

Title (en)
DOOR WITH A WEIGHT-BALANCING DEVICE WITH HELICAL SPRINGS

Title (de)
TOR MIT EINER SCHRAUBENFEDER-GEWICHTSAUSGLEICHSEINRICHTUNG

Title (fr)
PORTE AVEC SYSTEME D'EQUILIBRAGE DE POIDS A RESSORTS HELICOIDaux

Publication
EP 0890009 A1 19990113 (DE)

Application
EP 97920569 A 19970401

Priority

- DE 9700660 W 19970401
- DE 29605912 U 19960329
- DE 29615973 U 19960913

Abstract (en)
[origin: US6122862A] PCT No. PCT/DE97/00660 Sec. 371 Date Dec. 7, 1998 Sec. 102(e) Date Dec. 7, 1998 PCT Filed Apr. 1, 1997 PCT Pub. No. WO97/37097 PCT Pub. Date Oct. 9, 1997An overhead garage door arrangement in which a door leaf is moveable between open and closed position, and is installable against a ceiling for sliding up and down or that can be tilted or swung up and down for compensating against the weight of the door, at least one helical spring module is provided with a least two parallel-loaded helical tension springs that are arranged coaxially one within the other, and that are wound in opposite directions. The inner spring has an outside diameter which is smaller than the inside diameter of the outer spring. The oppositely wound coils of the coaxial springs cross each other. The two springs are pushed over a holding element which has a narrower first section for receiving the inner spring, and having a wider second section spaced from the first section for receiving the outer spring. The first and second sections of the holding element have edges with hook-shaped portions for grasping coils of the coaxial springs.

IPC 1-7
E05D 13/00; F16F 3/04

IPC 8 full level
E05D 13/00 (2006.01); **E05D 15/24** (2006.01); **E05F 15/00** (2015.01); **E05F 1/16** (2006.01); **E06B 9/08** (2006.01); **E06B 9/68** (2006.01); **F16F 3/04** (2006.01)

CPC (source: EP US)
E05D 13/1215 (2013.01 - EP US); **E05D 15/24** (2013.01 - EP US); **E05D 15/246** (2013.01 - EP US); **E05D 13/1238** (2013.01 - EP US); **E05Y 2201/654** (2013.01 - EP US); **E05Y 2201/67** (2013.01 - EP US); **E05Y 2201/672** (2013.01 - EP US); **E05Y 2600/11** (2013.01 - EP US); **E05Y 2600/32** (2013.01 - EP US); **E05Y 2800/21** (2013.01 - EP US); **E05Y 2800/246** (2013.01 - EP US); **E05Y 2800/407** (2013.01 - EP US); **E05Y 2900/106** (2013.01 - EP US)

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DE202011102570U1; EP2540952A2

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IT LI NL PT SE

DOCDB simple family (publication)
US 6122862 A 20000926; AT E203085 T1 20010715; AT E219206 T1 20020615; CN 1115461 C 20030723; CN 1215447 A 19990428; CZ 292803 B6 20031217; CZ 310498 A3 19990317; DE 19713457 A1 19971120; DE 19713457 B4 20070329; DE 19713458 A1 19971120; DE 19713458 B4 20070315; DE 59704016 D1 20010816; DE 59707506 D1 20020718; DK 0890009 T3 20020916; DK 0890010 T3 20010924; EP 0890009 A1 19990113; EP 0890009 B1 20020612; EP 0890010 A1 19990113; EP 0890010 B1 20010711; ES 2158556 T3 20010901; ES 2174251 T3 20021101; GR 3036353 T3 20011130; HU 222962 B1 20040128; HU 9901382 D0 19990628; HU P9901382 A2 19990830; HU P9901382 A3 19991129; NO 311649 B1 20011227; NO 984424 D0 19980923; NO 984424 L 19981112; PL 182883 B1 20020329; PL 329128 A1 19990315; PT 890009 E 20020930; PT 890010 E 20011031; RU 2150562 C1 20000610; UA 53638 C2 20030217; UA 58510 C2 20030815; WO 9737097 A1 19971009; WO 9737098 A1 19971009

DOCDB simple family (application)
US 15553198 A 19981207; AT 97920569 T 19970401; AT 97920570 T 19970401; CN 97193521 A 19970401; CZ 310498 A 19970401; DE 19713457 A 19970401; DE 19713458 A 19970401; DE 59704016 T 19970401; DE 59707506 T 19970401; DE 9700660 W 19970401; DE 9700661 W 19970401; DK 97920569 T 19970401; DK 97920570 T 19970401; EP 97920569 A 19970401; EP 97920570 A 19970401; ES 97920569 T 19970401; ES 97920570 T 19970401; GR 20010401205 T 20010808; HU P9901382 A 19970401; NO 984424 A 19980923; PL 32912897 A 19970401; PT 97920569 T 19970401; PT 97920570 T 19970401; RU 98114101 A 19961223; UA 98074006 A 19961223; UA 98105627 A 19970401