

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 September 2007 (07.09.2007)

PCT

(10) International Publication Number
WO 2007/098527 A1

(51) International Patent Classification:

B41J 2/175 (2006.01) **B41J 2/19** (2006.01)

(21) International Application Number:

PCT/AU2007/000186

(22) International Filing Date:

21 February 2007 (21.02.2007)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2006901084	3 March 2006 (03.03.2006)	AU
2006901287	7 March 2006 (07.03.2006)	AU
2006201083	15 March 2006 (15.03.2006)	AU

(71) Applicant (for all designated States except US): **SILVERBROOK RESEARCH PTY LTD** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SILVERBROOK, Kia** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU). **MORGAN, John Douglas** [AU/AU]; 393 Darling Street, Balmain, NSW 2041 (AU). **MCAULIFFE, Patrick John** [AU/AU]; 393 Darling Street, Balmain, NSW 2041 (AU). **KARPPINEN, Vesa**

[FI/AU]; 393 Darling Street, Balmain, NSW 2041 (AU). **WORBOYS, David John** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU). **WANG, Miao** [CN/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU). **DYER, Geoffrey Philip** [AU/AU]; 393 Darling Street, Balmain, NSW 2041 (AU). **TOW, Gregory Michael** [AU/AU]; 393 Darling Street, Balmain, NSW 2041 (AU). **JENSEN, David William** [NZ/AU]; 393 Darling Street, Balmain, NSW 2041 (AU). **ABRAHAM, Nicholas Kenneth** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU).

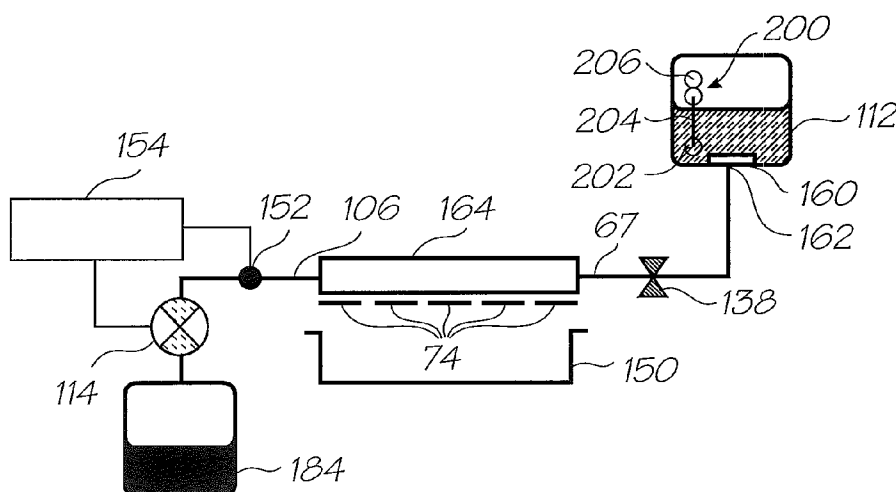
(74) Agent: **SILVERBROOK RESEARCH PTY LTD**; 393 Darling Street, Balmain, New South Wales 2041 (AU).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: PRINTER WITH ACTIVE FLUIDIC ARCHITECTURE



(57) Abstract: A inkjet printer that has an ink supply (112), a printhead integrated circuit (IC) (74) in fluid communication with the ink supply via an upstream ink line (67), the printhead IC (74), a waste ink outlet in fluid communication with the printhead IC (74) via a downstream ink line (106), an upstream shut off valve (138) in the upstream ink line (67), and, a downstream pump mechanism (114) in the downstream ink line. With a valve upstream of the printhead and a pump downstream of the printhead, the user has active control of the ink flow upstream, downstream or in the printhead IC. In the event that problems such as ink flooding, color mixing or printhead depriming occur, the user can follow simple troubleshooting protocols to rectify the situation.

WO 2007/098527 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.