

Title (en)

REFRIGERATED CABINET WITH ONE OR MORE AUTOMATICALLY CLOSING DOORS

Title (de)

KÜHLSCHRANK MIT EINER ODER MEHREREN AUTOMATISCH SCHLIESSENDEN TÜREN

Title (fr)

ARMOIRE RÉFRIGÉRÉE AVEC UNE OU PLUSIEURS PORTES À FERMETURE AUTOMATIQUE

Publication

EP 3366164 B1 20190904 (EN)

Application

EP 18158693 A 20180226

Priority

IT 201700022495 A 20170228

Abstract (en)

[origin: EP3366164A1] A refrigerated cabinet with one or more self-closing doors, comprising a support frame (2), which defines a load compartment 3, and at least one door (10) for closing the load compartment. The door is hinged to the frame with a vertical rotation axis (X) and may rotate to move between a closed position and a predefined position of maximum opening. The cabinet comprises an automatic door closing system, which comprises a hydropneumatic piston (40). The piston is hinged to the door in an offset position with respect to the rotation axis by means of a lever extension (43) integral with the door. The two hinging points of the piston are positioned with respect to the rotation axis so that: the hydropneumatic piston exerts a force (F) which always develops an angular momentum (M) for closing the door about the rotation axis, and the perpendicular distance (B) between the dynamic action axis (Y) of the piston and the rotation axis (X) decreases as the degree of angular opening of the door increases.

IPC 8 full level

A47F 3/04 (2006.01); **E05D 7/081** (2006.01); **E05F 1/10** (2006.01); **E05F 1/12** (2006.01); **E05F 3/22** (2006.01); **F25D 23/02** (2006.01)

CPC (source: EP)

A47F 3/043 (2013.01); **E05D 7/081** (2013.01); **E05D 11/06** (2013.01); **E05F 1/1091** (2013.01); **E05F 1/1292** (2013.01); **E05F 3/221** (2013.01);
F25D 23/028 (2013.01); **E05Y 2900/306** (2013.01); **E05Y 2900/31** (2013.01)

Citation (opposition)

Opponent : JBG-2 sp. z o. o.

- US 4430770 A 19840214 - NIEKRASZ FRANK M [US], et al
- CN 2171663 Y 19940713 - ZHANG MINGQUAN [CN]
- US 2008189906 A1 20080814 - RESNIK CORINNE [DE], et al
- EP 1619409 B1 20080123 - STABILUS GMBH [DE]

Cited by

EP3926134A1; CN114809845A; CN113047719A; WO2023100041A1

Designated contracting state (EPC)

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