

Title (en)  
TILTING DEVICE FOR VENETIAN BLINDS

Publication  
**EP 0190626 A3 19870603 (DE)**

Application  
**EP 86100979 A 19860124**

Priority  
DE 8503040 U 19850205

Abstract (en)  
[origin: EP0190626A2] 1. A tilting device for a venetian blind, having : a looped spring (15) which encloses a driving shaft (11) and is mounted thereon, at least under loading, with frictional contact directly or indirectly via a co-rotatable coupling sleeve (14) : looped spring ends (16a, 17a) bent outwardly from each end turn of the loop spring ; and fixed counter stops (24), an annular element (19, 20) entrainable in the direction of rotation by one of the looped spring ends being associated with each of the end turns and having a recess (22) at a place on its periphery through which the looped spring ends (16a, 17a) extend, the annular element (19, 20) enclosing the particular end turn of the looped spring (15) with a clearance such that, without affecting the spring function, any deflection is prevented which might cause permanent deformation of the looped spring (15), characterized in that the looped spring ends (16a, 17a) are directly connected to a guide member (25) which retains the lamellae, and on the rotation of the driving shaft (11) one of the ends of the loop spring abuts the counter stops (24) and reduces the frictional contact, and the annular element (19, 20) does not participate in the transmission of force between the looped spring (15) and the guide member (25), an annular element (19, 20) having on one side an inwardly extending annular flange (21) and itself bearing non-rotatably via the annular flange (21) alongside the looped spring (15) against the driving shaft or a coupling sleeve (14) enclosing the driving shaft.

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**E06B 9/307**; **E06B 9/308**

IPC 8 full level  
**E06B 9/307** (2006.01); **E06B 9/308** (2006.01)

CPC (source: EP)  
**E06B 9/307** (2013.01)

Citation (search report)  
• [A] CH 454417 A 19680415 - HUNTER DOUGLAS [NL]  
• [A] FR 2393920 A1 19790105 - HUNTER DOUGLAS IND BV [NL]  
• [A] FR 2491541 A1 19820409 - SCHENKER EMIL AG [CH]  
• [A] CH 273325 A 19510215 - ROLLADENFABRIK A GRIESSER AG [CH]  
• [A] DE 2400643 A1 19750717 - RAU DIETER  
• [A] CH 400817 A 19651015 - GRIESSER AG [CH]

Cited by  
US11480479B2; EP1052365A3; EP1052365A2; WO9627727A1; WO9943965A1

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