

Title (en)
ULTRASONIC ELECTRONIC CIGARETTE ATOMIZER

Title (de)
ELEKTRONISCHER ULTRASCHALLZIGARETTENZERSTÄUBER

Title (fr)
ATOMISEUR DE CIGARETTE ÉLECTRONIQUE À ULTRASONS

Publication
EP 3597056 A1 20200122 (EN)

Application
EP 18784756 A 20180413

Priority
• CN 201720386007 U 20170413
• CN 201720389134 U 20170413
• CN 2018082903 W 20180413

Abstract (en)
The present invention discloses an ultrasonic electronic cigarette atomizer, comprising an ultrasonic atomization sheet (1), an air inlet passage (2) and an air outlet passage (3). The air inlet passage (2) spans an atomization region of the ultrasonic atomization sheet (1) and then is communicated with the air outlet passage (3); the air flow direction of the air inlet passage (2) in the atomization region of the ultrasonic atomization sheet (1) is perpendicular to the smoke spraying direction of the ultrasonic atomization sheet (1); the ultrasonic electronic cigarette atomizer further comprises an e-liquid cup (4); the ultrasonic atomization sheet (1) is disposed in the e-liquid cup (4); an inner cavity of the e-liquid cup (4) is connected to an atomization surface of the ultrasonic atomization sheet (1) through an e-liquid guide structure; the atomization surface of the ultrasonic atomization sheet (1) is opposite to an e-liquid recovery structure; and the e-liquid recovery structure is connected to the ultrasonic atomization sheet (1) through the e-liquid guide structure. With the atomizer, it is not easy for the user to suck large particles of e-liquid; the large particles of e-liquid splashed can be recycled, so the utilization rate of the e-liquid is high; the ultrasonic atomization sheet is not easily immersed in the e-liquid, so the atomization start speed is fast.

IPC 8 full level
A24F 40/05 (2020.01); **A24F 40/44** (2020.01); **A24F 40/10** (2020.01)

CPC (source: EP US)
A24F 40/05 (2020.01 - EP US); **A24F 40/40** (2020.01 - EP US); **A24F 40/44** (2020.01 - EP US); **A24F 40/10** (2020.01 - EP US)

Cited by
EP4082360A4

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 3597056 A1 20200122; **EP 3597056 A4 20210106**; **EP 3597056 B1 20230308**; WO 2018188638 A1 20181018

DOCDB simple family (application)
EP 18784756 A 20180413; CN 2018082903 W 20180413