Title (en)

METHOD AND APPARATUS FOR PRODUCING HIGH RESISTANT RAILS

Publication

EP 0252895 B1 19921021 (FR)

Application

EP 87870094 A 19870707

Priority

LU 86510 A 19860710

Abstract (en)

[origin: US4810311A] Starting from a temperature at or above the A3 transformation point of the steel of the rail, the head of the rail is cooled to a temperature not lower than the Ms point at a rate lower than the critical quenching rate so that the head acquires a fine perlitic structure. Simultaneously the web is superficially cooled to the Ms point or below, at a rate greater than the head, so as to obtain a surface layer of martensite and/or bainite, and the surface cooling is controlled so that, at the end of controlled cooling, internal portions of the web not transformed to martensite and/or bainite retain sufficient heat to temper the surface layer during subsequent cooling to ambient temperature. At the same time the flange of the rail is cooled at a rate ensuring straightness of the rail.

IPC 1-7

C21D 9/04

IPC 8 full level

C21D 1/19 (2006.01); **C21D 9/04** (2006.01)

CPC (source: EP US)

C21D 1/19 (2013.01 - EP US); **C21D 9/04** (2013.01 - EP US)

Citation (examination)

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