

Title (en)

ELECTRONIC ATOMIZATION DEVICE CAPABLE OF ANALYZING COMPOSITION AND CONTENT OF SOLUTION

Title (de)

ELEKTRONISCHE ZERSTÄUBUNGSVORRICHTUNG ZUR ANALYSE DER ZUSAMMENSETZUNG UND DES LÖSUNGSGEHALTS

Title (fr)

DISPOSITIF D'ATOMISATION ÉLECTRONIQUE POUVANT ANALYSER LA COMPOSITION ET LE CONTENU D'UNE SOLUTION

Publication

**EP 4144242 A4 20231025 (EN)**

Application

**EP 21822059 A 20210403**

Priority

- CN 202010513147 A 20200608
- CN 2021085497 W 20210403

Abstract (en)

[origin: EP4144242A1] An electronic vaporizing device capable of analyzing solution composition and content comprises a detachable cartridge (1) and a battery device (2). The cartridge (1) comprises a mouthpiece part (11) and a connection part (10). The battery device (2) comprises a connector (20), and comprises a battery housing (21), an electrically connected battery (22), a circuit control board (23), a light source element (24), and a spectral sensor element (25). The circuit control board (23) is arranged with a microcontroller (27) and a power control circuit (28). The microcontroller (27) comprises a storage unit (271), an analysis and comparison unit (272), and a control unit (273). The storage unit (271) stores calibration spectral information related to a plurality of sample solutions. The light source element (24) emits light rays which may pass through the transparent window (100) and to-be-vaporized solution and then received by the spectral sensor element (25). After the spectral sensor element (25) receives light rays, it sends corresponding detection spectral information. The analysis and comparison unit (272) performs analysis and comparison of the detection spectral information with the calibration spectral information, and the control unit (273) sends a control signal. The device can analyze composition and content of the to-be-vaporized solution to control the cartridge (1) to work.

IPC 8 full level

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CPC (source: CN EP US)

**A24F 40/40** (2020.01 - CN EP); **A24F 40/42** (2020.01 - US); **A24F 40/46** (2020.01 - US); **A24F 40/50** (2020.01 - CN);  
**A24F 40/51** (2020.01 - EP US); **A24F 40/53** (2020.01 - EP); **A24F 40/57** (2020.01 - US); **A24F 40/65** (2020.01 - CN EP US);  
**A24F 40/10** (2020.01 - EP)

Citation (search report)

- [X] US 2016262451 A1 20160915 - LIU QIUMING [CN]
- [A] GB 2533652 A 20160629 - FONTEM HOLDINGS 2 BV [NL]
- See references of WO 2021248997A1

Designated contracting state (EPC)

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