

Title (en)
METHOD FOR THE PLASMA, LASER OR ELECTRON BEAM WELDING OF IDENTICAL OR DIFFERENT MATERIALS WITH A TENDENCY FOR EXCESSIVE HARDENING, WITH COPPER OR A COPPER ALLOY AS A FILLER MATERIAL

Title (de)
VERFAHREN ZUM PLASMA-, LASER- ODER ELEKTRONSTRAHLSCHWEISSEN VON ZU HOHER AUFHÄRTUNG NEIGENDEN ARTGLEICHEN ODER ARTVERSCHIEDENEN WERKSTOFFEN MIT KUPFER ODER EINER KUPFERLEGIERUNG ALS ZUSATZMATERIAL

Title (fr)
PROCEDE DE SOUDAGE AU PLASMA, AU LASER OU PAR BOMBARDEMENT ELECTRONIQUE DE MATERIAUX IDENTIQUES OU DIFFERENTS AYANT UNE TENDANCE AU DURCISSEMENT TROP GRANDE A L'AIDE DE CUIVRE OU D'UN ALLIAGE DE CUIVRE EN TANT QUE MATERIAU AUXILIAIRE

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Abstract (en)
[origin: WO2005030423A1] The invention relates to a method for welding identical or different materials (1, 2) with a tendency for excessive hardening, such as cast iron, cast steel, malleable iron, sintering material, case-hardened steel, steel with a high C content, annealed steel, high-strength steel etc., said method using a high-energy beam. The aim of the invention is to be able to assemble highly precise, delicate, finished elements (1, 2) by means of welding, and this in a cost-effective manner. To this end, copper or an alloy with a high copper content, and the material(s) to be welded defining the weld seam, are melted in the weld seam by means of the high energy beam, and the material(s) are welded by the solidification of the melted mass formed.

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