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(54) **COMPRESSOR SURGE DETECTION SYSTEM AND METHOD**

(57) A compressor surge detection system (1) for a refrigerating apparatus (100), comprises: a sensing system, configured for detecting a monitoring parameter representative of a saturating evaporating temperature of the refrigerating fluid at an inlet (I) of the compressor; a processing unit, programmed to process the monitoring parameter for deriving a diagnostic parameter, representative of an oscillatory behavior for the monitoring parameter and for generating an alert signal in response to the diagnostic parameter.

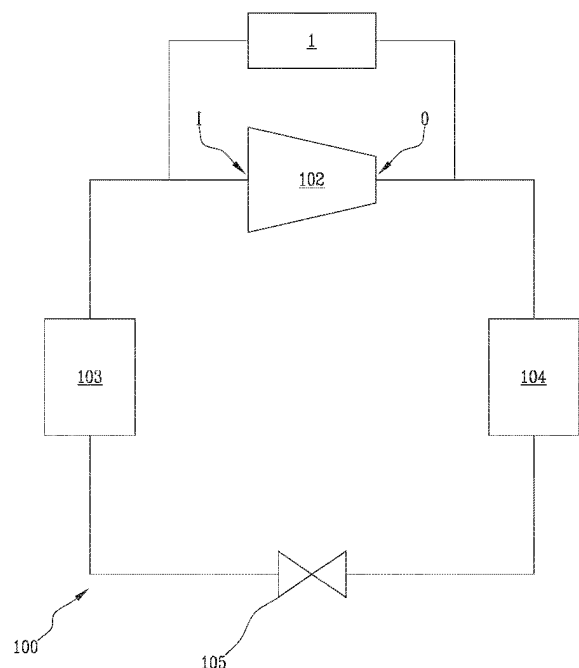


Fig.1

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EUROPEAN SEARCH REPORT

Application Number

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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	US 10 718 341 B2 (ABB SCHWEIZ AG [CH]) 21 July 2020 (2020-07-21)	1, 15	INV. F25B1/04
Y	* column 6, line 8 - column 10, line 10;	1-5, 7-14	F25B49/02
A	claim 5; figures 1, 5, 7, 8 *	6	F04D27/00
Y	US 4 686 834 A (HALEY PAUL F [US] ET AL) 18 August 1987 (1987-08-18)	1-5, 7-14	
A	* column 3, line 18 - column 5, line 53; figures 1-4 *	6	
Y	US 2006/147301 A1 (UEDA KENJI [JP] ET AL) 6 July 2006 (2006-07-06)	7, 14	
	* paragraphs [0005] - [0090]; figures 1-3 *		

TECHNICAL FIELDS
SEARCHED (IPC)F25B
F04D

The present search report has been drawn up for all claims

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Place of search

Munich

Date of completion of the search

15 April 2024

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Weisser, Meinrad

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
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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

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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
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15-04-2024

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