

Title (en)  
FOLDER

Title (de)  
FALZAPPARAT

Title (fr)  
APPAREIL DE PLIAGE

Publication  
**EP 1554207 B1 20060823 (DE)**

Application  
**EP 03776803 A 20031020**

Priority  
• DE 0303469 W 20031020  
• DE 10248820 A 20021019  
• DE 10307089 A 20030219  
• DE 10322651 A 20030520  
• DE 10331469 A 20030711

Abstract (en)  
[origin: WO2004037696A2] The invention relates to a guiding element for a strip-producing or strip-processing machine, said guiding element comprising a plurality of openings arranged in its envelope surface, at least in a longitudinal section thereof, essentially over the entire circumference, for the discharge of a pressurised fluid. Said openings are micro-openings having a diameter smaller than 500 nm. The guiding element can be brought into at least two angular positions in relation to an approaching strip, in which the fluid in the cited longitudinal section flows out of the micro-openings essentially over the entire circumference.

IPC 8 full level  
**B65H 45/16** (2006.01); **B41F 13/02** (2006.01); **B41F 21/10** (2006.01); **B41F 22/00** (2006.01); **B41F 25/00** (2006.01); **B65H 23/24** (2006.01); **B65H 23/26** (2006.01); **B65H 27/00** (2006.01); **B65H 45/30** (2006.01)

CPC (source: EP US)  
**B41F 13/02** (2013.01 - EP US); **B41F 21/104** (2013.01 - EP US); **B41F 22/00** (2013.01 - EP US); **B41F 25/00** (2013.01 - EP US); **B65H 23/24** (2013.01 - EP US); **B65H 23/26** (2013.01 - EP US); **B65H 27/00** (2013.01 - EP US); **B65H 45/28** (2013.01 - EP US); **B65H 45/30** (2013.01 - EP US); **B65H 2301/522** (2013.01 - EP US); **B65H 2401/242** (2013.01 - EP US); **B65H 2406/111** (2013.01 - EP US); **B65H 2406/1131** (2013.01 - EP US); **B65H 2801/21** (2013.01 - EP US); **B65H 2801/84** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004037696 A2 20040506; WO 2004037696 A3 20040902**; AT E337253 T1 20060915; AT E337255 T1 20060915; AT E339311 T1 20061015; AT E367349 T1 20070815; AT E390280 T1 20080415; AT E396047 T1 20080615; AT E413354 T1 20081115; AT E435180 T1 20090715; AU 2003285264 A1 20040513; AU 2003285264 A8 20040513; AU 2003286098 A1 20040513; AU 2003286098 A8 20040513; AU 2003286099 A1 20040513; AU 2003286100 A1 20040513; AU 2003286101 A1 20040513; AU 2003286101 A8 20040513; AU 2003286102 A1 20040513; AU 2003286102 A8 20040513; CN 100551798 C 20091021; CN 1319832 C 20070606; CN 1705606 A 20051207; CN 1705608 A 20051207; DE 20380219 U1 20041118; DE 50304780 D1 20061005; DE 50304781 D1 20061005; DE 50305063 D1 20061026; DE 50307743 D1 20070830; DE 50309490 D1 20080508; DE 50309897 D1 20080703; DE 50310757 D1 20081218; EP 1554122 A1 20050720; EP 1554122 B1 20060913; EP 1554207 A2 20050720; EP 1554207 B1 20060823; EP 1554208 A1 20050720; EP 1554208 B1 20060823; EP 1556218 A2 20050727; EP 1556218 B1 20080521; EP 1556219 A2 20050727; EP 1556219 B1 20080326; EP 1556300 A2 20050727; EP 1556300 B1 20081105; EP 1655257 A1 20060510; EP 1655257 B1 20070718; EP 1997759 A1 20081203; EP 1997759 B1 20090701; ES 2289732 T3 20080201; ES 2306904 T3 20081116; JP 2006502937 A 20060126; US 2006025295 A1 20060202; US 2006096476 A1 20060511; US 2006097101 A1 20060511; US 7314440 B2 20080101; US 7383772 B2 20080610; WO 2004037537 A2 20040506; WO 2004037537 A3 20040826; WO 2004037537 B1 20041021; WO 2004037538 A1 20040506; WO 2004037538 B1 20040910; WO 2004037539 A2 20040506; WO 2004037539 A3 20040701; WO 2004037539 B1 20041021; WO 2004037697 A2 20040506; WO 2004037697 A3 20040910; WO 2004037697 B1 20041021; WO 2004037698 A1 20040506; WO 2004037698 B1 20040722

DOCDB simple family (application)  
**DE 0303474 W 20031020**; AT 03776803 T 20031020; AT 03776804 T 20031020; AT 03776805 T 20031020; AT 03776806 T 20031020; AT 03776807 T 20031020; AT 03778236 T 20031020; AT 06100923 T 20031020; AT 08161186 T 20031020; AU 2003285264 A 20031020; AU 2003286098 A 20031020; AU 2003286099 A 20031020; AU 2003286100 A 20031020; AU 2003286101 A 20031020; AU 2003286102 A 20031020; CN 200380101720 A 20031020; CN 200380101721 A 20031020; DE 0303469 W 20031020; DE 0303470 W 20031020; DE 0303471 W 20031020; DE 0303472 W 20031020; DE 0303473 W 20031020; DE 20380219 U 20031020; DE 50304780 T 20031020; DE 50304781 T 20031020; DE 50305063 T 20031020; DE 50307743 T 20031020; DE 50309490 T 20031020; DE 50309897 T 20031020; DE 50310757 T 20031020; EP 03776803 A 20031020; EP 03776804 A 20031020; EP 03776805 A 20031020; EP 03776806 A 20031020; EP 03776807 A 20031020; EP 03778236 A 20031020; EP 06100923 A 20031020; EP 08161186 A 20031020; ES 03778236 T 20031020; ES 06100923 T 20031020; JP 2005501504 A 20031020; US 53121105 A 20050415; US 53167005 A 20050418; US 53190805 A 20050419