

Title (en)
AEROSOL GENERATING DEVICE WITH TWO HEATING PROFILES

Title (de)
AEROSOLERZEUGUNGSVORRICHTUNG MIT ZWEI HEIZPROFILEN

Title (fr)
DISPOSITIF DE GÉNÉRATION D'AÉROSOL AVEC DEUX PROFILS DE CHAUFFAGE

Publication
EP 4388906 A1 20240626 (EN)

Application
EP 22214707 A 20221219

Priority
EP 22214707 A 20221219

Abstract (en)
An aerosol generating device comprising a heater, a power source and memory comprising firmware. The power source is configured to supply power to the heater. The firmware is configured to control the application of power to the heater in a lower heater mode and a higher heater mode, wherein the lower heater mode has a lower mode temperature profile with a lower mode target temperature and the higher heater mode has a higher mode temperature profile with a higher mode target temperature. The firmware includes a control loop comprising a PID controller. The PID controller is configured to receive a temperature signal indicative of a measurement of the temperature of the heater, calculate, using the temperature signal, a PID controller output, and output the PID controller output. The control loop is configured to control, based on the PID controller output, a power applied to the heater from the power source to thereby regulate the temperature of the heater to a respective one of the lower mode or higher mode target temperatures.

IPC 8 full level
A24F 40/57 (2020.01); **A24F 40/20** (2020.01); **A24F 40/60** (2020.01)

CPC (source: EP)
A24F 40/57 (2020.01); **A24F 40/20** (2020.01); **A24F 40/60** (2020.01)

Citation (search report)
• [X] US 2022117307 A1 20220421 - ABI AOUN WALID [GB], et al
• [A] WO 2022230320 A1 20221103 - JAPAN TOBACCO INC [JP]

Cited by
WO2024132921A1

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4388906 A1 20240626; WO 2024132921 A1 20240627

DOCDB simple family (application)
EP 22214707 A 20221219; EP 2023086038 W 20231215