(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 2 604 786 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
23.04.2014 Bulletin 2014/17

(43) Date of publication A2:
19.06.2013 Bulletin 2013/25

(21) Application number: **12197136.0**

(22) Date of filing: **14.12.2012**

(51) Int Cl.:
E21B 21/08 *(2006.01)* ***E21B 33/035*** *(2006.01)*
E21B 33/06 *(2006.01)*

(84) Designated Contracting States:
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 States:
BA ME

(30) Priority: **14.12.2011 US 201161570358 P**
14.08.2012 US 201213585118

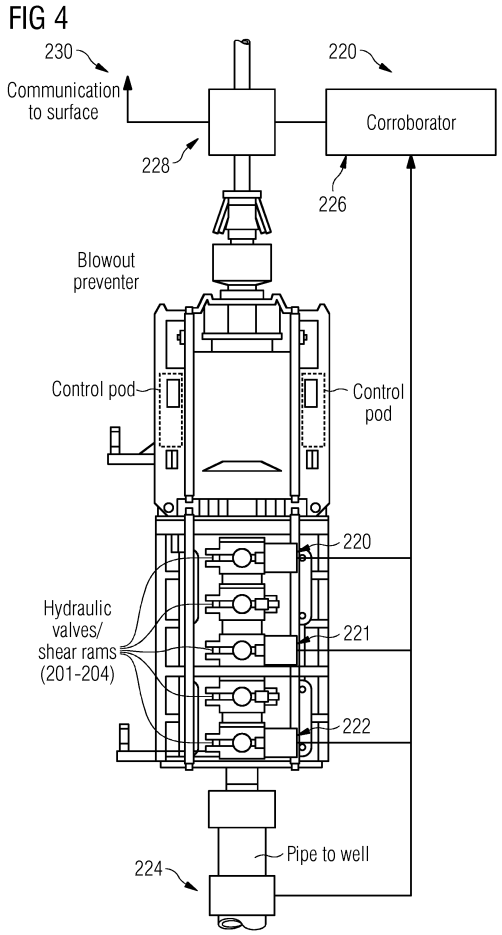
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(54) Blow out preventer (bop) corroborator

(57) 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.

FIG 4



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EUROPEAN SEARCH REPORT

Application Number
EP 12 19 7136

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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E21B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	12 March 2014	Morrish, Susan

CATEGORY OF CITED DOCUMENTS

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EPO FORM 1503 03.82 (P04C01)

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