

Title (en)  
Oven assembly and hot forming line

Title (de)  
Ofenanlage und Warmformlinie

Title (fr)  
Installation de four et ligne de forme de chauffe

Publication  
**EP 1867738 A2 20071219 (DE)**

Application  
**EP 07006511 A 20070329**

Priority  
DE 102006027625 A 20060613

Abstract (en)  
The oven assembly for the thermal treatment of steel sheets or steel sheet components, comprises a heating zone (H), which is formed from an initial furnace module (16) and an end furnace module (17), between which an extension furnace module (18) is integratable. Each of the furnace modules is equipped with a heating mechanism (23) and has a conveyor (24). The length of the extension furnace module corresponds to the overall length of the initial furnace module and the end furnace module. The furnace modules are coupled with one another over flanges (19, 20). The oven assembly for the thermal treatment of steel sheets or steel sheet components, comprises a heating zone (H), which is formed from an initial furnace module (16) and an end furnace module (17), between which an extension furnace module (18) is integratable. Each of the furnace modules is equipped with a heating mechanism (23) and has a conveyor (24). The length of the extension furnace module corresponds to the overall length of the initial furnace module and the end furnace module. The furnace modules are coupled with one another over flanges (19, 20) situated at the end with the incorporation of a seal. The adjacent furnace modules are coupled with one another. The furnace module is provided with an inert gas supply. An independent claim is included for a hot forming line for the production of a hardened sheet metal.

Abstract (de)  
Die Erfindung betrifft eine Ofenanlage 5 und eine Warmformlinie zur Herstellung von gehärteten Stahlblechprofilbauteilen 9 mit einer solchen Ofenanlage 5 in Form eines Durchlaufofens. Erfindungsgemäß ist vorgesehen, dass die Heizzone H der Ofenanlage 5 aus miteinander trennbar gekoppelten Ofenmodulen 16-18 gebildet ist. Die Ofenmodule 16-18 sind über endseitige Flansche unter Eingliederung einer Dichtung miteinander gekoppelt. Jedes Ofenmodul 16-18 ist mit den notwendigen Heizeinrichtungen und Fördermitteln ausgerüstet. Im Bedarfsfall kann die Ofenanlage 5 durch Eingliederung von Erweiterungs-Ofenmodulen 18 an gestiegene Leistungsanforderungen angepasst und in der Kapazität vergrößert werden.

IPC 8 full level  
**C21D 9/56** (2006.01); **C21D 1/18** (2006.01); **C21D 9/46** (2006.01); **F27B 9/02** (2006.01); **F27B 9/38** (2006.01); **F27B 9/39** (2006.01)

CPC (source: EP US)  
**C21D 1/18** (2013.01 - EP US); **C21D 1/673** (2013.01 - EP US); **C21D 9/0056** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C21D 9/56** (2013.01 - EP US); **F27B 9/02** (2013.01 - EP US); **F27B 9/38** (2013.01 - EP US); **F27B 9/39** (2013.01 - EP US)

Citation (applicant)  
• DE 1010547 B 19570619 - INTER CONTINENTALER HUETTENBAU  
• DE 10128200 B4 20040722 - BENTELER AUTOMOBILTECHNIK GMBH [DE]  
• DE 10254695 B3 20040415 - DAIMLER CHRYSLER AG [DE]  
• US 5923699 A 19990713 - SWANGER W SHANE [US]  
• FR 2369228 A1 19780526 - SECAIL JEAN [FR]  
• DE 1433840 A1 19681212 - CHOMAT LOUIS GOLFE JUAN

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CN106715725A; US10612108B2; WO2016012442A1

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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