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(71) Applicant: **MITSUBISHI HEAVY INDUSTRIES, LTD.**
Tokyo 108-8215 (JP)

(72) Inventors:
• **Mitsuhashi, Masato**
Kanazawa-ku,
Yokohama,
Kanagawa-ken (JP)
• **Okuda, Seiichi**
Naka-ku
Yokohama,
Kanagawa-ken (JP)

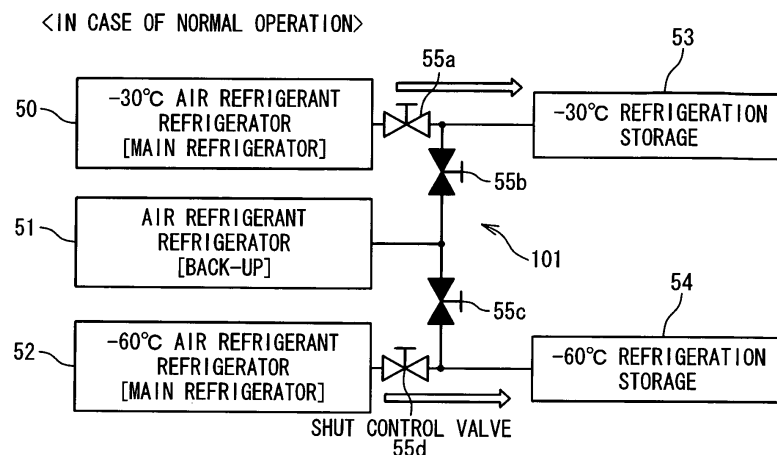
(74) Representative: **HOFFMANN EITLE**
Patent- und Rechtsanwälte
Arabellastrasse 4
81925 München (DE)

(54) **Air cycle refrigerator system and backup method using the same**

(57) A refrigerator system includes a plurality of refrigeration storages (53, 54) respectively set to different cooling temperatures; a plurality of air refrigerant refrigerators (50-52, 80-83); and a pipe section (102, 104, 106, 108) provided between the plurality of main air refrigerant refrigerators and the plurality of refrigeration storages. The pipe section comprises a valve section configured to thermally connect each of the plurality of air refrigerant

refrigerators other than a specific air refrigerant refrigerator to at least one of the plurality of refrigeration storages in a normal operation mode; and to thermally connect the specific air refrigerant refrigerator to a specific one of the plurality refrigeration storages corresponding to a failed one of the plurality of air refrigerant refrigerators other than the specific air refrigerant refrigerator, in place of the failed air refrigerant refrigerator in a failure operation mode.

Fig. 5A



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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)
A	WO 96/20109 A1 (UNITED TECHNOLOGIES CORP [US]) 4 July 1996 (1996-07-04) * the whole document * -----	1-17	INV. F25B9/00
			TECHNICAL FIELDS SEARCHED (IPC)
			F25B B64D
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
The Hague	19 November 2013	de Graaf, Jan Douwe	
<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>			

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 06 00 3380

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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