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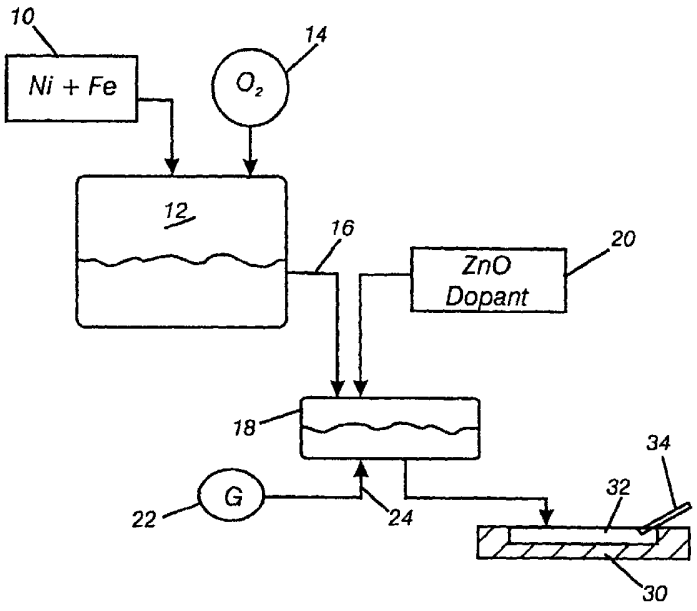
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[Continued on next page]

(54) Title: CAST CERAMIC ANODE FOR METAL OXIDE ELECTROLYTIC REDUCTION



(57) Abstract: The invention is a method for producing a cast ceramic anode for metal oxide electrolytic reduction by feeding metallic iron and metallic nickel in solid form to an oxidizing reactor (12); melting and oxidizing the iron and nickel and forming molten nickel ferrite; mixing the molten nickel ferrite with dopant (20) in a holding vessel (18) such as ladle or tundish to increase electrical conductivity of the mixture, and casting the mixture into a mold (30) to form a near net shape of the desired anode. Apparatus for carrying out the method, and the resulting product are also disclosed.

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B22D 19/00, 47/00
US CL : 164/76.1, 270.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 164/76.1, 270.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,999,097 A (SADOWAY) 12 March 1991 (12.03.1991), figures and abstract.	1-18
A	US 4,650,552 A (de NORA et al) 17 March 1987 (17.03.1987), figures and abstract.	1-18
A	US 4,173,518 A (YAMADA et al) 06 November 1979 (06.11.1979), figures and abstract.	1-18

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