

Title (en)

MATHEMATICAL MODEL FOR A METALLURGICAL ENGINEERING SYSTEM AND METHOD FOR OPTIMIZING THE OPERATION OF A METALLURGICAL ENGINEERING SYSTEM USING SAID MODEL

Title (de)

MATHEMATISCHES MODELL FÜR EINE HÜTTENTECHNISCHE ANLAGE UND OPTIMIERUNGSVERFAHREN FÜR DEN BETRIEB EINER HÜTTENTECHNISCHEN ANLAGE UNTER VERWENDUNG EINES DERARTIGEN MODELLS

Title (fr)

MODELE MATHEMATIQUE POUR UNE INSTALLATION UTILISANT LA TECHNIQUE SIDERURGIQUE ET PROCEDE D'OPTIMISATION POUR LE FONCTIONNEMENT DE L'INSTALLATION AU MOYEN DUDIT MODELE

Publication

EP 1593010 A2 20051109 (DE)

Application

EP 04708339 A 20040205

Priority

- EP 2004001076 W 20040205
- DE 10306273 A 20030214

Abstract (en)

[origin: WO2004072746A2] A mathematical model for a metallurgical engineering system and a method for optimizing the operation of a metallurgical engineering system by means of said model. A plurality of units (7-12) of a metallurgical engineering system (6) are modelled by means of a mathematical model. Said units are associated with supply and discharge media flows. In order to optimize operation of the system (6), structural parameters are supplied to an optimization computer (1) by a user (5). The structural parameters establish at least the number and type of units (7-12). On the basis of start parameters, which describe the initial states of the units (7-12), and an evaluation criterion (K), the optimization computer (1) determines optimized operating parameters according to an optimization algorithm (A) using said model.

IPC 1-7

G05B 19/418; **G05B 17/02**

IPC 8 full level

G05B 13/04 (2006.01); **G05B 17/02** (2006.01)

CPC (source: EP US)

G05B 13/042 (2013.01 - EP US); **G05B 17/02** (2013.01 - EP US); **G05B 2219/32017** (2013.01 - EP US)

Citation (search report)

See references of WO 2004072746A2

Designated contracting state (EPC)

AT BE DE ES FR IT

DOCDB simple family (publication)

WO 2004072746 A2 20040826; **WO 2004072746 A3 20041028**; BR PI0407465 A 20060214; CA 2515947 A1 20040826; CN 100468257 C 20090311; CN 1751277 A 20060322; DE 10306273 A1 20040902; EP 1593010 A2 20051109; MX PA05008632 A 20051104; RU 2005128553 A 20060327; US 2005267612 A1 20051201; US 7720653 B2 20100518

DOCDB simple family (application)

EP 2004001076 W 20040205; BR PI0407465 A 20040205; CA 2515947 A 20040205; CN 200480004244 A 20040205; DE 10306273 A 20030214; EP 04708339 A 20040205; MX PA05008632 A 20040205; RU 2005128553 A 20040205; US 20171205 A 20050811