

Title (en)

Automatic roller blind for roof windows and a method of controlling thereof

Title (de)

Automatischer Rollladen für Dachfenster und ein Verfahren zur Steuerung davon

Title (fr)

Store à enroulement automatique pour fenêtres de toit et procédé de commande de celui-ci

Publication

EP 2743442 B1 20160427 (EN)

Application

EP 12008299 A 20121212

Priority

EP 12008299 A 20121212

Abstract (en)

[origin: EP2743442A1] The invention relates to an automatic roller blind (1), in particular for roof windows, comprising a curtain (15), a motor (2) driving the curtain (15), a rechargeable battery (6) to store energy required to operate the motor (2), a photovoltaic panel (4) charging said rechargeable battery (6), and a microcontroller (7) to control an operation of the blind in response to control signals including at least a control signal representing a sunlight level. The invention also relates to a method of controlling such an automatic roller blind. In order to make the blind virtually and fully autonomous, i.e. capable of continuous automatic operation for a relatively long period of time without an auxiliary power supply or frequent battery (6) recharge sessions, said control signal representing a sunlight level is an output electrical power of the photovoltaic panel (4), and the microcontroller (7) controls the operation of the blind also on the basis of the output voltage of said rechargeable battery (6).

IPC 8 full level

E06B 9/42 (2006.01); **E06B 9/24** (2006.01)

CPC (source: EP)

E06B 9/42 (2013.01); **E06B 2009/2476** (2013.01)

Citation (opposition)

Opponent : VKR Holding A/S

- WO 2012059672 A2 20120510 - BUBENDORFF [FR], et al
- WO 2008047215 A1 20080424 - SOMFY SAS [FR], et al
- US 2010089388 A1 20100415 - GUNTON BRUCE STANLEY [GB]
- US 2012261078 A1 20121018 - ADAMS JASON O [US], et al
- US 2009308543 A1 20091217 - KATES LAWRENCE [US]

Cited by

CN115012800A; CN107002463A; EP3215702A4; EP4144949A3; WO2022159917A1; US10494863B2; US11519221B2; US11178992B2; WO2019241708A1; US10863846B2; US11272802B2; US11583126B2; US11840886B2

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 2743442 A1 20140618; EP 2743442 B1 20160427

DOCDB simple family (application)

EP 12008299 A 20121212