

Title (en)

Thermal actuator with corrugated heater element

Title (de)

Thermisches Betätigungslement mit gezahntem Heizelement

Title (fr)

Élément thermique d'actuation avec ondulations

Publication

EP 1637330 B1 20070418 (EN)

Application

EP 05109700 A 19980715

Priority

- EP 98933352 A 19980715
- AU PO807897 A 19970715
- AU PO793397 A 19970715
- AU PO807597 A 19970715
- AU PO807997 A 19970715
- AU PO805097 A 19970715
- AU PO805297 A 19970715
- AU PO794897 A 19970715
- AU PO795197 A 19970715
- AU PO807497 A 19970715
- AU PO794197 A 19970715
- AU PO805197 A 19970715
- AU PO804597 A 19970715
- AU PO795297 A 19970715
- AU PO804697 A 19970715
- AU PO804297 A 19970715
- AU PO804097 A 19970715
- AU PO805797 A 19970715
- AU PO805697 A 19970715
- AU PO800197 A 19970715
- AU PO803897 A 19970715
- AU PO793797 A 19970715
- AU PO800297 A 19970715
- AU PO806897 A 19970715
- AU PO806297 A 19970715
- AU PO803497 A 19970715
- AU PO803997 A 19970715
- AU PO803797 A 19970715
- AU PO804397 A 19970715
- AU PO806497 A 19970715
- AU PO794697 A 19970715
- AU PO794397 A 19970715
- AU PO800697 A 19970715
- AU PO800797 A 19970715
- AU PO800897 A 19970715
- AU PO801097 A 19970715
- AU PO794497 A 19970715
- AU PO794797 A 19970715
- AU PO794597 A 19970715
- AU PO803397 A 19970715
- AU PO801197 A 19970715
- AU PO850397 A 19970811
- AU PO939097 A 19970923
- AU PO939397 A 19970923
- AU PO939297 A 19970923
- AU PO938997 A 19970923
- AU PO939197 A 19970923
- AU PP087397 A 19971212
- AU PP089397 A 19971212
- AU PP088897 A 19971212
- AU PP089197 A 19971212
- AU PP089097 A 19971212
- AU PP089497 A 19971212
- AU PP088997 A 19971212
- AU PP087297 A 19971212
- AU PP088297 A 19971212
- AU PP087497 A 19971212
- AU PP087597 A 19971212
- AU PP089297 A 19971212
- AU PP139898 A 19980119
- AU PP139698 A 19980119
- AU PP259398 A 19980325
- AU PP259298 A 19980325
- AU PP259198 A 19980325
- AU PP399198 A 19980609
- AU PP398398 A 19980609
- AU PP398598 A 19980609

- AU PP398998 A 19980609
- AU PP398798 A 19980609
- AU PP399098 A 19980609
- AU PP398698 A 19980609
- AU PP398498 A 19980609

Abstract (en)

[origin: EP1650031A1] An inkjet nozzle arrangement is provided. The nozzle arrangement comprises a nozzle chamber having a slotted sidewall in a first surface and an ink ejection port defined in a second surface thereof, an ink supply channel interconnected to the nozzle chamber, a moveable vane located within the nozzle chamber and being moveable so as to cause ejection of ink from the nozzle chamber, and an actuator located outside the nozzle chamber and interconnected to the moveable vane through the slotted sidewall.

IPC 8 full level

B41J 2/14 (2006.01); **B41J 2/045** (2006.01); **B41J 2/055** (2006.01); **B41J 2/16** (2006.01); **B41J 2/165** (2006.01); **B41J 2/175** (2006.01);
B41J 2/19 (2006.01); **B41J 3/42** (2006.01); **B41J 3/44** (2006.01); **G12B 1/02** (2006.01); **H01H 1/00** (2006.01)

CPC (source: EP)

B41J 2/14314 (2013.01); **B41J 2/14427** (2013.01); **B41J 2/1623** (2013.01); **B41J 2/1628** (2013.01); **B41J 2/1629** (2013.01);
B41J 2/1631 (2013.01); **B41J 2/1632** (2013.01); **B41J 2/1635** (2013.01); **B41J 2/1639** (2013.01); **B41J 2/1642** (2013.01);
B41J 2/1643 (2013.01); **B41J 2/1645** (2013.01); **B41J 2/1646** (2013.01); **B41J 2/1648** (2013.01); **B41J 2/17596** (2013.01); **B41J 3/445** (2013.01);
B41J 2002/041 (2013.01)

Cited by

CN102308148A; CN111498983A; US8152337B2; WO2010127340A1; US10537913B2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE

DOCDB simple family (publication)

WO 9903681 A1 19990128; AT E358019 T1 20070415; AT E359915 T1 20070515; AT E386638 T1 20080315; AT E409119 T1 20081015;
EP 0999934 A1 20000517; EP 0999934 A4 20010627; EP 0999934 B1 20051026; EP 1637330 A1 20060322; EP 1637330 B1 20070418;
EP 1640162 A1 20060329; EP 1640162 B1 20070328; EP 1650030 A1 20060426; EP 1650030 B1 20080924; EP 1650031 A1 20060426;
EP 1650031 B1 20080220; ES 2302134 T3 20080701; JP 2003521389 A 20030715; JP 4160250 B2 20081001

DOCDB simple family (application)

AU 9800550 W 19980715; AT 05109700 T 19980715; AT 05109701 T 19980715; AT 05109707 T 19980715; AT 05109756 T 19980715;
EP 05109700 A 19980715; EP 05109701 A 19980715; EP 05109707 A 19980715; EP 05109756 A 19980715; EP 98933352 A 19980715;
ES 05109756 T 19980715; JP 2000502942 A 19980715