

# **A NOVEL TOTAL HEAT EXCHANGER WITH LITTLE ODOR TRANSFER USING ION EXCHANGE RESIN AS A DESICCANT**

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## **ABSTRACT**

*Total heat exchangers are used in many countries of the world as energy-saving devices for air-conditioning of buildings and others. But they have sometimes caused a problem of odor transfer, accumulation of offensive odor of being its source. We have sought for the cause of this problem and worked on how to solve it. And now we have developed a novel total heat exchanger with little odor transfer using ion exchange resin as a desiccant. The odor transfer preventing property of this novel total heat exchanger was analyzed in comparison with that of a conventional total heat exchanger using silica gel. Also made was a comparison with other desiccants such as synthesized zeolite.*