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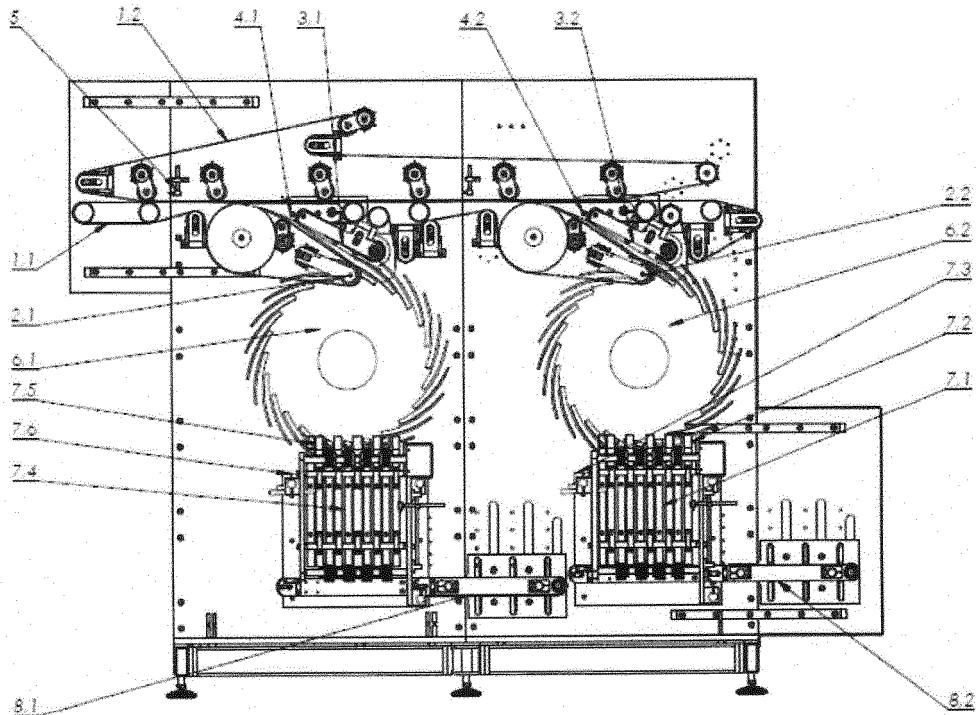
(54) **DEVICE FOR STACKING WORKPIECES SOAKED WITH A FLUID AND A METHOD FOR STACKING WORKPIECES SOAKED WITH A FLUID**

(57) The object of the invention is a device for stacking applicable in production plants, in particular in industrial stacking of individual workpieces of non-woven fabric, soaked with a fluid, of any basis weight and various sizes. The device for stacking workpieces soaked with a fluid is provided with elastic belts, contacting each other with their surfaces, of a guiding conveyor (1.1) and of a pressing conveyor (1.2), above the belt of the pressing conveyor (1.2), a counting sensor (5) is arranged, and along the elastic belts of the guiding conveyor (1.1) and of the pressing conveyor (1.2), forks (4.1) (4.2) are mounted. The device consists of at least two stacking units, preferably, the first unit consist of elastic belts, contacting each other with their surfaces, of a guiding conveyor (2.1) and of a pressing conveyor (3.1), a stacking star (6.1) arranged beneath them, provided with longitudinal, directed inwards, curved slots, and a lift (7) mounted on a horizontal extension arm, at a close distance to the stacking star (6.1). Below the lift (7), there is a belt of a delivery conveyor (8). The device is provided with vertical transporters (7,1, 7,4) having adjustable bands (7,2, 7,5) mounted below the stacking star (6.1) and which are provided with belts (1,2) with pickers. Adjustable stops (7,3, 7,6) are mounted to the vertical transporters, further, the vertical transporters (7,1, 7,4) are provided with receiving transporters (8,1, 8,2). A method for stacking workpieces soaked with a fluid, consisting in

that the soaked workpieces are guided to the units of the guiding conveyor (1.1) and of the pressing conveyor (1.2) which are counted by means of a counting sensor (5) and are guided through the fork (4.1) to stacking units in which workpieces are guided by means of the guiding conveyor (2.1) and of the pressing conveyor (3.1) onto the arms of the stacking star (6.1) which, by rotational movement, buffers them and passes them onto the lift (7.1) where the workpieces are arranged into an even stack which is carried onto the delivery conveyor (8). The stacking units operate alternately, at the time the lift (7.1) is activated the fork (4.1) is closed and respectively the fork (4.2) is opened, guiding the workpieces to the second stacking unit, the said workpieces being guided by means of the guiding conveyor (2.2) and the pressing conveyor (3.2) onto the arms of the stacking star (6.2) which, by rotational movement, buffers them and passes them onto the lift (7.2) where the workpieces are arranged into an even stack which is carried onto the delivery conveyor (8) transporting the workpiece stack outside the machine, wherein at the time the lift is activated (7.2), the fork (4.2) is closed and the fork (4.1) is opened. By means of the vertical transporters (7,1; 7,4) with belts provided with pickers, the stacked products is separated from the star (6.1) and the product is then carried by means of the adjustable stop (7,3; 7,6), preferably set in a given position depending on the packet length, and the adjustable

bands (7,2; 7,5) set depending on the packet width. Reception of the stacks is carried out by receiving transporters (8,1; 8,2) moving at a constant speed so that the transporter (8,1) is intended to receive the packet from the stacking transporter (7,4) and to pass it onto the trans-

porter (8,2), whereas the transporter (8,2) is intended to transport the packet between the pickers of the vertical transporter (7,1) and to receive the next packet stack from this conveyor and to transport it outside the ma-





EUROPEAN SEARCH REPORT

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EP 17 15 8223

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			TECHNICAL FIELDS SEARCHED (IPC)
			B65H
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 19 October 2017	Examiner Henningsen, Ole
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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5 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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19-10-2017

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