

Title (en)

METHOD FOR HEAT TREATING STEEL WORK PIECES

Publication

EP 0253176 A3 19890816 (DE)

Application

EP 87109238 A 19870626

Priority

DE 3623105 A 19860709

Abstract (en)

[origin: EP0253176A2] For heat treating iron and steel work pieces, the latter are heated up in a vacuum and cooled by blasting with inert gas under pressure. Martensite is formed evenly over the entire charge if, after rapid cooling to martensite-forming temperature, temperature equalisation between charge surface and charge interior is brought about by slowing down the gas-circulating velocity. For this purpose, the temperature of the charge surface is measured and the temperature course in the charge interior simulated by means of a computer program into which the charge-specific parameters have been previously fed.

IPC 1-7

C21D 1/74; C21D 1/773

IPC 8 full level

C21D 1/613 (2006.01); **C21D 1/22** (2006.01); **C21D 1/767** (2006.01); **C21D 11/00** (2006.01); **F27B 5/16** (2006.01)

CPC (source: EP)

C21D 1/22 (2013.01); **C21D 1/767** (2013.01); **C21D 11/00** (2013.01); **F27B 5/16** (2013.01); **F27B 2005/161** (2013.01)

Citation (search report)

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- [AD] FACHBERICHTE HÜTTENPRAXIS METALLWEITERVERARBEITUNG, Band 23, Nr. 9, 1985, Seiten 717-721, Sprechsaal-Verlag, Coburg, DE; P. LISTEMANN: "Neuere Entwicklungen auf dem Gebiet der Vakuum-Wärmebehandlung"
- [A] PATENT ABSTRACTS OF JAPAN, Band 8, Nr. 71 (C-217)[1508], 3. April 1984; & JP-A-58 224 121 (SUMITOMO KINZOKU KOGYO K.K.) 26-12-1983
- [A] PATENT ABSTRACTS OF JAPAN, Band 8, Nr. 225 (C-247)[1662], 16. Oktober 1984; & JP-A-59 110 735 (KAWASAKI SEITETSU K.K.) 26-06-1984

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Designated contracting state (EPC)

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