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(11) **EP 0 856 627 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
09.01.2002 Bulletin 2002/02

(51) Int Cl.7: **E05D 15/06**

(43) Date of publication A2:
05.08.1998 Bulletin 1998/32

(21) Application number: **98300688.3**

(22) Date of filing: **30.01.1998**

(84) Designated Contracting States:
**AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(72) Inventors:
• **Jacobs, Kenneth**
Bramley, Surrey, GU5 0EF (GB)
• **Menard, Joseph Auguste**
Purton, Swindon, Wiltshire, SN5 9DE (GB)

(30) Priority: **30.01.1997 GB 9701852**

(74) Representative: **White, Martin David**
MARKS & CLERK, 57-60 Lincoln's Inn Fields
London WC2A 3LS (GB)

(71) Applicant: **THE STANLEY WORKS**
New Britain, CT 06053 (US)

(54) **Sliding door assembly**

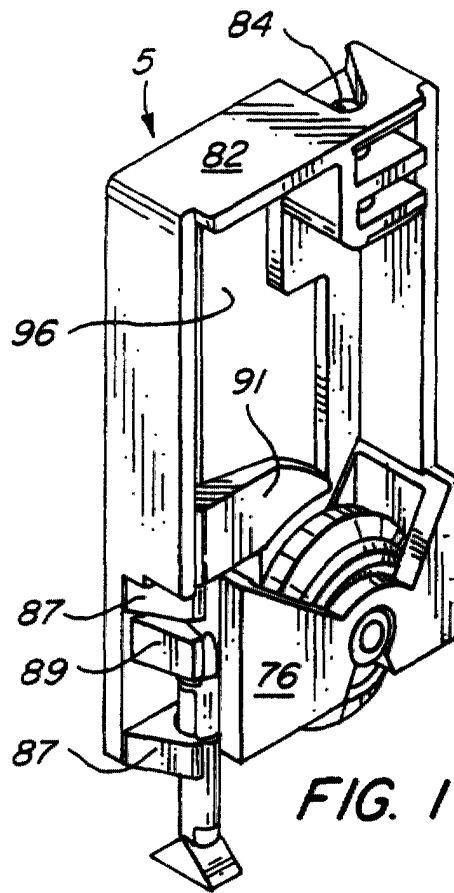
(57) A sliding door assembly comprises a sliding door, a track (100) underneath the sliding door, and a roller assembly (1). The roller assembly (1) comprises: a bracket (3) attached to the door at or near the bottom of the door, the bracket (3) having a generally planar body portion (24); a roller mounting member (5) slidably seated in said bracket (3), the roller mounting member (5) having first and second side walls (76, 78) extending generally parallel to the plane of said bracket body portion (24); and a roller (7) rotatably mounted on said roller mounting member (5) for travel along the track (100). The roller (7) is disposed between said first and second side walls (76, 78) and rotates about an axis perpendicular to the plane of the bracket body portion (24). The roller (7) has a rim (7a) and a median plane generally parallel to the plane of the bracket body portion (24). A vertically and rotatably displaceable anti-jump member (9) is engageable with the track (100) to prevent the roller (7) from derailing. The anti-jump member (9) comprises a handle (91) adjacent an upper end of said anti-jump member (9), an elongate shaft (93) extending downwardly from the handle (91), and an enlarged track engagement portion (95) at a lower end of the anti-jump member (9). The anti-jump member (9) is disposed with the shaft (93) lying in the median plane of the roller (7) and adjacent the roller rim (7a). The anti-jump member (9) is carried by the roller mounting member (5), for vertical displacement between a lowered position wherein said engagement portion (95) can engage and disengage the track (100), and a raised position wherein said engagement portion (95) is spaced upwardly from said

track (100), and for rotative displacement in the lowered position. The roller (7) comprises a wheel (7') having a circular central portion forming said rim (7a) and flanked by two co-axial circular side portions (7b, 7c) of smaller diameter than said central portion (7a). The track (100) is formed with two shoulders (204, 206) on either side of a central cavity (208), the two shoulders (204, 206) being situated at the top of the track (100). The roller (7) runs on the track (100) by virtue of the two side portions (7b, 7c) thereof running on the two shoulders (204, 206). The open top of the central cavity (208) forms a slot, level with the two shoulders (204, 206), and the central cavity (208) widens out below the two, overhanging, shoulders (204, 206). The central portion of the roller (7) extends through the slot and below the level of the two shoulders (204, 206) into the central cavity (208). The anti-jump member (9), when lowered, is selectively rotatable to an operative position and to an inoperative position such that, in the operative position of the anti-jump member (9), the shoulders (204, 206) of the track (100) overhang parts of said track engagement portion (95), so that the track engagement portion (95) cannot be withdrawn from the track (100), and such that, in the inoperative position of the anti-jump member (9), the shoulders (204, 206) of the track (100) overhang no part of said track engagement portion (95), so that the track engagement portion (95) can be displaced vertically, to be selectively inserted into or withdrawn from the track (100) through the slot. The door is able to slide, supported and guided on the track (100) by the roller assembly (1), with the anti-jump member (9) in any of said raised

EP 0 856 627 A3

and lowered positions. The roller assembly (1) is thus restrained from jumping off the track (100) with the anti-

jump member (9) lowered and rotated to its operative position.





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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 0688

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y	FR 2 641 569 A (KRIEG & ZIVY) 13 July 1990 (1990-07-13) * page 5, line 20 - page 11; figures * ---	1	E05D15/06
Y	FR 2 707 328 A (SOGAL FRANCE) 13 January 1995 (1995-01-13) * claims; figures * ---	1	
A	US 5 349 783 A (JASPERSON) 27 September 1994 (1994-09-27) * column 5, line 29 - column 43; claims; figures * ---	3	
A	FR 2 601 408 A (GUERIN) 15 January 1988 (1988-01-15) -----		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6) E05D
Place of search THE HAGUE		Date of completion of the search 21 November 2001	Examiner Vijverman, W
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EPO FORM 1503 03/92 (P04C01)

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

EP 98 30 0688

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21-11-2001

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2641569	A	13-07-1990	FR 2641569 A1	13-07-1990
FR 2707328	A	13-01-1995	FR 2707328 A1	13-01-1995
			AT 163725 T	15-03-1998
			AU 7231094 A	06-02-1995
			DE 69408844 D1	09-04-1998
			DE 69408844 T2	25-06-1998
			DK 707681 T3	07-12-1998
			EP 0707681 A1	24-04-1996
			ES 2115243 T3	16-06-1998
			WO 9502105 A1	19-01-1995
			HK 1009344 A1	28-05-1999
US 5349783	A	27-09-1994	CA 2116258 A1	27-08-1994
FR 2601408	A	15-01-1988	FR 2601408 A1	15-01-1988