

Title (en)

Installation and process for the transport of metallic workpieces and installation for the heat treatment of metallic workpieces

Title (de)

Vorrichtung und Verfahren zum Transportieren metallischer Werkstücke sowie Anlage zur Wärmebehandlung dieser Werkstücke

Title (fr)

Installation et procédé pour transporter des pièces métalliques ainsi qu'une installation pour le traitement thermique de ces pièces

Publication

EP 1229137 B1 20060809 (DE)

Application

EP 01101852 A 20010126

Priority

EP 01101852 A 20010126

Abstract (en)

[origin: EP1555330A2] The arrangement has a heat-insulated transport chamber (10) to hold work pieces (20). The chamber is moved horizontally and designed to be vacuum-tight, and evacuated of air to create vacuum to protect work pieces from environmental influences. The chamber has a heating unit for heating a treatment chamber. The transport chamber has removable thermal insulation made of steel. A vacuum pump evacuates the air from the transport chamber. Independent claims are also included for the following: (a) a system for heat treating metallic work pieces; and (b) a method of transporting metallic work pieces during a heat treatment process.

IPC 8 full level

C21D 9/00 (2006.01); **F27D 3/00** (2006.01); **F27D 3/12** (2006.01); **C21D 1/773** (2006.01)

CPC (source: EP US)

C21D 9/0018 (2013.01 - EP US); **C21D 9/0025** (2013.01 - EP US); **F27D 3/0024** (2013.01 - EP US); **F27D 3/12** (2013.01 - EP US); **C21D 1/773** (2013.01 - EP US); **C21D 9/0056** (2013.01 - EP US)

Cited by

EP1473372A1; EP1323995A3; DE20305423U1; EP1464905A1; DE10359458B4; DE10359458A1; US6902635B2; DE102009041927A1; WO2006024780A1; WO2004009855A1

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EP 1555330 A2 20050720; **EP 1555330 A3 20060412**; **EP 1555330 B1 20070509**; AT E335859 T1 20060915; AT E362000 T1 20070615; CN 1374408 A 20021016; DE 50110689 D1 20060921; DE 50112495 D1 20070621; EP 1229137 A1 20020807; EP 1229137 B1 20060809; ES 2270907 T3 20070416; ES 2285597 T3 20071116; US 2002146659 A1 20021010; US 6749800 B2 20040615

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EP 05008611 A 20010126; AT 01101852 T 20010126; AT 05008611 T 20010126; CN 02100915 A 20020107; DE 50110689 T 20010126; DE 50112495 T 20010126; EP 01101852 A 20010126; ES 01101852 T 20010126; ES 05008611 T 20010126; US 5657802 A 20020125