

Title (en)

AIR CONDITIONER

Title (de)

KLIMAANLAGE

Title (fr)

CLIMATISEUR

Publication

**EP 2211123 A1 20100728 (EN)**

Application

**EP 08837535 A 20081010**

Priority

- JP 2008002865 W 20081010
- JP 2007264615 A 20071010

Abstract (en)

The present invention provides an air conditioner that can optimize the COP even if usage conditions vary. A refrigerant circuit ( 10 ) comprises and connects a compressor ( 21 ), an outdoor heat exchanger ( 23 ), an indoor expansion valve ( 41, 51 ), and an indoor heat exchanger ( 42, 52 ) such that a refrigerant circulates therein. An outdoor fan ( 28 ) feeds a fluid toward the outdoor heat exchanger ( 23 ). A heat exchanging temperature sensor ( 33 ) senses a condensing temperature of the refrigerant. An outdoor temperature sensor ( 36 ) senses the temperature of the outdoor air, which exchanges heat with the refrigerant inside the outdoor heat exchanger ( 23 ). A control unit ( 8 ) controls at least one member selected from the group consisting of the compressor ( 21 ), the indoor expansion valve ( 41, 51 ), and the outdoor fan ( 28 ) using as a target value a value calculated by dividing a degree of supercooling of the refrigerant in the vicinity of an outlet of the outdoor heat exchanger ( 23 ) by the difference between the condensing temperature ascertained by the heat exchanging temperature sensor (33) and the outdoor temperature ascertained by the outdoor temperature sensor ( 36 ).

IPC 8 full level

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CPC (source: EP US)

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Cited by

CN112856842A; CN103115417A; CN105627496A; US11486617B2; US2022026082A1; WO2013165535A1

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Designated extension state (EPC)

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AU 2008310483 B2 20110908; CN 101821560 A 20100901; CN 101821560 B 20150204; ES 2716469 T3 20190612; JP 5056855 B2 20121024;  
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