

Title (en)

Method of manufacturing a thin sheet of low carbon steel

Title (de)

Verfahren zur Herstellung eines dünnen Bandes aus Weichstahl

Title (fr)

Procédé de fabrication d'une bande mince en acier doux

Publication

EP 0524162 B1 19981111 (FR)

Application

EP 92870104 A 19920713

Priority

- BE 9100673 A 19910717
- BE 9100732 A 19910809

Abstract (en)

[origin: EP0524162A2] The finishing rolling to a thickness of 0.5 mm to 2 mm is performed in a temperature range where the steel has a ferritic structure, with a rolling end temperature equal to or lower than 750 DEG C; the rolls employed for this finishing rolling are lubricated and the hot-rolled strip is then subjected to recrystallising tempering. The strip may be made of steel of the ULC-IF type and the temperature for starting the finishing rolling is then lower than 800 DEG C. The strip may also be made of steel of the ELC or ULC type, and the temperature for starting the finishing rolling is then between 750 DEG C and 550 DEG C or between 450 DEG C and 250 DEG C. The reduction ratio of the strip during the finishing rolling is equal to or greater than 50 %. Subsequently, the hot strip may be cold-rolled in at least one cold-rolling stage, with a total cold reduction ratio lower than or equal to 95 %, to a thickness smaller than or equal to 0.50 mm.

IPC 1-7

C21D 8/04; C21D 8/02; B21B 1/26

IPC 8 full level

B21B 1/26 (2006.01); **C21D 8/02** (2006.01); **C21D 8/04** (2006.01); **B21B 27/10** (2006.01); **B21B 45/00** (2006.01); **B21B 45/02** (2006.01)

CPC (source: EP)

B21B 1/26 (2013.01); **C21D 8/0231** (2013.01); **C21D 8/0426** (2013.01); **B21B 27/10** (2013.01); **B21B 45/004** (2013.01); **B21B 45/0242** (2013.01); **B21B 45/0263** (2013.01); **B21B 2201/02** (2013.01); **B21B 2201/04** (2013.01); **C21D 8/0226** (2013.01); **C21D 8/0236** (2013.01); **C21D 8/0263** (2013.01); **C21D 8/0431** (2013.01); **C21D 8/0463** (2013.01); **C21D 2211/005** (2013.01)

Citation (examination)

EP 0306076 A1 19890308 - HOOGOVENS GROEP BV [NL]

Cited by

US6773522B1; US6616778B1; EP0761325A1; US6109336A; EP2128277A1; EP0659891A3; NL1000694C2; US6053996A; NL1007731C2; EP1627928A4; EP0718411A1; FR2728490A1; US5704997A; FR2730942A1; US6056832A; WO9726377A1; WO9701402A1; WO0036162A1; US6280542B1; WO2007132436A3; WO9800248A1; WO9626295A1; WO9929446A1; WO9746332A1; EP0681031B1

Designated contracting state (EPC)

BE DE FR GB LU NL

DOCDB simple family (publication)

EP 0524162 A2 19930120; EP 0524162 A3 19930324; EP 0524162 B1 19981111; DE 69227548 D1 19981217; DE 69227548 T2 19990729

DOCDB simple family (application)

EP 92870104 A 19920713; DE 69227548 T 19920713