

Title (en)  
HYBRID DRAWING CUSHION FACILITY

Title (de)  
ZIEHKISSEN-VORRICHTUNG MIT HYBRID-ANTRIEB

Title (fr)  
DISPOSITIF COUSSIN DE SERRE-FLAN A ENTRAINEMENT HYBRIDE

Publication  
**EP 1758696 A1 20070307 (DE)**

Application  
**EP 05761755 A 20050618**

Priority  
• DE 2005001094 W 20050618  
• DE 102004030678 A 20040624

Abstract (en)  
[origin: WO2006000188A1] The invention relates to a hybrid drawing cushion facility which comprises a combination of fluid cylinders (6) and one or more electric drives (7, 15) acting upon the pressure box (3). The fluid cylinders (6) perform the force function on a high level and the electric drives (7, 15) perform the path function, such as pre-acceleration and run-up, and the force function on a low level when the fluid cylinders (6) are deactivated.

IPC 8 full level  
**B21D 24/02** (2006.01); **B21D 24/10** (2006.01)

CPC (source: EP KR)  
**B21D 22/20** (2013.01 - KR); **B21D 24/02** (2013.01 - EP KR); **B21D 24/10** (2013.01 - EP KR)

Citation (search report)  
See references of WO 2006000188A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**DE 102004030678 A1 20060126; DE 102004030678 B4 20060330**; AT E393674 T1 20080515; BR PI0512612 A 20080325; CN 100548524 C 20091014; CN 1976770 A 20070606; DE 502005003912 D1 20080612; EP 1758696 A1 20070307; EP 1758696 B1 20080430; ES 2306179 T3 20081101; JP 2008503352 A 20080207; JP 5101276 B2 20121219; KR 101012817 B1 20110208; KR 20070031412 A 20070319; WO 2006000188 A1 20060105

DOCDB simple family (application)  
**DE 102004030678 A 20040624**; AT 05761755 T 20050618; BR PI0512612 A 20050618; CN 200580021260 A 20050618; DE 2005001094 W 20050618; DE 502005003912 T 20050618; EP 05761755 A 20050618; ES 05761755 T 20050618; JP 2007516963 A 20050618; KR 20077001806 A 20050618