

Title (en)

Package brake and automatic winder including the same

Title (de)

Spulenbremse und automatischer Spuler, der diese Bremse beinhaltet

Title (fr)

Freinage global et enrouleur automatique l'incluant

Publication

EP 2161232 A3 20110216 (EN)

Application

EP 09168228 A 20090820

Priority

JP 2008228861 A 20080905

Abstract (en)

[origin: EP2161232A2] A first acting force (f1) that is directed to the front direction towards a take-up tube 21 and that exerts a braking force between an action member 32 and a holding member 31 and a second acting force (f2) that is directed to a rear direction away from the take-up tube 21 and that exerts a braking force between the action member 32 and the holding member 31 are applied to the action member 32 and the holding member 31. Thus, an excessive increase of a holding force can be effectively controlled while increasing the braking force (Fig. 1).

IPC 8 full level

B65H 54/42 (2006.01); **B65H 54/553** (2006.01); **B65H 54/74** (2006.01)

CPC (source: EP)

B65H 54/42 (2013.01); **B65H 54/553** (2013.01); **B65H 54/74** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)

- [X] DE 102006050140 A1 20080430 - OERLIKON TEXTILE GMBH & CO KG [DE]
- [X] DE 19650932 A1 19980610 - SCHLAFHORST & CO W [DE]
- [X] DE 19908093 A1 20000831 - SCHLAFHORST & CO W [DE]
- [X] JP S63267669 A 19881104 - MURATA MACHINERY LTD

Cited by

ITMI20120479A1; EP2573024A3; EP3312119A1; EP3375743A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

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