

Title (en)  
PREPARATION METHOD OF STEEL PRODUCT HAVING DIFFERENT STRENGTHS USING LASER HEAT TREATMENT, AND HEAT HARDENED STEEL USED THEREIN

Title (de)  
HERSTELLUNGSVERFAHREN FÜR EIN STAHLPRODUKT MI5 UNTERSCHIEDLICHEN STÄRKEN MITTELS LASERWÄRMEBEHANDLUNG UND WÄRMEGEHÄRTETER STAHL DAFÜR

Title (fr)  
PROCÉDÉ DE PRÉPARATION D'UN PRODUIT D'ACIER AYANT DIFFÉRENTES RÉSISTANCES À L'AIDE D'UN TRAITEMENT PAR CHAUFFAGE LASER ET ACIER DURCI PAR CHAUFFAGE UTILISÉ DANS CE PROCÉDÉ

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Application  
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Abstract (en)  
[origin: EP2762577A1] Disclosed are a preparation method of a steel product capable of local reinforcement using laser heat treatment, and a heat hardened steel used in the method. According to the present invention, the preparation method of a steel part comprises the following steps: (a) preparing a material comprising 0.1-0.5 wt% of C, 0.1-0.5 wt% of Si, 0.5-3.0 wt% of Mn, 0.1 wt% or less of P, 0.05 wt% or less of S, 0.01-1.0 wt% of Cr, 0.1 wt% or less of Al, 0.2 wt% or less of Ti, 0.0005-0.08 wt% of B, and the balance of Fe and inevitable impurities; (b) preparing a formed product by forming the material into a predetermined shape; and (c) locally reinforcing the high strength portion by carrying out laser heat treatment on a portion requiring high strength at the formed product.

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