

Title (en)

Process and apparatus for treating stainless-steel strips

Title (de)

Verfahren und Anlage zur Behandlung von Banderzeugnissen aus nichtrostendem Stahl

Title (fr)

Procédé et dispositif pour le traitement de produits sous forme de bande en acier inoxydable

Publication

EP 0763609 B1 19991215 (DE)

Application

EP 96250179 A 19960819

Priority

- DE 19535844 A 19950915
- DE 19537501 A 19950926

Abstract (en)

[origin: EP0763609A1] Hot-rolled stainless steel is continuously treated by initially breaking up the scale on its surface by passing through straightening rolls, followed by passing through a blasting device and then a series of alkali baths with alternating anodes and cathodes. The strip then passes through a cell with ≥ 2 anodes and then a cell with 1 cathode which is connected to one of the anodes in the previous cell via a rectifier. After passing through an abrasive or grinding device it goes through a further electrolytic cell with ≥ 2 cathodes which are connected to the anodes of the previous anode cell via rectifiers. Finally it is treated by washing, brushing and drying. In the case of non-annealed strip, the electrolyte used in the cells is Na₂SO₄ with H₂SO₄ being used in the last cell to ensure passivation. In the case of an annealed strip, the electrolyte used is H₂SO₄ with Na₂SO₄ being used in the last cell to ensure passivation. The abrasive surface treatment maybe carried out with a high pressure liq. spray device using water or electrolyte as the liquid.

IPC 1-7

C25F 1/06; C25F 7/00

IPC 8 full level

B08B 3/08 (2006.01); **B21B 45/06** (2006.01); **C23G 3/02** (2006.01); **C25F 1/06** (2006.01); **C25F 7/00** (2006.01)

CPC (source: EP US)

C25F 1/06 (2013.01 - EP US); **C25F 7/00** (2013.01 - EP US); **B21B 45/06** (2013.01 - EP US)

Cited by

DE102018219198A1; DE102018219199A1; US6565735B1; EP2581143B1; EP3879008A1; DE102020106353A1

Designated contracting state (EPC)

DE ES FI FR IT SE

DOCDB simple family (publication)

EP 0763609 A1 19970319; EP 0763609 B1 19991215; ES 2142018 T3 20000401; JP H09137300 A 19970527; US 5804056 A 19980908

DOCDB simple family (application)

EP 96250179 A 19960819; ES 96250179 T 19960819; JP 25382596 A 19960904; US 71539496 A 19960913