

Title (en)  
DEVICE AND METHOD FOR HEAT-TREATING STEEL WIRES

Title (de)  
VORRICHTUNG UND VERFAHREN ZUM WÄRMEBEHANDELN VON STAHLDRÄHTEN

Title (fr)  
DISPOSITIF ET PROCÉDÉ DE TRAITEMENT THERMIQUE DE FILS D'ACIER

Publication  
**EP 2531624 B1 20200408 (DE)**

Application  
**EP 11702388 A 20110125**

Priority  
• AT 1532010 A 20100204  
• AT 2011000039 W 20110125

Abstract (en)  
[origin: WO2011094775A1] The invention relates to a furnace (1) for heat-treating at least one elongated, in particular metal object such as one or more wires (2), in particular steel wires, in a continuous process, comprising a furnace entrance (3) and a furnace exit (4) and one or more furnace sections (5), which extend between the furnace entrance (3) and the furnace exit (4) and form a first shaft (8), wherein in the furnace (1), in particular in the first shaft (8), one or more heating elements (6) for setting a temperature in the one or more furnace sections (5) are arranged, and wherein the elongated, in particular metal object can be transported along the first shaft (8). According to the invention, at least one second shaft (9) connected to the first shaft (8) and at least one fan (7) are provided, wherein an atmosphere in the furnace (1) can be circulated by the fan in the circuit along the first shaft (8) and the second shaft (9). The invention further relates to a module for heat-treating at least one elongated, in particular metal object such as one or more wires (2), in particular steel wires, in a continuous process, and to a device comprising a furnace (1) and such a module, and to a method for heat-treating at least one elongated metal object such as one or more wires (2), in particular steel wires, in a continuous process.

IPC 8 full level  
**C21D 9/52** (2006.01); **C21D 9/56** (2006.01); **C21D 9/573** (2006.01); **C21D 11/00** (2006.01); **F27B 9/20** (2006.01); **F27B 9/28** (2006.01); **F27B 9/30** (2006.01)

CPC (source: EP)  
**C21D 9/52** (2013.01); **C21D 9/561** (2013.01); **C21D 9/5732** (2013.01); **C21D 11/00** (2013.01); **F27B 9/20** (2013.01); **F27B 9/28** (2013.01); **F27B 9/30** (2013.01)

Citation (examination)  
BE 834316 A 19760202

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2011094775 A1 20110811**; AT 509356 A1 20110815; AT 509356 B1 20111215; CA 2787403 A1 20110811; CA 2787403 C 20180313; CN 102782164 A 20121114; CN 102782164 B 20141112; EP 2531624 A1 20121212; EP 2531624 B1 20200408; JP 2013518986 A 20130523; JP 2015178680 A 20151008; JP 5764833 B2 20150819; JP 6133359 B2 20170524

DOCDB simple family (application)  
**AT 2011000039 W 20110125**; AT 1532010 A 20100204; CA 2787403 A 20110125; CN 201180008517 A 20110125; EP 11702388 A 20110125; JP 2012551438 A 20110125; JP 2015106578 A 20150526