

Title (en)
REFRIGERATOR

Title (de)
KÜHLSCHRANK

Title (fr)
RÉFRIGÉRATEUR

Publication
EP 3271669 A4 20180418 (EN)

Application
EP 16842200 A 20160826

Priority
• KR 20150121602 A 20150828
• KR 20150183473 A 20151222
• KR 2016009481 W 20160826

Abstract (en)
[origin: KR20170026054A] The present invention provides a refrigerator discharging air to a storage chamber when the temperature of the air heated by a defrosting heater is lowered, so as to delay temperature rise of the storage chamber during defrosting. According to the present invention, the refrigerator comprises: a main unit; the storage chamber installed inside the main unit to open a front side; an evaporator installed in a rear side of the storage chamber to generate cold air; the defrosting heater installed in a lower part of the evaporator; a lower cold air duct having the evaporator installed therein, and including a first passage to guide and supply the cold air generated by the evaporator to the storage chamber; and an upper cold air duct having a second passage to guide and supply the cold air generated by the evaporator to the storage chamber in an upper part of the lower cold air duct, and a cool pack in which a cold storage material is charged. The cool pack stores cold storage energy by the cold air transferred to the second passage. During defrosting, the stored cold storage energy is heated by the defrosting heater to lower the temperature of the air discharged to the storage chamber through the second passage, so as to delay temperature rise inside the storage chamber.

IPC 8 full level
F25D 21/08 (2006.01); **F25D 11/00** (2006.01); **F25D 17/06** (2006.01); **F25D 17/08** (2006.01); **F25D 23/06** (2006.01)

CPC (source: CN EP US)
F25D 11/006 (2013.01 - CN EP US); **F25D 17/062** (2013.01 - CN EP); **F25D 17/067** (2013.01 - CN); **F25D 21/08** (2013.01 - CN EP US); **F25D 23/067** (2013.01 - CN); **F25D 17/067** (2013.01 - EP); **F25D 23/067** (2013.01 - EP); **F25D 2317/067** (2013.01 - CN EP)

Citation (search report)
• [X] US 2015121925 A1 20150507 - PARK SHINHYUN [KR], et al
• [XY] KR 20060106412 A 20061012 - LG ELECTRONICS INC [KR]
• [XY] JP H02302572 A 19901214 - SANYO ELECTRIC CO
• [A] JP H04103980 A 19920406 - SANYO ELECTRIC CO
• [A] EP 1155267 A1 20011121 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
• [A] WO 0037867 A1 20000629 - DAIKIN IND LTD [JP], et al
• [A] KR 20150057109 A 20150528 - LG ELECTRONICS INC [KR]
• See references of WO 2017039234A1

Cited by
CN109436580A; CN113227684A

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
AU 2016316427 A1 20171102; AU 2016316427 B2 20211104; CN 107810374 A 20180316; EP 3271669 A1 20180124; EP 3271669 A4 20180418; EP 3271669 B1 20210714; KR 102508224 B1 20230309; KR 20170026054 A 20170308

DOCDB simple family (application)
AU 2016316427 A 20160826; CN 201680038804 A 20160826; EP 16842200 A 20160826; KR 20150183473 A 20151222