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(54) **Mechanical device for opening/closing the shutters of external doors/windows**

(57) The invention is a new device for opening and closing the shutters of external doors/windows, comprising at least one pivot (N1) comprising a tubular cylindrical element or bushing (B) integral with said shutter arranged with its axis (Bx) parallel to the rotation axis of the shutter itself, a cylindrical element or pin (A) integral with said post (M), partially inserted coaxially at one end (B2) of

said bushing (B) and rotating with respect to it, and one torsion spring (C) positioned coaxially inside said bushing (B) and constrained with one end (C2) to said pin (A) and with the opposite end (C1) to the bushing (B) itself, said torsion spring (C) being loaded.

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EUROPEAN SEARCH REPORT

Application Number
EP 08 10 4560

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 264 223 C (EWALD VIETEN) 30 May 1912 (1912-05-30)	1,3-6, 11,12	INV. E05F11/36
Y	* page 1, line 1 - line 6 * * page 1, line 18 - line 29 * * page 1, line 49 - line 58 * * figures 1, 2 *	2,9,10	
X	FR 2 660 690 A2 (GAMBINI ROMAIN) 11 October 1991 (1991-10-11) * page 5, line 42 - page 6, line 7 * * page 6, line 24 - line 27 * * page 8, line 23 - line 29 * * page 8, line 40 - line 43 * * claim 2 * * figures 2, 6, 7, 8, 9 *	1,3-8,12	
Y	DE 101 41 017 A1 (KUNZ MARKUS [DE]) 20 February 2003 (2003-02-20) * figure 3 *	2	
Y	FR 455 409 A (BOTTEMAN & FAGES SOC [FR]) 30 July 1913 (1913-07-30)	9,10	TECHNICAL FIELDS SEARCHED (IPC)
A	* page 1, line 27 - line 47 * * figures 1-4 *	11	E05F
A	FR 2 630 774 A1 (GAMBINI ROMAIN [FR]) 3 November 1989 (1989-11-03) * page 4, line 10 - line 22 * * figures 1-3 *	1-12	

The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 5 July 2012	Examiner Prieto, Daniel
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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EPO FORM 1503 03.82 (P4/C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-12

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-12

Device for opening and closing the shutters of windows/
doors including pivots with a torsion spring and a cord.

2. claims: 1, 13, 14

Device for locking the shutters in closed position,
comprising a hooked part, a locking element and a latch with
a lever.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

05-07-2012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 264223	C	30-05-1912	NONE	
FR 2660690	A2	11-10-1991	NONE	
DE 10141017	A1	20-02-2003	NONE	
FR 455409	A	30-07-1913	NONE	
FR 2630774	A1	03-11-1989	NONE	