

Title (en)
LIQUID SUPPLY METHOD AND APPARATUS

Title (de)
FLÜSSIGKEITZUFUHRVERFAHREN UND VORRICHTUNG

Title (fr)
PROCÉDÉ ET APPAREIL D'ALIMENTATION EN LIQUIDE

Publication
EP 4070676 A4 20231220 (EN)

Application
EP 20896553 A 20200810

Priority
• CN 201911225987 A 20191204
• CN 2020108146 W 20200810

Abstract (en)
[origin: EP4070676A1] Disclosed are a liquid supply method and apparatus, belonging to the technical field of vaping simulation. The method is applied to an electronic cigarette, the electronic cigarette being provided with a micro-flow liquid supply assembly and a liquid storage assembly, wherein the liquid storage assembly is used for storing at least one liquid. The method comprises: acquiring a working parameter of an electronic cigarette, wherein the working parameter comprises at least one of an output power of an atomizer, the temperature in an atomizing chamber and an output voltage of the electronic cigarette (110); determining the consumption rate of at least one liquid according to the working parameter, wherein the at least one liquid is an e-liquid or an e-liquid component (120); and according to the consumption rate of each liquid, controlling a micro-flow liquid supply assembly to use a micro-channel to supply each liquid to an atomization assembly for atomization (130). The method solves the problem in the related art of liquid leakage or dry burning being easily caused since it is difficult to balance e-liquid supply and e-liquid consumption in an actual use process of an electronic cigarette.

IPC 8 full level
A24F 40/48 (2020.01); **A24F 40/485** (2020.01); **A24F 40/50** (2020.01); **A24F 40/10** (2020.01)

CPC (source: EP US)
A24F 40/10 (2020.01 - US); **A24F 40/48** (2020.01 - EP); **A24F 40/485** (2020.01 - EP US); **A24F 40/50** (2020.01 - EP); **A24F 40/51** (2020.01 - US); **A24F 40/53** (2020.01 - US); **A24F 40/10** (2020.01 - EP)

Citation (search report)
• [IA] WO 2019144659 A1 20190801 - CHINA TOBACCO YUNNAN IND CO LTD [CN]
• [A] US 2018020729 A1 20180125 - ALARCON RAMON [US], et al
• [A] CN 207692971 U 20180807 - CHINA TOBACCO YUNNAN IND CO LTD
• See references of WO 2021109609A1

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

DOCDB simple family (publication)
EP 4070676 A1 20221012; **EP 4070676 A4 20231220**; CN 110839966 A 20200228; CN 110839966 B 20220405; US 2022295899 A1 20220922; WO 2021109609 A1 20210610

DOCDB simple family (application)
EP 20896553 A 20200810; CN 201911225987 A 20191204; CN 2020108146 W 20200810; US 202217832700 A 20220606