

Search history

Search pn=WO2015171797 (Results 1)

1:

Search [SP]: 1. a method to dislodge debris from a pump system, the pump system including a down-hole pump coupled by a rod string to an above-ground pump actuator which is coupled to a controller configured to operate the pump system, wherein the pump actuator has an adjustable stroke length, the method comprising: determining that the pump system should begin operating in a pump clean mode and implementing the pump clean mode configured in the controller wherein the pump clean mode comprises: cycling the pump actuator at a preset command speed using a preset starting stroke length, preset acceleration rate and a preset deceleration rate continuing to cycle the pump actuator while incrementally decreasing the stroke length by a preset stroke length increment resulting in increased pump cycling frequencies determining that the pump clean mode is complete and returning the pump system to a normal operation mode. 2. the method of claim 1, wherein the pump clean mode further comprises impressing a preset vibration frequency during a portion of a pump stroke of a pump cycle. 3. the method of claim 2, wherein the preset vibration frequency is the pump system rod string resonant frequency. 4. the method of claim 1, wherein the preset command speed is a full speed for the pump system as a whole. 5. the method of claim 1, wherein the step of determining that the pump system should begin operating in the pump clean mode comprises determining that a preset number of cycles of the pump system have been completed in the normal operation mode. 6. the method of claim 1, wherein the step of determining that the pump system should begin operating in the pump clean mode comprises determining that a pump system output has decreased. 7. the method of claim 1, wherein the step of determining that the pump clean mode is complete comprises determining that a preset number of cycles of the pump system have been completed in the pump clean mode. 8. the method of claim 1, wherein the step of determining that the pump clean mode is complete comprises determining that the stroke length has become less than or equal to a preset minimum stroke length. 9. the method of claim 1, wherein the implementation of the pump clean mode is accomplished by a control arrangement configured with one of remote telemetry, key pad, automatically at preset time, and automatically upon detection of a malfunction of the pump. (Results 0)

Search [SP]: subterranean pump with pump cleaning mode a method to dislodge debris from a pump system in which the pump system includes a down-hole pump coupled by a rod string to an above-ground pump actuator, which is coupled to a controller configured to operate the pump system, and where the actuator has an adjustable stroke length. the method also includes determining that the pump system should begin operating in a pump clean mode, implementing the pump clean mode configured in the controller, and cycling the pump actuator at a preset command speed using a preset starting stroke length, preset acceleration rate and a preset deceleration rate. the method also includes continuing to cycle the pump actuator while incrementally decreasing the stroke length by a preset stroke length increment resulting in increased pump cycling frequencies. further, the method calls for determining that the pump clean mode is complete, and returning the pump system to a normal operation mode. (Results 168)

Search 3 and pump (Results 119)

4:

Search 4 and (cleaning OR clean) (Results 2)

5:

Title: Method of and apparatus for **cleaning** down well valves of well **pumps** in situ

Abstract: Source: US4098340A [EN] **Pump** valves are flushed by accelerated fluid flow therethrough induced by moving the **pump** rods through an accelerated downstroke.

Classifications:

International (IPC 8-9): E21B37/00 E21B43/12 F04B47/04 (Advanced/Invention);

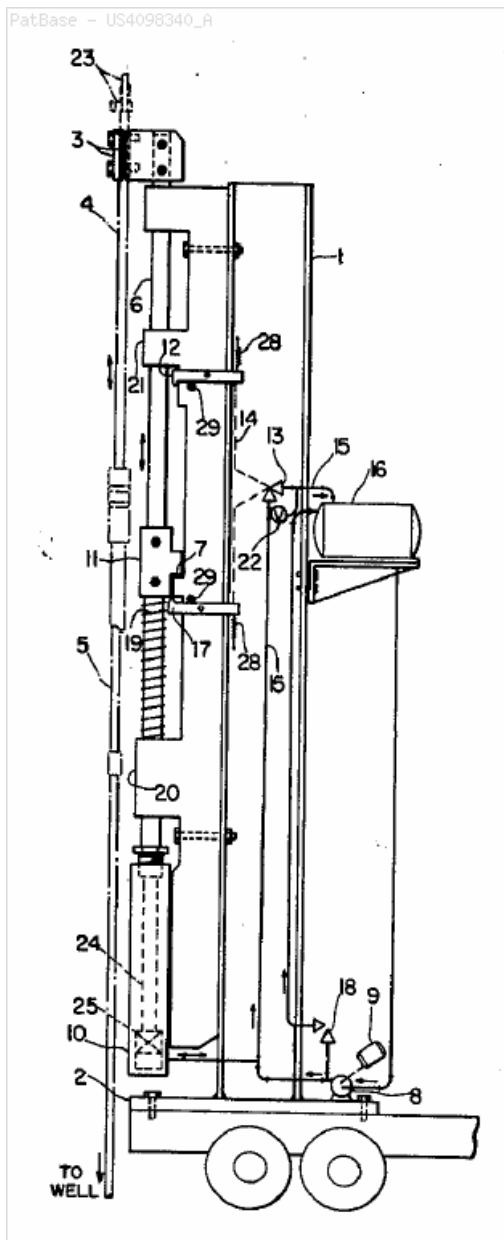
E21B37/00 E21B43/12 F04B47/00 (Core/Invention)

International (IPC 1-7): E21B37/00 E21B43/00

CPC: E21B37/00 E21B43/127 F04B47/04

European: E21B37/00 E21B43/12B9C F04B47/04

US: 166/311 166/68



Family:

Publication number	Publication date	Application number	Application date
US4098340 A	19780704	US19770814885	19770712

Priority:

US19770814885 19770712

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Inventor(s): (std): HOLIMAN WILLIAM E ; STEELE BARNEY RAYMOND

Title: SUBTERRANEAN **PUMP** WITH **PUMP CLEANING** MODE

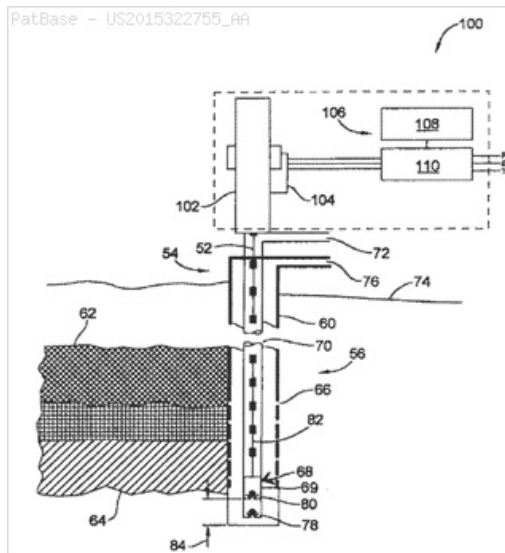
Abstract: Source: US2015322755A [EN] A method to dislodge debris from a **pump** system in which the **pump** system includes a down-hole **pump** coupled by a rod string to an above-ground **pump** actuator, which is coupled to a controller configured to operate the **pump** system, and where the actuator has an adjustable stroke length. The method also includes determining that the **pump** system should begin operating in a **pump clean** mode, implementing the **pump clean** mode configured in the controller, and cycling the **pump** actuator at a preset command speed using a preset starting stroke length, preset acceleration rate and a preset deceleration rate. The method also includes continuing to cycle the **pump** actuator while incrementally decreasing the stroke length by a preset stroke length increment resulting in increased **pump** cycling frequencies. Further, the method calls for determining that the **pump clean** mode is complete, and returning the **pump** system to a normal operation mode.

Classifications:

International (IPC 8-9): E21B28/00 E21B37/00 E21B43/12
E21B47/00 F04B1/12 F04B47/00 F04B47/02 F04B49/00 F04B49/06
F04B49/12 (Advanced/Invention)

CPC: E21B43/126 E21B28/00 E21B37/00 F04B1/128 F04B47/00
F04B49/12 F04B47/026 F04B49/06 E21B47/0008 E21B43/127

US: 166/311 417/53



Family:

Publication number	Publication date	Application number	Application date
AR100964 AA	20161116	AR2015P101392	20150507
AU2015256007 AA	20151112	AU20150256007	20150506
BR112016026007 A2	20170815	BR20161126007	20150506
CA2943898 AA	20160923	CA20152943898	20150506
CA2997092 AA	20151112	CA20152997092	20150506
CO20160003561 A2	20170209	CO20160003561	20161028
EA201692247 A1	20170331	EA20160092247	20150506
EP3140547 A1	20170315	EP20150788917	20150506
MX2016013205 A1	20170126	MX20160013205	20150506
US2015322755 AA	20151112	US20150704079	20150505
US2017074080 AA	20170316	US20160343453	20161104
US9689251 BB	20170627	US20150704079	20150505
WO15171797 A1	20151112	WO2015US29510	20150506

Priority:

CA20182943898 20180313 US20140990492P 20140508 US20150704079 20150505
WO2015US29510 20150506 US20160343453 20161104

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW