Title (en)

MULTI-ROLL HOUSING

Publication

EP 0121811 B1 19870304 (DE)

Application

EP 84102747 A 19840314

Priority

- DE 3312008 A 19830402
- DE 3323641 A 19830630

Abstract (en)

[origin: US4631948A] A rolling stand has a support frame, a pair of small-diameter working rolls defining a workpiece nip open perpendicular to the plane and rotatable about respective horizontal, parallel, and vertically spaced axes. A pair of large-diameter backup rolls are rotatable about respective axes parallel to and vertically flanking the working-roll axes. These backup-roll axes define a vertical plane offset from the working-roll plane. In addition each backup roll bears vertically on the respective working roll and a drive counterrotates the rolls of each roll pair to draw an elongated workpiece of predetermined maximum width generally perpendicular to the planes through the nip. The working rolls are longer than the maximum workpiece width and have end portions projecting axially beyond the workpiece. The rolls are pressed vertically toward the nip to compress and deform the workpiece thereat. Respective pushing elements engage horizontally generally perpendicular to the planes against the end portions of the working rolls and respective actuators push these elements horizontally generally perpendicular to the planes against the end portions of the working rolls.

IPC 1-7

B21B 13/14

IPC 8 full level

B21B 13/14 (2006.01); B21B 13/02 (2006.01)

CPC (source: EP KR US)

B21B 13/06 (2013.01 - KR); **B21B 13/145** (2013.01 - EP US); B21B 2013/025 (2013.01 - EP US); B21B 2013/028 (2013.01 - EP US)

Cited by

WO2015011373A1; DE10036564C2; FR3008633A1; CN105531044A; US6314782B1; WO2019145639A1; US11420244B2; US10173252B2; TWI617370B; WO2019170994A1; US11654464B2

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

EP 0121811 A1 19841017; **EP 0121811 B1 19870304**; DE 3323641 A1 19841004; DE 3462444 D1 19870409; KR 840008425 A 19841215; KR 910005236 B1 19910724; US 4631948 A 19861230

DOCDB simple family (application)

EP 84102747 A 19840314; DE 3323641 A 19830630; DE 3462444 T 19840314; KR 840001598 A 19840328; US 59594784 A 19840402