

Title (en)  
REFRIGERATOR AND WORKING METHOD THEREOF

Title (de)  
KÜHLSCHRANK UND BETRIEBSVERFAHREN DAFÜR

Title (fr)  
RÉFRIGÉRATEUR ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication  
**EP 2833089 B1 20180725 (EN)**

Application  
**EP 13767595 A 20130326**

Priority  
• JP 2012069008 A 20120326  
• CN 2013073215 W 20130326

Abstract (en)  
[origin: EP2833089A1] A refrigerator and a operating method thereof. Warm air is prevented from flowing into a storage chamber during defrosting or when cooling starts, heat transfer from a cooling chamber to the storage chamber is prevented, and the temperature rise in the storage chamber is constrained to a low level. A separator (40) is used to divide a part of an air supply passage (16), to form a space portion (14) in communication with a cooling chamber (13) through an air supply opening portion (13a). A first opening portion (19) freely opened and closed is disposed in a separating area between the space portion (14) and the divided air supply passage (16), and a second opening portion (20) freely opened and closed is disposed in a separating area between the space portion (14) and an air return passage (29) or the cooling chamber (13). In this manner, heat transfer from the cooling chamber (13) to storage chambers (4) to (6) can be decreased. In addition, by setting the first opening portion (19) in a closed state and setting the second opening portion (20) in an open state, a condenser (32) performs cooling and an air blower (30) supplies air. In this manner, the space portion (14) used as an air circulation path makes air in the space portion (14) and the cooling chamber (13) circulate and cooled, so as to adjust the temperature thereof.

IPC 8 full level  
**F25D 21/04** (2006.01); **F25D 17/06** (2006.01)

CPC (source: EP US)  
**F25D 11/00** (2013.01 - US); **F25D 17/04** (2013.01 - US); **F25D 17/045** (2013.01 - EP US); **F25D 17/065** (2013.01 - EP US);  
**F25D 21/06** (2013.01 - US); **F25D 21/08** (2013.01 - EP US); **F25D 2317/067** (2013.01 - EP US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2833089 A1 20150204**; **EP 2833089 A4 20151118**; **EP 2833089 B1 20180725**; AU 2013242698 A1 20141009; AU 2013242698 B2 20151119;  
CN 104160225 A 20141119; CN 104160225 B 20160706; JP 2013200074 A 20131003; JP 5847626 B2 20160127; US 2015033773 A1 20150205;  
WO 2013143449 A1 20131003

DOCDB simple family (application)  
**EP 13767595 A 20130326**; AU 2013242698 A 20130326; CN 2013073215 W 20130326; CN 201380011040 A 20130326;  
JP 2012069008 A 20120326; US 201314385123 A 20130326