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(54) **Roller with contoured surface for conveying ultrathin webs and apparatus comprising such a roller**

(57) A web conveying roller (18) is provided with circumferentially or spirally extending grooves (42) and lands (44), the lands having convex curvatures (46, 48; 54) to cause a conveyed, ultrathin web (30), at the beginning of a wrap angle (α) onto the roller, to undulate

along the width of the roller over the lands and into the grooves while remaining spaced from the convex curvatures of the lands; so that, air entrained between the web and the lands can flow into the grooves.

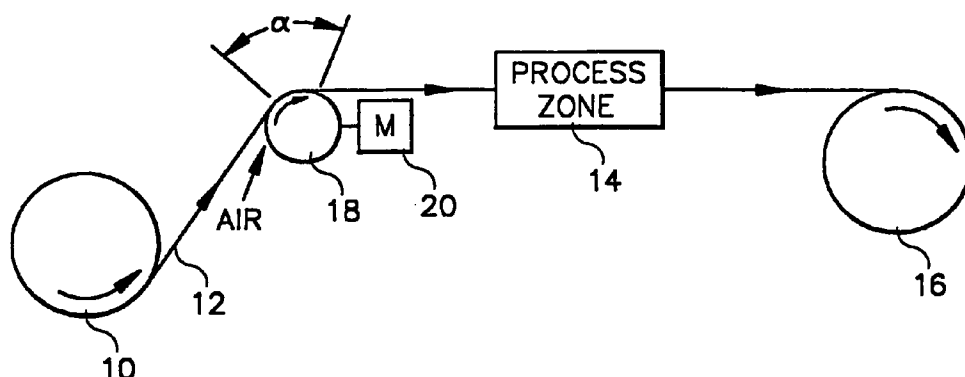


FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 95 11 5687

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)
X	EP-A-0 590 253 (ESCHER WYSS GMBH) 6 April 1994 * the whole document *	1-10	B65H27/00
A	US-A-3 405 855 (DALY DAVID A ET AL) 15 October 1968 * the whole document *	1-10	
A	US-A-4 029 249 (NAGEL PETER ET AL) 14 June 1977 * the whole document *	1-10	
A	US-A-4 914 796 (LIOY DANIEL C ET AL) 10 April 1990 * the whole document *	1-10	
A	US-A-3 630 424 (RAU JOHN A) 28 December 1971 * the whole document *	1-10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65H
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		24 September 1996	Henningsen, O
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			

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