

Title (en)

Sorting device for printed valuable papers, in particular bank notes.

Title (de)

Sortiervorrichtung für gedruckte Wertpapiere, insbesondere Banknoten.

Title (fr)

Dispositif de tri pour titres de valeur imprimés, en particulier des billets de banque.

Publication

EP 0029268 A2 19810527 (DE)

Application

EP 80201063 A 19801110

Priority

US 9444679 A 19791115

Abstract (en)

1. Apparatus for sorting marked individual items from a series of papers of value (a,b), particularly banknotes, placed in succession and transported continuously along a conveyor track (1), comprising a detector (2) which responds to the marking ; a rotating intake roller (4), which is situated behind the detector in the direction of transport, the peripheral speed of which is synchronized with the speed of conveyance of the notes of value and which possesses on the inside a stationary valve plate (12), containing a circular arc slit (17), extending about a certain angle and communicating with a suction nozzle (13, 15) issuing on the periphery of the intake roller (4), as long as the nozzle is moving within the range of the angle mentioned ; valves (19), which can be controlled by the detector (2), for temporarily connecting the circular arc slit (17) with a vacuum source for the purpose of drawing by suction marked individual items from the conveyor track ; and a deposition system (31 to 35) for the separated marked individual items, characterized in that the stationary valve plate (12) of the intake roller (4) has two concentric circular arc slits (11, 17), each of which can be attached to the vacuum source via a separately controllable valve (19, 19a) ; that the intake roller (4) possesses four suction nozzles (13,15 ; 14, 16) which are situated in pairs diametrically opposite one another, successive such suction nozzles being capable of being brought into communication alternatively with one or the other circular arc slit (11, 17) during the rotation of the intake roller (4) in peripheral direction, and that a second intake roller (6), being of identical construction to the first intake roller (4) and in tangential contact with the latter, is provided between the above-mentioned intake roller (4) and the deposition system (31 to 35), this second intake roller similarly possessing four suction nozzles (37 to 40) and two concentric circular arc slits (36, 42), which can be attached to the vacuum source via separately controllable valves (10, 10a) and the peripheral speed of which is synchronized with that of the first intake roller (4).

Abstract (de)

Die Vorrichtung sortiert gekennzeichnete Einzelstücke aus einer rasch kontinuierlich hintereinander entlang einer Förderbahn (1) geförderten Reihe von gedruckten Wertpapieren, insbesondere Banknoten, aus. Die Kennzeichnung der auszusortierenden Einzelstücke erfolgt mittels einer auf die Kennzeichnung ansprechenden Anzeigeeinrichtung (2). Ein Ablagetisch (35) über der Förderbahn nimmt die aussortierten Einzelstücke auf. Eine erste Ansaugwalze (4), deren Tätigkeit von der Anzeigeeinrichtung gesteuert wird, entfernt das gekennzeichnete Einzelstück und fördert es zu einer zweiten Ansaugwalze (6). Von dieser zweiten Ansaugwalze (6) wird das aussortierte Einzelstück dann zu dem Ablagetisch gefördert.

IPC 1-7

G07D 7/00

IPC 8 full level

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CPC (source: EP US)

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