

Title (en)
LAUNDRY TREATMENT APPLIANCE

Title (de)
WÄSCHEBEHANDLUNGSGERÄT

Title (fr)
APPAREIL DE TRAITEMENT DU LINGE

Publication
EP 4386125 A1 20240619 (EN)

Application
EP 22213556 A 20221214

Priority
EP 22213556 A 20221214

Abstract (en)
Laundry treatment appliance (100) comprising: a casing (105), a drum (110) mounted inside said casing (105) and designed to receive laundry, a heat pump system (125) comprising a closed recirculation circuit containing a refrigerant, a door (120) to give access to the drum (110), a main power line (MPL) providing an AC supply voltage (V_{SUPPLY}), a door power line (DPL) connectable to the main power line (MPL) to receive the AC supply voltage (V_{SUPPLY}), a door-lock device (215) switchable into a locking or unlocking state to respectively lock or unlock the door (120) to respectively allow or prevent connection between the door power line (DPL) and the main power line (MPL), a switching arrangement (SA) connected to the door-lock device (215), a driving device (220) configured to drive the door-lock device (215) to switch it into the locking or unlocking state, and a control unit (245) configured to control the switching arrangement (SA) and the driving device (220), wherein the switching arrangement (SA) comprises a first safety switch (230) switchable into a closed or an open state for respectively allowing or preventing connection between the driving device (220) and the door-lock device (215), and a second safety switch (235) switchable into a closed or an open state for respectively allowing or preventing connection between the door-lock device (215) and the door power line (DPL), the first (230) and second (235) safety switches being arranged each one in a respective sealed housing (230_H, 235_H), so as to prevent leakages of refrigerant from entering the first (230) and second (235) safety switches, and wherein the control unit (245) is configured to control the first (230) and second (235) safety switches to avoid a concurrent closed state of the first (230) and second (235) safety switches during door-lock and door-unlock procedures.

IPC 8 full level
D06F 37/42 (2006.01); **D06F 25/00** (2006.01); **D06F 39/14** (2006.01); **D06F 58/20** (2006.01); **D06F 103/40** (2020.01); **D06F 105/44** (2020.01)

CPC (source: EP)
D06F 37/42 (2013.01); **D06F 39/14** (2013.01); **D06F 25/00** (2013.01); **D06F 34/10** (2020.02); **D06F 34/20** (2020.02); **D06F 58/206** (2013.01); **D06F 2103/40** (2020.02); **D06F 2105/44** (2020.02)

Citation (search report)

- [A] AU 2019445898 A1 20211104 - ELECTROLUX APPLIANCES AB [SE]
- [A] EP 3757276 A1 20201230 - LG ELECTRONICS INC [KR]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4386125 A1 20240619; CN 118186733 A 20240614

DOCDB simple family (application)
EP 22213556 A 20221214; CN 202311719028 A 20231213