

Title (en)  
Rolling mill and rolling method

Title (de)  
Walzwerk und Walzverfahren

Title (fr)  
Laminoir et procédé de laminage

Publication  
**EP 1184094 A2 20020306 (EN)**

Application  
**EP 01103675 A 20010223**

Priority  
JP 2000258529 A 20000829

Abstract (en)  
In a rolling mill in which hydraulic apparatus (12;13), for controlling the roll balance or the shape of the rolled material are incorporated in movable frames (10;11) provided separately from roll chocks (4;5) mounted at each end of the rolls (1,2), reducing the roll inclination thereby making it possible to carry out stable rolling, and also reducing the roll vibrations, and making it possible to manufacture products with a high quality. Providing hydraulic apparatus (12 and 13) for controlling the roll balance and the shape of the rolled material inside the movable frames (10 and 11), hydraulic apparatus (16 and 17) that push and restrict the roll chocks (4 and 5) and the movable frames (10 and 11) in the direction of flow of the rolled material relative to the roller stand (3), and the hydraulic apparatus (18 and 19) that push and restrict the movable frames (10 and 11) in the up/down direction relative to the roller stand (3). <IMAGE>

IPC 1-7  
**B21B 31/02**; **B21B 31/20**

IPC 8 full level  
**B21B 13/00** (2006.01); **B21B 31/02** (2006.01); **B21B 31/20** (2006.01); **B21B 31/18** (2006.01); **B21B 31/32** (2006.01); **B21B 37/00** (2006.01)

CPC (source: EP KR US)  
**B21B 13/00** (2013.01 - KR); **B21B 31/02** (2013.01 - EP US); **B21B 31/203** (2013.01 - EP US); **B21B 31/18** (2013.01 - EP US); **B21B 31/32** (2013.01 - EP US); **B21B 37/007** (2013.01 - EP US); **B21B 2031/206** (2013.01 - EP US)

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 1184094 A2 20020306**; **EP 1184094 A3 20041222**; CN 1340388 A 20020320; KR 20020017904 A 20020307; TW 504411 B 20021001; US 2002023473 A1 20020228

DOCDB simple family (application)  
**EP 01103675 A 20010223**; CN 01116550 A 20010228; KR 20010010244 A 20010228; TW 90104359 A 20010226; US 79175301 A 20010226