

Title (en)  
ROLLING STAND WITH CROSSING BACK-UP AND/OR WORKING ROLLS

Title (de)  
WALZGERÜST MIT GEKREUZTEN STÜTZ- UND/ODER ARBEITSWALZEN

Title (fr)  
CAGE DE LAMINOIR DOTÉE DE CYLINDRES D'APPUI ET/OU DE TRAVAIL CROISÉS

Publication  
**EP 1107835 B1 20020515 (DE)**

Application  
**EP 99919049 A 19990302**

Priority  
• DE 9900628 W 19990302  
• DE 19840538 A 19980828

Abstract (en)  
[origin: US6519994B1] A roll stand with backup rolls and work rolls for rolling sheet and strip in which the upper and lower work rolls, together with the backup rolls associated therewith, can be displaced from the common vertical plane into positions in which the vertical planes passing through the roll axes of the work rolls and backup rolls intersect in that chocks supporting each roll within the housing window are displaced in pairs horizontally in opposite directions. Each pair of rolls formed of the upper and lower backup rolls and work rolls is received by its roll chocks in one of two cassettes extending horizontally into the housing windows located on either side of the roll housing and is guided therein such that it can be vertically and/or horizontally adjusted. The cassettes can be swiveled in opposite directions about a common central vertical axis formed by upper and lower centering pin bearings provided at the housing crosspiece and at the cassette, and each cassette is vertically supported in the area of the housing windows against the roll stand frame by articulated supports mounted on cardan joints at both ends.

IPC 1-7  
**B21B 13/02**; **B21B 31/18**

IPC 8 full level  
**B21B 31/02** (2006.01); **B21B 13/02** (2006.01); **B21B 13/14** (2006.01); **B21B 31/18** (2006.01); **B21B 31/10** (2006.01); **B21B 31/32** (2006.01)

CPC (source: EP KR US)  
**B21B 13/023** (2013.01 - EP US); **B21B 31/18** (2013.01 - KR); **B21B 31/185** (2013.01 - EP US); **B21B 13/02** (2013.01 - EP US);  
**B21B 31/10** (2013.01 - EP US); **B21B 31/32** (2013.01 - EP US); **B21B 2013/025** (2013.01 - EP US); **B21B 2203/06** (2013.01 - EP US)

Designated contracting state (EPC)  
AT DE ES FI FR GB IT NL SE

DOCDB simple family (publication)  
**US 6519994 B1 20030218**; AT E217549 T1 20020615; AU 3698399 A 20000321; BR 9913297 A 20010515; CA 2341380 A1 20000309;  
CN 1139440 C 20040225; CN 1313795 A 20010919; DE 19840538 A1 20000309; DE 59901469 D1 20020620; EP 1107835 A1 20010620;  
EP 1107835 B1 20020515; ES 2173737 T3 20021016; JP 2002523242 A 20020730; KR 20010072202 A 20010731; WO 0012236 A1 20000309

DOCDB simple family (application)  
**US 78603801 A 20010228**; AT 99919049 T 19990302; AU 3698399 A 19990302; BR 9913297 A 19990302; CA 2341380 A 19990302;  
CN 99809826 A 19990302; DE 19840538 A 19980828; DE 59901469 T 19990302; DE 9900628 W 19990302; EP 99919049 A 19990302;  
ES 99919049 T 19990302; JP 2000567323 A 19990302; KR 20017001429 A 20010202