

(19)



(11)

EP 2 110 503 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

21.10.2009 Bulletin 2009/43

(51) Int Cl.:

E05D 7/04 (2006.01)

E05D 7/08 (2006.01)

(21) Application number: **08007354.7**

(22) Date of filing: **15.04.2008**

(84) Designated Contracting States:

**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 States:

AL BA MK RS

(71) Applicant: **PAIL SERRAMENTI s.r.l.**

66041 Atessa CH (IT)

(72) Inventor: **The designation of the inventor has not yet been filed**

(74) Representative: **Di Blasio, Gianluca**

Via Lago di Bracciano, 6

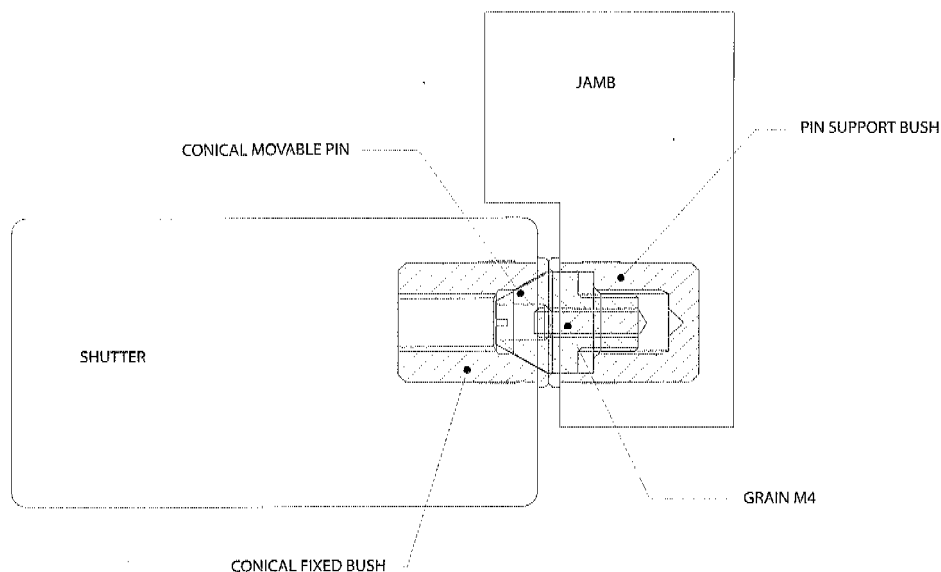
65015 Montesilvano (PE) (IT)

(54) **Adjustable pivot**

(57) The invention consists in an adjusting pivot composed of an adjustable, movable, conical pin, mounted into a pin-support bush and an adding fixed conical bush,

so that, by adjusting the movable pin to the user liking, it is possible to reach the desired adherence with the bush, in this way, the perfect tightness of the door is guarantee.

1



EP 2 110 503 A1

Description

Technical field where the invention refers to

[0001] The object of the present application is a product which refers to the shutters and inner window and doors frames field. 5

Pre-existing technical state and problems to be solved

[0002] The pivot is a door support technical element that is introduced in the rabbet of the door, on the hinge side, with the purpose of strengthening the tightness of the door. 10

[0003] The present technical door devices propose pivots, with pins and bushes, installed on the door and rabbet or vice versa, they are fixed and not adjustable. 15

[0004] The technical problem that a fixed pivot causes is correlated to the settlement, dilatation and rubbing both of the hinges of the door and the door itself, more precisely, of the walls on which it is installed. 20

Proposed solution and advantages achieved

[0005] The invention, object of the present application, gives a technical solution to the above exposed problem, since it consists in creating an adjustable pivot (tav.1), which, in the course of time, is capable of going along and solve the phenomena of settlement, dilatation, rubbing and others which can occur both on the hinges of the door and on the door itself, and again, on the walls. 25 30

[0006] The pivot is composed of a conical, movable pin (tav.3), mounted on a pin-support bush (tav.2). It can be adjusted by unscrewing or screwing it till it reaches the desired adherence with the conical, fixed bush (tav. 4). in this way, the perfect tightness of the door is guaranteed in every case. 35

Industrial accomplishment

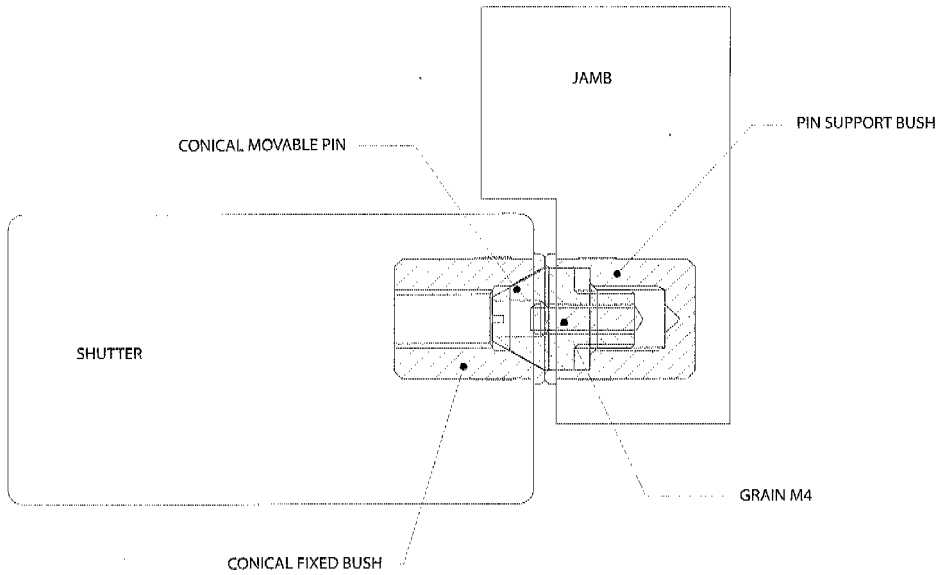
[0007] The invention of the present patent application can be industrially manufactured in the field of the production of shutters and inner window and doors frames. 40

Claims

1. Pivot registration, to be intended as original principle;
2. Elements which compose the adjusting pivot, i.e.: movable, conical pin, pin-support bush and fixed, conical bush, as per picture elements herewith enclosed. 45 50

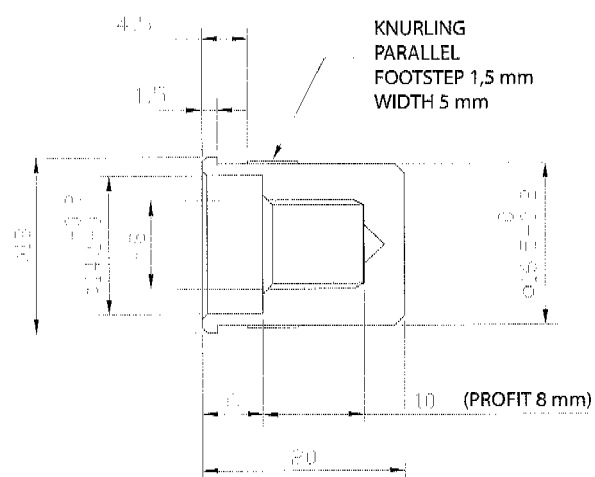
55

1



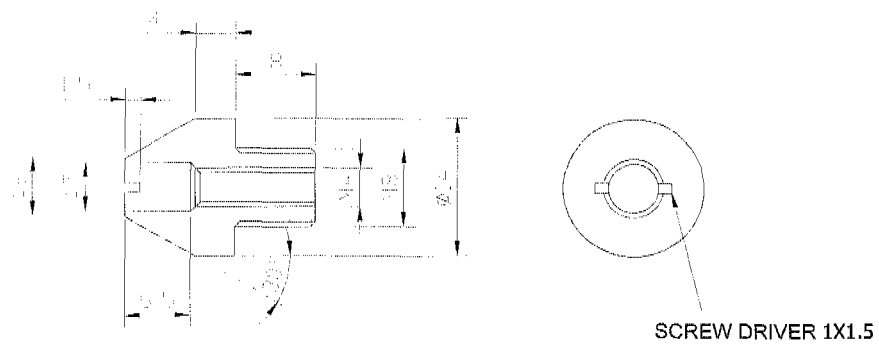
2

PIN SUPPORT BUSH DETAIL



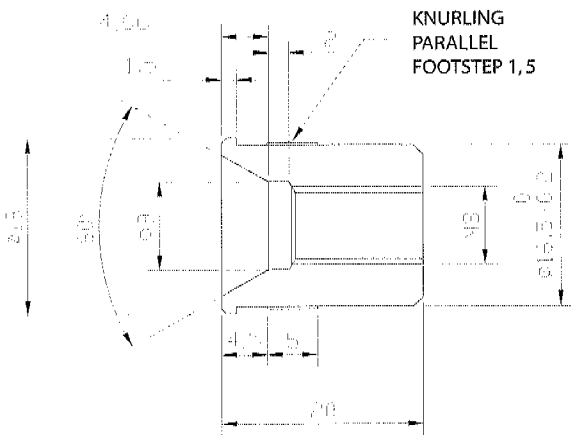
3

CONICAL MOVABLE PIN DETAIL



4

CONICAL FIXED BUSH DETAIL





EUROPEAN SEARCH REPORT

Application Number
EP 08 00 7354

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	US 5 548 869 A (RYCZEK WILLIAM F [US]) 27 August 1996 (1996-08-27) * column 4, line 35 - line 43 * * column 5, line 22 - line 67 * * figures *	1,2	INV. E05D7/04 E05D7/08
A	US 4 109 346 A (STROZIER ROBERT E) 29 August 1978 (1978-08-29) * column 3, line 34 - line 46 * * figures *	1,2	
A	EP 0 940 538 A (NIEMANN HANS DIETER [DE]) 8 September 1999 (1999-09-08) * paragraph [0028] * * figure 1 *	1,2	
			TECHNICAL FIELDS SEARCHED (IPC)
			E05D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 8 December 2008	Examiner Van Kessel, Jeroen
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			

2
EPO FORM 1503.03.82 (P04C01)

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

EP 08 00 7354

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.

08-12-2008

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5548869	A	27-08-1996	CA	2145936 A1	01-10-1995
US 4109346	A	29-08-1978	CA	1124968 A1	08-06-1982
EP 0940538	A	08-09-1999	DE	29803806 U1	15-07-1999
			DK	0940538 T3	19-12-2005
			PL	331661 A1	13-09-1999