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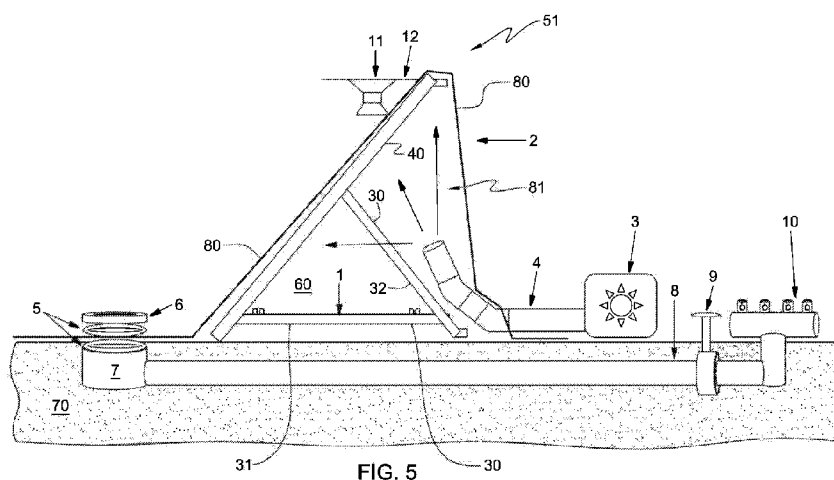
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(54) Title: ABOVE GROUND FLUID STORAGE SYSTEM



(57) Abstract: An above ground liquid storage system includes a substantially impermeable liner bounding an interior for receiving a liquid. A plurality of supporting structures and a base support the liner and the liquid when the liquid is received in the interior. The liner extends from the base over a top end of the plurality of supporting structures and descends to the ground to form a cavity under the plurality of supporting structures. A temperature controller in communication with the cavity controls a temperature of the cavity to control the temperature of liquid in the interior.

A. CLASSIFICATION OF SUBJECT MATTER***E21B 43/267(2006.01)i, E21B 43/26(2006.01)i, E21B 43/08(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)

E21B 43/267; E04H 4/00; E02D 27/00; E02B 7/02; A01K 7/04; B65G 5/00; E02B 3/10

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: water storage, liner, supporting structure, temperature control and freeze inhibiting.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 7574834 B2 (MURRAY MICHAEL LANCE) 18 August 2009	1,3-7,9-11
Y	See abstract, column 3, line 55 - column 6, line 4 and figures 1, 2.	2,8
Y	US 04440112A A (LILYERD; J. R.) 03 April 1984	2,8
A	See abstract, figure 1 and claim 1.	1,3-7,9-11
A	US 05246308A A (BROTHERS; GARY S.) 21 September 1993	1-11
	See abstract, column 5, line 61 - column 7, line 3 and figures 1, 2.	
A	US 06079904A A (TRISL; KLAUS) 27 June 2000	1-11
	See abstract, column 4, line 17 - line 31 and figures 1, 2.	



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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"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

"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

"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

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/032528

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 7574834 B2	18.08.2009	US 2007-0264083 A1 WO 2007-130558 A2 WO 2007-130558 A3	15.11.2007 15.11.2007 15.11.2007
US 04440112A A	03.04.1984	None	
US 05246308A A	21.09.1993	WO 1991-13012 A1	05.09.1991
US 06079904A A	27.06.2000	EP 0854238 A2 EP 0854238 A3 EP 0854238 B1	22.07.1998 27.01.1999 03.04.2002