Title (en)

HEAT TREATMENT METHOD

Title (de)

WÄRMEBEHANDLUNGSVERFAHREN

Title (fr)

PROCÉDÉ DE TRAITEMENT THERMIQUE

Publication

EP 3408417 B1 20220413 (DE)

Application

EP 17703346 A 20170125

Priority

- DE 102016201024 A 20160125
- EP 2017051514 W 20170125

Abstract (en)

[origin: CN206204366U] The utility model provides a heat treatment device (100), has first smelting pot (110) for heat steel (200) to being higher than the temperature below the AC3 temperature, its characterized in that: heat treatment device (100) also have the station of processing (150) and second smelting pot, wherein handle station (150) including a device that makes one or more second area (220) the quick rapid cooling of steel (200).

IPC 8 full level

C21D 8/00 (2006.01); **C21D 1/19** (2006.01); **C21D 1/60** (2006.01); **C21D 1/613** (2006.01); **C21D 1/62** (2006.01); **C21D 1/667** (2006.01); **C21D 1/673** (2006.01); **C21D 9/00** (2006.01)

CPC (source: AT EP KR US)

C21D 1/19 (2013.01 - AT EP KR US); **C21D 1/60** (2013.01 - EP); **C21D 1/613** (2013.01 - EP); **C21D 1/62** (2013.01 - AT EP); **C21D 1/667** (2013.01 - EP US); **C21D 1/673** (2013.01 - EP KR US); **C21D 1/78** (2013.01 - AT); **C21D 1/84** (2013.01 - AT); **C21D 8/005** (2013.01 - EP KR US); **C21D 9/0062** (2013.01 - AT EP KR US); **C21D 9/0068** (2013.01 - EP KR US); **C21D 9/46** (2013.01 - AT); **F27B 9/028** (2013.01 - AT); C21D 2211/001 (2013.01 - US); C21D 2211/002 (2013.01 - EP KR US); C21D 2211/008 (2013.01 - EP KR US); C21D 2221/00 (2013.01 - EP KR US)

Citation (examination)

- DE 102013010946 B3 20141231 - DAIMLER AG [DE]
- DE 102010049205 B4 20120426 - BRAUN ELISABETH [DE]

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)

DE 202016104191 U1 20170427; AT 15722 U1 20180415; BR 112018015072 A2 20181211; BR 112018015072 B1 20220303; CN 109072325 A 20181221; CN 109072325 B 20210402; CN 206204366 U 20170531; DE 102016201024 A1 20170727; EP 3408417 A1 20181205; EP 3408417 B1 20220413; EP 3851546 A1 20210721; ES 2920485 T3 20220804; HU E059496 T2 20221128; JP 2019506531 A 20190307; JP 6940509 B2 20210929; KR 20180117111 A 20181026; MX 2018009036 A 20190110; PL 3408417 T3 20220829; PT 3408417 T 20220704; US 11359254 B2 20220614; US 2019032163 A1 20190131; WO 2017129603 A1 20170803

DOCDB simple family (application)

DE 202016104191 U 20160729; AT 2042016 U 20160823; BR 112018015072 A 20170125; CN 201621047930 U 20160908; CN 201780008221 A 20170125; DE 102016201024 A 20160125; EP 17703346 A 20170125; EP 2017051514 W 20170125; EP 21162238 A 20170125; ES 17703346 T 20170125; HU E17703346 A 20170125; JP 2018538675 A 20170125; KR 20187024556 A 20170125; MX 2018009036 A 20170125; PL 17703346 T 20170125; PT 17703346 T 20170125; US 201716072631 A 20170125