

Title (en)
TUNNEL FURNACE FOR THE MELTING OF PLATINUM AND PALLADIUM

Title (de)
TUNNELOFEN ZUM SCHMELZEN VON PLATIN UND PALLADIUM

Title (fr)
FOUR TUNNEL POUR FONDRE LE PLATINE ET LE PALLADIUM

Publication
EP 4113043 A1 20230104 (EN)

Application
EP 21183175 A 20210701

Priority
EP 21183175 A 20210701

Abstract (en)
Described is a tunnel furnace (1) for melting platinum and palladium, which comprises, on a load-bearing frame (11), along its direction of extension (X):- a station (2) for loading at least one train of ingot moulds, located upstream of the tunnel furnace (1), comprising at least one ingot mould (L) having the metal to be melted and at least one spacer (D);- a thrust chamber (3) and an outlet chamber (5) which have a variable pressure, designed to pass between a vacuum condition and an external pressure condition by depressurising and pressurising inert gas;- a vacuum hood (4) interposed between the thrust chamber (3) and the outlet chamber (5), connected to it, and which has a substantially constant vacuum pressure in such a way as to guarantee the degassing of said metal to be melted. The hood (4) comprises in succession at least one vacuumed melting zone (4a) and at least one vacuum solidification zone (4b);- an unloading station (6) for the train of ingot moulds, positioned downstream of the tunnel furnace (1), in which the metal of the ingot mould (L) is in the solid ingot state;- means (24, 12 32, 33, 34, 35, 36, 37, 52, 53, 54, 55, 56, 57, 61) for moving the train of ingot moulds between the loading station (2) and the unloading station (6).

IPC 8 full level
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CPC (source: EP)
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Citation (applicant)
• JP H04127958 A 19920428 - TOYO RADIATOR CO LTD
• JP 2009115413 A 20090528 - CHUBU UERINGU CO LTD

Citation (search report)
• [Y] WO 2012130451 A1 20121004 - IECO KEEPS ON IMPROVING S R L [IT], et al
• [Y] WO 2019138318 A1 20190718 - IKOI S P A [IT]
• [A] WO 2015083135 A1 20150611 - TERA AUTOMATION S R L [IT]

Designated contracting state (EPC)
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Designated extension state (EPC)
BA ME

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KH MA MD TN

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