

Title (en)
Arc furnace pressure ring assembly

Title (de)
Bogenofen-Druckringanordnung

Title (fr)
Ensemble formant un anneau de pression pour four à arc

Publication
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Application
EP 07017854 A 20050119

Priority

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- ZA 200400360 A 20040119
- ZA 200400936 A 20040205
- ZA 200400938 A 20040205
- ZA 200400937 A 20040205
- ZA 200406208 A 20040804
- ZA 200406209 A 20040804
- ZA 200408292 A 20041014

Abstract (en)
[origin: WO2005071335A2] The invention provides for a pressure ring assembly [10] suitable for use in an electric arc furnace, wherein the pressure ring assembly [10] comprises at least two pressure ring segments [22] engaging each other, at least one contact shoe [50] arranged between the pressure ring [20] and an electrode, and a piston arrangement [40] between the pressure ring segment [22] and the contact shoe [50] for forcing the contact shoe [50] into electrical contact with the electrode. The pressure ring assembly [10] is characterised therein that it is made of a metal alloy wherein a first metal of the alloy is copper, and a second metal is selected from a group comprising of chrome and silver. The pressure ring assembly [10] is further characterised therein that each pressure ring segment [22] includes two tapered engagement formations [27] defined within the pressure ring segment [22] and being adapted to be engaged by complementarily tapered connecting means [60] such that the pressure ring segments [22] are drawn towards each other during installation of the pressure ring assembly. The pressure ring assembly [10] further provides for a sealing arrangement between the pressure ring and the contact shoe [50].

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