

Title (en)

NEW SWING DOOR WITH ROTARY-TRANSLATORY DOOR LEAF MOVEMENT

Title (de)

NEUE SCHWENKTÜR MIT ROTATORISCHER UND TRANSLATORISCHER TÜRFLÜGELBEWEGUNG

Title (fr)

NOUVELLE PORTE BATTANTE AVEC MOUVEMENT DE BATTANT DE PORTE PIVOTANT

Publication

EP 4219876 A1 20230802 (EN)

Application

EP 23165610 A 20220224

Priority

- IT 202100004547 A 20210226
- EP 22158452 A 20220224

Abstract (en)

Door (10) comprising a door leaf (12) movable between a closed and an open position and a system of movement (20) comprising in turn an upper coupling device (21) and a lower coupling device (22) of the pinion-rack type, for connecting the door leaf with a fixed frame (11) of the door, said coupling devices comprising a respective runner (21b, 22b) suitable for translating along the upper (12b) and lower (12c) horizontal edges of the door leaf, and a toothed pinion (21e, 22e), secured by a pin (21d, 22d) to the fixed frame and a rack (21f, 22f), fixed to the door leaf and engaged with the toothed pinion in which the runner of each coupling device has a circular seat that couples with the corresponding pin so as to define a rotoidal coupling, comparable to a hinge, between the runner and the fixed pin. The door has the advantage of involving a space, of smaller size, subject to the risk of crushing objects along the side of hinging of the door leaf, and a wider passage with respect to current pivot doors with fixed axis of rotation.

IPC 8 full level

E06B 3/50 (2006.01); **E05D 7/081** (2006.01); **E06B 3/70** (2006.01)

CPC (source: EP)

E05D 3/022 (2013.01); **E06B 3/5018** (2013.01); **E06B 3/70** (2013.01); **E05D 7/081** (2013.01); **E05F 15/619** (2015.01); **E05Y 2201/716** (2013.01); **E05Y 2201/722** (2013.01); **E05Y 2900/11** (2013.01); **E05Y 2900/132** (2013.01)

Citation (search report)

- [A] US 1910344 A 19330523 - ANNA KOTLER
- [A] WO 9523270 A2 19950831 - ONTARIO LTD 420820 [CA], et al
- [A] KR 101932938 B1 20181227 - KUMOH NAT INST TECHNOLOGY IND ACAD COOP FOUND [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 MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4050190 A1 20220831; **EP 4050190 B1 20231004**; **EP 4050190 C0 20231004**; EP 4219876 A1 20230802; IT 202100004547 A1 20220826

DOCDB simple family (application)

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