

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 May 2006 (11.05.2006)

PCT

(10) International Publication Number
WO 2006/049730 A3

(51) International Patent Classification⁷: **B41J 29/393**

(21) International Application Number:
PCT/US2005/033949

(22) International Filing Date:
22 September 2005 (22.09.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/975,305 27 October 2004 (27.10.2004) US

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(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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, 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).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

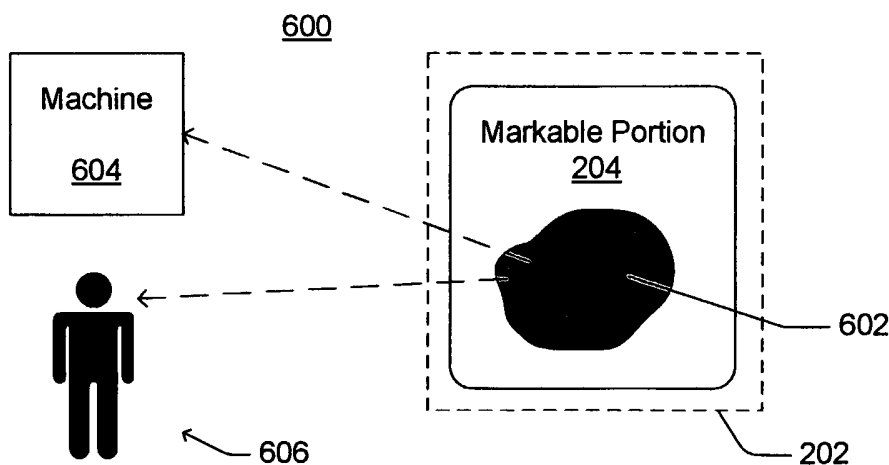
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
22 June 2006

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.

(54) Title: MARKING REPLACEABLE RESOURCE UNITS WITHIN PRINTING DEVICES



(57) Abstract: A marking beam (306, 212) of electromagnetic energy is generated within a printing device (102, 102') and a visibly markable portion (204) of a replaceable subsystem (202) that is at least partially arranged within the printing device (102, 102') is altered by illuminating at least part of the markable portion (204) with the marking beam (212).

WO 2006/049730 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2005/033949

A. CLASSIFICATION OF SUBJECT MATTER INV. B41J29/393		
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		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 060 895 A (EASTMAN KODAK COMPANY) 20 December 2000 (2000-12-20) abstract; figures 1-3 paragraphs [0015] - [0017], [0034], [0038]	1,2,4,7, 9,10
Y	US 5 699 091 A (BULLOCK ET AL) 16 December 1997 (1997-12-16) abstract; figures 1-7 columns 3-7	1-20
Y	US 2004/147399 A1 (GORE MAKARAND P) 29 July 2004 (2004-07-29) abstract; figure 1 paragraphs [0007] - [0009], [0023], [0028], [0031] - [0034], [0044], [0045]	1-20
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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Date of the actual completion of the international search 25 April 2006		Date of mailing of the international search report 11/05/2006
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Callan, F

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2005/033949

Patent document cited in search report	A	Publication date		Patent family member(s)	Publication date
EP 1060895	A	20-12-2000	JP	2001030516 A	06-02-2001
			US	2002015066 A1	07-02-2002
<hr style="border-top: 1px dashed black;"/>					
US 5699091	A	16-12-1997	DE	69516850 D1	15-06-2000
			DE	69516850 T2	01-02-2001
			DE	69516851 D1	15-06-2000
			DE	69516851 T2	01-02-2001
			DE	69516852 D1	15-06-2000
			DE	69516852 T2	01-02-2001
			DE	69517402 D1	13-07-2000
			DE	69517402 T2	08-02-2001
			EP	0721171 A2	10-07-1996
			JP	8248839 A	27-09-1996
			US	5491540 A	13-02-1996
<hr style="border-top: 1px dashed black;"/>					
US 2004147399	A1	29-07-2004	CN	1741910 A	01-03-2006
			US	2004146812 A1	29-07-2004
			WO	2004067653 A2	12-08-2004
<hr style="border-top: 1px dashed black;"/>					