

Title (en)

Method of straightening and calibrating a railway bogie frame by means of magnetic induction heating

Title (de)

Verfahren zum Geradebiegen und Kalibrieren eines Eisenbahndrehgestells mithilfe von magnetischer Induktionsheizung

Title (fr)

Procédé de redressage et d' étalonnage d'une structure de bogie au moyen d'un chauffage par induction magnétique

Publication

EP 2192016 A1 20100602 (EN)

Application

EP 08425762 A 20081126

Priority

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Abstract (en)

A method of straightening and calibrating a railway bogie frame (1) carried out by reciprocally connecting, by means of electric soldering operations, metal portions shaped by means of previous production cycles; during the electric soldering operations, the metal material undergoes a thermal cycle which produces melted zones and thermally altered zones (Z) in which residual strains introduced by rapidly heating/cooling the metal are present. The frame is then subjected to a step of heating in a furnace which does not completely eliminate the distortions in the frame because some parts thereof may not be aligned with respect to the nominal shape. The method of straightening and calibrating by heating comprises the step of applying loads to the frame and punctually heating at least one portion of the frame itself by arranging an inductor (20) facing the portion and feeding an alternating current to the inductor (20) so as to generate induced currents in the metal portion facing the inductor (20); such induced currents close in the metal portion, which is heated in a concentrated, punctual manner by Joule effect.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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