

Title (en)
METHOD FOR REGULATING THE TEMPERATURE OF A METAL STRIP, ESPECIALLY FOR ROLLING A METAL HOT STRIP IN A FINISHING TRAIN

Title (de)
VERFAHREN ZUR REGELUNG DER TEMPERATUR EINES METALLBANDES, INSBESONDERE IN EINER FERTIGSTRASSE ZUM WALZEN VON METALLWARMBAND

Title (fr)
PROCEDE DE REGULATION DE LA TEMPERATURE D'UNE BANDE METALLIQUE, EN PARTICULIER DANS UN TRAIN FINISSEUR POUR LE LAMINAGE A CHAUD DE BANDES METALLIQUES

Publication
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Application
EP 04710836 A 20040213

Priority

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- DE 10308222 A 20030225
- DE 10321791 A 20030514

Abstract (en)
[origin: US7310981B2] The invention relates to a method for controlling and regulating the temperature of a metal strip in a finishing train of a hot rolling mill. A target function is formed by comparing a desired temperature gradient with an actual temperature gradient. The target function measures deviations from desired indications positioned in various places on the finishing train. The speed of the strip and the flow of the cooling agent are adjusted by predicting with the aid of a method of non-linear optimization with auxiliary conditions and are regulated and controlled online by solving a quadratic optimization problem with linear auxiliary conditions, preferably with the aid of an active set strategy.

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B21B 37/74 (2006.01)

CPC (source: EP US)
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Citation (opposition)
Opponent :

- DE 10064267 A1 20020704 - ALSTOM SWITZERLAND LTD [CH]
- EP 1231010 A1 20020814 - SIEMENS WESTINGHOUSE POWER [US]
- US 4274273 A 19810623 - FAPIANO DONALD J, et al

Cited by
EP2287345A1; WO2011009819A1

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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

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