

Title (en)

APPARATUS FOR THE CONTROLLED THERMAL TREATMENT OF RAILROAD-SWITCH COMPONENTS

Publication

**EP 0247021 A3 19880907 (DE)**

Application

**EP 87890068 A 19870408**

Priority

AT 137186 A 19860522

Abstract (en)

[origin: EP0247021A2] For the thermal treatment of railroad-switch components, the latter are austenitised over their entire profile cross-section and subsequently are cooled rapidly to transformation temperature. The cooling and maintaining at transformation temperature is effected using nozzles (4) accommodated in penstocks (1) and capable of being oriented in order to keep the cooling rate and the temperature as constant as possible over the entire cross-section. In addition, the supply of coolant to the nozzles can be controlled so that the hardness of the component decreases towards the welding ends. (Fig. 1). <IMAGE>

IPC 1-7

**C21D 9/04; C21D 1/667**

IPC 8 full level

**C21D 1/667** (2006.01); **C21D 9/04** (2006.01)

CPC (source: EP)

**C21D 1/667** (2013.01); **C21D 9/04** (2013.01)

Citation (search report)

- [AD] DE 3209918 A1 19831006 - KLOECKNER WERKE AG [DE]
- [AD] AT 323224 B 19750625 - WENDEL SIDELOR [FR]
- [AD] DE 2541978 A1 19770324 - KRUPP AG HUETTENWERKE [DE], et al
- [AD] EP 0161236 A2 19851113 - CENTRE RECH METALLURGIQUE [BE], et al
- [AD] DE 249086 C

Cited by

EP0924003A3; EP2573194A4; US5482576A; CN103898303A; US6178768B1; WO9314230A1

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