

Title (en)

PROCESS AND DEVICE FOR PRODUCING A STEEL STRIP WITH THE PROPERTIES OF A COLD-ROLLED PRODUCT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON STAHLBAND MIT KALTWALZEIGENSCHAFTEN

Title (fr)

PROCEDE ET DISPOSITIF DE PRODUCTION D'UNE FEUILLE D'ACIER PRESENTANT LES PROPRIETES D'UN PRODUIT LAMINE A FROID

Publication

EP 0804300 A1 19971105 (DE)

Application

EP 95932632 A 19950921

Priority

- DE 9501347 W 19950921
- DE 4438783 A 19941020
- DE 19520832 A 19950531

Abstract (en)

[origin: US5832985A] PCT No. PCT/DE95/01347 Sec. 371 Date Apr. 21, 1997 Sec. 102(e) Date Apr. 21, 1997 PCT Filed Sep. 21, 1995 PCT Pub. No. WO96/12573 PCT Pub. Date May 2, 1996A process for producing a steel strip with properties of a cold-rolled product. The process including comprising the sequential steps of: a) producing a thin slab 30 to 100 mm thick from a steel melt by continuous casting in a continuous casting machine, and, after a cast strip emerges from a mold of the continuous casting machine, cast rolling the cast strip with a liquid core to reduce thickness of the cast strip by at least 10%; b) descaling the thin slab produced according to step a); c) hot rolling the descaled thin slab at temperatures in a range of 1150 DEG to 900 DEG C. for reducing thickness by at least 50% to produce an intermediate strip with a maximum thickness of 20 mm; d) after hot rolling, accelerated cooling of the intermediate strip to a temperature in a range of 850 DEG to 600 DEG C.; e) rolling down the cooled intermediate strip by isothermic rolling at 850 DEG to 600 DEG C. on a finishing train with at least three stands into strips with a maximum thickness of 2 mm, whereby the strip thickness is reduced by at least 25% per roll pass; and f) subsequently cooling the isothermic rolled steel strip in accelerated fashion to a temperature no greater than 100 DEG C.

IPC 1-7

B21B 1/46; C21D 8/04

IPC 8 full level

B21B 1/46 (2006.01); **B22D 11/128** (2006.01); **C21D 8/02** (2006.01); **B21B 1/26** (2006.01); **B21B 1/34** (2006.01); **B21B 45/00** (2006.01); **B21B 45/02** (2006.01)

CPC (source: EP US)

B21B 1/463 (2013.01 - EP US); **C21D 8/0215** (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP US); **B21B 1/26** (2013.01 - EP US); **B21B 1/34** (2013.01 - EP US); **B21B 1/466** (2013.01 - EP US); **B21B 45/004** (2013.01 - EP US); **B21B 45/0218** (2013.01 - EP US); **B21B 2201/04** (2013.01 - EP US); **B21B 2201/12** (2013.01 - EP US); **B21B 2201/14** (2013.01 - EP US); **Y10T 29/49991** (2015.01 - EP US)

Citation (search report)

See references of WO 9612573A1

Cited by

CN111589865A; AT511674A1; AT511674B1; AT511657A1; AT511657B1

Designated contracting state (EPC)

AT CH DE FR GB IT LI

DOCDB simple family (publication)

US 5832985 A 19981110; AT E179640 T1 19990515; AU 3561395 A 19960515; AU 686014 B2 19980129; CA 2202616 A1 19960502; CA 2202616 C 20010123; CN 1062196 C 20010221; CN 1161009 A 19971001; EP 0804300 A1 19971105; EP 0804300 B1 19990506; JP 3807628 B2 20060809; JP H11511696 A 19991012; WO 9612573 A1 19960502

DOCDB simple family (application)

US 81778497 A 19970421; AT 95932632 T 19950921; AU 3561395 A 19950921; CA 2202616 A 19950921; CN 95195695 A 19950921; DE 9501347 W 19950921; EP 95932632 A 19950921; JP 51357596 A 19950921