

Title (en)
ELECTRONIC CIGARETTE ATOMISER AND ELECTRONIC CIGARETTE

Title (de)
ZERSTÄUBER FÜR ELEKTRONISCHE ZIGARETTE UND ELEKTRONISCHE ZIGARETTE

Title (fr)
ATOMISEUR DE CIGARETTE ÉLECTRONIQUE ET CIGARETTE ÉLECTRONIQUE

Publication
EP 3991580 A4 20220824 (EN)

Application
EP 20833559 A 20200628

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Abstract (en)
[origin: EP3991580A1] An atomizer for electronic cigarette and an electronic cigarette (100'), the atomizer for electronic cigarette comprising an outer shell (10, 10b) and an end cover (20, 20b); a liquid storage cavity (30, 30b, 111') and an atomizing assembly (40, 40b, 10') are arranged inside the outer shell (10, 10b); the atomizing assembly (40, 40b, 10') comprises a porous body (41) and a heat generating body (42, 42a, 22'); the porous body (41) comprises a first side part (413) and a second side part (414) arranged opposite to one another, and an atomizing surface (412, 41b, 211') extending from the first side part (413) to the second side part (414), and the heat generating body (42, 42a, 22') being arranged on the atomizing surface (412, 41b, 211'); the atomizing surface (412, 41b, 211') and the end cover are spaced apart a certain distance and form an atomizing cavity (60, 60b, 121'), the atomizing cavity (60, 60b, 121') being in fluid communication with a smoke outlet channel by means of communication openings, and air inlets (25, 25a, 25b) being disposed on the end cover (20, 20b) or the outer shell (10, 10b); the air inlets (25, 25a, 25b) are arranged close to the first side part (413) along the direction of extension of the atomizing surface (412), and the communication openings are arranged close to the second side part (414) along the direction of extension of the atomizing surface (412), such that the air flow entering the atomizing cavity (60, 60b, 121') from the air inlets (25, 25a, 25b) flows towards the communication openings along the direction of extension of the atomizing surface (412, 41b, 211'). During suction of the atomizer, the air flow passes through the entire atomizing cavity (60, 60b, 121'), so that the aerosols escaping from the atomizing surface can be guided out with the air flow as much as possible to reduce entrapment.

IPC 8 full level
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A24F 40/10 (2020.01 - EP)

Citation (search report)
• [XAYI] US 2019191772 A1 20190627 - QIU WEIHUA [CN]
• [Y] CN 204146318 U 20150211 - SHENZHEN FIRST UNION TECH CO
• [A] CN 206079042 U 20170412 - SHENZHEN FIRST UNION TECH CO
• [A] EP 2460422 A1 20120606 - PHILIP MORRIS PROD [CH]
• [A] CN 207370092 U 20180518 - CHANGZHOU PAITENG ELECTRONIC TECH SERVICE CO LTD
• [A] CN 206620836 U 20171110 - CHINA TOBACCO HUNAN IND CO LTD
• [A] US 2018310614 A1 20181101 - XU YONGJIE JAMES [US]
• See references of WO 2020259692A1

Cited by
EP4295716A1

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