

Title (en)  
Lifting mechanism

Title (de)  
Hebemechanismus

Title (fr)  
Mécanisme de levage

Publication  
**EP 1068832 A3 20020502 (DE)**

Application  
**EP 00111990 A 20000619**

Priority  
DE 19931877 A 19990709

Abstract (en)  
[origin: EP1068832A2] The lifting mechanism has at least one lever supported on a shaft which is connected with a tension spring. Between the lever (10) and the spring (22) is located a mechanical control device (16,17) that brings about an almost constant lever arm between a pivot point (15) of the spring and the shaft (8) via a rotation angle of the shaft of up to about 100 degrees. The control device is designed as an intermediate lever which is connected with the lever and at a second pivot point with the tension spring.

IPC 1-7  
**A47L 15/42**

IPC 8 full level  
**A47L 15/42** (2006.01)

CPC (source: EP US)  
**A47L 15/0081** (2013.01 - EP US)

Citation (search report)

- [A] US 4811997 A 19890314 - SUYAMA KOJI [JP], et al
- [A] US 3589787 A 19710629 - MESSERSMITH EUGENE
- [A] US 3246938 A 19660419 - NORREN TORE H, et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 451 (C - 1241) 23 August 1994 (1994-08-23)

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Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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**DE 19931877 A1 20010111**; DE 50012106 D1 20060413; EP 1068832 A2 20010117; EP 1068832 A3 20020502; EP 1068832 B1 20060125;  
ES 2255916 T3 20060716; US 6375175 B1 20020423

DOCDB simple family (application)  
**DE 19931877 A 19990709**; DE 50012106 T 20000619; EP 00111990 A 20000619; ES 00111990 T 20000619; US 61195900 A 20000706