

Title (en)

Process for producing high strength steel belt.

Title (de)

Verfahren zur Herstellung eines besonders festen Stahlgurts.

Title (fr)

Méthode pour la manufacture d'une courroie en acier à haute résistance.

Publication

**EP 0481378 A1 19920422 (EN)**

Application

**EP 91117409 A 19911011**

Priority

JP 27542290 A 19901016

Abstract (en)

A high strength steel belt (1) having an excellent flatness and a duplex structure of austenite and martensite has been prepared by a process which comprises providing a cold rolled or cold rolled and annealed strip of a martensitic structure from low carbon martensitic stainless steel containing from 10 to 17 % by weight of Cr and having a carbon content of not exceeding 0.15 % by weight, connecting ends of the strip or ends of a plate cut from said strip to provide an endless belt, causing the endless belt to circularly move between rolls (2,3) under tension and to repeatedly pass through a heating furnace (4) where the belt is heated to a temperature within the range from (the As point of the steel + 30 DEG C.) to the Af point of the steel and not higher than 900 DEG C. so that a part of the martensitic phase may be changed to a reversed austenitic phase, and cooling the heated belt to ambient temperature.

IPC 1-7

**B21B 5/00; B21D 53/14**

IPC 8 full level

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CPC (source: EP)

**B21D 53/14** (2013.01); **C21D 8/0205** (2013.01)

Citation (search report)

- [A] DE 3628862 A1 19870312 - NISSHIN STEEL CO LTD [JP]
- [A] DE 3416260 A1 19841108 - VOLVO CAR BV [NL]
- [A] PATENT ABSTRACTS OF JAPAN, unexamined applications, M field, vol. 11, no. 128, April 22, 1987 THE PATENT OFFICE JAPANESE GOVERNMENT page 77 M 583

Cited by

DE102008005803A1; CN111945113A; CN112974532A; EP1449933A1; AU2010298597B2; DE10152293B4; CN109277426A; DE10025808A1; AT408088B; CZ305966B6; WO2011037759A3; WO9919109A1; US9822422B2; US10260120B2; US6464804B2; US6436553B1; TWI495731B

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