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(54) **Method and device for traversing of yarn on textile machines**

(57) The invention relates to the method for traversing of yarn (3) upon its winding on bobbin (72) mounted in winding mechanism of an operating unit of textile machine, at which the traversing motion of yarn (3) is generated through a straight-line reciprocating motion of traversing rod (2) being common for a row of operating units, while before dead centre of the traversing rod (2) its kinetic energy is transformed to potential energy, which contributes to deceleration in motion of the traversing rod (2), behind dead centre the potential energy of the traversing rod (2) changes to kinetic energy, which contributes to acceleration in motion of the traversing rod (2). Before dead centre of the traversing rod (2) in the first phase of its deceleration its kinetic energy transforms to potential energy of magnetic field, and in the second phase of deceleration to potential energy of a field of elastic forces, subsequently behind dead centre of the traversing rod (2) in the first phase of acceleration of the traversing rod (2) the potential energy of the field of elastic forces transforms to kinetic energy of the traversing rod (2), and in the second phase of its acceleration the potential energy of magnetic field transforms to its kinetic energy.

The invention also relates to the respective device for traversing yarn (3) on textile machines.

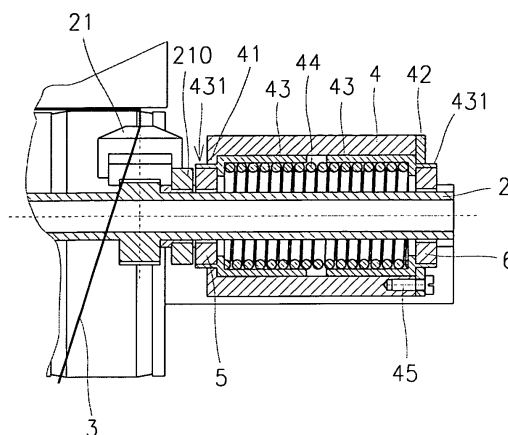


Fig. 2



EUROPEAN SEARCH REPORT

Application Number
EP 12 18 3041

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	DE 10 2008 000601 A1 (RIETER CZ AS [CZ]) 25 September 2008 (2008-09-25)	1	INV.
A	* paragraphs [0035], [0036], [0040]; figures *	2,3	B65H54/28 B65H54/38
X	----- WO 99/31000 A1 (BARMAG BARMER MASCHF [DE]; GAERTNER JUERGEN [DE]; LIEBER REINHARD [DE]) 24 June 1999 (1999-06-24) * page 5, lines 1-6 * * page 6, lines 25-27 * * page 7, line 4 - page 8, line 30; figures *	1	
A	----- DE 10 2006 053135 A1 (OERLIKON TEXTILE GMBH & CO KG [DE]) 15 May 2008 (2008-05-15) * paragraphs [0013], [0015], [0020], [0021], [0022], [0064], [0068], [0075] - [0097]; figures *	1-3	
			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		7 October 2013	Lemmen, René
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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The members are as contained in the European Patent Office EDP file on
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07-10-2013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 102008000601 A1	25-09-2008	NONE	

WO 9931000 A1	24-06-1999	DE 19881906 D2	30-11-2000
		WO 9931000 A1	24-06-1999

DE 102006053135 A1	15-05-2008	AT 467600 T	15-05-2010
		CN 101535159 A	16-09-2009
		DE 102006053135 A1	15-05-2008
		EP 2106378 A1	07-10-2009
		WO 2008058605 A1	22-05-2008

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82