits (BOP)

Publication

EP 2604786 A3 20140423 (EN)

Application

EP 12197136 A 20121214

Priority

- US 201161570358 P 20111214
- US 201213585118 A 20120814

Abstract (en)

[origin: EP2604786A2] Systems and methods are provided for supplementing existing management methods for and corroborating condition and performance of a blow out preventer for a submerged well. The corroborator is located on the blow out preventer and includes a flow meter external to a pipe to measure flow inside the pipe, a pipe joint locator, a ram seal confirmation agent, a dedicated communication connection from the corroborator to a computer topside. Data from at least one sensor topside, which may represent a mud tank level, is also received. The computer is enabled to calculate a probability that a malfunction related to the well occurs. The computer may be configured to implement a Principal Component Analysis model of the well based on historical data, to assess a likelihood that a threshold value will be surpassed based on collected sensor data and to generate an alert. The computer implements instructions to perform steps of the present invention.

IPC 8 full level

E21B 21/08 (2006.01); **E21B 33/035** (2006.01); **E21B 33/06** (2006.01)

CPC (source: BR EP US)

E21B 33/0355 (2013.01 - BR EP US); **E21B 33/06** (2013.01 - BR EP US); **E21B 33/061** (2013.01 - EP US); **E21B 34/04** (2013.01 - BR EP US); **E21B 47/001** (2020.05 - BR EP US)

Citation (search report)

- [A] US 2007151763 A1 20070705 - REITSMA DONALD G [US], et al
- [A] US 4440239 A 19840403 - EVANS JOHN L [US]
- [A] US 2007289746 A1 20071220 - FOSSLI BORRE [NO]
- [A] US 2003000693 A1 20030102 - COUREN PATRICE PAUL LOUIS [FR], et al

Cited by

CN114592820A; WO2017024524A1

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

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DOCDB simple family (application)

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