

Title (en)  
Machine to draw bars

Title (de)  
Maschine zum Ziehen von Stangen

Title (fr)  
Machine d'étirage des barres

Publication  
**EP 0645200 B1 19980128 (EN)**

Application  
**EP 94114476 A 19940914**

Priority  
IT US930200 A 19930929

Abstract (en)  
[origin: EP0645200A1] Machine to draw bars, which comprises a die-holder drawplate assembly and a drawing assembly (11) of the type disclosed in EP-A-548723 and also comprises an assembly for the reciprocal adjustment of chain assemblies (13-113), an assembly of links and an assembly for backward drawing, in which the drawplate (12) includes downstream momentarily actuated grippers (17) and is associated with a carriage (18) able to move along the drawing axis (15) upstream of the drawplate (12) by a length coordinated with the minimum length of clamping by the facing chains (13-113), the movable carriage (18) being associated with a first jack actuation means (22), the support (47) of the drawplate (12) cooperating during drawing with a toric load cell (33), the load cell (33) being associated with a unit (57) that governs means (32) that actuate angular displacement. <IMAGE>

IPC 1-7  
**B21C 1/30**

IPC 8 full level  
**B21C 1/30** (2006.01)

CPC (source: EP)  
**B21C 1/30** (2013.01); **B21L 11/10** (2013.01)

Cited by  
DE19637686C1; DE10134949A1; EP0864382A1; CN104550314A; EP0849010A1; US5921128A; US5809823A; EP0827789A3; CN105848799A; CN109290512A; US9636728B2; DE19636322C1; US5855136A; FR2731925A1; US5660071A; EP0826438A3; RU2475318C1; WO2015101943A1; WO9630136A1; US6644467B1; US6663523B1; WO0114076A1; WO0114075A1; EP4245434A1; DE102022106273A1

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

DOCDB simple family (publication)  
**EP 0645200 A1 19950329; EP 0645200 B1 19980128**; AT E162742 T1 19980215; DE 69408239 D1 19980305; DE 69408239 T2 19980827; ES 2111225 T3 19980301

DOCDB simple family (application)  
**EP 94114476 A 19940914**; AT 94114476 T 19940914; DE 69408239 T 19940914; ES 94114476 T 19940914