

Title (en)

LIGHT-LOAD DEHUMIDIFICATION AND REFRIGERATION METHOD AND DEVICE

Title (de)

LEICHTLASTENTFEUCHTUNGS- UND -KÜHLUNGSVERFAHREN UND -VORRICHTUNG

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉSHUMIDIFICATION ET DE RÉFRIGÉRATION DE CHARGE LÉGÈRE

Publication

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Application

EP 15893991 A 20151206

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Abstract (en)

The present invention provides an under-loading dehumidification and refrigeration apparatus, where an evaporator (3) is divided into a first evaporator section (5) and a second evaporator section (7), and a throttling apparatus (6) is connected in series between the first evaporator section (5) and the second evaporator section (7); and in a case of refrigeration and dehumidification, an electronic expansion valve A (8) performs throttling on a liquid refrigerant input from a condenser (2); and the first evaporator section (5) and the second evaporator section (7) raise a temperature of a gas-liquid two-phase refrigerant to become a gas refrigerant, to reduce an ambient temperature to perform dehumidification; or in a case of constant temperature dehumidification, the electronic expansion valve A (8) performs no throttling, and the first evaporator section (5) reduces a temperature of the liquid refrigerant; the throttling apparatus (6) performs throttling on the liquid refrigerant; and the second evaporator section (7) raises a temperature of a gas-liquid two-phase refrigerant to become a gas refrigerant, to reduce an ambient temperature to perform dehumidification.

IPC 8 full level

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