

Title (en)  
DUAL FORCE RAM DRIVE FOR A SCREW PRESS

Title (de)  
STEMPELANTRIEB MIT ZWEI KRÄFTEN FÜR EINE SCHRAUBENPRESSE

Title (fr)  
ENTRAÎNEMENT DE VÉRIN À DOUBLE FORCE POUR UNE PRESSE À VIS

Publication  
**EP 2432671 A4 20120530 (EN)**

Application  
**EP 08876907 A 20081106**

Priority  
• US 2008082636 W 20081106  
• US 97244707 P 20070914

Abstract (en)  
[origin: WO2010059147A2] Precise motion of the ram of a fastener press is controlled by high torque and low torque motors for high speed/low force and high force pressing of the ram by the ram, respectively. The high torque motor means drive passes through a bidirectional overrunning clutch. The clutch is controlled by the relative motion of the two separate motor drive speeds of which are regulated by a controller. The clutching motion is therefore controlled only by the relative speed of its drive versus driven components. This provides an extremely smooth and responsive transition between high speed/low force and low speed/high force operation of the ram so that the pressing cycle can be as fast and efficient as possible.

IPC 8 full level  
**B60W 10/02** (2006.01); **B30B 1/18** (2006.01); **B30B 15/12** (2006.01)

CPC (source: EP)  
**B30B 1/18** (2013.01); **B30B 1/186** (2013.01); **B30B 15/12** (2013.01)

Citation (search report)  
• [X] DE 102005038583 A1 20070222 - SCHULER PRESSEN GMBH & CO [DE]  
• [XY] JP 2008119737 A 20080529 - JAPAN AUTOMATIC MACHINE CO LTD  
• [XY] RU 2011537 C1 19940430 - RYBINSKIY AVIATSION [RU]  
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• [XA] JP 2000312999 A 20001114 - ENOMOTO KIKO KK  
• See references of WO 2010059147A2

Cited by  
US11819906B2; US11752720B2; US11541618B1; US11904564B2; US11919267B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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