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54 **Roll caster with isothermal shell cooling.**

57 A roll caster for continuous casting of metals in strip form wherein each of the casting rolls (10) has a roll (12) and a shell (14) over each roll. Each roll has at least one axial feed bore for supplying coolant into the roll (12) and at least one axial drain bore for draining the coolant from the roll (12). A plurality of parallel annular grooves (18a-d) surround the roll (12) for flowing coolant between the roll and the shell (14). A plurality of radial feed passageways and radial drain passageways connect each axial feed bore and each axial drain bore, respectively, to annular grooves (18a-d) with each of said radial feed passageways and each of said radial drain passageways servicing at least one annular groove (18a-d) and with the radial feed passageway connected to an annular groove (18a-d) on the generally opposite side of the roll (12) from the radial drain passageway for the same groove; and with each radial feed passageway extending radially outwardly from an axial feed bore in a direction generally opposite from each immediately adjacent radial feed passageway and with each radial drain passageway extending radially outwardly from an axial drain bore in a direction generally opposite from each immediately adjacent radial drain passageway to provide substantially isothermal cooling of the casting roll's shell.

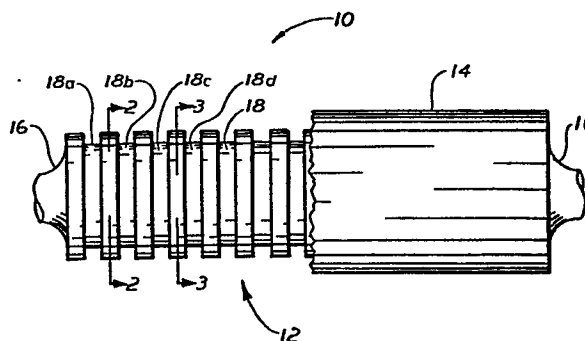


FIG. 1



European Patent
Office

EUROPEAN SEARCH REPORT

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EP 83 10 4755

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. 3)
Y	DE-A-2 406 469 (SCAL SOCIETE DE CONDITIONEMENTS EN ALUMINIUM) * Figures 2,4; page 7, line 22 - page 9, line 18 *	1	B 22 D 11/06
Y,D	--- US-A-3 757 847 (P.J. SOFINSKY et al.) * Whole document *	1	
A,D	--- DE-B-1 508 927 (PROLIZENZ) -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
			B 22 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 07-11-1983	Examiner STEIN K.K.
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 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	