Title (en)

METHOD OF PLASMA INCISION OF MATTER WITH A SPECIFICALLY TUNED RADIOFREQUENCY ELECTROMAGNETIC FIELD GENERATOR

Title (de)

VERFAHREN ZUM PLASMASCHNEIDEN VON MATERIE MITTELS SPEZIELL ABGESTIMMTEN ELEKTROMAGNETISCHEN FELDGENERATOREN

Title (fr)

TECHNIQUE D'INCISION AU PLASMA D'UN MATERIAU A L'AIDE D'UN GENERATEUR DE CHAMP ELECTROMAGNETIQUE A FREQUENCES RADIOELECTRIQUES ACCORDEES DE MANIERE SPECIFIQUE

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Application

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Abstract (en)

[origin: WO9921496A1] The present invention is a device to place an incision into matter (32) with a harmonious plasma cloud. A radio frequency generator system (10) produces electromagnetic waveform which is transmitted by an active transmitter incising electrode tip (28). This electromagnetic wave is utilized to initiate a plasma cloud with processes such as thermal ionization, and a photoelectric effect which then triggers an avalanche effect for charged atomic particles at the surface of the active transmitter incising electrode tip (28). This electromagnetic wave is impedance matched, frequency matched, power matched, tuned to the plasma cloud in order to sustain, control a harmonious plasma cloud which demonstrates reduced atomic particle turbulence, and chaos while forming a coating over the surface of the active transmitter incising electrode tip (28). The magnetic bottle effect, the pinch effect, and the tunnelling effect are employed to trap, contain, compress, contour, focus, and amplify the energy of the incising plasma cloud.

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