## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization

International Bureau





(10) International Publication Number WO 2012/106036 A3

(43) International Publication Date 9 August 2012 (09.08.2012)

(51) International Patent Classification: **B41J 2/175** (2006.01) H01L 51/56 (2006.01)

(21) International Application Number:

PCT/US2011/065306

(22) International Filing Date:

15 December 2011 (15.12.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

4 February 2011 (04.02.2011) 61/439,816 US 13/154,419 6 June 2011 (06.06.2011) US

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- (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, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- (88) Date of publication of the international search report: 1 November 2012

(54) Title: MODULAR PRINTHEAD FOR OLED PRINTING

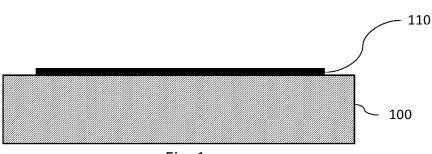


Fig. 1

(57) Abstract: The disclosure generally relates to a modular printhead configured for ease of access and quick replacement of the printhead. In one embodiment, the disclosure is directed to an integrated printhead which includes: a printhead die supporting a plurality of micropores thereon; a support structure for supporting the printhead die; a heater interposed between the printhead die and the support structure; and an electrical trace connecting the heater to a supply source. The support structure accommodates the electrical trace through a via formed within it so as to form a solid state printhead containing all of the connections within and providing easily replaceable printhead.





#### INTERNATIONAL SEARCH REPORT

International application No. PCT/US2011/065306

#### A. CLASSIFICATION OF SUBJECT MATTER

## B41J 2/175(2006.01)i, H01L 51/56(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) B41J 2/175; B41J 2/16; B41J 2/055; B41J 2/05; B41J 2/045

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: printhead, support structure, heater, electrical trace, connection joint, micropore, solder bump, under-bump metal(UBM).

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2008-0309731 A1 (SAITO RIICHI et al.) 18 December 2008 See paragraphs [0033]-[0047] and figures 1-10	1,3,7,9-11 2,4-6,8,12-32
X A	JP 2010-143116 A (CANON INC) 01 July 2010 See paragraphs [0018]-[0020], [0029]-[0033] and figures 2, 3	1 2-32
A	JP 11-320873 A (RICOH CO LTD) 24 November 1999 See abstract and figures 3, 5	1-32
A	JP 2005-288705 A (BROTHER IND LTD) 20 October 2005 See abstract and figures 3, 4	1-32

		Further	documents	are lis	sted in	the	continuation	of Box C.
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See patent family annex.

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03 SEPTEMBER 2012 (03.09.2012)

"&" document member of the same patent family

Date of the actual completion of the international search

30 AUGUST 2012 (30.08.2012)

Date of mailing of the international search report

Authorized officer

Name and mailing address of the ISA/KR



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# INTERNATIONAL SEARCH REPORT

International application No.

Information on patent family members				
Publication date	Patent family member(s)	Publication date		
18.12.2008	JP 2008-307828 A US 8100508 B2	25. 12.2008 24.01.2012		
01.07.2010	None			
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	Publication date  18. 12. 2008  01. 07. 2010  24. 11. 1999	Publication date Patent family member(s)  18. 12. 2008		