

Title (en)  
LIQUID-COOLED SUPPORT FOR THE HEAD OF AN ELECTRODE

Publication  
**EP 0010305 B1 19810422 (DE)**

Application  
**EP 79104036 A 19791018**

Priority  
DE 2845367 A 19781018

Abstract (en)  
[origin: ES485398A1] A fluid-cooled holder for the tip of an electrode of an electric arc smelting furnace, having a cylindrical holding portion which can be secured to an electrode support arm, a metal cooling system which is secured to the holding portion and which carries a screw-threaded portion for screwing on the electrode tip, and also having a tubular heat screen which is disposed around the cooling system at a spacing and which comprises a metal tube (11, 11a) which is electrically insulated with respect to the current-carrying cooling system (3, 3a) and which can be sufficiently cooled, by way of a refractory substance (17, 17a) between the cooling system and the metal tube, for the temperature of the metal tube to be kept to a value below the softening temperature of the material of the metal tube, when the holder is used in an electric arc smelting furnace.

IPC 1-7  
**H05B 7/101**; **F28F 1/00**

IPC 8 full level  
**F27D 11/10** (2006.01); **F28F 1/00** (2006.01); **H05B 7/101** (2006.01)

CPC (source: EP US)  
**H05B 7/101** (2013.01 - EP US)

Cited by  
EP0149768A1; EP0077513A1; EP0051074A1; EP0079304A1; DE3344283A1; EP0075534A1; EP0050683A1

Designated contracting state (EPC)  
AT CH DE FR IT SE

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**EP 0010305 A1 19800430; EP 0010305 B1 19810422**; AR 220782 A1 19801128; AT E43 T1 19810515; BR 7906676 A 19800722; CA 1131278 A 19820907; DE 2845367 B1 19800424; DE 2845367 C2 19810122; DE 2960277 D1 19810730; ES 485398 A1 19800516; GB 2036517 A 19800625; GB 2036517 B 19821110; JP S5557295 A 19800426; MX 146063 A 19820507; US 4291190 A 19810922

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**EP 79104036 A 19791018**; AR 27849979 A 19791015; AT 79104036 T 19791018; BR 7906676 A 19791017; CA 337846 A 19791017; DE 2845367 A 19781018; DE 2960277 T 19791018; ES 485398 A 19791017; GB 7934631 A 19791005; JP 13366179 A 19791018; MX 17966779 A 19791017; US 8414479 A 19791012