

Title (en)  
PLASMA GENERATION DEVICE AND PLASMA TREATMENT METHOD

Title (de)  
PLASMAERZEUGUNGSVORRICHTUNG UND PLASMABESTRAHLUNGSVERFAHREN

Title (fr)  
DISPOSITIF DE GÉNÉRATION DE PLASMA ET PROCÉDÉ DE TRAITEMENT PAR PLASMA

Publication  
**EP 4037440 A4 20221116 (EN)**

Application  
**EP 19947409 A 20190927**

Priority  
JP 2019038099 W 20190927

Abstract (en)  
[origin: EP4037440A1] A plasma generation device includes a device main body formed with a reaction chamber for plasmatizing a processing gas, a ceramic nozzle formed with a first ejection port for ejecting a plasma gas that is plasmatized in the reaction chamber, and a metal nozzle cover in which a second ejection port for ejecting a gas so as to cover the plasma gas is formed to cover the first ejection port.

IPC 8 full level  
**H05H 1/26** (2006.01); **H05H 1/46** (2006.01)

CPC (source: EP)  
**H05H 1/466** (2021.05); **H05H 1/341** (2013.01)

Citation (search report)

- [X] JP 2010212182 A 20100924 - JAPAN RADIO CO LTD
- [X] JP H05174994 A 19930713 - ORIGIN ELECTRIC
- [X] EP 1893004 A1 20080227 - THERMAL DYNAMICS CORP [US]
- [A] WO 2019180839 A1 20190926 - FUJI CORP [JP]
- [A] JP S56126981 U 19810926
- [A] JP S57165370 U 19821018
- [XI] JP H08294779 A 19961112 - KOIKE SANSEI KOGYO KK
- [A] US 5220150 A 19930615 - PFENDER EMIL [US], et al
- [A] US 3830428 A 19740820 - DYOS G
- See also references of WO 2021059469A1

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)  
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DOCDB simple family (application)  
**EP 19947409 A 20190927**; CN 201980100638 A 20190927; JP 2019038099 W 20190927; JP 2021548108 A 20190927