

Title (en)

Improved electrode assembly for electric arc furnaces.

Title (de)

Elektrodevorrichtung für elektrische Lichtbogenöfen.

Title (fr)

Assemblage d'électrode pour fours électriques à arc.

Publication

EP 0145219 A1 19850619 (EN)

Application

EP 84307459 A 19841030

Priority

US 54747483 A 19831031

Abstract (en)

An electrode assembly for an electric arc furnace incorporates a water cooled sleeve (24) which extends downwardly from an electrode clamp (18) around a portion of a consumable electrode (14) held by the clamp. During normal electrode movement, the sleeve is preferably telescopically received within, but spaced from, a water cooled annulus (34) defining an opening in a furnace roof. A sliding seal (40, 42) is provided acting between the sleeve and the annulus, of a form which allows the sleeve to be lifted upwardly out of and re-inserted into engagement with the annulus. The annulus may be extended vertically to shroud the sleeve.

IPC 1-7

H05B 7/12; **H05B 7/10**

IPC 8 full level

C12P 21/04 (2006.01); **H05B 7/10** (2006.01); **H05B 7/12** (2006.01)

CPC (source: EP)

H05B 7/10 (2013.01); **H05B 7/12** (2013.01)

Citation (search report)

- [A] US 2551420 A 19510501 - GIAMPIETRO CONTI
- [A] DE 1030481 B 19580522 - DEMAG ELEKTROMETALLURGIE GMBH
- [A] US 3835233 A 19740910 - PRENN O
- [A] US 1690795 A 19281106 - GUIDO SAGRAMOSO
- [A] FR 1174176 A 19590306 - SUNROD MFG CORP
- [A] US 2979550 A 19610411 - SHERMAN SR DELMAR C

Cited by

AU2002240739B2; CN110657664A; KR100648614B1; CN115506033A; WO02071811A3

Designated contracting state (EPC)

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