

Title (en)
Arc furnace pressure ring assembly

Title (de)
Bogenofen-Druckringanordnung

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

Publication
EP 1971190 B1 20161109 (EN)

Application
EP 08010861 A 20050119

Priority

- EP 05702724 A 20050119
- 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].

IPC 8 full level
H05B 7/10 (2006.01); **F27B 3/08** (2006.01); **F27B 3/10** (2006.01); **F27D 11/10** (2006.01)

CPC (source: EP)
F27B 3/085 (2013.01); **F27B 3/10** (2013.01); **F27D 11/10** (2013.01); **H05B 7/10** (2013.01)

Cited by
WO2015028709A1; WO2015028706A1; EA030200B1; EA029350B1; EA032518B1; US9968000B2; WO2015028707A1; US10034332B2; US10039158B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005071335 A2 20050804; WO 2005071335 A3 20060223; EP 1721493 A2 20061115; EP 1721493 B1 20180307; EP 1876866 A2 20080109; EP 1876866 A3 20130703; EP 1876866 B1 20141112; EP 1876867 A2 20080109; EP 1971190 A2 20080917; EP 1971190 A3 20131106; EP 1971190 B1 20161109; HK 1119350 A1 20090227; HK 1119351 A1 20090227

DOCDB simple family (application)
IB 2005050225 W 20050119; EP 05702724 A 20050119; EP 07017854 A 20050119; EP 07017855 A 20050119; EP 08010861 A 20050119; HK 08110365 A 20080919; HK 08110660 A 20080925