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(54) Unnecessary yarn removal method and device for a winding package

(57) The present invention is characterized by removal of the yarn end wound last onto the full package on an auto-winder when doffing is carried out.

As a result, when doffing is carried out after yarn joining once a package (4) has become full, removal is possible of the joint (2c) of the yarn existing at the yarn end wound last onto the full package. Furthermore, when one winding package (4) is formed from one supply yarn package (1, 1A), removal is possible of the inner layer yarn part (often damaged) of the supply package (1, 1A).

FIG. 1A

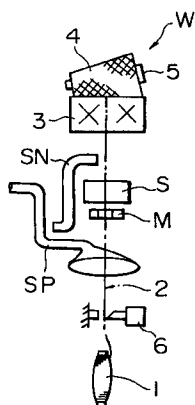


FIG. 1B

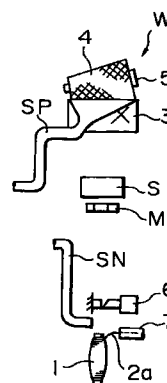


FIG. 1C

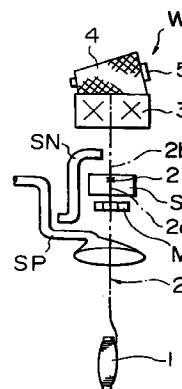
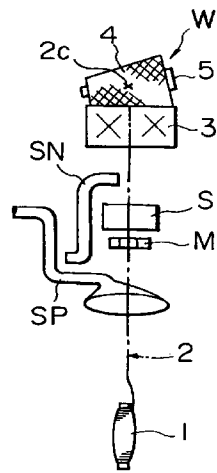


FIG.1D





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 96 12 0196

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	US 3 778 996 A (OLSON ET AL.) * column 3, line 47 - column 6, line 53; figures *	1	B65H67/04 B65H54/88
A	US 4 703 900 A (NOSHI ET AL.) * column 1, line 10 - column 5, line 6; figures *	1,4	
			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
BERLIN		5 November 1997	David, P
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>& : member of the same patent family, corresponding document</p>			

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