

Title (en)

COLD-ROLLED SHEET OR STRIP AND PROCESS FOR MANUFACTURING THEM.

Title (de)

KALTGEWALZTES BLECH ODER BAND UND VERFAHREN ZU SEINER HERSTELLUNG.

Title (fr)

TOLE OU FEUILLARD LAMINES A FROID ET PROCEDE POUR LEUR FABRICATION.

Publication

EP 0400031 B1 19931110 (DE)

Application

EP 89901844 A 19890127

Priority

- DE 3803064 A 19880129
- DE 3843732 A 19881222
- DE 8900057 W 19890127

Abstract (en)

[origin: US5139580A] In order to produce sheet possessing good forming properties, in particular for rotationally symmetrical deep-drawings, a low-carbon steel containing not more than 0.009% N is alloyed with 0.01 to 0.94% Ti and in certain cases with 0.01 to 0.06% Nb and continuously cast. The plate slabs are heated to a temperature above 1120 degrees Celsius, rolled to obtain a hot strip above the Ar3 point, and would at 520+/-100 degrees Celsius. After cold rolling to the desired fine sheet thickness, the steel strip is annealed by recrystallization, skin-passes and made into sheets.

IPC 1-7

C21D 8/04; C22C 38/14

IPC 8 full level

C21D 9/48 (2006.01); **C21D 8/04** (2006.01); **C22C 38/00** (2006.01); **C22C 38/06** (2006.01); **C22C 38/14** (2006.01)

CPC (source: EP US)

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Cited by

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Designated contracting state (EPC)

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US 5139580 A 19920818; DD 285298 A5 19901212; DD 285298 B5 19990128; DE 3803064 C1 19890406; DE 3803064 C2 19950420; DE 3843732 A1 19900705; DE 3843732 C2 20010510; DE 58906176 D1 19931216; EP 0400031 A1 19901205; EP 0400031 B1 19931110; EP 0400031 B2 20020102; ES 2018975 A6 19910516; GR 1000537 B 19920825; JP H03503185 A 19910718; JP H0814003 B2 19960214; WO 8907158 A1 19890810

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