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Applicant: HEATBATH CORPORATION, Springfield Massachusetts 01101 (US)

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② Inventor: Jones, William C., 7 Locke Drive, Enfield Connecticut 06082 (US)
Inventor: Britt, Kenneth R., 18 Pepin Avenue,

Designated Contracting States: BE DE FR GB IT LU NL

Easthampton Massachusetts 01027 (US)
Inventor: Newell, Isaac L., 111 Lakewood Circle South,
Manchester Connecticut 06040 (US)

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Representative: Smith, Sydney et al, Elkington and Fife High Holborn House 52/54 High Holborn, London WC1V 6SH (GB)

A non-cyanide salt bath and process for carburization of ferrous metals and alloys.

(5) 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 °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 °C to 1050 °C.

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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT				
Category	Citation of document of re	with indication, where appropriate, levant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
х	DE-C- 627 008 UND SILBER-SCH * Claim; examp	(DEUTSCHE GOLD- EIDEANSTALT) les 1,2 *	1-5,6, 8-10	C 23 C 8/46
A,D	CO.)	(PARK CHEMICAL & CA - A - 944 665	1-3,6 8-10	
А	carburization : bath. Electrol	5d, Columbus, SA et al.: "Liquid in noncyanide ytic & KOGYO KANETSU	1,2,4	
A	US-A-2 492 803 * Claim 1; pa page 2, lines 2	(P.M.LEININGER) age 1, lines 29-32; 21-22 *	1,10	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
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 * Abstract *		2,3,4, 6,8,9	
	The present search report has	been drawn up for all claims		
	Place of search THE HAGUE	Date of completion of the search 17-12-1985	ELSEN	Examiner D.B.A.

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone
Y: particularly relevant if combined with another document of the same category
A: technological background
O: non-written disclosure

A: technological backgrou O: non-written disclosure P: intermediate document

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T: theory or principle underlying the invention
E: earlier patent document, but published on, or after the filing date
D: document cited in the application
L: document cited for other reasons

&: member of the same patent family, corresponding

