Title (en)

IMPROVEMENT IN SMART PRACTICABLE CLOSING ELEMENT

Title (de

VERBESSERUNG IN INTELLIGENTEM ANWENDBAREM VERSCHLUSSELEMENT

Title (fr)

AMÉLIORATION APPORTÉE À LA FERMETURE À OUVERTURE INTELLIGENTE

Publication

EP 3530863 A4 20200805 (EN)

Application

EP 16918998 A 20161201

Priority

- ES 201600889 A 20161024
- ES 2016070853 W 20161201

Abstract (en)

[origin: EP3530863A1] The invention relates to an improvement in a smart, practicable closure, wherein the purpose is to equip the smart, practicable closure (window or door in a building), as a support, with a wider range of features and uses by means of incorporating a series of pieces of electronic and telecommunications equipment, without modifying the structural features of the closure. Said smart, practicable closure is formed by a technical LCD film which allows viewing texts, data and pixelated color images overlapping the view of the outside, another technical film (2) constituting a tactile and interactive surface connected to one another and to the assembly by means of a series of electronic circuits and modules capable of using audiovisual computer and communication applications for receiving, storing, treating and processing the information that they receive from the sensors and antennas (10), microphones (8), cameras (9) and other data inputs, as well as outputs including speakers (7) and other modules or ports (10). The smart, practicable closure of the present invention additionally comprises a technical liquid crystal film (5) as an incident light filtering element, going from being transparent to translucent and supported by a secondary illumination system, all of which can be connected to the conventional power grid, and a photovoltaic cell (12) for recharging the accumulator (11), as the secondary power supply system. The present invention is provided with a system (13) for unlocking closing points and deactivating the mechanization for opening in the case of an emergency, and an internal pressure regulation system.

IPC 8 full level

E06B 9/24 (2006.01); E06B 3/66 (2006.01)

CPC (source: EP)

E06B 3/66 (2013.01); E06B 9/24 (2013.01); E06B 2009/2464 (2013.01); E06B 2009/2476 (2013.01)

Citation (search report)

- [Y] US 2014371931 A1 20141218 LIN MEI-JECH [US], et al
- [Y] EP 2813884 A1 20141217 ONYX DISPLAY MEDIA PTY LTD [ZA]
- [YA] WO 2016086017 A1 20160602 VIEW INC [US]
- [Y] RUBEN BAETENS ET AL: "Properties, requirements and possibilities of smart windows for dynamic daylight and solar energy control in buildings: A state-of-the-art review", SOLAR ENERGY MATERIALS AND SOLAR CELLS., vol. 94, no. 2, 1 February 2010 (2010-02-01), NL, pages 87 105, XP055537368, ISSN: 0927-0248, DOI: 10.1016/j.solmat.2009.08.021
- · See references of WO 2018078195A1

Cited by

CN109610989A

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

DOCDB simple family (publication)

EP 3530863 A1 20190828; EP 3530863 A4 20200805; ES 2671582 A1 20180607; ES 2671582 B1 20181218; WO 2018078195 A1 20180503

DOCDB simple family (application)

EP 16918998 A 20161201; ES 201600889 A 20161024; ES 2016070853 W 20161201