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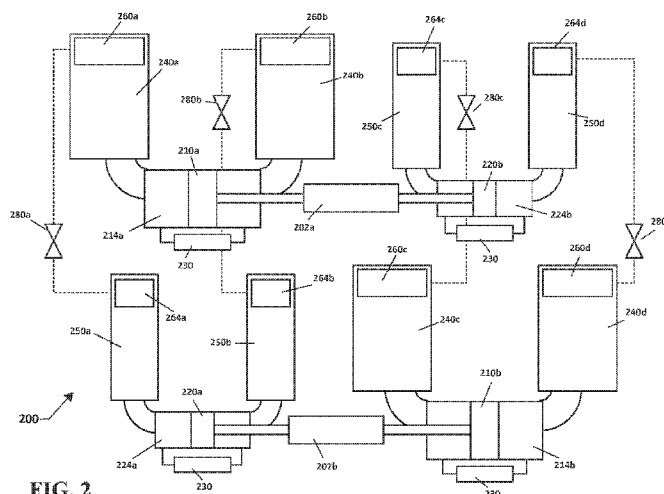


FIG. 2

(57) Abstract: A modular compressed air energy storage system includes modular low pressure and high pressure subsystems coupled together with interstage pipes. Each of the subsystems includes a hydraulic vessel (214a, 224b) adapted to contain a heat transfer liquid and having a piston (210a, 220b) disposed therein for horizontal reciprocating movement. First and second pressure vessels (240a, 240b, 250c, 250d) are coupled to the hydraulic vessel (214a, 224b) on opposite sides of the piston (210a, 220b), each adapted to contain the heat transfer liquid and/or a gas. First and second heat transfer devices (260a, 260b, 264c, 264d) are respectively disposed within upper regions of the pressure vessels (240a, 240b, 250c, 250d). The piston (210a, 220b) is moveable in a first direction to displace at least some of the heat transfer liquid from the hydraulic vessel (214a, 224b) to the first pressure vessel (240a, 250c) and is moveable in a second direction to displace at least some of the heat transfer liquid from the hydraulic vessel (214a, 224b) to the second pressure vessel (240b, 250d).



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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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 8 359 857 B2 (INGERSOLL ERIC D [US] ET AL) 29 January 2013 (2013-01-29) cited in the application column 11, lines 47-52; figures 3A,7A column 11, lines 62-67	1-25
A	US 2012/096845 A1 (INGERSOLL ERIC D [US] ET AL) 26 April 2012 (2012-04-26) the whole document	1-25



Further documents are listed in the continuation of Box C.



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INTERNATIONAL SEARCH REPORT

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