



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
11.12.2013 Bulletin 2013/50

(51) Int Cl.:
B65H 69/04 (2006.01) **B65H 69/06** (2006.01)
B65H 54/26 (2006.01)

(43) Date of publication A2:
27.03.2013 Bulletin 2013/13

(21) Application number: **12175315.6**

(22) Date of filing: **06.07.2012**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

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(30) Priority: **21.09.2011 JP 2011206506**

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(54) **Yarn winding machine**

(57) A fine spinning machine includes a winding device (13) adapted to wind a yarn into a package (45); a spinning device (9) adapted to supply a spun yarn (10) to the winding device (13); a yarn joining device (43) adapted to perform a yarn joining operation to join the spun yarn (10) between the package (45) and the spinning device (9); and a moving means (30). The moving means (30) can move the yarn joining device (43) between a yarn joining position and a retreated position, the yarn joining position being a position located close to a yarn path between the package (45) and the spinning device (9) during a normal winding, and the retreated position being a position located away from the yarn path.

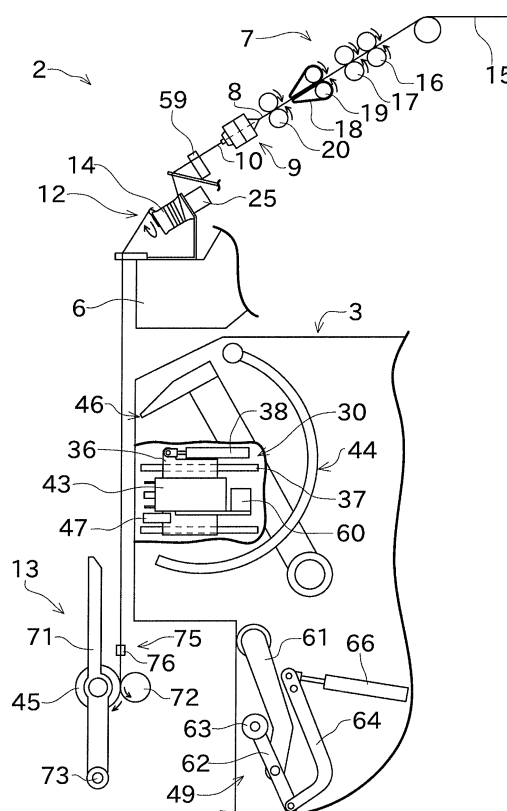


FIGURE 2



EUROPEAN SEARCH REPORT

Application Number
EP 12 17 5315

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 559 773 A (STAHLECKER PETER H [US]) 24 December 1985 (1985-12-24) * the whole document *	1-3,5,7, 11,12	INV. B65H69/04 B65H69/06 B65H54/26
X	US 4 083 171 A (KONIG REINHARD ET AL) 11 April 1978 (1978-04-11) * column 10, line 43 - column 11, line 45 *	1,3,5-8, 12	
X	US 4 248 037 A (MARTIN CHARLES R ET AL) 3 February 1981 (1981-02-03) * the whole document *	1,6,7,9, 10,12	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			B65H D01H
Place of search		Date of completion of the search	Examiner
The Hague		25 October 2013	Pussemier, Bart
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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EPO FORM 1503 03.82 (P04C01)

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

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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
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25-10-2013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4559773 A	24-12-1985	DE 3301074 A1 US 4559773 A	19-07-1984 24-12-1985
US 4083171 A	11-04-1978	BE 845994 A1 BR 7605934 A CS 192565 B2 DE 2540703 A1 ES 451429 A1 FR 2323783 A1 JP S5237848 A NL 7609778 A PL 100909 B1 US 4083171 A	31-12-1976 16-08-1977 31-08-1979 17-03-1977 01-11-1977 08-04-1977 24-03-1977 15-03-1977 30-11-1978 11-04-1978
US 4248037 A	03-02-1981	NONE	