

Title (en)
PLASMA DEVICE DRIVEN BY MULTIPLE-PHASE ALTERNATING OR PULSED ELECTRICAL CURRENT AND METHOD OF PRODUCING A PLASMA

Title (de)
PLASMAVORRICHTUNG MIT ANSTEUERUNG DURCH MEHRPHASIGEN WECHSEL- ODER GEPULSTEN STROM UND VERFAHREN ZUM HERSTELLEN EINES PLASMAS

Title (fr)
APPAREIL À PLASMA ENTRAÎNÉ PAR UN COURANT ÉLECTRIQUE PULSÉ OU ALTERNATIF MULTIPHASÉ ET PROCÉDÉ DE PRODUCTION D'UN PLASMA

Publication
EP 3377673 A4 20190731 (EN)

Application
EP 16866871 A 20161109

Priority
• US 201514942673 A 20151116
• US 201514942737 A 20151116
• US 2016061134 W 20161109

Abstract (en)
[origin: WO2017087233A1] A plasma source and method of producing a plasma are provided. The plasma source includes at least three hollow cathodes, including a first hollow cathode, a second hollow cathode, and a third hollow cathode, each hollow cathode having a plasma exit region. The plasma source includes a source of power capable of producing multiple output waves, including a first output wave, a second output wave, and a third output wave, wherein the first output wave and the second output wave are out of phase, the second output wave and the third output wave are out of phase, and the first output wave and the third output wave are out of phase. Each hollow cathode is electrically connected to the source of power such that the first hollow cathode is electrically connected to the first output wave, the second hollow cathode is electrically connected to the second output wave, and the third is electrically connected to the third output wave.

IPC 8 full level
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CPC (source: EP KR)
B01J 19/08 (2013.01 - KR); **C03C 17/001** (2013.01 - KR); **C23C 16/50** (2013.01 - EP KR); **H01J 37/32568** (2013.01 - EP); **H01J 37/32577** (2013.01 - EP); **H01J 37/32596** (2013.01 - EP); **H05H 1/44** (2013.01 - EP KR); **C03C 17/001** (2013.01 - EP); **C03C 2218/153** (2013.01 - EP KR); **H05H 2245/40** (2021.05 - EP KR)

Citation (search report)
• [XII] US 7411353 B1 20080812 - RUTBERG ALEXANDER P [US], et al
• [A] US 5609690 A 19970311 - WATANABE SYOUZOU [JP], et al
• [A] US 2010028238 A1 20100204 - MASCHWITZ PETER [US]
• [A] EP 2915902 A1 20150909 - ASAHI GLASS CO LTD [JP]
• See references of WO 2017087233A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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