

Title (en)  
DIRECT-CURRENT ARC FURNACE

Publication  
**EP 0473809 B1 19930811 (DE)**

Application  
**EP 90116866 A 19900903**

Priority  
EP 90116866 A 19900903

Abstract (en)  
[origin: EP0473809A1] In a direct-current arc furnace, the arc is deflected under the influence of the high-current lines (18), which run below the furnace vessel, in the direction away from the power supply device (19). This leads to thermal overloading of a part of the furnace vessel wall. If the lining layers are constructed such that, in a first sector (21) which opens towards the power supply device (19), they are formed from a material having a lower specific conductivity than the lining layer in the second sector (22), the arc burns symmetrically again. A lining layer which is inhomogeneous in this sense can furthermore be used for deliberate deflection of the arc. <IMAGE>

IPC 1-7  
**F27D 11/10**; **H05B 7/06**

IPC 8 full level  
**F27B 3/08** (2006.01); **F27B 3/14** (2006.01); **F27D 11/10** (2006.01); **H05B 7/02** (2006.01); **H05B 7/06** (2006.01); **H05B 7/18** (2006.01)

CPC (source: EP KR US)  
**F27D 11/10** (2013.01 - EP US); **H05B 7/00** (2013.01 - KR); **H05B 7/06** (2013.01 - EP US)

Cited by  
US5274663A; EP1197719A1; EP0530932A3; EP0600362A1; EP0581112A1; US5383218A

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**EP 0473809 A1 19920311**; **EP 0473809 B1 19930811**; AT E93114 T1 19930815; BR 9103756 A 19920519; CA 2049853 A1 19920304; CN 1027314 C 19950104; CN 1059594 A 19920318; DE 59002344 D1 19930916; ES 2044352 T3 19940101; JP H04233191 A 19920821; KR 920007498 A 19920428; RU 2013730 C1 19940530; US 5237585 A 19930817; ZA 916844 B 19920527

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