

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 March 2003 (06.03.2003)

PCT

(10) International Publication Number
WO 03/018318 A1

(51) International Patent Classification⁷: B41J 2/20

(74) Agent: SILVERBROOK, Kia; Silverbrook Research Pty Ltd, 393 Darling Street, Balmain, New South Wales 2041 (AU).

(21) International Application Number: PCT/AU02/01122

(22) International Filing Date: 21 August 2002 (21.08.2002)

(25) Filing Language: English

(26) **Publication Language:** English

(30) Priority Data:
09/942,547 31 August 2001 (31.08.2001) US

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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

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

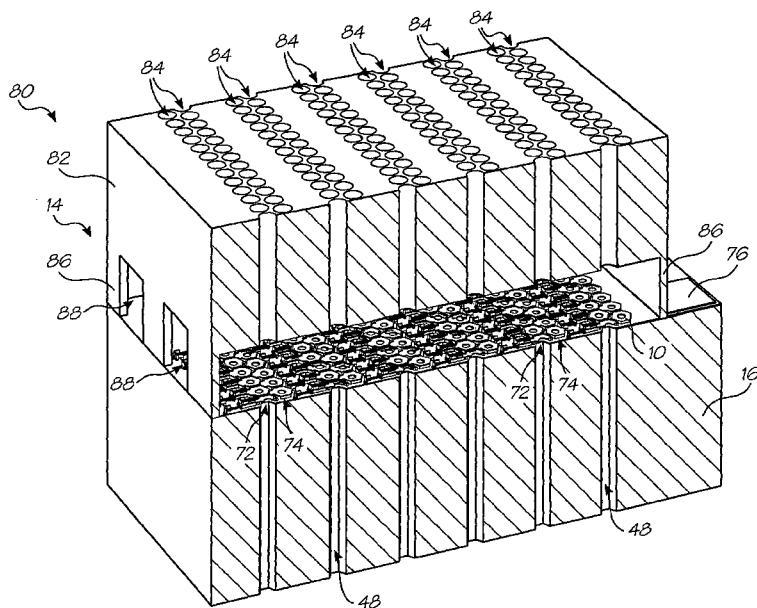
(72) Inventor; and

(75) **Inventor/Applicant (for US only): SILVERBROOK, Kia** [AU/AU]; Silverbrook Research Pty Ltd, 393 Darling Street, Balmain, New South Wales 2041 (AU).

Published:
— *with international search report*

[Continued on next page]

(54) Title: RESIDUE REMOVAL FROM NOZZLE GUARD FOR INK JET PRINTHEAD



(57) Abstract: A nozzle guard (80) for an ink jet printer printhead with an array (14) of nozzles (10). The nozzle guard (80) has an array of apertures (84) individually corresponding to the nozzle array (14). The ink droplets are ejected through the apertures (84) and onto the media to be printed. A wiper blade (143) sweeps dust and residual ink (144) stuck to the exterior surface (142) of the nozzle guard (82) characterized in that the exterior surface (142) has a recess (146) individually associated with each of the apertures (86) for preventing residual matter (144) carried by the wiper blade (143) from lodging within the aperture (84).

WO 03/018318 A1



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.