

Title (en)

METHOD FOR THE FEED-BACK CONTROL OF A CONDITIONING UNIT AND USE THEREOF

Title (de)

VERFAHREN ZUM REGELN EINER KONDITIONIEREINHEIT UND VERWENDUNG EINES SOLCHEN VERFAHREN

Title (fr)

PROCÉDÉ DE RÉGLAGE D'UNE UNITÉ DE CONDITIONNEMENT ET UTILISATION DU MÊME

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Application

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Abstract (en)

[origin: WO2016206983A2] The invention relates to a conditioning unit (3) comprising a base (20) and a buffer store (21), a medium being conducted through the base (20) and a temperature control unit (23) being arranged between the buffer store (21) and the base (20) and having a first heating surface (24) and a second heating surface (25), and a temperature spread being adjusted between the first heating surface (24) and the second heating surface (25) by means of the temperature control unit (23). The aim of the invention is to devise a conditioning unit which allows the temperature of a gaseous or liquid medium to be precisely set and maintained constant despite strong variations in through-flow or pressure of the medium. For this purpose, the conditioning unit (3) is operated in a feed-back control to maintain a predetermined desired temperature (T_{soll}) of the medium, a manipulated variable (Y) for the feed-back control of the conditioning unit (3) being combined from a model part (A), which calculates the power (P_v) required for the temperature control of the medium in the conditioning unit (3), and a feed-back control part (R), which corrects the power (P_v) calculated by means of the model part (A), a feed-back control error (F) composed of a desired temperature (T_{soll}) and an actual temperature (T_{ist}) being integrated exponentially into the feed-back control part (R).

IPC 8 full level

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Citation (search report)

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