

Title (en)

Method of heat treating in vacuum furnaces.

Title (de)

Verfahren zur Wärmebehandlung in Vakuumöfen.

Title (fr)

Procédé pour le traitement thermique dans un four à vide.

Publication

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Application

**EP 91105103 A 19910328**

Priority

DE 4100989 A 19910115

Abstract (en)

[origin: EP0495151A1] The invention relates to the heat treatment of workpieces in a vacuum furnace, using hydrogen. For convective heating and for high-pressure gas-quenching of the workpieces, usually nitrogen and helium are used. To achieve shorter heating and/or cooling times, the use of hydrogen is desirable, but this raises safety engineering problems. The risks are here considerably reduced if, according to the invention, a space which surrounds at least a part of the vacuum furnace and is insulated gas-tight is flushed with an inert gas and continuously checked for its hydrogen content and oxygen content.

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