

Title (en)

Process and apparatus for cleaning metal strip

Title (de)

Verfahren und Vorrichtung zum Reinigen eines Metallbandes

Title (fr)

Procédé et dispositif pour nettoyer une bande métallique

Publication

EP 1005926 A3 20020724 (EN)

Application

EP 99122944 A 19991118

Priority

US 20156498 A 19981130

Abstract (en)

[origin: EP1005926A2] A process and apparatus for cleaning metal strip without the use of pickling acids, including an uncoiler (1), a leveller (2) capable of removing substantially all dimensional irregularities from the strip, and a cleaner (3), including at least one grinder unit, brushing unit and polishing unit, for removing surface oxide from the strip. Tension is applied to the cleaned strip to enhance material handling and control and to facilitate leveling. The cleaned strip may be treated (5) with acid to remove ground surface material and to condition the strip. Such strip, having a reduced surface roughness of about 5 to 30 microinches, is suitable for many post-processing operations. <IMAGE>

IPC 1-7

B21B 45/06; B08B 1/02; B08B 3/04

IPC 8 full level

B08B 1/02 (2006.01); **B08B 3/04** (2006.01); **B21B 45/06** (2006.01); **B21B 1/36** (2006.01); **B21B 15/00** (2006.01); **B21B 45/00** (2006.01); **B21B 45/02** (2006.01)

CPC (source: EP)

B08B 1/20 (2024.01); **B08B 3/041** (2013.01); **B21B 45/06** (2013.01); **B21B 1/36** (2013.01); **B21B 45/00** (2013.01); **B21B 45/0287** (2013.01); **B21B 2015/0071** (2013.01)

Citation (search report)

- [XA] WO 9847634 A1 19981029 - DANIELI WEAN A DIVISION OF DAN [US]
- [XA] US 5554235 A 19960910 - NOE ROLF [DE], et al
- [DXAY] US 2759301 A 19560821 - VALETTE LE ROY R, et al
- [DYA] US 5273558 A 19931228 - NELSON LEONARD E [US], et al
- [YA] US 2335196 A 19431123 - PECSOK MICHAEL C
- [XA] PATENT ABSTRACTS OF JAPAN vol. 017, no. 005 (M - 1349) 6 January 1993 (1993-01-06)

Cited by

CN109434665A; CN116727315A; CN102699054A; CN103128112A; EP1628784A4; CN117259482A; US9822422B2; US10260120B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1005926 A2 20000607; **EP 1005926 A3 20020724**; AU 5956399 A 20000601; CA 2290767 A1 20000530; JP 2000158037 A 20000613

DOCDB simple family (application)

EP 99122944 A 19991118; AU 5956399 A 19991119; CA 2290767 A 19991126; JP 33866899 A 19991129