

Title (en)

A NON-CYANIDE SALT BATH AND PROCESS FOR CARBURIZATION OF FERROUS METALS AND ALLOYS

Publication

EP 0147011 A3 19860326 (EN)

Application

EP 84306336 A 19840917

Priority

US 56628883 A 19831228

Abstract (en)

[origin: EP0147011A2] A non-cyanide molten salt bath composition for the carburization of objects made of ferrous metals or alloys at a temperature in the range of 900-1050 DEG C comprises: (a) 85-99% of an alkali metal chloride or a mixture of alkali metal chlorides; (b) 0.25-8% of an activator, which is an oxygen containing compound barium and/or strontium compound and (c) sufficient amount of finely divided graphite to provide a continuous cover on the surface of the molten salt mixture. The ferrous metal or alloy part is immersed in the molten mixture at a temperature in the range of 900 DEG C to 1050 DEG C.

IPC 1-7

C23C 8/46

IPC 8 full level

C23C 8/46 (2006.01)

CPC (source: EP)

C23C 8/46 (2013.01)

Citation (search report)

- [X] DE 627008 C 19360306 - DEGUSSA
- [AD] FR 2156086 A1 19730525 - PARK CHEM CO
- [A] US 2492803 A 19491227 - LEININGER PAUL M
- [A] CHEMICAL ABSTRACTS, vol. 90, 1979, no. 26895d, Columbus, Ohio, US; M.WASA et al.: "Liquid carburization in noncyanide bath. Electrolytic carburization" & KOGYO KANETSU 1978, 15(4), 27-34
- [A] CHEMICAL ABSTRACTS, vol. 84, 1976, page 176, no. 183033q, Columbus, Ohio, US; K.HOSOKAWA: "Boro-carburizing of iron and steel immersed in a hot bath containing boron carbide and barium oxide" & NIPPON KINZOKU GAKKAISHI 1976, 40(1), 57-61

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Designated contracting state (EPC)

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