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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: METHOD OF AND APPARATUS FOR PRODUCING HYDROGEN USING GEOTHERMAL ENERGY

(57) Abstract: The present inventive subject matter is drawn to apparatus for producing hydrogen using geothermal energy comprising: heating means for heating a solution for use in electrolysis with heat from geothermal fluid and producing a heated solution; and electrolysis means for producing hydrogen by electrolysis of said heated solution. The present invention also relates to a method for producing hydrogen using geothermal energy comprising: heating a solution for use in electrolysis with heat from geothermal fluid and producing a heated solution; and producing hydrogen by electrolysis of said heated solution. In addition, in accordance with the present invention, apparatus for producing hydrogen using geothermal energy is provided comprising: heating means for heating a solution for use in electrolysis with heat from geothermal fluid and producing a heated solution; electrolysis means for producing hydrogen by electrolysis of said heated solution; and power producing means for producing power using heat present in said geothermal fluid.



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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: C25B 1/02(2006.01);1/04(2006.01);F24J 3/08(2006.01)
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USPC: 204/242;205/633,637;60/641.2,641.3

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. : 204/275.1, 278

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)

EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/0145288 A1 (Van Breems) 10 October 2002 (10.10.2002), paragraph [0020],[0085]	1, 9, 13, 25, 28
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Y		2-8, 10-12, 14-24, 26-27, 29-36
Y	US 3,583,386 A (Slack) 8 June 1971 (8.6.1971), abstract, col. 6 lines 67-71	16-24
Y	US 5,598,706 A (Bronicki et al) 4 February 1997(6,2.1997) col. 1 lines 46-49, col. 2 lines 6-21, col. 3 line 53-col. 4 line 5).	2-8, 17-19, 22, 31-36
Y	US 6,303,009 B1 (Bossard) 16 October 2001 (16.10.2001), col. 3 lines 39-41.	10, 23



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