

Title (en)
SHIELDING DEVICE AND REFRIGERATOR HAVING SHIELDING DEVICE

Title (de)
ABSCHIRMVORRICHTUNG UND KÜHLSCHRANK MIT EINER ABSCHIRMVORRICHTUNG

Title (fr)
DISPOSITIF DE PROTECTION ET RÉFRIGÉRATEUR COMPRENANT LEDIT DISPOSITIF DE PROTECTION

Publication
EP 3978843 A4 20220720 (EN)

Application
EP 20815525 A 20200512

Priority
• JP 2019098052 A 20190524
• CN 2020089787 W 20200512

Abstract (en)
[origin: EP3978843A1] The present invention aims to provide a shielding device (70, 90) that occupies less volume of storage compartments, and a refrigerator (10, 100). The shielding device (70, 90) is used to properly close air passages (109) for supplying cold air in the refrigerator (10, 100). The shielding device (70, 90) comprises: a plurality of rotatable shielding walls (71, 711, 712, 713, 714) disposed surrounding a blower (47, 107) from radially outside, and shielding wall driving mechanisms (60) configured to drive the rotatable shielding walls (71, 711, 712, 713, 714) to perform the opening or closing action. In addition, the shielding wall driving mechanism (60) has a drive motor (74, 89) serving as a drive source, and a power transmission mechanism such as gears (811, 812, 813, 814, 815, 816, 817) for transmitting the power of the drive motor (74, 89) to the rotatable shielding walls (71, 711, 712, 713, 714).

IPC 8 full level
F25D 17/06 (2006.01); **F25D 11/02** (2006.01); **F25D 17/04** (2006.01)

CPC (source: EP)
F25D 11/02 (2013.01); **F25D 17/045** (2013.01); **F25D 2317/066** (2013.01); **F25D 2317/0683** (2013.01)

Citation (search report)
• [X] CN 108759245 A 20181106 - QINGDAO HAIER CO LTD, et al
• [X] WO 2018108139 A1 20180621 - QINGDAO HAIER JOINT STOCK CO LTD [CN]
• [X] WO 2013143383 A1 20131003 - HAIER GROUP CORP [CN], et al
• [X] JP 2007120802 A 20070517 - MATSUSHITA ELECTRIC IND CO LTD
• [X] CN 108302874 A 20180720 - QINGDAO HAIER CO LTD
• See also references of WO 2020238614A1

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)
EP 3978843 A1 20220406; **EP 3978843 A4 20220720**; CN 113906264 A 20220107; CN 113906264 B 20230714; JP 2020193730 A 20201203; JP 7291381 B2 20230615; WO 2020238614 A1 20201203

DOCDB simple family (application)
EP 20815525 A 20200512; CN 2020089787 W 20200512; CN 202080038452 A 20200512; JP 2019098052 A 20190524