

Title (en)
A HEAT TRANSFER ASSEMBLY

Title (de)
WÄRMEÜBERTRAGUNGSANORDNUNG

Title (fr)
ENSEMBLE DE TRANSFERT DE CHALEUR

Publication
EP 4082364 A1 20221102 (EN)

Application
EP 21170455 A 20210426

Priority
EP 21170455 A 20210426

Abstract (en)
A heat transfer assembly for heating an aerosol generating medium, such as a cigarette, without burning. The heat transfer assembly comprises a heat absorber, a heat modulator, and a heat diffuser. The heat absorber is configured to absorb thermal energy from a proximate heat source in a first temperature range. The heat absorber is thermally coupled to the heat modulator, and the heat modulator is thermally coupled to the heat diffuser. The heat modulator is configured to absorb the thermal energy emitted from the heat source, and to provide thermal energy to the heat diffuser in a second temperature range different to the first temperature range, wherein the lowest temperature of the first temperature range is greater than the highest temperature of the second temperature range. The heat modulator comprises at least one phase change material.

IPC 8 full level
A24F 42/10 (2020.01)

CPC (source: EP US)
A24F 42/10 (2020.01 - EP US); **A24F 42/60** (2020.01 - US); **A24F 40/20** (2020.01 - EP)

Citation (search report)

- [XA] WO 2008029381 A2 20080313 - OGLESBY & BUTLER RES & DEV LTD [IE], et al
- [XA] WO 2013009883 A1 20130117 - KUMAR JAY [US], et al
- [A] WO 03034847 A1 20030501 - BRITISH AMERICAN TOBACCO CO [GB]

Cited by
WO2022228939A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4082364 A1 20221102; CN 117177685 A 20231205; JP 2024517125 A 20240419; US 2024206563 A1 20240627;
WO 2022228939 A1 20221103

DOCDB simple family (application)
EP 21170455 A 20210426; CN 202280029937 A 20220419; EP 2022060274 W 20220419; JP 2023564683 A 20220419;
US 202218557231 A 20220419