

Title (en)
FREQUENCY CONTROL METHOD AND SYSTEM FOR VARIABLE FREQUENCY COMPRESSOR OF HEAT PUMP HOT WATER MACHINE

Title (de)
FREQUENZSTEUERUNGSVERFAHREN UND SYSTEM FÜR VERDICHTER MIT VARIABLER FREQUENZ FÜR
WÄRMEPUMPENWARMWASSERMASCHINE

Title (fr)
PROCÉDÉ ET SYSTÈME DE COMMANDE DE FRÉQUENCE POUR COMPRESSEUR À FRÉQUENCE VARIABLE DE MACHINE À EAU
CHAUDE À POMPE À CHALEUR

Publication
EP 3299744 A4 20190102 (EN)

Application
EP 15893020 A 20150716

Priority
• CN 201510268372 A 20150522
• CN 2015084252 W 20150716

Abstract (en)
[origin: EP3299744A1] Disclosed are a method and a system for controlling frequency of a variable-frequency compressor in a heat pump water heater. The method includes: detecting water temperature of water flowing out from a heat exchanger and water tank temperature of a water tank; determining preset water temperature of the water flowing out from the heat exchanger according to the water tank temperature; and controlling the frequency of the variable-frequency compressor according to the water temperature and the preset water temperature. The present method and system propose a control mode of frequency of the compressor based on the water temperature of the water flowing out from the heat exchanger. Working frequency of the variable-frequency compressor may be reduced effectively and working energy efficiency of a heat pump group may be improved under low water tank temperature. Meanwhile, in case of ensuring stable water temperature, minimum working frequency of the compressor may be controlled effectively and thus reliability of the compressor may be ensured.

IPC 8 full level
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CPC (source: EP US)
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Citation (search report)
• [XAI] JP 2005098546 A 20050414 - MATSUSHITA ELECTRIC IND CO LTD
• [I] JP 2005147542 A 20050609 - MATSUSHITA ELECTRIC IND CO LTD
• [A] EP 2559953 A1 20130220 - MITSUBISHI ELECTRIC CORP [JP]
• See references of WO 2016187939A1

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CN109140710A; CN111735242A; EP4130599A4; CN108253630A; EP3845818A4

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