Title (en)

CONTINUOUS ELECTROLYTIC PICKLING AND DESCALING OF CARBON STEEL AND STAINLESS STEEL

Title (de)

KONTINUIERLICHES ELEKTROLYTISCHES BEIZEN UND ENTZUNDERN VON UNLEGIERTEM STAHL UND NICHTROSTENDEM STAHL

Title (fr)

DECAPAGE ET DECALAMINAGE PAR VOIE ELECTROLYTIQUE CONTINUE DE L'ACIER AU CARBONE ET DE L'ACIER INOXYDABLE

Publication

EP 1358367 B1 20040915 (EN)

Application

EP 01271468 A 20011218

Priority

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Abstract (en)

[origin: WO0250344A1] Continuos electrolytic method in a neutral solution for the pickling and the descaling of carbon steels and stainless steels, in the presence of electrolysis current flow indirect effects, said current being AC or DC and having a frequency lower than 3 Hz, characterized in that the anodic treatment times and the cell currents are selected according to the formula: It=c+kI where: I is the current density crossing the cell; t is the anodic treatment time; c is the constant fraction of electric charge density outputted for the direct oxide change anodic reactions; and k is a time constant for the calculation of the fraction of electric charge density, proportional to the current density I (kI), outputted for the indirect anodic reactions linked to Oxygen development and to the consequent acidification at the steel/electrolytic solution interface (Carbon steels) or at the scale/electrolytic solution interface (stainless steels).

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C25F 1/06

IPC 8 full level

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