

Title (en)  
Door closer

Title (de)  
Türschliesser

Title (fr)  
Ferme-porte

Publication  
**EP 2180124 A1 20100428 (EN)**

Application  
**EP 08167384 A 20081023**

Priority  
EP 08167384 A 20081023

Abstract (en)  
A concentric cross mechanism for transiting torsion includes a main body unit of a concentric cross mechanism, a main body unit of the torsion-driven mechanism, a main body unit of the force-generating mechanism, and a restriction device. A center point is defined by crossing a vertical concentric axis and a horizontal concentric axis. The axle of the driven bevel gear and the scroll springs spin reversely with the axle of the torsion-generating bevel gear. The first bevel gear is provided for outputting the torsion on the upper and bottom ends thereof. Furthermore, when the rotary rod connected with one side of the torsion output axle is disposed in the positioning block, the door is driven by the other side of the torsion output axle to swing in a predetermined angle.

IPC 8 full level  
**E05F 15/12** (2006.01)

CPC (source: EP)  
**E05F 1/1041** (2013.01); **E05F 15/614** (2015.01); **E05F 15/63** (2015.01); **E05Y 2900/132** (2013.01)

Citation (applicant)  
US 6336294 B1 20020108 - KOWALCZYK THOMAS M [US], et al

Citation (search report)  
• [A] DE 3202930 A1 19830811 - GEZE GMBH [DE]  
• [A] WO 9212318 A1 19920723 - RECORD TUERAUTOMATION GMBH [DE]  
• [XA] US 6336294 B1 20020108 - KOWALCZYK THOMAS M [US], et al  
• [A] DE 102004043844 A1 20060323 - DORMA GMBH & CO KG [DE]

Cited by  
CN105484598A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 2180124 A1 20100428; EP 2180124 B1 20130123**

DOCDB simple family (application)  
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