

(19) World Intellectual Property Organization
International Bureau



PCT



(43) International Publication Date
13 November 2008 (13.11.2008)

(10) International Publication Number
WO 2008/134792 A1

(51) International Patent Classification:
B41J 2/05 (2006.01)

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

(21) International Application Number:
PCT/AU2008/000515

(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, SV,
SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
ZA, ZM, ZW.

(22) International Filing Date: 14 April 2008 (14.04.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/744,885 7 May 2007 (07.05.2007) US

(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).

(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]; 393 Darling Street, Balmain, New South
Wales 2041 (AU).

Published:
— with international search report

(54) Title: **INKJET PRINthead WITH LOW VOLTAGE INK VAPORIZING HEATERS**

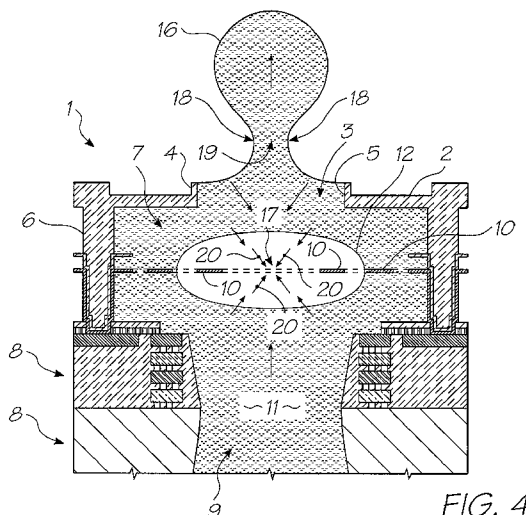


FIG. 4

(57) Abstract: There is disclosed an ink jet printhead which comprises a plurality of nozzles and one or more heater elements (10) corresponding to each nozzle. Each heater element (10) is configured to heat a bubble forming liquid (11) in the printhead to a temperature above its boiling point to form a gas bubble (12) therein. The generation of the bubble (12) causes the ejection of a drop of an ejectable liquid (such as ink) through an ejection aperture (5) in each nozzle, to effect printing. In each nozzle, the heater element (10) requires an electrical pulse with a voltage less than 10 volts and a duration less than 1.5 microseconds, to form the vapor bubble that causes the ejection of the drop. With the realization that drive pulse voltages above, say, 12 volts are not a fixed parameter of printhead design, the benefits of low voltage printhead operation can be incorporated into a design that yields efficiencies that negate the circumstances that created the initial demand for high voltage operation.

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