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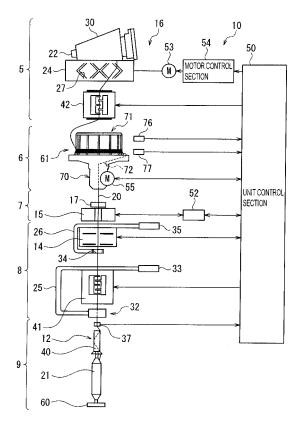
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#### (54) Yarn winding device and automatic winder comprising yarn winding device

(57) The invention relates to a winding unit (10) that includes an accumulator (61) which enables that a yarn (20) can be accumulated before it is wound into a package (30), and can be drawn out to a yarn supplying bobbin (21) side under the control of a unit control section (50). When a clearer (15) detects a yarn defect, the unit control section (50) draws out a portion of the yarn containing the yarn defect from the accumulator (61) to the yarn supplying bobbin (21) side. The drawn-out yarn (20) is caught and guided to a splicer device (14) by an upper yarn guide pipe (26). Furthermore, a lower yarn caught by a lower yarn guide pipe (25) is guided to the splicer device (14) for a yarn splicing operation.

#### FIGURE 1



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## **EUROPEAN SEARCH REPORT**

Application Number

EP 09 15 5645

	DOCUMENTS CONSID	ERED TO BE RELEVANT			
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages		elevant claim	CLASSIFICATION OF THE APPLICATION (IPC)
х	WO 2006/058582 A1 ( [DE]) 8 June 2006 (	SAURER GMBH & CO KG	1-4	1,7	INV. B65H51/22
Y	* pages 14-15; figu		8-1	.0	B65H63/06 B65H67/08
(	[DE]) 22 March 2001	BARMAG BARMER MASCHF (2001-03-22) - column 4, line 49;	8-1	.0	В65Н69/06
A	EP 0 277 717 A1 (TO 10 August 1988 (198 * column 3, lines 3		8-1	.0	
A	EP 0 004 781 A1 (DU 17 October 1979 (19 * claims 1,3; figur	79-10-17)	8-1	.0	
					TECHNICAL FIELDS SEARCHED (IPC)
					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 March 2011		Pus	semier, Bart
X : parti Y : parti docu	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with anot ment of the same category	L : document cited	ocument ate I in the ap for other	, but publis oplication reasons	shed on, or
O : non	nological background written disclosure mediate document	& : member of the document			, corresponding

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CLAIMS INCURRING FEES
The present European patent application comprised at the time of filling claims for which payment was due.
Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.
LACK OF UNITY OF INVENTION
The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:
see sheet B
All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



# LACK OF UNITY OF INVENTION SHEET B

**Application Number** 

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-7, 10

A yarn winding device with a yarn accumulating device comprising a draw-out mechanism drawing out the yarn accumulated in the yarn accumulating device to an upstream side in a yarn traveling direction.

2. claims: 8-10

A yarn winding device with a yarn accumulating device comprising a yarn accumulation amount detecting section and whereby a control section controls rotation number of a winding driving section provided in the winding section according to the yarn accumulation amount detected by the yarn accumulation amount detecting section.

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#### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 09 15 5645

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-03-2011

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