

Title (en)  
Device for delivering sheet-like products

Title (de)  
Vorrichtung zur Auslage bogenförmiger Produkte

Title (fr)  
Dispositif de sortie de produits en forme de feuille

Publication  
**EP 0754642 A3 19970827 (DE)**

Application  
**EP 96108055 A 19960521**

Priority  
US 50486795 A 19950720

Abstract (en)  
[origin: US5727783A] An apparatus for delivery of sheet-like products is provided which includes a reorientating conveyer 14 coupled to deceleration unit 6, the deceleration unit 6 for receiving signatures 5 from a product forming device such as a folding or a cutting cylinder. The deceleration unit 6 slows down the signatures 5 from a single spaced configuration to an overlapped shingled configuration. The reorientation conveyer 14 grips signatures in an overlapped shingled configuration with grippers 17, the grippers 17 having a pitch 16. Since the deceleration unit 6 does not release the signatures 5 until after the grippers 17 are engaged, control over the signatures is maintained during the transfer. In the reorientation conveyer 14, the grippers 17 rotate the signatures into a spine leading formation while maintaining control over the signatures 5. A transport conveyer 22, including grippers 25 having a smaller pitch 23, receives the signatures from the reorientation conveyer 14, thereby changing the spacing between the shingled signatures to correspond to pitch 23. The transport conveyer 22 travels substantially parallel to the reorientation conveyer 14 over a second transfer area 24. Grippers 17 of the reorientation conveyer do not release the signatures 5 until after grippers 25 of the transport conveyer 22 are engaged, thereby maintaining control over the signatures throughout the transfer.

IPC 1-7  
**B65H 29/04**; **B65H 29/06**; **B65H 29/68**

IPC 8 full level  
**B65H 5/08** (2006.01); **B65H 29/04** (2006.01); **B65H 29/06** (2006.01); **B65H 29/68** (2006.01); **B65H 35/04** (2006.01)

CPC (source: EP US)  
**B65H 29/003** (2013.01 - EP US); **B65H 29/06** (2013.01 - EP US); **B65H 29/68** (2013.01 - EP US); **B65H 2301/33** (2013.01 - EP US); **B65H 2301/44712** (2013.01 - EP US); **B65H 2301/4474** (2013.01 - EP US); **B65H 2404/561** (2013.01 - EP US); **B65H 2405/531** (2013.01 - EP US)

Citation (search report)  
• [DY] DE 4417178 A1 19950216 - HEIDELBERGER DRUCKMASCH AG [DE]  
• [Y] US 3809214 A 19740507 - REIST W  
• [A] EP 0399188 A2 19901128 - AM INT [US]  
• [A] EP 0300170 A1 19890125 - FERAG AG [CH]  
• [A] US 5261520 A 19931116 - DUKE B MICHAEL [US]  
• [A] EP 0242702 A1 19871028 - FERAG AG [CH]

Cited by  
EP0990535A1; EP1227052A1; AU782812B2; US6588745B2; US6254088B1

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DOCDB simple family (publication)  
**US 5727783 A 19980317**; AT E197033 T1 20001115; DE 19621332 A1 19970123; DE 59606007 D1 20001123; EP 0754642 A2 19970122; EP 0754642 A3 19970827; EP 0754642 B1 20001018; JP H0940261 A 19970210

DOCDB simple family (application)  
**US 82787697 A 19970403**; AT 96108055 T 19960521; DE 19621332 A 19960528; DE 59606007 T 19960521; EP 96108055 A 19960521; JP 19107496 A 19960719