

# Europäisches Patentamt European Patent Office Office européen des brevets

(11) **EP 1 106 767 A3** 

(12)

### **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 17.12.2003 Bulletin 2003/51

(51) Int CI.7: **E05D 15/30**, E05D 15/44

(43) Date of publication A2: 13.06.2001 Bulletin 2001/24

(21) Application number: 00309670.8

(22) Date of filing: 01.11.2000

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU

MC NL PT SE TR

Designated Extension States:

AL LT LV MK RO SI

(30) Priority: 09.12.1999 GB 9929090

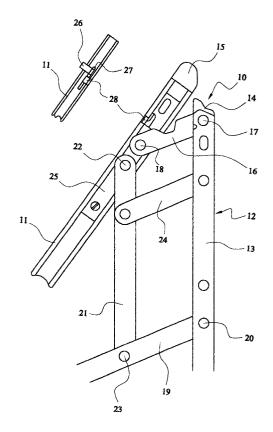
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#### (54) Friction hinge for openable closure member

(57)A friction hinge assembly (10) for mounting an openable closure member, such as a side hung window frame, on a fixed frame member of a fixed frame, said hinge assembly having a fixed guide track (11) which is securable to said fixed frame member and a linkage (12) which is connectable to a frame element of said openable closure member, in which the linkage comprises: a first arm (13) securable to the frame element; a short second connecting arm (16) pivoted at one end (17) to an end region of the first arm (13) and mounted pivotally at its opposite end (18) on the guide track (11); a longer third connecting arm (19) pivoted at one end (20) to the first arm (13) and pivoted at its opposite end to a slide block (not shown) mounted for slidable movement lengthwise of the guide track (11) during opening and closing movement of the closure member; and, a fourth control arm (21) mounted pivotally at one end (22) on the guide track (11) close to the pivot mounting (18) of the second arm (16) on the guide track (11), and pivoted at its opposite end (23) to the third arm (19) at a position intermediate the ends thereof so that the fourth arm (21) extends generally parallel to the first arm (13) to form an approximate parallelogram linkage therewith; and, in which: the second and fourth arms (16, 21) are pivotally connected to a mounting block (25) which is positioned on the guide track (11) at a mounting position close to one end (15) of the guide track (11) to determine a required position for the hinge axis of the closure member for usual opening and closing movements of the closure member relative to the fixed frame, said mounting block (25) being adjustable lengthwise of the guide track (11)

from said mounting position when it is required to increase the spacing of the hinge axis from the end (15) of the guide track (11) and thereby allow easier access for cleaning purposes to the outer face of the closure member, when the latter is moved to an open position.





## **EUROPEAN SEARCH REPORT**

Application Number

EP 00 30 9670

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

EP 00 30 9670

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.

23-10-2003

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