

Title (en)  
Door opening and closing device

Title (de)  
Vorrichtung zum Öffnen und Schliessen einer Tür

Title (fr)  
Dispositif pour ouvrir et fermer une porte

Publication  
**EP 1344948 A3 20040623 (EN)**

Application  
**EP 03380055 A 20030312**

Priority  
ES 200200593 A 20020313

Abstract (en)  
[origin: EP1344948A2] The device comprises a fluid dynamic cylinder (1) for driving the door opening and closing movement and means for damping said movement when the door nears its final open or closed position, and it is characterised in that said damping means comprise a telescopic body (2) and a moveable thrust washer (3) on the rod (4) of said fluid dynamic cylinder (1), said washer (3) being able to be fixed on said rod (4) in the desired position, so that when said washer (3) abuts with the telescopic body (2), it moves it and damps the door opening or closing movement. <??>It enables easily adjusting the damping means, as this can be done by simply moving the thrust washer along the cylinder rod.  
<IMAGE>

IPC 1-7  
**F15B 15/22**; F15B 15/24; F15B 11/046

IPC 8 full level  
**F15B 15/22** (2006.01)

CPC (source: EP ES)  
**F15B 15/227** (2013.01 - EP ES)

Citation (search report)  
• [X] US 3967539 A 19760706 - WILLIAMSON ROBERT E  
• [X] US 4151978 A 19790501 - FREI ROGER E [CA]  
• [X] US 2587182 A 19520226 - LIVERS CARLOS B

Cited by  
CN109826887A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1344948 A2 20030917**; **EP 1344948 A3 20040623**; ES 2230935 A1 20050501

DOCDB simple family (application)  
**EP 03380055 A 20030312**; ES 200200593 A 20020313