

Title (en)
SURFACE-WAVE APPLICATOR AND METHOD FOR PLASMA PRODUCTION

Title (de)
OBERFLÄCHENWELLENAPPLIKATOR UND VERFAHREN ZUR PLASMAERZEUGUNG

Title (fr)
APPLICATEUR D'ONDE DE SURFACE ET PROCÉDÉ POUR LA PRODUCTION DE PLASMA

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Abstract (en)
[origin: WO2014009412A1] The invention relates to a surface-wave applicator (1) for plasma production, comprising: an electrically conductive coaxial assembly (2) formed by a central core (20) and an outer tubular conductor (21) surrounding the central core (20) and separated from same by an annular space (22) allowing propagation of an electromagnetic wave (W); and a dielectric tube (3) inserted, at the end of the coaxial assembly (2), into the annular electromagnetic wave propagation space (22) and extending beyond the output plane (Y) of the applicator by a length at least twice the outside diameter of the tube (3), such that an electromagnetic wave (W) being propagated in the coaxial assembly (2) is introduced into the section of the dielectric tube (3) along the longitudinal direction (X) of the tube (3) in order to produce a surface-wave plasma along the portion of the dielectric tube in which the inner wall (30) and/or the outer wall (31) is in contact with a plasma gas (4).

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