

Title (en)

Process and device for quenching of metal pieces

Title (de)

Verfahren und Vorrichtung zum Abschrecken metallischer Werkstücke

Title (fr)

Procédé et dispositif de trempe de pièces métalliques

Publication

EP 0562250 B1 19971119 (DE)

Application

EP 93101876 A 19930206

Priority

DE 4208485 A 19920317

Abstract (en)

[origin: EP0562250A1] For quenching heated metal workpieces (15) at a quenching intensity which is in a range typical for oil- or water-quenching with an H-value of 0.2 to 4, the quenching medium used is a cooling gas which is made to act in the form of discrete impingement jets issuing from a nozzle field onto the workpiece surface which is to be cooled. With a limitation of the delivery rate for the cooling gas to a preset maximum limit of about 1,000 kW/m<2> of nozzle field, the quenching intensity is brought to a value of between H = 0.2 and H = 4 by appropriate selection of gas jet parameters, in particular the gas velocity w, the gas pressure p, the gas jet cross-sectional area and the number of the impingement jets per unit area. <IMAGE>

IPC 1-7

C21D 1/613; **C21D 1/667**

IPC 8 full level

C21D 1/18 (2006.01); **C21D 1/613** (2006.01); **C21D 1/667** (2006.01); **C21D 9/40** (2006.01)

CPC (source: EP US)

C21D 1/613 (2013.01 - EP US); **C21D 1/667** (2013.01 - EP US); **C21D 9/40** (2013.01 - EP US)

Cited by

EP0727498A1; EP0690138A1; US5630322A; FR2844809A1; DE19961208B4; AT405190B; KR100953818B1; WO2004027098A1

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DOCDB simple family (publication)

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