

Title (en)

Apparatus and methods for rolling and stress relaxing a metal strip

Title (de)

Vorrichtung und Verfahren zum Walzen und Nachlassen von Spannungen von einem Metallband

Title (fr)

Dispositif et méthodes pour laminer et relaxer des contraintes d'une bande métallique

Publication

EP 0785286 A1 19970723 (EN)

Application

EP 96307976 A 19961104

Priority

GB 9600862 A 19960116

Abstract (en)

A metal strip (10) of predetermined initial thickness is fed from an input drum (22) between two rollers (12,14) whose separation is less than the initial thickness of the strip, thereby effecting a predetermined thickness reduction. The strip is thereafter passed around three guide rollers (24,26,28) which subject it to successive changes in direction in opposite angular sense, the strip then being coiled up on an output drum (30). The longitudinal speed of movement of the strip and the extents and rates of changes in angular direction of the strip as it passes around the guide rollers (24,26,28) causes the strip to become heated to a temperature sufficient to relax its structure and offset any adverse effect on its subsequent elongation capability caused by the thickness reduction carried out by the initial rollers (12,14). The guide rollers (24,26,28) cause opposite surface portions of the strip to be subjected to alternate tension and compression. <IMAGE>

IPC 1-7

C21D 8/02; B21B 45/00; B21B 41/08

IPC 8 full level

B21D 25/00 (2006.01); **B21B 41/08** (2006.01); **B21B 45/00** (2006.01); **B21D 1/02** (2006.01); **C21D 8/02** (2006.01); **B21B 1/30** (2006.01);
B21B 1/36 (2006.01)

CPC (source: EP)

B21B 41/08 (2013.01); **B21B 45/004** (2013.01); **B21D 1/02** (2013.01); **C21D 8/0242** (2013.01); **B21B 1/30** (2013.01); **B21B 1/36** (2013.01);
B21B 2261/22 (2013.01)

Citation (applicant)

GB 6296008 A

Citation (search report)

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- [Y] EP 0443278 A1 19910828 - MESNEL SA ETS [FR]
- [X] US 3247946 A 19660426 - JOSEPH KLEIN ALBERT
- [A] US 3429164 A 19690225 - OGANOWSKI KASIMIR, et al
- [Y] PATENT ABSTRACTS OF JAPAN vol. 006, no. 058 (M - 122) 15 April 1982 (1982-04-15)
- [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 207 (M - 327) 21 September 1984 (1984-09-21)

Designated contracting state (EPC)

DE ES FR IT

DOCDB simple family (publication)

EP 0785286 A1 19970723; CZ 497 A3 19980812; GB 2309185 A 19970723; GB 9600862 D0 19960320

DOCDB simple family (application)

EP 96307976 A 19961104; CZ 497 A 19970103; GB 9600862 A 19960116