

Title (en)
Hot forming line

Title (de)
Warmformlinie

Title (fr)
Ligne de formage à chaud

Publication
EP 1867738 B2 20160831 (DE)

Application
EP 07006511 A 20070329

Priority
DE 102006027625 A 20060613

Abstract (en)
[origin: DE102006027625B3] 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.

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 (opposition)
Opponent :

- DE 1433841 A1 19681010 - CHOMAT LOUIS GOLFE JUAN
- US 2001055740 A1 20011227 - BLOOM DAVID [US], et al
- US 5669992 A 19970923 - BRONSEMA BRAND [US], et al
- DE 716709 C 19420127 - INDUGAS IND & GASOFEN BAUGESEL
- "HICON roller hearth furnaces for solution heat treating plate and sheet - operating results and experience gained on existing facilities", HICON ALUMINUM 2002 - PAPER 10, Seiten 1-18

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CN106715725A; US10612108B2; WO2016012442A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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DOCDB simple family (application)
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