

Title (en)

PROCESS FOR HEAT EXCHANGE AND ITS USE IN THE CONTROLLED COOLING OF ROLLED PRODUCTS

Publication

**EP 0312843 B1 19921216 (DE)**

Application

**EP 88116561 A 19881006**

Priority

- DE 3735789 A 19871022
- DE 3735790 A 19871022

Abstract (en)

[origin: EP0312843A1] A process for heat exchange between liquid media, on the one hand, and likewise liquid media or solid bodies, on the other hand, if this is effected by means of flow or the solid body is subjected on all sides to a guided flow of liquid medium. A predetermined proportion of a gaseous medium is continuously admixed to the last-mentioned liquid medium, e.g. in the temperature-controlled cooling of rolling stock, in such a way that, during and after the deformation by rolling, the rolling stock is fed in in rolling-stock guide tubes (FR) through which water flows and to which the water is fed with a presettable inlet pressure from an annular nozzle 8, 9a of adjustable outlet cross-section which surrounds the rolling stock conveyed in in a feed tube, and the size of the outlet cross-section and/or of the inlet pressure is of adjustable magnitude, such that, taking effect as an injection nozzle, the annular nozzle 8, 8a produces mixtures of the water emerging from the outlet cross-section with the air drawn in from the feed tube in correspondingly different proportions. <IMAGE>

IPC 1-7

**B21B 45/02**

IPC 8 full level

**B21B 45/02** (2006.01); **C21D 9/573** (2006.01)

CPC (source: EP)

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Cited by

CN101947564A; CN113070354A; EP0882804A1; US6096146A; EP0737524A1; US5617735A; AU702427B2; CN103252366A

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