

Title (en)
Process for heat treatment

Title (de)
Verfahren zur Wärmebehandlung

Title (fr)
Procédé de traitement thermique

Publication
EP 1842930 A1 20071010 (DE)

Application
EP 06015702 A 20060727

Priority
DE 102006015739 A 20060404

Abstract (en)
In a heat treatment process work pieces are placed within an oven in which the existing hot atmosphere is circulated by the jet injection of a further gas e.g. nitrogen to drive the circulation process. The injected gas is introduced essentially transverse to the oven longitudinal axis at a speed above 50 m/s, preferably above the speed of sound and at a pressure of 2 to 10 bar. The gas is injected in pulses together with a gaseous or liquid hydrocarbon agent at a pressure above 100 bar.

Abstract (de)
Die Erfindung betrifft ein Verfahren zur Wärmebehandlung von Werkstücken in einem Wärmebehandlungsofen, wobei die Behandlungsatmosphäre in dem Wärmebehandlungsofen umgewälzt wird. Erfindungsgemäß wird ein Treibgas so in den Wärmebehandlungsofen eingedüst, dass die Behandlungsatmosphäre im Wesentlichen durch das eingedüste Treibgas umgewälzt wird.

IPC 8 full level
C21D 1/767 (2006.01); **C21D 9/00** (2006.01); **F27B 9/30** (2006.01); **F27D 7/02** (2006.01)

CPC (source: EP)
C21D 1/767 (2013.01); **C21D 9/0056** (2013.01); **F27B 9/3011** (2013.01); **F27D 7/02** (2013.01)

Citation (search report)

- [XA] US 4191525 A 19800304 - SALLMAN CHARLES M [US]
- [X] US 5795146 A 19980818 - ORBECK GARY A [US]
- [DX] EP 0355520 A2 19900228 - LINDE AG [DE]
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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

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