Title (en)

Primary cooling method in continuously annealing steel strips

Title (de)

Primärkühlverfahren für das kontinuierliche Glühen von Stahlbändern

Title (fr)

Procédé de refroidissement primaire pour le recuit en continu de bandes d'acier

Publication

EP 0803583 A3 19990120 (EN)

Application

EP 97105044 A 19970325

Priority

JP 13085196 A 19960426

Abstract (en)

[origin: EP0803583A2] In a primary cooling method in continuously annealing steel strips which comprises a heating step (A), a soaking step (B), a primary cooling step (C) including at least a rapid cooling step in a second half thereof, an overaging step (D), and a final cooling step (E), inert atmosphere gas containing H2 gas is employed as cooling gas for use in the rapid cooling step and concentration of the H2 gas is switched between two ranges of low and high concentrations of H2 gas, depending on the required cooling rate of the rapid cooling step corresponding to the product grades of steel strips (26). Accordingly, the consumption of expensive H2 gas is reduced thus enhancing the economy of the cooling operation while assuring the safety and efficiency of the primary cooling operation. <IMAGE>

IPC 1-7

C21D 9/573

IPC 8 full level

C21D 1/613 (2006.01); **C21D 9/573** (2006.01); C21D 1/667 (2006.01)

CPC (source: EP)

C21D 1/613 (2013.01); **C21D 9/573** (2013.01); C21D 1/667 (2013.01)

Citation (search report)

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- [Y] US 5137586 A 19920811 - KLINK JAMES H [US]
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- [A] DE 3736501 C1 19880609 - DEGUSSA
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