

Title (en)

Process for producing hot-rolled strip or heavy plates.

Title (de)

Verfahren zur Erzeugung von Warmband oder Grobblechen.

Title (fr)

Procédé de fabrication de feuillard laminé à chaud ou tÔles fortes.

Publication

**EP 0352597 B1 19940622 (DE)**

Application

**EP 89113109 A 19890718**

Priority

DE 3825634 A 19880728

Abstract (en)

[origin: US4994118A] The invention relates to a process for the production of hot rolled strip or heavy plates from stainless and refractory steels or from forgeable alloys on a nickel basis with a final thickness in the range of 5 to 60 mm by the production of a slab from monobloc casting or by continuous casting and heating the slab at a temperature above 1100 DEG C. followed by the hot rolling of the slab and accelerated cooling of the product rolled to the end thickness. The characterizing feature of the invention is that the heated slab is rolled without interruptions first to a maximum of 1/6 of its initial thickness, mainly by deformation passes in which the degree of deformation pass in the thickness direction is greater than the degrees of deformation shown by curve A in FIG. 1, in dependence on the surface temperature of the product. Then finish rolling is performed to the end thickness, mainly by deformation passes in which the degree of deformation per pass in the thickness direction is greater than the degrees of deformation shown by curve B1 or curve B2 in FIG. 1, in dependence on the surface temperature of the product and the pause between two adjacent passes as parameters. The surface temperature of the finish rolled product must be not less than 1030 DEG C., if the product contains up to 1.0% molybdenum and not less than 1050 DEG C., if the product contains more than 1.0% molybdenum. At the latest 100 seconds following finish rolling, the product is cooled at an accelerated rate with a speed in the core of more than 3 K/sec, more particularly more than 5 K/sec, to a temperature which is equal to or lower than 650 DEG C.

IPC 1-7

**C21D 8/02; C22F 1/10**

IPC 8 full level

**B21B 1/46** (2006.01); **B21B 3/02** (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22F 1/10** (2006.01)

CPC (source: EP KR US)

**B21B 1/34** (2013.01 - KR); **C21D 8/0205** (2013.01 - EP US); **C22F 1/10** (2013.01 - EP US)

Cited by

CN114178314A

Designated contracting state (EPC)

AT BE DE ES FR GB IT LU NL SE

DOCDB simple family (publication)

**EP 0352597 A1 19900131; EP 0352597 B1 19940622**; AT E107708 T1 19940715; CA 1318838 C 19930608; DE 3825634 A1 19900201; DE 3825634 C2 19940630; DE 58907934 D1 19940728; ES 2058410 T3 19941101; JP H02175816 A 19900709; KR 900001424 A 19900227; US 4994118 A 19910219

DOCDB simple family (application)

**EP 89113109 A 19890718**; AT 89113109 T 19890718; CA 606790 A 19890727; DE 3825634 A 19880728; DE 58907934 T 19890718; ES 89113109 T 19890718; JP 19438589 A 19890728; KR 890010760 A 19890728; US 38655089 A 19890727