

Title (en)  
METHOD FOR THE LOCAL FIXING OF RAILWAY WHEEL-SETS

Title (de)  
VERFAHREN ZUR LOKALEN FESTIGUNG VON EISENBAHNRADSÄTZEN

Title (fr)  
PROCÉDÉ DE RENFORCEMENT LOCAL D'ESSIEUX DE VÉHICULE FERROVIAIRE

Publication  
**EP 2179067 A1 20100428 (DE)**

Application  
**EP 08789046 A 20080808**

Priority

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Abstract (en)  
[origin: CA2697059A1] The object of the invention is increasing the service life or service performance of railway wheel-sets. The said technical effect is achieved in that in the method for increasing the service life or service performance of the railway wheel-sets, wherein each wheel is configured in the form of a cylindrical working part having a running or rolling surface and a rim being connected to the same via a radius transition, the metal hardening of the wheel-set, or of a wheel is carried out by means of transmission of electricity via rotating contact rollers, which are pressed onto the surface to be treated under pressure, wherein the heating and hardening of the surface is carried out in the form of one or more strips. The invention is characterized in that the heating for the hardening can be carried out in two annular sections, or annular zones, wherein the limit of the first section begins at the connecting line of the radius transition at the beginning of the rolling surface, and may extend across the entire width of the rolling surface. Preferably, the first annular section extends across a distance of approximately 30 mm at the width of the rolling surface. The limit of the second section begins at the connecting line of the radius transition at the adjacent rim surface and preferably extends up to 35 mm in the width of the rim surface. The local heating in each of the said sections is carried out in the form of one or more annular strips, wherein the heating temperature exceeds the temperature of the phase transition AC3 by approximately 60 - 280 °C. If the heating is carried out along multiple strips the distances between the sections of the heat emission of each strip is preferably at least approximately 2-4 mm from each side of the heating zone. The rotational speed of the wheel-set at heating is preferably approximately 3.5 - 15 rotations per hour.

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