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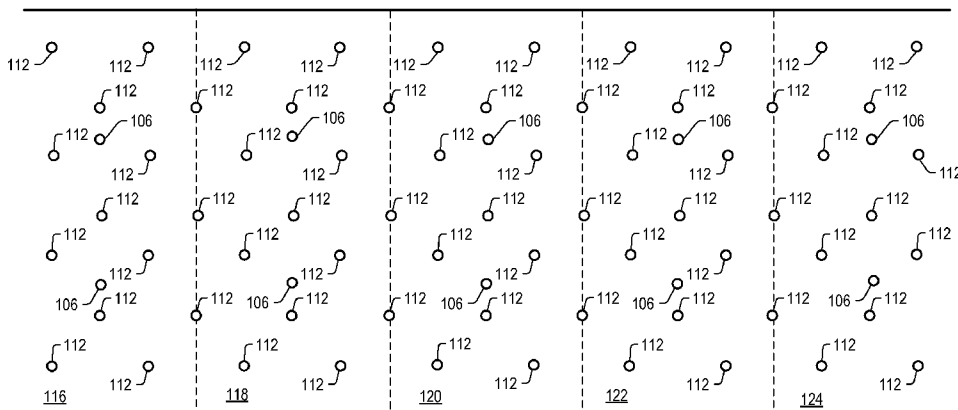
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[Continued on next page]

(54) Title: HEATING HYDROCARBON CONTAINING FORMATIONS IN A LINE DRIVE STAGED PROCESS



(57) Abstract: A method for treating a hydrocarbon containing formation is disclosed. The method includes providing heat to a first section of the formation with one or more first heaters in the first section. First hydrocarbons are heated in the first section such that at least some of the first hydrocarbons are mobilized. At least some of the mobilized first hydrocarbons are produced through a production well located in a second section of the formation. The second section is located substantially adjacent to the first section. A portion of the second section is provided some heat from the mobilized first hydrocarbons but is not conductively heated by heat from the first heaters. Heat is provided to the second section with one or more second heaters in the second section to further heat the second section.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/81905

A. CLASSIFICATION OF SUBJECT MATTER  
IPC: E21B 43/24( 2006.01),43/30( 2006.01)

USPC: 166/245,272.1,302  
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. : 166/57, 60, 245, 258, 272.1, 302

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)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/0062052 A (Rouffignac et al) 23 May 2002 (23.05.2002), Figure 44; Para's [0606], [0612], [0613], [0704]-[0711].	1-3
A	US 7,066,254 A (VINEGAR ET AL) 27 June 2006 (27.06.2006); Figure 138.	1-3
A	US 3,794,113 A (STRANGE ET AL) 26 February 1974 26.02.1974, Figure 1.	1-3
A	US 3,599,714 A (MESSMAN ET AL) 17 August 1971 (17.08.1971), see entire document	1-3
A	US 3,150,715 A (DIETZ) 29 September 1964 (29.09.1964), see entire document.	1-3
A	US 3,132,692 A (MARX ET AL) 12 May 1964 (12.05.1964), see entire document.	1-3
A	US 3,097,690 A (TERWILLIGER ET AL) 16 July 1963 (16.07.1963), see entire document.	1-3



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	"T" 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
"E" earlier application or patent published on or after the international filing date	"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
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/81905

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☒ Claims Nos.: 4-21  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.