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(54) Title: BLOWOUT PREVENTER MONITOR WITH TRIGGER SENSOR AND METHOD OF USING SAME

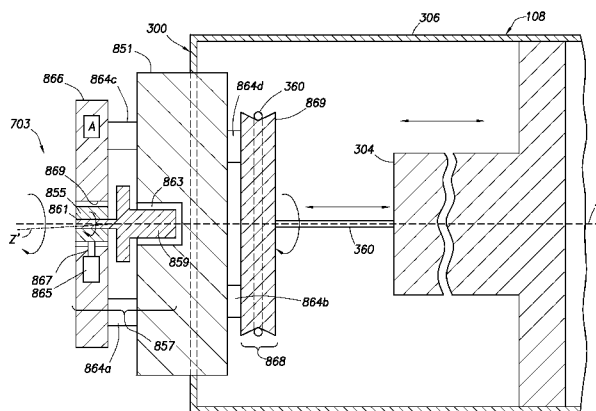


FIG. 8

(57) Abstract: The present disclosure relates to a monitor for a blowout preventer of a wellbore. The blowout preventer includes a housing, rams, and an actuator comprising a cylinder with a piston. The piston is operatively connectable with the ram and movable therewith. The monitor includes a monitor base operatively connectable to the cylinder (the monitor base having an interior side inside the cylinder and an exterior side outside the cylinder), an interior plate positionable inside the cylinder about the interior side of the base (the interior plate operatively connectable to the piston and movable therewith), an exterior plate positionable outside the cylinder about the exterior surface of the monitor base (the exterior plate coupled by magnets to the interior plate and rotatable therewith), and a trigger sensor operatively connectable about the monitor base and the exterior plate to detect rotation thereof whereby a position of the ram may be determined.

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<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) E21B		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2012/000646 A1 (LIOTTA JOSEPH JAMES [US] ET AL) 5 January 2012 (2012-01-05) page 3 - page 4; figures 4B,4K-4M -----	1-34
A	US 2008/196888 A1 (JUDGE ROBERT ARNOLD [US] ET AL) 21 August 2008 (2008-08-21) abstract -----	1-34
A	US 2008/197306 A1 (JUDGE ROBERT ARNOLD [US]) 21 August 2008 (2008-08-21) cited in the application the whole document -----	1-34
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <span style="margin-left: 100px;"><input checked="" type="checkbox"/> See patent family annex.</span>		
* Special categories of cited documents :		
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family	
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10 March 2015	20/03/2015	
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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