

Title (en)  
AIR-CONDITIONING CONTROL SYSTEM AND AIR-CONDITIONING CONTROL METHOD

Title (de)  
KLIMAANLAGENSTEUERUNGSSYSTEM UND KLIMAANLAGENSTEUERUNGSVERFAHREN

Title (fr)  
SYSTÈME ET PROCÉDÉ DE COMMANDE DE CLIMATISATION

Publication  
**EP 3940306 A4 20220427 (EN)**

Application  
**EP 20771145 A 20200306**

Priority  
• JP 2019045791 A 20190313  
• JP 2020009760 W 20200306

Abstract (en)  
[origin: EP3940306A1] In an air conditioning operation based on a rule base, a long time is taken to approach a target temperature distribution. An air conditioning control system (1) according to the present disclosure is a system for controlling an air conditioning apparatus (100) that performs an air conditioning operation in a target space ( $\alpha$ ). The air conditioning control system (1) includes a detecting unit (200) and a server (300). The detecting unit (200) detects a temperature distribution of the target space ( $\alpha$ ). The server (300) controls the air conditioning apparatus (100) such that the temperature distribution of the target space ( $\alpha$ ) approaches a target temperature distribution, on the basis of the temperature distribution detected by the detecting unit (200), by using a learning device that has learned by deep reinforcement learning.

IPC 8 full level  
**F24F 11/56** (2018.01); **F24F 11/62** (2018.01); **F24F 11/64** (2018.01); **F24F 11/65** (2018.01); **F24F 11/74** (2018.01); **F24F 11/79** (2018.01); **F24F 11/80** (2018.01); **F24F 11/89** (2018.01); **F24F 110/10** (2018.01)

CPC (source: EP US)  
**F24F 11/56** (2017.12 - EP); **F24F 11/62** (2017.12 - EP); **F24F 11/64** (2017.12 - EP US); **F24F 11/65** (2017.12 - EP); **F24F 11/74** (2017.12 - EP); **F24F 11/79** (2017.12 - EP); **F24F 11/80** (2017.12 - EP); **F24F 2110/10** (2017.12 - EP US)

Citation (search report)  
• [X] US 2018100662 A1 20180412 - FARAHMAND AMIR-MASSOUD [US], et al  
• [X] JP H05312381 A 19931122 - JAPAN RES DEV CORP, et al  
• [A] JP 2018071853 A 20180510 - INFO GREEN CO LTD, et al  
• See references of WO 2020184454A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3940306 A1 20220119**; **EP 3940306 A4 20220427**; CN 113544439 A 20211022; JP 2020148385 A 20200917; JP 7071307 B2 20220518; US 2022178572 A1 20220609; WO 2020184454 A1 20200917

DOCDB simple family (application)  
**EP 20771145 A 20200306**; CN 202080019521 A 20200306; JP 2019045791 A 20190313; JP 2020009760 W 20200306; US 202017437393 A 20200306