

Title (en)
Mechanism for pressure balancing

Title (de)
Mechanismus für Druckausgleich

Title (fr)
Mécanisme d'équilibrage de pression

Publication
EP 2597403 A2 20130529 (EN)

Application
EP 12183434 A 20120907

Priority
TR 201111528 A 20111122

Abstract (en)
Present invention relates to a mechanism for pressure balancing (2), activated by using the movement of the doors (11) pulled towards the refrigerator(1)/freezer (3) body under the influence of the vacuum formed due to the pressure difference resulting from the inflow of the air into said refrigerator(1)/freezer(3), as a result of opening and closing of the refrigerator(1)/freezer (3) doors (11), and enabling opening of the door (11) without exerting a force greater than the normal one by allowing inflow of the air into the refrigerator(1)/freezer (3) section until inner and outer pressures are balanced, comprising at least an air duct (21) through which the ambient air proceeds to be conveyed into the refrigerator (1)/freezer (3) by the action of the pulled door as a result of the vacuum formed upon opening and closing of said door (11), at least a movable piece (23) constituting the air inlet of said air duct (21), at least a pushing part connected on the door (11), enabling conveyance of the ambient air into the refrigerator(1)/freezer (3) through the formed opening by pushing said (26) movable piece (23) towards the air duct (21), at least a spring (22) enabling the movable piece that is pushed by said pushing piece (26) to head for backwards and enabling the movable piece (23) to cover the air duct (21) inlet by taking its initial position once the pressure balance is achieved.

IPC 8 full level
F25D 17/04 (2006.01)

CPC (source: EP)
F25D 17/047 (2013.01)

Citation (applicant)
• JP 2000111237 A 20000418 - NIPPON LIGHT METAL CO
• EP 2059737 B1 20091230 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
• DE 10203425 A1 20030807 - BAEHRING HORST [DE]
• DE 29912563 U1 20001130 - LIEBHERR HAUSGERAETE [DE]
• EP 0598979 A1 19940601 - LIEBHERR HAUSGERAETE [DE]
• EP 1174668 A1 20020123 - LIEBHERR HAUSGERAETE [DE]

Cited by
CN103411376A; CN103471327A; CN112833600A; CN112780815A; US10415870B2; US2022307754A1; US10663209B2; WO2017084862A1; WO2018121202A1

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 2597403 A2 20130529; EP 2597403 A3 20150121

DOCDB simple family (application)
EP 12183434 A 20120907