

Title (en)  
ATOMIZATION CORE HAVING AIRFLOW BIN

Title (de)  
ZERSTÄUBUNGSKERN MIT LUFTSTROMKAMMER

Title (fr)  
NOYAU D'ATOMISATION AYANT UN COMPARTIMENT D'ÉCOULEMENT D'AIR

Publication  
**EP 4223157 A4 20240124 (EN)**

Application  
**EP 21960093 A 20211223**

Priority  
CN 2021140963 W 20211223

Abstract (en)  
[origin: EP4223157A1] The present invention provides an atomizing core which includes a heating unit, and a liquid transfer unit made of a porous material and configured for absorbing and transferring liquid. The liquid transfer unit includes an air guide part, and a base connected to and surrounding the air guide part. A gap between the air guide part and the base forms an air flow chamber. The liquid transfer unit is provided with an air inlet communicated with the air flow chamber, an air outlet communicated with the air flow chamber, and a liquid inlet part for contacting with the liquid. The heating unit includes a heating part which generates heat when energized, and electrical connection parts for transmitting currents to the heating part. The heating part is disposed on an inner wall of the air flow chamber and in contact with the liquid transfer unit. Due to the fact that the air flow chamber of the atomizing core is disposed in the liquid transfer unit made of a porous material and the heating part of the heating unit are disposed in the air flow chamber, the volume, flow rate and path of the air flow are determined mainly by the structure of the liquid transfer unit and not affected by other parts and the assembly relation of parts, so the consistency of the atomization effect is guaranteed.

IPC 8 full level  
**A24F 40/44** (2020.01); **A24F 40/46** (2020.01); **A24F 40/10** (2020.01)

CPC (source: EP KR)  
**A24F 40/10** (2020.01 - KR); **A24F 40/40** (2020.01 - KR); **A24F 40/44** (2020.01 - EP KR); **A24F 40/46** (2020.01 - EP KR);  
**A24F 40/485** (2020.01 - KR); **A24F 40/10** (2020.01 - EP)

Citation (search report)  
• [XI] CN 112089106 A 20201218 - SHENZHEN HUACHENGDA PREC INDUSTRY CO LTD  
• [X] US 2015201675 A1 20150723 - LORD CHRISTOPHER [GB]  
• [E] WO 2023102742 A1 20230615 - SHENZHEN HUACHENGDA PREC INDUSTRY CO LTD [CN]  
• [A] US 2018289067 A1 20181011 - COURBAT JEROME [CH], et al  
• [A] US 2017215481 A1 20170803 - LI YONGHAI [CN], et al  
• See also references of WO 2023115480A1

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4223157 A1 20230809; EP 4223157 A4 20240124; CA 3197824 A1 20230623; JP 2024518229 A 20240501; KR 20230098095 A 20230703; WO 2023115480 A1 20230629**

DOCDB simple family (application)  
**EP 21960093 A 20211223; CA 3197824 A 20211223; CN 2021140963 W 20211223; JP 2023556499 A 20211223; KR 20227044621 A 20211223**