

Title (en)

LASER BEAM WELDING METHOD WITH A METAL VAPOUR CAPILLARY FORMATION CONTROL

Title (de)

LASERSTRAHLSCHWEISSVERFAHREN MIT EINER STEUERUNG FÜR DIE BILDUNG EINER METALLDAMPFKAPILLARE

Title (fr)

PROCEDE DE SOUDAGE PAR FAISCEAU LASER AVEC CONTROLE DE LA FORMATION DU CAPILLAIRE DE VAPEURS METALLIQUES

Publication

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Application

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Priority

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- FR 0553197 A 20051021

Abstract (en)

[origin: WO2007045798A1] The invention relates to a method for welding at least one, preferably two metal parts to each other, by a laser beam consisting in using a laser beam (10), a first gas flow and a welding nozzle provided with an output orifice which is passed through by the laser beam and the first gas flow and in welding the part(s) by melting the metal thereof at a point of the laser beam impact with said weldable part(s) in such a way that a capillary (11) or a key hole (12) filled with metal vapour is formed. During welding, the first gas flow is directed only to the aperture of the metal vapour capillary in a direction perpendicular to the weldable part(s) in such a way that a dynamic gas pressure is produced.

IPC 8 full level

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