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[Continued on next page]

(54) Title: FLOW REGULATOR ASSEMBLY

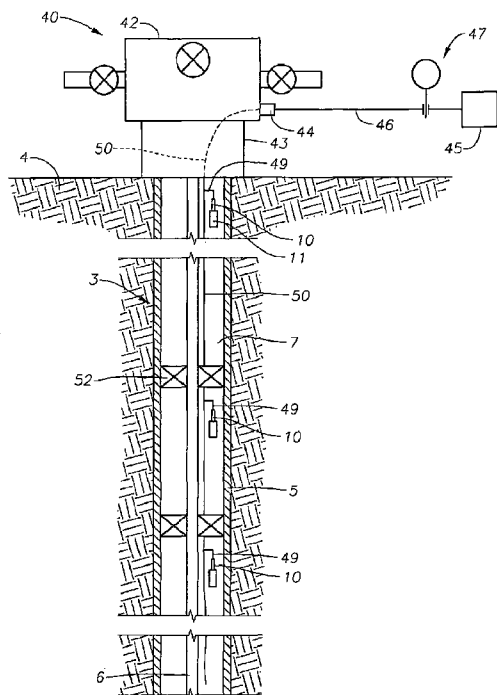


Fig. 5

(57) Abstract: A system for and method of supplying an injection fluid to a well assembly so that the injection fluid flows at a substantially constant flow rate. The fluid can be injected at a single site in the well assembly or multiple sites. A flow control regulator is included that attaches to the well assembly and provides a self adjusting flow control for the fluid being injected. The regulator includes a slidable floating sleeve having an orifice through which the fluid flows. The sleeve includes an inlet port that can register with a fluid supply port to allow the injection fluid to make its way into the sleeve. The fluid exits the sleeve through the orifice to generate a pressure differential across the orifice that in turn exerts a sliding force onto the sleeve. Moving the sleeve misaligns the inlet port and fluid supply port thereby throttling flow through the regulator to a predetermined flow rate.





TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG). **Published:**

Declarations under Rule 4.17:

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- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/061306**A. CLASSIFICATION OF SUBJECT MATTER***E21B 43/16(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 43/16; E21B 34/06; E21B 34/08; E21B 34/10; E21B 34/12

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

(Chinese Patents and application for patent)

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

eKOMPASS(KIPO internal) & Keywords: flow control device

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 7426962 B2 (MOEN et al.) 23 September 2008 See Abstract, Fig. 1, Column 6	1-11, 13
Y	US 2006-0175052 A1 (TIPS) 10 August 2006 See Abstract, Fig. 1, Paragraphs 21,22,23, Claim 1	1-11, 13
A	US 2007-0012454 A1 (ROSS et al.) 18 January 2007 See Abstract, Fig. 3, Paragraphs 22,23,25	1-14
A	US 6786285 B2 (JOHNSON et al.) 07 September 2004 See Abstract, Fig. 1, Claim 1	1-14

 Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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