Title (en)

HOT ROLLING METHOD

Publication

EP 0153849 B1 19920115 (EN)

Application

EP 85301178 A 19850222

Priority

- JP 3747884 A 19840229
- JP 10755384 A 19840529
- JP 20414784 A 19841001
- JP 21150384 A 19841011

Abstract (en)

[origin: EP0153849A2] A hot rolling method using a hot finishing mill including a pair of work rolls each having a taper ground end at one end of its barrel and arranged one above the other with the taper ground ends being on opposite sides so as to locate both edges of a plate-like material to be rolled in respective zones of the taper ground ends. According to the invention the work rolls are cyclically shifted in their axial directions within a range so as not to permit the both edges of the material to come out of the taper ground ends of the work rolls, thereby preventing edge built-ups of the material and simultaneously effecting crown-controlling of the rolled material. The work rolls are finely shifted and simultaneously a bending action is applied to the work rolls in a manner to eliminate a bending action acting upon the work rolls caused by the material being rolled by the work rolls. The work rolls are cyclically shifted, while a distance from an edge of the material to a starting point of the taper ground end of the work roll nearliest to the edge of the material is variably set so as to decrease dependently upon increase of thermal expansion of the work rolls. Stepwise variation in shifting distance of the work rolls per unit number of rolled material is varied in a rolling cycle.

IPC 1-7

B21B 13/14; B21B 31/18

IPC 8 full level

B21B 31/18 (2006.01); **B21B 37/42** (2006.01); B21B 1/26 (2006.01); B21B 27/02 (2006.01)

CPC (source: EP)

B21B 31/18 (2013.01); **B21B 37/42** (2013.01); B21B 1/26 (2013.01); B21B 2027/022 (2013.01); B21B 2269/04 (2013.01); B21B 2269/14 (2013.01)

Citation (examination)

- EP 0049798 A2 19820421 - SCHLOEMANN SIEMAG AG [DE]
- DE 200426 C

Cited by

EP0235769A3; DE4105079A1; DE3638331A1; GB2223435A; EP0618020A1; GB2198981A; GB2198981B; GB2202174A; GB2202174B; EP0276743A1; US4864836A; EP0249801A1; US4800742A; US4955221A; EP1228818B2

Designated contracting state (EPC)

BE DE FR GB LU NL SE

DOCDB simple family (publication)

EP 0153849 A2 19850904; **EP 0153849 A3 19860212**; **EP 0153849 B1 19920115**; AU 3911085 A 19850905; AU 566417 B2 19871022; BR 8500894 A 19851022; CA 1261654 A 19890926; DE 3585164 D1 19920227; KR 850007092 A 19851030; KR 900009128 B1 19901222

DOCDB simple family (application)

EP 85301178 A 19850222; AU 3911085 A 19850225; BR 8500894 A 19850228; CA 475265 A 19850227; DE 3585164 T 19850222; KR 850001288 A 19850228