

Title (en)  
Device for aligning sheets

Title (de)  
Vorrichtung zur Ausrichtung von Bogen

Title (fr)  
Dispositif d'alignement de feuilles

Publication  
**EP 1460009 A3 20041117 (DE)**

Application  
**EP 04102742 A 20011128**

Priority  
• DE 10062819 A 20001215  
• EP 01270479 A 20011128

Abstract (en)  
[origin: WO0248012A2] The invention relates to devices for aligning sheets, which are overlapped with an offset and supplied to the device by a stream feeder and which can be transferred to a device that is located downstream, after alignment of the front edge and one lateral edge of the sheets. At least part of a sheet can be brought to rest on the periphery of an alignment cylinder, which is used to align the front edge of the sheet by means of front lay marks located on the periphery of said cylinder. At least one recess is provided on the periphery of the alignment cylinder, which, by the application of a negative pressure to said recess allows at least part of the sheet to be fixed by friction on the periphery of the alignment cylinder, in such a way that in the contact zone, drive forces from said cylinder can be transferred by friction to the sheet. A measuring device determines the offset of a lateral edge of the sheet in relation to a predetermined set alignment. A transversal displacement device is used to align a lateral edge of the sheet in accordance with the measurement result of the measuring device. The acceleration and/or speed and/or angle of rotation of the drive motor for driving the rotation of the alignment cylinder can be controlled or adjusted according to predetermined laws of motion, in particular in accordance with the angle of rotation of the alignment cylinder.  
[origin: WO0248012A2] The invention relates to devices for aligning sheets (1), which are overlapped with an offset and supplied to the device by a stream feeder and which can be transferred to a device (63) that is located downstream, after alignment of the front edge and one lateral edge of the sheets. At least part of a sheet can be brought to rest on the periphery of an alignment cylinder (62), which is used to align the front edge of the sheet by means of front lay marks located on the periphery of said cylinder. At least one recess is provided on the periphery of the alignment cylinder, which, by the application of a negative pressure to said recess allows at least part of the sheet to be fixed by friction on the periphery of the alignment cylinder, in such a way that in the contact zone, drive forces from said cylinder can be transferred by friction to the sheet. A measuring device (64) determines the offset of a lateral edge of the sheet in relation to a predetermined set alignment. A transversal displacement device is used to align a lateral edge of the sheet in accordance with the measurement result of the measuring device. The acceleration and/or speed and/or angle of rotation of the drive motor for driving the rotation of the alignment cylinder can be controlled or adjusted according to predetermined laws of motion, in particular in accordance with the angle of rotation of the alignment cylinder.

IPC 1-7  
**B65H 9/10**; **B65H 9/06**; **B65H 9/08**

IPC 8 full level  
**B65H 9/06** (2006.01); **B65H 9/08** (2006.01); **B65H 9/10** (2006.01); **B65H 7/10** (2006.01); **B65H 9/20** (2006.01)

CPC (source: EP US)  
**B65H 7/10** (2013.01 - EP US); **B65H 9/08** (2013.01 - EP US); **B65H 9/105** (2013.01 - EP US); **B65H 9/106** (2013.01 - EP US); **B65H 9/20** (2013.01 - EP US); **B65H 11/007** (2013.01 - EP US); **B65H 2301/3621** (2013.01 - EP US); **B65H 2403/21** (2013.01 - EP US); **B65H 2403/481** (2013.01 - EP US); **B65H 2403/51** (2013.01 - EP US); **B65H 2511/12** (2013.01 - EP US); **B65H 2511/21** (2013.01 - EP US); **B65H 2511/22** (2013.01 - EP US); **B65H 2511/23** (2013.01 - EP US); **B65H 2511/24** (2013.01 - EP US); **B65H 2511/514** (2013.01 - EP US); **B65H 2513/11** (2013.01 - EP US); **B65H 2513/23** (2022.08 - EP US); **B65H 2555/10** (2013.01 - EP US); **B65H 2557/60** (2013.01 - EP US); **B65H 2701/1315** (2013.01 - EP US)

Citation (search report)  
• [A] DE 2836098 A1 19800228 - RAES KARL  
• [DA] DE 2046602 A1 19720608 - KOENIG & BAUER SCHNELLPRESSFAB

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 0248012 A2 20020620**; **WO 0248012 A3 20030123**; AT E294760 T1 20050515; AT E318782 T1 20060315; AT E322443 T1 20060415; AU 5654602 A 20020624; DE 10137007 A1 20020620; DE 50106144 D1 20050609; DE 50109117 D1 20060427; DE 50109466 D1 20060518; EP 1341712 A2 20030910; EP 1341712 B1 20050504; EP 1460009 A2 20040922; EP 1460009 A3 20041117; EP 1460009 B1 20060301; EP 1479627 A1 20041124; EP 1479627 B1 20060405; US 2004051236 A1 20040318; US 7156390 B2 20070102

DOCDB simple family (application)  
**DE 0104477 W 20011128**; AT 01270479 T 20011128; AT 04102741 T 20011128; AT 04102742 T 20011128; AU 5654602 A 20011128; DE 10137007 A 20010728; DE 50106144 T 20011128; DE 50109117 T 20011128; DE 50109466 T 20011128; EP 01270479 A 20011128; EP 04102741 A 20011128; EP 04102742 A 20011128; US 43360803 A 20030616