

Title (en)

Device for forming and delivering small packages consisting of several plain individual products of paper, cellulose wadding or the like.

Title (de)

Einrichtung zur Bildung und Abgabe von Päckchen aus mehreren, flächigen Einzelerzeugnissen aus Papier, Zellstoffwatte od. dgl.

Title (fr)

Dispositif pour la formation et la distribution des petits paquets constitués de plusieurs produits plats de papier, d'ouate de cellulose ou similaires.

Publication

**EP 0076939 A1 19830420 (DE)**

Application

**EP 82108652 A 19820918**

Priority

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- DE 3220130 A 19820528

Abstract (en)

1. A device for forming packages consisting of several plain individual products of paper, cellulose wadding or the like, and for delivering said packages in a rapid sequence, said individual products (A) being conveyed at intervals by a belt conveyor system (1-2-3) to a stacking mechanism (B-C, D-E), and the packages (P) formed therein being removed and led away by a delivery mechanism (17) following said stacking mechanism, whereby two stacking mechanisms (B-C, D-E) are arranged one after the other in feeding direction, said stacking mechanisms operating in alternating sequence and the conveyance of the products to the second stacking mechanism (D-E) taking place straight through the first stacking mechanism (B-C), whereby each of the stacking mechanisms comprises a collecting cassette (C-E) arranged below the belt conveyor system, as well as an expeller mechanism (B, D) arranged above the belt conveyor system (1-2-3) and including a vertically operating expeller plate (25), said belt conveyor system (1-2-3) comprising, at least in the range of the expeller mechanisms (B, D), parallelly moving individual belts (1-2) which are arranged in such a way that the products (A) are grasped in narrow marginal zones and are pushed, by one of the expeller mechanisms (B, D), through the belt conveyor system (1-2-3) into one of the collecting cassettes (C-E), the delivery mechanism (17) being arranged relative to the stacking mechanisms (B-C, D-E) in such a way that the delivery mechanism takes place in a direction perpendicularly to the direction of feed (Z), characterized in that each of the expeller mechanisms (B, D) comprises a movable lifting frame (4) which slides in rod guides (5) and at the lower end of which at least one expeller plate (25, 25a) is provided, and which is adapted to be lifted, against the force of a compression spring (8), by means of an eccentric sheave (6) secured to a drive shaft (10), and that, during the operation of the second stacking mechanism (D), the expeller mechanism (B) of the first stacking mechanism is blocked by a locking mechanism comprising a driveable hollow control shaft (9) enclosing the drive shaft (10) over part of its length to which control shaft a cam plate (11) is attached the circumference of which comprises two angle areas having radii of different length, and further comprising a stop member (14) attached to the lifting frame (4), said stop member being guided on the circumference of the cam plate (11) in such a manner that, depending on the position of the cam plate, the lifting frame (4) is either held back in its raised-position or is released.

Abstract (de)

Eine Einrichtung zur Bildung und Abgabe von Päckchen aus mehreren, flächigen Einzelerzeugnissen aus Papier, Zellstoffwatte od. dgl. Die Einzelerzeugnisse werden in Abständen auf einem Transportband (1-2) angeordnet, abwechselnd zwei Stapelvorrichtung (B-C, D-E) zugeführt, die in Zuführungsrichtung (Z) hintereinander angeordnet sind. Die Zuführung zur zweiten Stapelvorrichtung (D-E) erfolgt durch die erste Stapelvorrichtung (B-C) hindurch, die während des Betriebes der zweiten Stapelvorrichtung (D-E) in ihrem Betrieb gesperrt, aber für die Erzeugnisse (A) durchgängig gehalten wird. Jeder Stapelvorrichtung (B-E, D-E) ist eine Abgabevorrichtung zugeordnet, die umlaufende Transportketten (17) aufweist und die Päckchen (P) zugeführt werden und auf der die Abführung der Päckchen (P) in einer Richtung rechtwinklig zur Zuführungsrichtung (Z) der Gesamteinrichtung erfolgt. Mit der Einrichtung lässt sich eine hohe Durchsatzgeschwindigkeit erreichen, da während der Übergabe eines Päckchens (P) von einer Stapelvorrichtung (B-C) an die Abgabevorrichtung (17) durch die andere Stapelvorrichtung (D-E) bereits das nächste Päckchen (P) gebildet wird.

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