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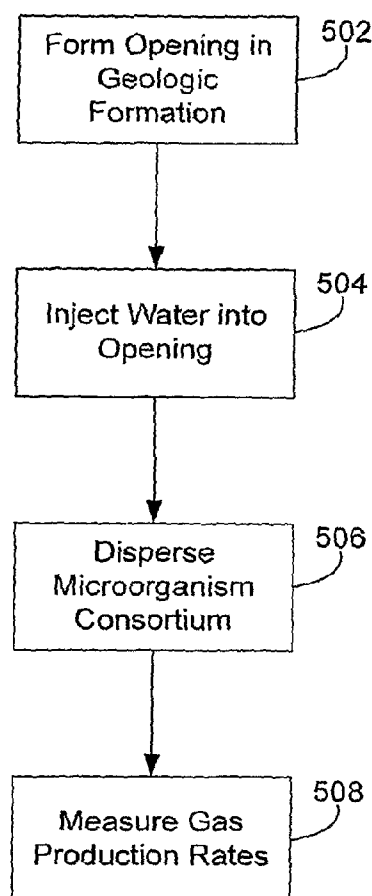
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(54) Title: BIOGENIC FUEL GAS GENERATION IN GEOLOGIC HYDROCARBON DEPOSITS



(57) Abstract: A method to stimulate the biogenic production of a metabolite with enhanced hydrogen content that includes forming an opening in a geologic formation to provide access to a consortium of microorganisms, and injecting water into the opening to disperse at least a portion of the consortium over a larger region of a hydrocarbon deposit. The method may also include measuring a change in the rate of production of the metabolite in the formation. Also, an method to stimulate biogenic production of a metabolite that includes measuring a salinity level of formation water in a geologic formation, and injecting water into the opening to reduce the salinity level of the formation water in the formation. The method may also include measuring a change in the rate of production of the metabolite in the formation.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: E21B 43/22(2006.01)

USPC: 166/246,252.3,272.6

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)

U.S. : 166/246,252.3,268,272.6,305.1,371

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/0045279 A1 (CONVERSE et al.) 29 November 2001 (29.11.2001), see entire document including at least Fig. 2A, [0017], [0028], [0068-0069], [0071], [0079-0083], and [0091-0093].	1-25



Further documents are listed in the continuation of Box C.



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* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

05 December 2007 (05.12.2007)

Date of mailing of the international search report


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Name and mailing address of the ISA/US

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US07/02420

Continuation of B. FIELDS SEARCHED Item 3:

East: (micro\$1organism\$1 with consorti\$3) and ((remov\$3 separat\$3 extract\$4 produc\$4) with (metabolite\$1 (combust\$5 with gas\$2) hydrogen methane\$1 acetate\$1)) and ((water fluid\$1 liquid\$1) with (\$3inject\$3 \$3introduc\$4) same (formation\$1 hydrocarbon\$1 subterranean geological\$2 wellbore\$1 borehole\$1 downhole))