

Title (en)

DOUBLE PHASE STAINLESS STEEL STRIP FOR STEEL BELT

Title (de)

BAND AUS DOPPELPHASIGEM NICHTTOSTENDEM STAHL FÜR STAHLRIEMEN

Title (fr)

BANDE D'ACIER INOXYDABLE DOUBLE PHASE POUR CEINTURE D'ACIER

Publication

**EP 1396552 A1 20040310 (EN)**

Application

**EP 02738626 A 20020606**

Priority

- JP 0205572 W 20020606
- JP 2001175109 A 20010611

Abstract (en)

A high-strength dual-phase stainless steel strip has a chemical composition consisting of 0.04-0.15 mass % C, 10.0-20.0 mass % Cr, 0.5-4.0 mass % Ni and the balance being Fe except inevitable impurities, and a metallurgical structure composed of 20-85 vol. % martensite grains and the balance ferrite grains with prior austenite grains controlled to 10  $\mu$  m or less in size. The stainless steel strip is conditioned to hardness of HV 300 or more. Transformation strains are uniformly distributed in a steel matrix during martensitic transformation, so that the steel strip is formed and straightened to a belt shape without Ljders band. Consequently, steel belts with fine external appearance are manufactured from the stainless steel strip.

IPC 1-7

**C22C 38/00**; **C22C 38/40**; **C22C 38/58**

IPC 8 full level

**C22C 38/42** (2006.01); **C22C 38/44** (2006.01)

CPC (source: EP KR US)

**C21D 6/004** (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C21D 9/52** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/40** (2013.01 - KR); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US)

Cited by

FR2872825A1; HRP20151160B1; US2017321311A1; EP3216888A4; EP2241645A4; US9267197B2; WO2006016043A3

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**EP 1396552 A1 20040310**; **EP 1396552 A4 20041222**; **EP 1396552 B1 20050831**; AT E303458 T1 20050915; CN 1227383 C 20051116; CN 1514885 A 20040721; DE 60205896 D1 20051006; JP 4252893 B2 20090408; JP WO2002101108 A1 20040924; KR 20040014492 A 20040214; US 2004168750 A1 20040902; WO 02101108 A1 20021219

DOCDB simple family (application)

**EP 02738626 A 20020606**; AT 02738626 T 20020606; CN 02811582 A 20020606; DE 60205896 T 20020606; JP 0205572 W 20020606; JP 2003503853 A 20020606; KR 20037013354 A 20031010; US 48020503 A 20031210