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(54) **PUMPING SYSTEM AND METHOD**

(57) A pumping method can include displacing a rod string with pressure applied to an actuator by a pressure source including an accumulator and a separate gas volume in communication with the accumulator. A sensor indicates whether a fluid is in the gas volume. A pumping system can include an actuator, a pump connected between the actuator and an accumulator, a hydraulic fluid contacting a gas in the accumulator, a separate gas volume in communication with the accumulator, and a sensor that detects the hydraulic fluid in the gas volume. Another pumping system can include an actuator, a pump connected between the actuator and an accumulator that receives nitrogen gas from a nitrogen concentrator assembly while a hydraulic fluid flows between the pump and the actuator, a separate gas volume in communication with the accumulator, and a sensor that detects a presence of the hydraulic fluid in the gas volume.

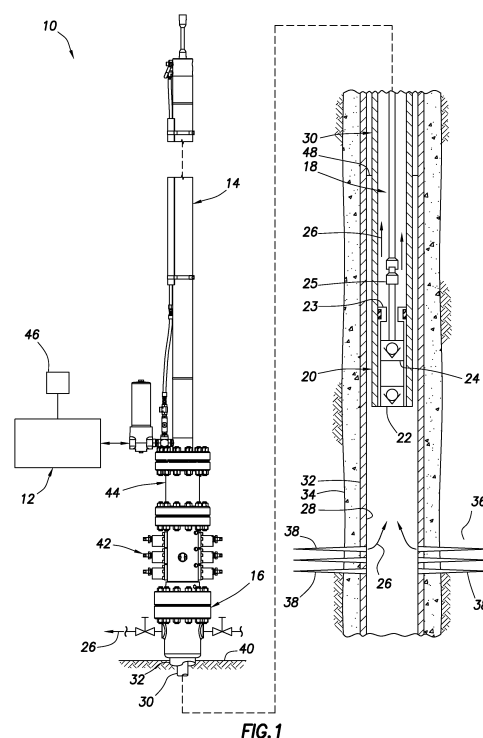


FIG. 1



EUROPEAN SEARCH REPORT

Application Number
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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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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 13 April 2017	Examiner Kecman, Ivan
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 16 18 3123

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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