

Title (en)
Inkjet nozzle actuated by slotted plunger

Title (de)
Tintenstrahldüse mit geschlitztem Kolben

Title (fr)
Buse de jet d'encre avec piston fenté

Publication
EP 1510340 A2 20050302 (EN)

Application
EP 04024063 A 19980715

Priority

- AU PO806697 A 19970715
- AU PO807297 A 19970715
- AU PO807197 A 19970715
- AU PO804797 A 19970715
- AU PO803597 A 19970715
- AU PO804497 A 19970715
- AU PO806397 A 19970715
- AU PO805697 A 19970715
- AU PO806997 A 19970715
- AU PO804997 A 19970715
- AU PO803697 A 19970715
- AU PO804897 A 19970715
- AU PO807097 A 19970715
- AU PO806797 A 19970715
- AU PO800197 A 19970715
- AU PO804197 A 19970715
- AU PO800497 A 19970715
- AU PO793597 A 19970715
- AU PO793697 A 19970715
- AU PO806197 A 19970715
- AU PO805497 A 19970715
- AU PO806597 A 19970715
- AU PO805597 A 19970715
- AU PO805397 A 19970715
- AU PO793397 A 19970715
- AU PO795097 A 19970715
- AU PO794997 A 19970715
- AU PO806097 A 19970715
- AU PO805997 A 19970715
- AU PO807397 A 19970715
- AU PO807697 A 19970715
- AU PO807597 A 19970715
- AU PO807797 A 19970715
- AU PO805897 A 19970715
- AU PP398398 A 19980609
- AU PP398298 A 19980609
- EP 98933350 A 19980715

Abstract (en)
An ink jet printing nozzle arrangement comprising: (a) a nozzle chamber having an ink ejection slot at one end; (b) a plunger constructed from soft magnetic material positioned between said nozzle chamber and an ink chamber supplying ink to said nozzle chamber; (c) an electric coil located adjacent to the plunger and electrically connected to a nozzle activation signal; wherein said electric coil is located within a cavity defined by a said plunger, said plunger having along one surface a series of slots, said cavity having its dimensions reduced as result of movement of said plunger, said reduction in dimensions resulting in an ink flow through said slots into said nozzle chamber and thereby assisting in the ejection of ink from said ink ejection port. <IMAGE>

IPC 1-7
B41J 2/045; **B41J 2/14**; **B41J 2/16**

IPC 8 full level
B41J 2/045 (2006.01); **B41J 2/13** (2006.01); **B41J 2/14** (2006.01); **B41J 2/16** (2006.01); **B41J 2/175** (2006.01); **B41J 3/42** (2006.01); **B41J 3/44** (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)

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 9903680 A1 19990128; AT E289922 T1 20050315; AT E352420 T1 20070215; AT E352421 T1 20070215; AT E352422 T1 20070215; AT E352423 T1 20070215; AT E353053 T1 20070215; AT E355972 T1 20070315; AT E381991 T1 20080115; EP 0999933 A1 20000517; EP 0999933 A4 20001220; EP 0999933 B1 20050302; EP 1508443 A2 20050223; EP 1508443 A3 20050316; EP 1508443 B1 20070307; EP 1508444 A2 20050223; EP 1508444 A3 20050316; EP 1508444 B1 20071121; EP 1508445 A1 20050223; EP 1508445 B1 20070131; EP 1508446 A1 20050223; EP 1508446 B1 20070110; EP 1508448 A1 20050223; EP 1508448 B1 20070117; EP 1508449 A1 20050223;

EP 1508449 B1 20070124; EP 1510339 A2 20050302; EP 1510339 A3 20050309; EP 1510339 B1 20070124; EP 1510340 A2 20050302; EP 1510340 A3 20050309; EP 1510340 B1 20070124; EP 1510341 A2 20050302; EP 1510341 A3 20050316; EP 1510341 B1 20070124; EP 1512535 A1 20050309; EP 1512535 B1 20071226; JP 2001510107 A 20010731; JP 2007062379 A 20070315; JP 2007062380 A 20070315; JP 2007062381 A 20070315; JP 2007062382 A 20070315; JP 2007062383 A 20070315; JP 4137964 B2 20080820; JP 4137965 B2 20080820; JP 4170582 B2 20081022; JP 4171037 B2 20081022; JP 4173174 B2 20081029; JP 4185538 B2 20081126

DOCDB simple family (application)

AU 9800548 W 19980715; AT 04024057 T 19980715; AT 04024059 T 19980715; AT 04024060 T 19980715; AT 04024062 T 19980715; AT 04024063 T 19980715; AT 04024064 T 19980715; AT 04024065 T 19980715; AT 98933350 T 19980715; EP 04024057 A 19980715; EP 04024058 A 19980715; EP 04024059 A 19980715; EP 04024060 A 19980715; EP 04024061 A 19980715; EP 04024062 A 19980715; EP 04024063 A 19980715; EP 04024064 A 19980715; EP 04024065 A 19980715; EP 04024066 A 19980715; EP 98933350 A 19980715; JP 2000502941 A 19980715; JP 2006270310 A 20061002; JP 2006270641 A 20061002; JP 2006270743 A 20061002; JP 2006270831 A 20061002; JP 2006270974 A 20061002