

Title (en)

CLOSURE DEVICE COMPRISING AT LEAST ONE CONCERTINA-FOLDING CLOSURE

Title (de)

VERSCHLUSSVORRICHTUNG MIT MINDESTENS EINEM ZIEHHARMONIKAARTIG GEFALTETEN VERSCHLUSS

Title (fr)

DISPOSITIF D'OBTURATION COMPORTANT AU MOINS UN OBTURATEUR REPLIABLE EN ACCORDEON

Publication

EP 2231978 B1 20160907 (FR)

Application

EP 08872992 A 20081222

Priority

- FR 2008001815 W 20081222
- FR 0709067 A 20071221
- FR 0806173 A 20081105
- FR 0806172 A 20081105

Abstract (en)

[origin: FR2925567A1] The device has an accordion-pleated shutter (1) formed of a succession of motorized leafs (2) articulated one with respect to another by articulation units i.e. hinges (3). Transversal edges of one leaf have supporting and guiding elements (4) i.e. rubbles, that are respectively guided by curved parallel sliders (5). The sliders are constituted of lateral posts (7) or parallel lower or upper cross pieces (12) of a peripheral frame (6). The sliders have a length lower or equal to the sum of the width of the leaves such that the shutter presents a zigzag or rectilinear form at a deployed state.

IPC 8 full level

E05F 15/605 (2015.01); **E05D 15/26** (2006.01); **E05F 15/652** (2015.01); **E06B 3/48** (2006.01)

CPC (source: EP US)

E05D 15/26 (2013.01 - EP); **E05F 15/605** (2015.01 - EP US); **E06B 3/481** (2013.01 - EP US); **E05F 15/643** (2015.01 - US); **E05F 15/652** (2015.01 - EP US); **E05Y 2900/132** (2013.01 - EP)

Citation (examination)

DE 888221 C 19530831 - WOELM ERNST

Cited by

WO2021194431A1; FR3130869A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2925567 A1 20090626; **FR 2925567 B1 20151113**; EP 2231978 A2 20100929; EP 2231978 B1 20160907; FR 2925565 A1 20090626; FR 2925565 B1 20120720; FR 2925566 A1 20090626; FR 2925566 B1 20151113; WO 2009106742 A2 20090903; WO 2009106742 A3 20091230

DOCDB simple family (application)

FR 0806173 A 20081105; EP 08872992 A 20081222; FR 0709067 A 20071221; FR 0806172 A 20081105; FR 2008001815 W 20081222