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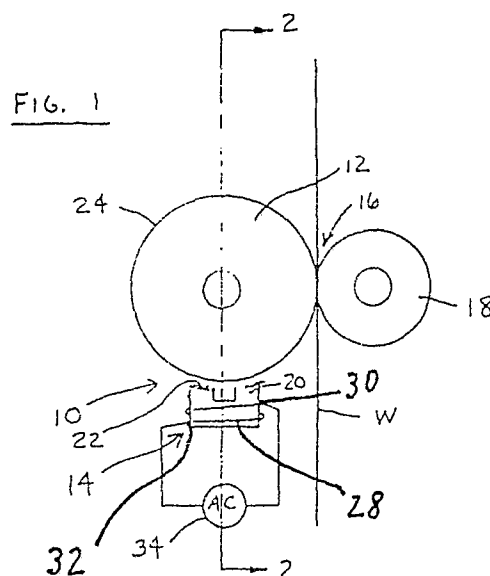
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54 **Heating apparatus for heating a calender roll.**

57 A heating apparatus (10) is disclosed for heating a calender roll (12). The heating apparatus (10) utilizes heat supplied by induction heating and from a heat transfer medium. The heating apparatus (10) includes heating channels defined by the roll (12). The channels extend through the roll (12) such that the heat transfer medium is permitted to flow through the channels so that heat is transferred from the transfer medium to the roll (12). An induction heater (14) is disposed adjacent to the external surface (24) of the roll (12) and extends along substantially the entire length of the roll (12) such that when the induction heater (14) is energized, heat is induced in the region of the external surface (24) of the roll (12) for supplementing the amount of heat transferred from the heating medium so that the temperature of the external surface (24) of the roll (12) is increased to a level which, in the absence of the induction heater (14), would cause excessive shell stress. Furthermore, the temperature level is attainable without the hazards associated with the use of a heat transfer medium operating at least at such temperature level.





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. 4)
A	DE-A-3 525 950 (SULZER-ESCHER WYSS AG) * page 6, lines 2-9; page 7, line 5 - page 8, line 5; figure 7 * ---	1,6,8,9	D 21 G 1/02 D 21 F 5/02
A	US-A-3 365 774 (E. KUSTERS) * Column 5, lines 21-31,38-42; figures 1,4 * ---	2,3,8,9	
A	EP-A-0 067 786 (BELOIT CORP.) * Figures 1,4 * ---	1,6,8,9	
A	DE-A-3 340 683 (VALMET OY) * Figures 1,2 * -----	1,6,8,9	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			D 21 G D 21 F F 16 C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28-11-1988	Examiner HOEPER
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	