

Title (en)

Apparatus for forming a stream of uniformly overlapped printed products

Title (de)

Vorrichtung zur Bildung eines Stroms von Druckprodukten in gleichmässiger Schuppenformation

Title (fr)

Appareil pour former un courant de produits imprimés se chevauchant uniformément

Publication

EP 0857674 A3 20000329 (EN)

Application

EP 98102100 A 19980206

Priority

- US 95029197 A 19971014
- US 79877597 A 19970211

Abstract (en)

[origin: EP0857674A2] A conveying apparatus has a receiving surface for a stack of printed products lying above one another, with a conveying device adjoining the receiving surface. A vacuum roll rotatable in the conveying direction can act by means of a reduced pressure on the lower side of the printed product in order to produce the desired overlap. The upper tangential plane of the vacuum roll thereby forms a part of the receiving surface. The apparatus herein generates a stream of overlapping signatures with the overlap between adjacent signatures in the stream being uniform. Such uniform overlap generally corresponds to the distance from the upstream end of the receiving surface or signature support portion of the apparatus to the vacuum roll, and more specifically to the upstream edge of a transverse manifold slot provided in the roll. Overlapped signatures are fed by the roll to a downstream nip and blower assembly for being pulled through the nip thereof. The nip is shiftably mounted so as to adjust the size of nip space during running of the apparatus to accommodate for changing thickness of the signature material drawn through the self-adjusting nip at any one time, such as due to varying numbers of signatures being in the nip space or when thicker folded over spines are therein. The precise location at which air from the blowers is directed back upstream against the signatures can be fine tuned and preset as determined by the thickness of the signatures to be run. <IMAGE>

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IPC 8 full level

B65H 3/10 (2006.01); **B65H 5/24** (2006.01)

CPC (source: EP)

B65H 3/10 (2013.01); **B65H 2301/42322** (2013.01)

Citation (search report)

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- [X] FR 2721297 A1 19951222 - BERTIN & CIE [FR]
- [A] US 5326088 A 19940705 - NEWSOME JOHN R [US]
- [A] US 4771896 A 19880920 - NEWSOME JOHN R [US]
- [X] PATENT ABSTRACTS OF JAPAN vol. 007, no. 207 (M - 242) 13 September 1983 (1983-09-13)
- [A] PATENT ABSTRACTS OF JAPAN vol. 004, no. 128 (M - 031) 9 September 1980 (1980-09-09)

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EP0959030A1; CN108408441A; CN112875349A

Designated contracting state (EPC)

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