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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: THERMAL ENERGY STORAGE AND COOLING SYSTEM UTILIZING MULTIPLE REFRIGERANT AND COOLING LOOPS WITH A COMMON EVAPORATOR COIL

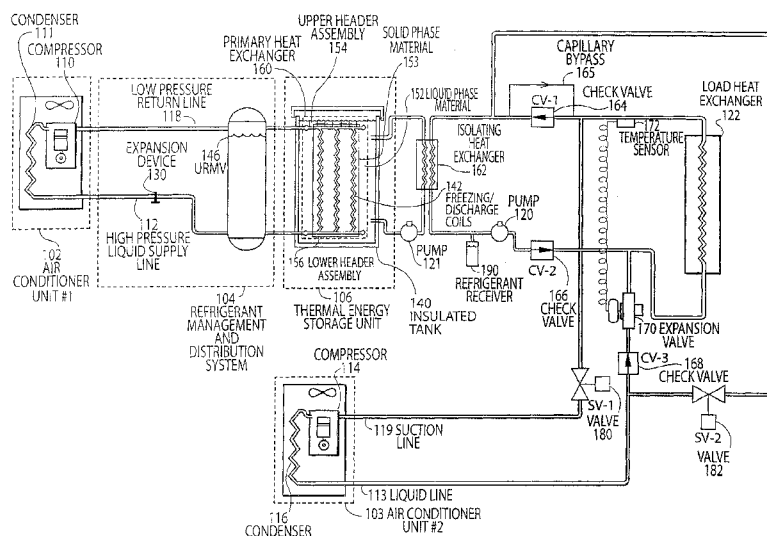


FIGURE 1

(57) Abstract: Disclosed is a method and device for a refrigerant-based thermal energy storage and cooling system with multiple condensing units utilizing a common evaporator coil. The disclosed embodiments provide a refrigerant-based ice storage system with increased reliability, lower cost components, and reduced power consumption and ease of installation.



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A. CLASSIFICATION OF SUBJECT MATTER

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USPC - 62/199

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)

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USPC 62/199

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC 62/59,66,75,79,117,529,196.4,197,199; Backward/forward citation searches; Text searchElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST (PGPB, USPT, USOCR, EPAB, JPAB); Terms: (primary first second\$3) near2 (loop circuit) and (ice free\$3 froz\$3) with stor\$3;
Google ("ice storage" refrigerant compressor condenser valve load phase")

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2008/0034760 A1 (Narayanamurthy et al.) 14 February 2008 (14.02.2008) figs. 3-5 and para [0035]-[0039]	1-41
Y	US 2001/0023594 A1 (Ives) 27 September 2001 (27.09.2001) figs. 3-5 and para [0047]-[0050]	1-41
Y	US 2006/0070385 A1 (Narayanamurthy et al.) 06 April 2006 (06.04.2006) figs. 1-9 and para [0025]-[0031]	19-24 and 36-41

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"&" document member of the same patent family

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