



(51) International Patent Classification:
B41J 2/14 (2006.01) *H05K 7/02* (2006.01)

(21) International Application Number:
PCT/AU2008/001198

(22) International Filing Date:
19 August 2008 (19.08.2008)

(25) Filing Language: English

(26) Publication Language: English

(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): **O'FARRELL, Stephen, Richard** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU). **WASZCZUK, Jan** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU). **SLEJPEN, Stephen, John** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU). **ANDREW, James** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU). **STRUDWICKE, Craig, Donald** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU). **GRANGER, William** [AU/AU]; 393 Darling Street, Balmain, New South Wales 2041 (AU). **JANOS, Mark** [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, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, 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, LY, MA, MD, ME, 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, ST, 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, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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 (Art. 21(3))

(54) Title: PRINTED CIRCUIT BOARD BONDING DEVICE

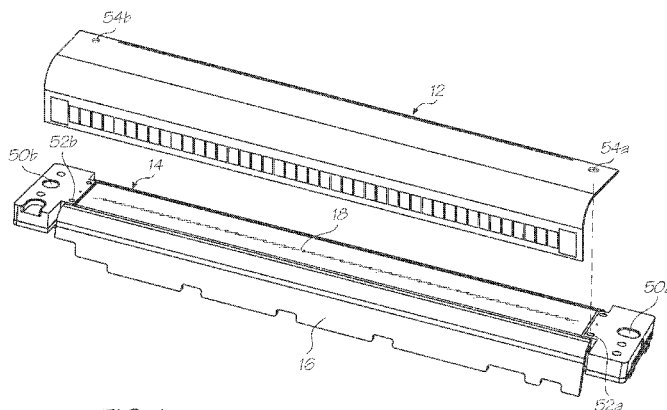


FIG. 1

(57) Abstract: The present invention relates to a bonding device for bonding a flexible printed circuit board (PCB) to a printhead assembly. The printhead assembly includes a printhead carrier and an ink ejection printhead carried by the carrier. The bonding device includes a support structure assembly and a first heater assembly arranged on the support structure assembly to be movable along a first path and configured to bond the flexible PCB to the printhead. A bending mechanism is arranged on the support structure and is configured to bend the bonded PCB. A second heater assembly is arranged on the support structure assembly to be movable along a second path and is configured to bond the bent PCB to the printhead carrier. A control system controls operation of the heater assemblies and the bending mechanism.