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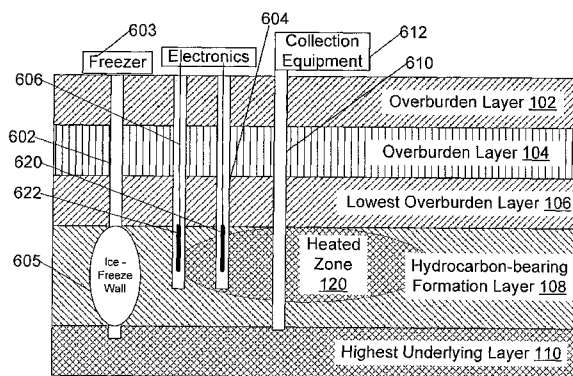
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FIG. 7



(57) Abstract: A method of producing liquid hydrocarbons from a hydrocarbon-bearing rock in situ in a geological formation begins with exploring the formation by drilling a plurality of boreholes into the formation and taking core samples of the hydrocarbon-bearing rock and at least one overburden layer. Electrical parameters of the hydrocarbon-bearing rock and the overburden layer are determined, as well as a roughness of a boundary between the hydrocarbon-bearing rock and the at least one overburden layer. These electrical parameters are used to construct a computer model of a portion of the hydrocarbon-bearing rock and at least one overburden layer, the computer model based upon modeling the formation as a rough-walled waveguide. This computer model is used to simulate propagation of radio frequency energy within the hydrocarbon-bearing rock, including simulation of radio frequency wave confinement within the hydrocarbon-bearing rock, at several frequencies and temperatures. A frequency for retorting is selected based upon simulation results. Radio frequency couplers are installed into at least one borehole in the hydrocarbon-bearing rock and driven with radio frequency energy to heat the hydrocarbon-bearing rock. As the rock heats, it releases carbon compounds and these are collected.



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INTERNATIONAL SEARCH REPORT

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B. FIELDS SEARCHED

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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 practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A A	<p>US 4 140 180 A (BRIDGES JACK ET AL) 20 February 1979 (1979-02-20) column 14, lines 42-48 column 20, lines 14-42 column 21, lines 28-39</p> <p style="text-align: center;">-----</p> <p>US 2003/014190 A1 (DUBINSKY VLADIMIR [US] ET AL DUBINSKY VLADIMIR [US] ET AL) 16 January 2003 (2003-01-16) * abstract</p> <p style="text-align: center;">-----</p> <p style="text-align: center;">-/--</p>	<p>11-18</p> <p>1-10</p> <p>1-18</p>

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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A	KOVALEVA L A ET AL: "Mathematical modeling of high-frequency electromagnetic heating of the bottom-hole area of horizontal oil wells" JOURNAL OF ENGINEERING PHYSICS AND THERMOPHYSICS, KLUWER ACADEMIC PUBLISHERS-PLENUM PUBLISHERS, NE LNKD-DOI:10.1007/S10891-005-0013-X, vol. 77, no. 6, 1 November 2004 (2004-11-01), pages 1184-1191, XP019221516 ISSN: 1573-871X page 2, paragraph 1	1-18
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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