

Title (en)
COOLING CONTROL

Title (de)
STEUERUNG EINER KÜHLUNG

Title (fr)
COMMANDE DE REFROIDISSEMENT

Publication
EP 2817425 A1 20141231 (DE)

Application
EP 13714569 A 20130320

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• EP 12161804 A 20120328
• EP 2013055753 W 20130320
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Abstract (en)
[origin: EP2644719A1] Controlling a cooling of a material (4) using a coolant, comprises controlling a supply (13) of the coolant to the material by at least one actuator (6) which can be set to at least two different positions, where an actuator curve set is assigned to the actuator, which specifies a relationship between a coolant stream, a pressure of the coolant, and a position of the actuator; adjusting a coolant stream; determining a corresponding position of the target coolant stream and adjusting the actuator in the determined position. Controlling a cooling of a material (4) using a coolant, comprises controlling a supply (13) of the coolant to the material by at least one actuator (6) which can be set to at least two different positions, where an actuator curve set is assigned to the actuator, which specifies a relationship between a coolant stream, a pressure of the coolant, and a position of the actuator; adjusting a coolant stream, where the pressure of the coolant upstream of at least one actuator, when seen in the flow direction of the coolant, is determined from pressure value of the actuator curves to the determined; determining a corresponding position of the target coolant stream and adjusting the actuator in the determined position. Independent claims are also included for: (1) a computer program product for controlling the cooling process of the material using the coolant, where the computer program product, when executed by a computer unit, performs the steps comprising determining the pressure of the coolant upstream of at least one actuator, and a coolant stream corresponding position of the actuator curve, and generating a signal which triggers adjustment of the actuator and sets actuator in the determined position; (2) a control device (7) for controlling a cooling system of a material, comprising a storage unit which is designed for the storage of actuator curves, a processor unit which is adapted to determine position of the actuator, and a signal unit, which is adapted to transmit a signal to adjust at least one actuator in the determined position to a control unit; and (3) a cooling section (2) of a metal processing line, preferably a rolling line, comprising a control device for controlling the cooling of a material in the cooling section.

IPC 8 full level
C21D 1/667 (2006.01)

CPC (source: EP)
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Citation (search report)
See references of WO 2013143925A1

Cited by
US11135631B2; US11745237B2

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