

Title (en)
DEVICE FOR CONTINUOUSLY HUMIDIFYING AND DEHUMIDIFYING ADDITIONAL AIR FROM MANUFACTURING PROCESSES AND VENTILATING AND AIR CONDITIONING SYSTEMS

Title (de)
VORRICHTUNG ZUR KONTINUIERLICHEN BEFEUCHTUNG UND ENTFEUCHTUNG DER ZULUFT VON FERTIGUNGSPROZESSEN UND RAUMLUFTTECHNIK-ANLAGEN

Title (fr)
DISPOSITIF D'HUMIDIFICATION ET DE DESHUMIDIFICATION EN CONTINU DE L'AIR FOURNI DANS DES PROCESSUS DE FABRICATION ET DES INSTALLATIONS DE CONDITIONNEMENT DE L'AIR

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Application
EP 01998775 A 20011121

Priority

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Abstract (en)
[origin: WO0244624A1] The invention relates to a device for continuously humidifying and dehumidifying additional air from manufacturing processes and ventilating and air conditioning systems. The inventive device is characterized by a membrane contactor (1) comprising a membrane. The additional air can be guided along one side of the membrane and a hygroscopic fluid can be guided along the other side of the membrane. A dosing device (22) is also provided in order to add water so that the water content of the hygroscopic fluid can be increased, in addition to a regenerator (7) enabling the water content of the hygroscopic fluid to be lowered. A control device connected to the dosing device (22) and the regenerator (7) controls the water content of the hygroscopic fluid in such a way that it is possible to switch between humidification and dehumidification irrespective of the partial pressure difference between the additional air and the hygroscopic fluid.

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