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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: INJECTION LINE VALVE MECHANISM

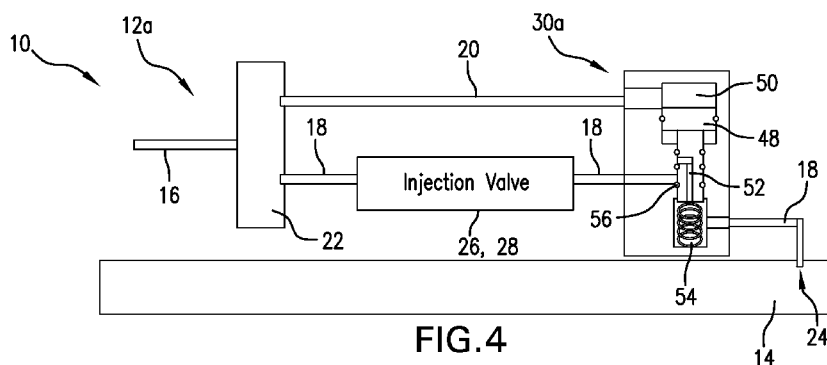


FIG. 4

(57) Abstract: A downhole valve assembly, including a line operatively arranged to carry a fluid, a splitter arranged on the line, the splitter dividing the line into a control leg and an injection leg. The injection leg terminating in an injection port, and a valve mechanism actuatable for selectively sealing the injection port, the valve mechanism controllable via a fluid pressure in the line, the fluid pressure communicated to the valve mechanism via the control leg for actuating the valve mechanism.

A. CLASSIFICATION OF SUBJECT MATTER***E21B 34/08(2006.01)i, E21B 34/02(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

E21B 34/08; E21B 33/03; E21B 34/02; E21B 34/14; E21B 37/06

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: downwell, wellbore, borewell, downhole, borehole, subsurface, valve, line, conduit, passageway, injection, hydraulic, pressure, sliding, sleeve, chamber

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4848457 A (LILLEY, ROBERT O.) 18 July 1989 See column 2, line 45 - column 4, line 9 and figures 1 - 2.	1-20
A	US 2010-0051289 A1 (CONSTANTINE, JESSE J. et al.) 04 March 2010 See paragraph 0024 and figure 2.	1-20
A	US 4125155 A (BROCK, JR., BILL M.) 14 November 1978 See column 4, lines 3 - 19 and figure 3.	1-20
A	US 5168933 A (PRITCHARD, JR., JOHN J. et al.) 08 December 1992 See column 2, line 46 - column 3, line 65 and figures 1 - 2.	1-20



Further documents are listed in the continuation of Box C.



See patent family annex.

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"&" document member of the same patent family

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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4848457 A	18.07.1989	None	
US 2010-0051289 A1	04.03.2010	WO 2010-027738 A2 WO 2010-027738 A3	11.03.2010 10.06.2010
US 4125155 A	14.11.1978	None	
US 5168933 A	08.12.1992	None	