

Title (en)  
PENETRATING PLASMA GENERATING APPARATUS FOR HIGH VACUUM CHAMBERS

Title (de)  
EINDRINGENDE VORRICHTUNG ZUR PLASMAERZEUGUNG FÜR HOCHVAKUUMKAMMERN

Title (fr)  
APPAREIL DE GÉNÉRATION DE PLASMA PÉNÉTRANT POUR CHAMBRES À VIDE ÉLEVÉ

Publication  
**EP 2471087 A1 20120704 (EN)**

Application  
**EP 10769069 A 20100829**

Priority  
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• IL 2010000707 W 20100829

Abstract (en)  
[origin: WO2011024174A1] Plasma generating apparatus including a high vacuum processing chamber, a transformer type plasmatron, coupled with the high vacuum processing chamber, and at least one gas source, coupled with the transformer type plasmatron, for introducing at least one gas into the transformer type plasmatron, the high vacuum processing chamber comprising at least one entry port, the transformer type plasmatron including a radio frequency power source, for generating alternating current power, a plurality of conductors, coupled with the radio frequency power source, a closed loop discharge chamber, for confining the gas, a plurality of high permeability magnetic cores, coupled around an outer portion of the closed loop discharge chamber and with the conductors, a plurality of apertures, located along an inner portion of the closed loop discharge chamber, and at least two dielectric gaskets, for coupling the inner portion with the outer portion, wherein the entry port is configured to receive the inner portion such that the inner portion physically penetrates the high vacuum processing chamber, the conductors forming a primary winding around the plurality of high permeability magnetic cores, the gas in the closed loop discharge chamber forming a secondary winding around the plurality of high permeability magnetic cores, wherein the transformer type plasmatron igniting the gas into at least one respective plasma when the conductors are provided with the alternating current power, and the apertures releasing the respective plasma from the inner portion into the high vacuum processing chamber.

IPC 8 full level  
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