

Title (en)

MAGNET-FREE GENERATION OF ION PULSES

Title (de)

MAGNETFREIE ERZEUGUNG VON IONENPULSEN

Title (fr)

GÉNÉRATION NON MAGNÉTIQUE D'IMPULSIONS D'IONS

Publication

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Application

EP 17726938 A 20170531

Priority

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- EP 2017063084 W 20170531

Abstract (en)

[origin: WO2017211627A1] The invention relates to a device and to a method for generating, storing, and liberating ions from a residual gas atmosphere, comprising an electron source for liberating electrons, an anode that is permeable to the electrons liberated by the electron source and has a negative spatial charge distribution, formed by the electrons, within an ion storage chamber at least partly surrounded by the anode, and a pulse electrode, isolated electrically from the anode, for extracting the ions from the storage chamber, wherein there are no further electrodes within the ion storage chamber and the ion storage chamber has a spatial potential distribution that is attractive to the ions generated by ionization of the residual gas atmosphere exclusively on the basis of the negative spatial charge distribution produced by the electrons, and stores ions.

IPC 8 full level

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CPC (source: EP)

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Citation (examination)

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- US 3839655 A 19741001 - HELGELAND W, et al
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- "Vacuum Physics and Technology", vol. 14, 1 January 1980, ELSEVIER, ISBN: 978-0-12-475914-5, ISSN: 0076-695X, article AUTHOR UNKNOWN ET AL: "3. Partial Pressure Measurement", pages: 81 - 100, XP093123919, DOI: 10.1016/S0076-695X(08)60372-5
- "Vacuum Physics and Technology", vol. 14, 1 January 1980, ELSEVIER, ISBN: 978-0-12-475914-5, ISSN: 0076-695X, article AUTHOR UNKNOWN ET AL: "3. Partial Pressure Measurement", pages: 81 - 100, XP093123919, DOI: 10.1016/S0076-695X(08)60372-5

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