

Title (en)
PUMPING SYSTEM AND METHOD

Title (de)
PUMPSYSTEM UND -VERFAHREN

Title (fr)
PROCÉDÉ ET SYSTÈME DE POMPAGE

Publication
EP 3135859 A2 20170301 (EN)

Application
EP 16183123 A 20160805

Priority

- US 2015043694 W 20150805
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- US 201514956527 A 20151202
- US 201514956545 A 20151202
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Abstract (en)
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.

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US 3696675 A 19721010 - GILMOUR A SCOTT

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