

Title (en)

Air cycle refrigerator system and backup method using the same

Title (de)

Luftkreislaufkühler und Sicherheitsverfahren dafür

Title (fr)

Système de refroidissement à cycle d'air et procédé de sécurité l'utilisant

Publication

EP 1772686 B1 20151007 (EN)

Application

EP 06003380 A 20060220

Priority

JP 2005264183 A 20050912

Abstract (en)

[origin: EP1772686A2] 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 of 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.

IPC 8 full level

F25B 9/00 (2006.01)

CPC (source: EP NO)

F25B 9/004 (2013.01 - EP NO); **F25B 2400/06** (2013.01 - EP NO); **F25B 2500/06** (2013.01 - EP NO)

Cited by

FR3029275A1; GB2480861A; GB2480861B; US11067315B2; US10168078B2

Designated contracting state (EPC)

DE DK FI GB

DOCDB simple family (publication)

EP 1772686 A2 20070411; EP 1772686 A3 20131225; EP 1772686 B1 20151007; DK 1772686 T3 20151026; JP 2007078211 A 20070329; JP 4241699 B2 20090318; NO 20060745 L 20070313; NO 338893 B1 20161031

DOCDB simple family (application)

EP 06003380 A 20060220; DK 06003380 T 20060220; JP 2005264183 A 20050912; NO 20060745 A 20060216