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[Continued on next page]

(54) Title: INTERMEDIATE VAPOR COLLECTION WITHIN ENCAPSULATED CONTROL INFRASTRUCTURES

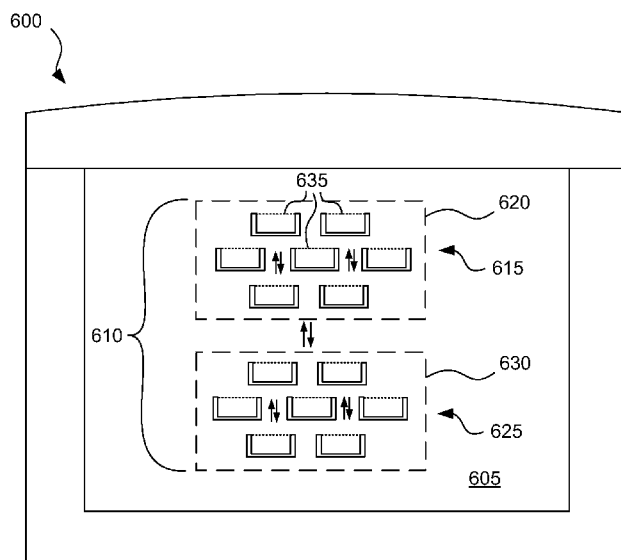


FIG. 6

(57) Abstract: A method of recovering hydrocarbons from hydrocarbonaceous materials can include forming a constructed permeability control infrastructure (600). This constructed infrastructure (600) defines a substantially encapsulated volume. A mined hydrocarbonaceous material can be introduced into the control infrastructure to form a permeable body (605) of hydrocarbonaceous material. The permeable body (605) can be heated sufficient to remove hydrocarbons therefrom. Hydrocarbon products can be collected from intermediate locations (620, 630) within the permeable body (605). Advantageously, an intermediate fluid collection system (610) can be used to draw a hydrocarbon product from the permeable body (605) at preselected locations. Such intermediate collection can provide hydrocarbon product fractions which can reduce or eliminate the need for full-scale distillation of a hydrocarbon product having a full range of products such as that typically found in crude oil. In addition, product quality can be tailored by monitoring such intermediate draws and adjusting operating parameters accordingly.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2010/023515**A. CLASSIFICATION OF SUBJECT MATTER***C10G 9/00(2006.01)i, C10G 1/04(2006.01)i, E21B 43/00(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)

C10G, E21B

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: (oil shale <or> shale oil <or> kerogen <or> tar <or> bitumen) <and> (permeab* <or> in situ)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2008-098177 A1 (RED LEAF RESOURCES, INC.) 14 August 2008 See claims; figures	1-26
X	US 2008-0190813 A1 (DANA TODD et al.) 14 August 2008 See claims; figures	1-26
A	US 4294563 A1 (KILBURN; JAMES S.) 13 October 1981 See column 2, line 34 - column 3, line 55; claims	1-26
A	US 4043595 A1 (FRENCH; GORDON B.) 23 August 1977 See figure 4; claims	1-26



Further documents are listed in the continuation of Box C.



See patent family annex.

* 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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"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

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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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