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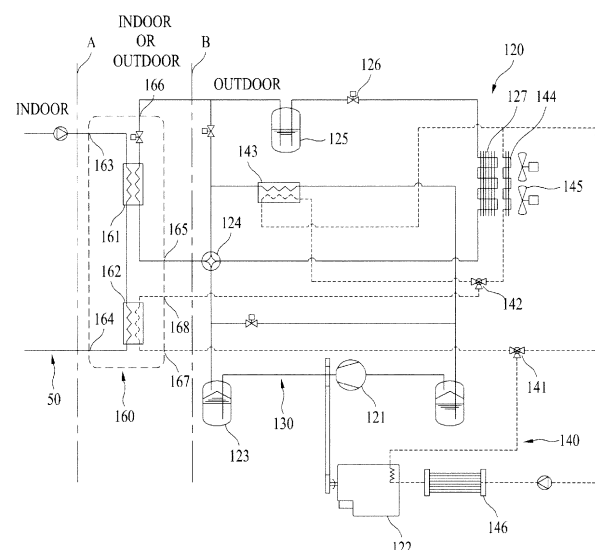
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(54) **Gas heat pump system**

(57) The present invention relates to a gas heat pump system which uses a gas engine (122), and more particularly to a gas heat pump system for driving a compressor (121) to realize a refrigerating cycle by using a gas engine (122).

The gas heat pump system includes a refrigerant pipeline, a compressor (121) for compressing refrigerant, a gas engine (122) for driving the compressor (121), a cooling water pipeline (140) provided to cool down the gas engine (122), a chiller (160) having a refrigerant heat exchanger (161) for heat exchange between the refrigerant from the compressor (121) and a fluid, and a high temperature heat exchanger (162) for heat exchange between the fluid having heat exchanged thus and the cooling water.

FIG. 2



**PARTIAL EUROPEAN SEARCH REPORT**

Application Number

under Rule 62a and/or 63 of the European Patent Convention.  
This report shall be considered, for the purposes of  
subsequent proceedings, as the European search report

EP 12 18 3190

**DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 754 614 A (YUYAMA HIROSHI [JP]) 5 July 1988 (1988-07-05)	1-7,9-13	INV. F25B27/00
A	* column 1, line 26 - column 3, line 53; figure 7 *	8	ADD. F25B13/00
X	EP 1 628 099 A2 (LG ELECTRONICS INC [KR]) 22 February 2006 (2006-02-22)	1-7,9-13	
A	* paragraph [0023] - paragraph [0132]; figures 1-9 *	8	
X	EP 1 628 092 A2 (LG ELECTRONICS INC [KR]) 22 February 2006 (2006-02-22)	1-7,9-13	
A	* paragraph [0027] - paragraph [0057]; figures 2-4 *	8	
			TECHNICAL FIELDS SEARCHED (IPC)
			F25B

**INCOMPLETE SEARCH**

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

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EPO FORM 1503 03.82 (P04E07)

Place of search	Date of completion of the search	Examiner
Munich	1 June 2018	Szilagyi, Barnabas
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		

**INCOMPLETE SEARCH  
SHEET C**

Application Number

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Claim(s) completely searchable:  
1-13

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Claim(s) not searched:  
14, 15

Reason for the limitation of the search:

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The search has been restricted to the subject-matter indicated by the applicant in his letter of 24-04-2018 filed in reply to the invitation pursuant to Rule 62a(1) EPC.

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-06-2018

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