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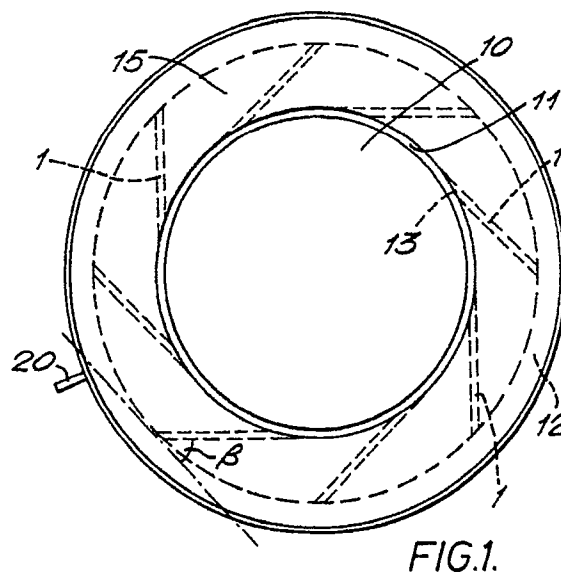
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54 **Method and apparatus for closing the gap between an electrode and its furnace cover in an electric furnace.**

57 Method for closing the gap between a graphite electrode (10) and a through-hole for the electrode formed in the furnace cover of an electric furnace by means of a cooling sealing ring (15) made of a refractory material.

To the gap (11) there is fed a gas-fluid-mixture via a plurality of conduits (1) in the cooling sealing ring (15) uniformly distributed over its circumference, radially inside and aligned in tangential-radial direction with a small axial component which gas-fluid-mixture serves to seal, the fluid of which additionally also withdraws heat from the inside region of the cooling sealing ring by endothermic actions, by vaporisation and/or by cracking to graphite or petrol coke at the surface of the electrode.





European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number

EP 90 31 3013

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	GB-A-2 114 408 (COATED ELECTRODES) & EP-A-80335 (CAT. D) ---		H 05 B 7/12
A	EP-A-0 309 583 (NIPPON CARBON CO., LTD) ---		
A,D	US-A-3 697 660 (J.F. FROLOV) ---		
A	DE-A-1 167 992 (BROWN BOVERI & CIE) ---		
A	FR-A- 466 265 (J.I. BRONN) -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			F 27 D H 05 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28-03-1991	Examiner COULOMB J.C.
<b>CATEGORY OF CITED DOCUMENTS</b> 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 P : intermediate document 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 document			