

Title (en)
ARC FURNACES ELECTRODE

Publication
EP 0053200 B1 19860917 (DE)

Application
EP 80107523 A 19801202

Priority
EP 80107523 A 19801202

Abstract (en)
[origin: ES8301088A1] The invention concerns an electrode for arc furnaces, especially for electrosteel production, comprising a metallic liquid-cooled upper shaft (1) and an exchangeable lower active portion (2) of self-consuming material, particularly graphite, whereby a securing means is provided which is electrically insulated against the current-conducting components (11) of the shaft (1) and said securing means detachably connects the shaft (1) with the active portion (2) as well as holding the contact surfaces of the active portion (23) pressed against the contact surfaces (14) of the current-conducting components (11) of said shaft. To further develop an electrode of this type, which also provides the possibility of rapid and simple disconnection or connection with respect to the shaft (1) and the active portion (2) with a simple design, especially of the area of the active portion on the connection side, the securing device is designed as a clamping means (40 60) which takes direct effect on the upper end of the active portion (2) in such manner that the clamping force essentially pressure-loads the material of the active portion (2), whereby the physical properties of the material of the active portion (2) are so exploited that no complicated designs are required on the connection side for said active portion (2).

IPC 1-7
H05B 7/101; **H05B 7/085**

IPC 8 full level
H05B 7/08 (2006.01); **H05B 7/085** (2006.01); **H05B 7/101** (2006.01); **H05B 7/14** (2006.01)

CPC (source: EP KR US)
H05B 7/08 (2013.01 - KR); **H05B 7/085** (2013.01 - EP US); **H05B 7/101** (2013.01 - EP US)

Cited by
WO02062105A1; WO8707811A1; EP0127568B1; EP0061612B1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0053200 A1 19820609; **EP 0053200 B1 19860917**; AT E22383 T1 19861015; AU 546162 B2 19850815; AU 7769481 A 19820610; CA 1173482 A 19840828; DD 208283 A5 19840328; DE 3071765 D1 19861023; DK 532781 A 19820603; ES 508108 A0 19821116; ES 8301088 A1 19821116; FI 813636 L 19820603; GB 2092418 A 19820811; GR 77313 B 19840911; HU 192078 B 19870528; IN 155086 B 19841229; JP S57119493 A 19820724; KR 830007888 A 19831107; KR 870000098 B1 19870210; NO 814093 L 19820603; NZ 199015 A 19850712; PL 234059 A1 19820719; PT 74061 A 19811201; PT 74061 B 19830511; SU 1093266 A3 19840515; TR 21916 A 19851115; US 4481500 A 19841106; YU 279781 A 19831031; ZA 817978 B 19821027

DOCDB simple family (application)
EP 80107523 A 19801202; AT 80107523 T 19801202; AU 7769481 A 19811120; CA 390225 A 19811117; DD 23528781 A 19811201; DE 3071765 T 19801202; DK 532781 A 19811201; ES 508108 A 19811201; FI 813636 A 19811117; GB 8136351 A 19811202; GR 810166642 A 19811127; HU 354181 A 19811126; IN 1319CA1981 A 19811124; JP 19431381 A 19811202; KR 810004570 A 19811126; NO 814093 A 19811201; NZ 19901581 A 19811120; PL 23405981 A 19811202; PT 7406181 A 19811130; SU 3360407 A 19811202; TR 2191681 A 19811201; US 32606881 A 19811130; YU 279781 A 19811127; ZA 817978 A 19811117