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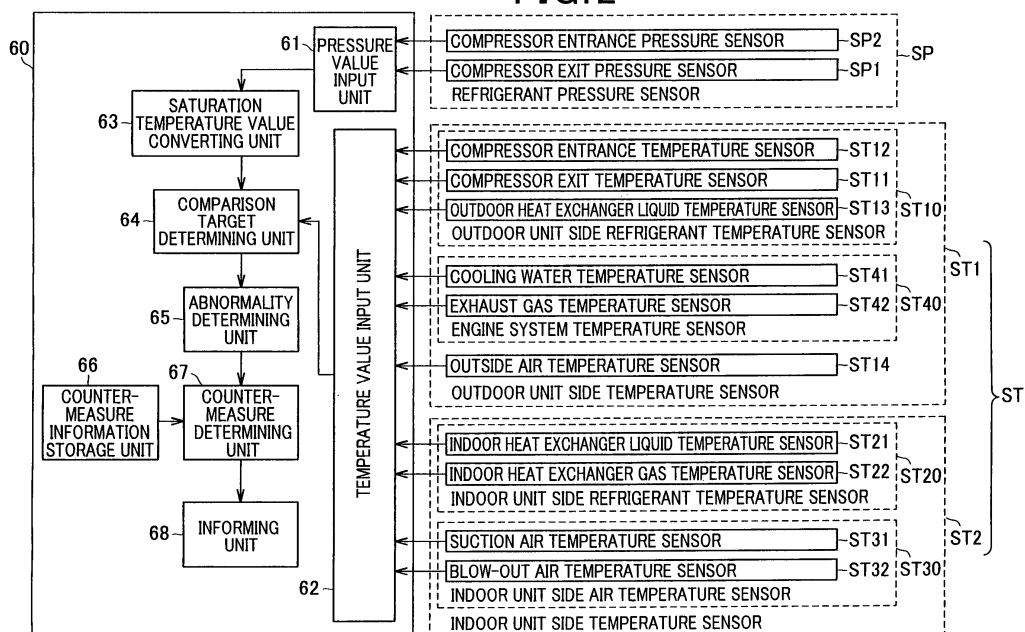
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(54) **Air conditioner and energy equipment**

(57) An air conditioner (100) comprising a refrigerant circuit (1) including a compressor (15), a four-way valve (18), an outdoor heat exchanger (19) and an indoor heat exchanger (26) which are successively connected to one another, plural sensors (SP, ST) containing refrigerant state detecting sensors (SP, ST11, ST12, ST13, ST21, ST22) for detecting a state of refrigerant in the refrigerant circuit, the compressor being driven on the basis of de-

tection values of the respective sensors to perform an air conditioning operation, and an abnormality determining unit (65) for mutually comparing the detection values of mutual comparison target sensors of the plural sensors to determine presence or absence of abnormality of each of the sensors when the refrigerant returns to a stationary state after the air conditioning operation is stopped.

FIG. 2





EUROPEAN SEARCH REPORT

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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	JP 2004 116836 A (MITSUBISHI ELECTRIC CORP) 15 April 2004 (2004-04-15) * paragraph [0199] - paragraph [0205] * * figures 1,3,29 *	1-4,7,10	INV. F25B13/00 F25B49/00
A	JP H07 248167 A (MITSUBISHI ELECTRIC CORP) 26 September 1995 (1995-09-26) * figure 1 *	2	
A	JP 2005 351575 A (MITSUBISHI HEAVY IND LTD) 22 December 2005 (2005-12-22) * figure 1 *	1-4,7,10	
			TECHNICAL FIELDS SEARCHED (IPC)
			F25B F24F
<p>The present search report has been drawn up for all claims</p>			
Place of search		Date of completion of the search	Examiner
The Hague		20 October 2015	Dezso, Gabor
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☒ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-4, 7, 10

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-4, 7, 10

Air conditioner with abnormality determining unit
determining saturation temperature from pressure value

2. claims: 5, 8

Air conditioner with abnormality determining unit and with
an exhaust gas temperature sensor

3. claims: 6, 9

Air conditioner with abnormality determining unit and with a
cooling water temperature sensor

4. claim: 11

Energy equipment with a fluid circulating passage and fluid
state detecting sensors and an abnormality determining unit

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

EP 10 00 3012

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
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20-10-2015

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