Title (en)

NEBULIZER WITH NANOMETRIC FLOW RATE OF A LIQUID EFFLUENT AND NEBULIZING INSTALLATION COMPRISING SAME

Title (de)

ZERSTÄUBER MIT NANOMETRISCHEM DURCHFLUSS EINES AUSFLUSSES UND DIESEN UMFASSENDE ZERSTÄUBUNGSANLAGE

Title (fr)

NEBULISEUR A DEBIT NANOMETRIQUE D'UN EFFLUENT LIQUIDE ET INSTALLATION DE NEBULISATION COMPORTANT UN TEL NEBULISEUR.

Publication

EP 1888250 A2 20080220 (FR)

Application

EP 06764717 A 20060601

Priority

- FR 2006001249 W 20060601
- FR 0505884 A 20050609

Abstract (en)

[origin: WO2006131626A2] The invention concerns a nebulizer with nanometric flow rate of a liquid effluent in a nebulizing gas comprising at least, arranged substantially concentric, a capillary tube (6) for intake of the liquid effluent and a nebulizing needle (9) including a central channel (9b) fed with liquid effluent through the capillary tube (6), a chamber (4a) for intake of the nebulizing gas feeding a nozzle for expelling the nebulizing gas, the nebulizing needle passing through the intake chamber (4a) and the nozzle (4b) expelling the nebulizing gas, the nebulizing needle (9) including a outlet for the liquid effluent whereof the aperture diameter (F_a) is less than 20 ?m, the ratio of the diameter of the outlet of the nozzle (4b) expelling the nebulizing gas and the outlet (F_o) of the nebulizing needle being more than 10. The inventive nanometric flow rate nebulizer and nebulizing installation are applicable in mass spectrometry of trace elements contained in intracellular or microbiological medium for example.

IPC 8 full level

B05B 7/06 (2006.01); **G01N 21/73** (2006.01); **H01J 49/04** (2006.01)

CPC (source: EP US)

B05B 7/066 (2013.01 - EP US)

Citation (search report)

See references of WO 2006131626A2

Cited by

WO2012076368A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006131626 A2 20061214; **WO 2006131626 A3 20070329**; EP 1888250 A2 20080220; FR 2886871 A1 20061215; FR 2886871 B1 20081017; US 2009014640 A1 20090115; US 7863560 B2 20110104

DOCDB simple family (application)

FR 2006001249 W 20060601; EP 06764717 A 20060601; FR 0505884 A 20050609; US 91639606 A 20060601