

Title (en)
METHOD FOR PLASMA WELDING

Title (de)
VERFAHREN ZUM PLASMASCHWEISSEN

Title (fr)
PROCEDE DE SOUDAGE AU PLASMA

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Application
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Abstract (en)
[origin: WO02076158A1] The invention relates to a method for plasma welding by means of a free microwave induced plasma jet which is produced according to the following method: microwaves are produced in a high frequency microwave source; the microwaves are guided in a wave guide (1); process gas is introduced into a microwave transparent tube (2) which comprises a gas inlet (4) and a gas outlet (3) at a pressure $p \leq 1$ bar, the process gas being introduced into the microwave transparent tube (2) via the gas inlet (4) so that it comprises a tangential flow component; a plasma (7) is produced in the microwave transparent tube (2) by igniting the process gases without electrodes; a jet of plasma (17) is produced by introducing the plasma into the work chamber (16) through a metallic expansion nozzle (5) arranged on the gas outlet (3) of the tube (2).

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