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Declarations under Rule 4.17:

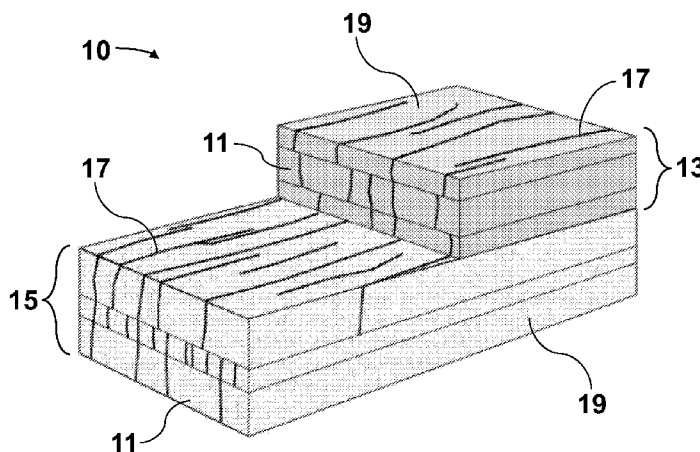
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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[Continued on next page]

(54) Title: A SYSTEM AND METHOD FOR CONFORMANCE CONTROL IN A SUBTERRANEAN RESERVOIR



PRIOR ART

Fig. 1

(57) Abstract: A system and method for optimizing the design of a conformance control treatment for a subterranean reservoir is disclosed. The system and method include performing tracer analysis between an injection well and a production well. A flow capacity and storage capacity curve is constructed from the tracer analysis. A storage capacity associated with a threshold residence time is determined using the flow capacity and storage capacity curve. A conformance control treatment is determined for the storage capacity associated with the threshold residence time. A chemical slug is injected into the injection well to increase the flow resistance in high permeability regions of a subterranean reservoir, thereby enhancing the recovery of hydrocarbons from the reservoir.



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— *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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12 April 2012

**A. CLASSIFICATION OF SUBJECT MATTER*****E21B 33/138(2006.01)i, E21B 43/22(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 33/138; G06F 9/44; E21B 43/24; E21B 43/22

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) &amp; Keywords: injection, production, hydrocarbon, recovery, conformance

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 04903768 A (SHU; PAUL) 27 February 1990 See claims 1-9 and figures 1-3.	1-15
A	US 2010-0051280 A1 (AKRAM FARRUKH) 04 March 2010 See claims 1-20.	1-15
A	US 04445573 A (MCCALEB; GEORGE E.) 01 May 1984 See claims 1-18 and figures 1-5.	1-15
A	US 04159037 A (VARNON; JAMES E. et al.) 26 June 1979 See claims 1-27 and figures 1A-1B.	1-15

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

\* Special categories of cited documents:

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"&amp;" document member of the same patent family

Date of the actual completion of the international search

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 04903768 A	27.02.1990	None	
US 2010-0051280 A1	04.03.2010	N020092917A	03.03.2010
US 04445573 A	01.05.1984	None	
US 04159037 A	26.06.1979	None	