

Title (en)  
ATOMIZING CORE AND ITS MANUFACTURING METHOD, AND AN ATOMIZATION GENERATING DEVICE INCLUDING SAID ATOMIZING CORE

Title (de)  
ZERSTÄUBERKERN UND HERSTELLUNGSVERFAHREN SOWIE EINE ZERSTÄUBUNGSERZEUGUNGSVORRICHTUNG MIT BESAGTEM ZERSTÄUBUNGSKERN

Title (fr)  
NOYAU D'ATOMISATION ET SON PROCÉDÉ DE FABRICATION, ET DISPOSITIF DE GÉNÉRATION D'ATOMISATION COMPRENANT LEDIT NOYAU D'ATOMISATION

Publication  
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Application  
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Abstract (en)  
[origin: EP3510880A1] The present invention provides mainly a self-regulating smart atomizing core and its manufacturing method, and an atomization generating device including said atomizing core. Said atomizing core comprises a main body being consisted of grains (11, 12, 13) and having a first surface and a second surface set oppositely, a heating and atomizing layer is set on the second surface, the main body having open apertures (111, 121, 131) connecting the first surface and the second surface for allowing a liquid to pass through, the sizes of said open apertures among the grains of said main body decrease from the first surface to the second surface in the thickness direction, the first surface is configured, when it is in contact with the liquid, to allow the liquid flows into the apertures among the grains of said main body, pass through these apertures toward the second surface. During the liquid flowing through the main body, because apertures among the grains of the main body decrease from the first surface to the second surface, the flow rate of the liquid toward the second surface gradually increases and the pressure also gradually increases, which allow the liquid to arrive finally at the second surface and to be atomized under high rate and high pressure. The present invention provides also an atomization generating device for electronic cigarette, said atomization generating device may be sheet-type and/or negative-pressure type.

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Cited by  
CN110664017A; CN113666763A; CN114804833A; CN113636857A; CN113854645A; CN113712268A; CN114176270A; CN110477456A; CN113647696A; EP4062781A4; WO2022179232A3; WO2023071816A1; WO2023185019A1; WO2023035152A1; WO2024140179A1

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