

Title (en)  
WINDOW ACTUATOR WITH OBSTACLE DETECTION

Title (de)  
FENSTERAKTUATOR MIT HINDERNISERKENNUNG

Title (fr)  
ACTIONNEUR DE FENÊTRE AVEC DÉTECTION D'OBSTACLES

Publication  
**EP 3235992 A1 20171025 (EN)**

Application  
**EP 17166774 A 20170418**

Priority  
EP 16165754 A 20160418

Abstract (en)  
An electrically operated actuator (10) for operating a window (1), the window comprising a frame (2) and a sash (3) being pivotally suspended from the frame (2) by a horizontal pivot axis. The actuator (10) is adapted to perform a first closing operation (101) while monitoring an indicator of a closing force applied onto the sash (3) by the actuator (10). The actuator is adapted to initiate a first reversing operation (102) upon the indicator of closing force exceeding a threshold during the first closing operation (101), and the actuator (10) is configured to initiate a subsequent, second closing operation (104) after the first reversing operation (102). The threshold is selected from a plurality of predetermined thresholds.

IPC 8 full level  
**E05F 15/41** (2015.01); **E05F 15/611** (2015.01); **E05D 7/08** (2006.01); **E05D 7/081** (2006.01); **E05D 7/082** (2006.01); **E05F 15/619** (2015.01)

CPC (source: EP)  
**E04D 13/0354** (2013.01); **E05F 15/41** (2013.01); **E05F 15/611** (2015.01); **E05D 7/08** (2013.01); **E05D 7/081** (2013.01); **E05D 7/082** (2013.01); **E05F 15/619** (2015.01); **E05Y 2400/54** (2013.01); **E05Y 2400/55** (2013.01); **E05Y 2400/554** (2013.01); **E05Y 2400/57** (2013.01); **E05Y 2800/41** (2013.01); **E05Y 2800/748** (2013.01); **E05Y 2900/148** (2013.01); **E05Y 2900/152** (2013.01)

Citation (applicant)  
• EP 2754820 A2 20140716 - SCHUECO INT KG [DE]  
• EP 1441100 A1 20040728 - SOMFY [FR]

Citation (search report)  
• [XY] GB 2026723 A 19800206 - TEKRON PATENTS LTD  
• [Y] WO 2015068111 A1 20150514 - ADITYA AUTO PRODUCTS & ENGG I PVT LTD [IN]  
• [A] US 5449987 A 19950912 - MCMILLAN SCOTT D [US]

Cited by  
CN113107302A; EP3597848A1; FR3084100A1; WO2019158597A1

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

DOCDB simple family (publication)  
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DOCDB simple family (application)  
**EP 17166774 A 20170418**; EP 16165754 A 20160418; EP 17166777 A 20170418