



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 0 800 880 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
30.12.1998 Bulletin 1998/53

(51) Int Cl.6: **B22D 11/06**

(43) Date of publication A2:
15.10.1997 Bulletin 1997/42

(21) Application number: **97302492.0**

(22) Date of filing: **11.04.1997**

(84) Designated Contracting States:
DE FR GB IT

(72) Inventor: **Baharis, Chris
Wantirna Victoria 3152 (AU)**

(30) Priority: **18.04.1996 AT 9356/96**

(74) Representative: **Lerwill, John et al
A.A. Thornton & Co.
Northumberland House
303-306 High Holborn
London, WC1V 7LE (GB)**

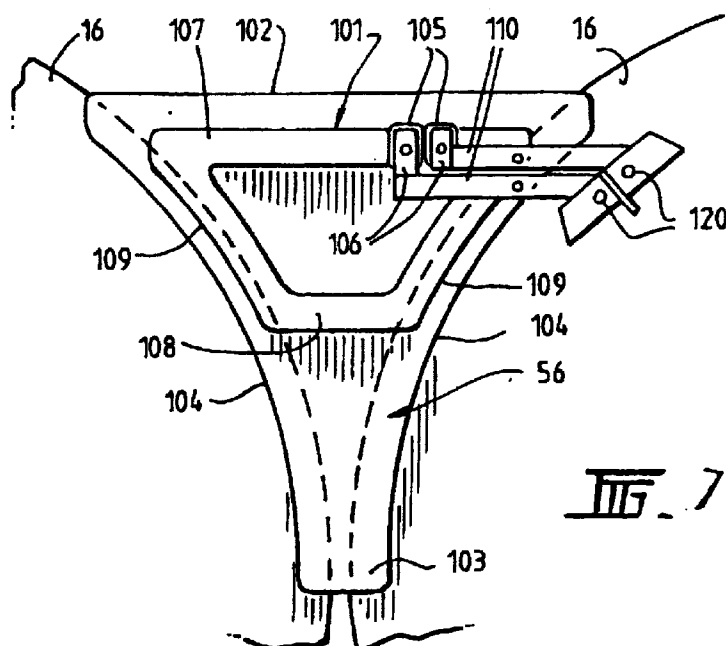
(71) Applicants:

- **Ishikawajima-Harima Heavy Industries Co., Ltd.
Chiyoda-ku, Tokyo 100 (JP)**
- **BHP STEEL (JLA) PTY. Ltd.
Melbourne, Victoria 3000 (AU)**

(54) **Method and apparatus for casting metal strip**

(57) Metal strip is cast from a casting pool of molten metal supported above the nip between a pair of chilled casting rolls (16). The casting pool is confined by refractory plates (56) engaging the ends of the rolls (16). Molten metal in the casting pool in the vicinity of the end closures (56) is subjected to electromagnetic induction

heating by passing electric current through electrical conductors (101) disposed outside the refractory plates (56). Each conductor (101) is in the form of a trapezium shaped loop of metal tube having wide top segment (107) and narrow bottom segment (108) connected by downwardly convergent side segments (109) aligned with roll edges.



EP 0 800 880 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 30 2492

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.6)	
7 X	EP 0 598 212 A (DIDIER WERKE AG) 25 May 1994 * claim 1; figure 1 *	1,8	B22D11/06	
3 D,X	EP 0 491 641 A (USINOR SACILOR ;THYSSEN STAHL AG (DE); THYSSEN EDELSTAHLWERKE AG ()) 24 June 1992 * claims 1,2; figure 1 *	1,8		
8 A	EP 0 212 248 A (SCHLOEMANN SIEMAG AG) 4 March 1987 * claims 1,7,8 *	1,8		
2 A	PATENT ABSTRACTS OF JAPAN vol. 014, no. 407 (M-1019), 4 September 1990 & JP 02 155543 A (HITACHI LTD;OTHERS: 01), 14 June 1990, * abstract *	1,8		
2 A	PATENT ABSTRACTS OF JAPAN vol. 014, no. 119 (M-0945), 6 March 1990 & JP 01 317658 A (NIPPON STEEL CORP), 22 December 1989, * abstract *	1,8		TECHNICAL FIELDS SEARCHED (Int.Cl.6)
2 D,A	PATENT ABSTRACTS OF JAPAN vol. 011, no. 278 (M-623), 9 September 1987 & JP 62 077156 A (NIPPON STEEL CORP;OTHERS: 01), 9 April 1987, * abstract *	1,8		B22D
The present search report has been drawn up for all claims				
Place of search BERLIN		Date of completion of the search 10 November 1998	Examiner Kesten, W	
CATEGORY OF CITED DOCUMENTS		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		
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				

EPO FORM 1503 03.82 (P04C01)