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(71) Applicant (for all designated States except US): **LEX-
MARK INTERNATIONAL, INC** [US/US]; 740 West
New Circle Road, Lexington, KY 40550 (US).

(71) Applicant and

(72) Inventor (for all designated States except US): **AKERS,
Charles, Edward**; 2181 Birkdale Drive, Lexington, KY
40509 (US).

(72) Inventors: **MCCAIN, Sandra, Helton**; 232B Hartland
Parkside, Lexington, KY 40515 (US). **SISK, Phillip,
Wayne**; 541 West Short Street#36, Lexington, KY 40507
(US). **SUN, Jing, X**; 655 Gingermill Lane, Lexington, KY
40509 (US).

(74) Agent: **BRADY, John, A.**; Lexmark International, Inc.,
740 West New Circle Road, Lexington, KY 40550 (US).

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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PIGMENTED INKJET INK

(57) Abstract: The present invention provides pigmented inks comprising self-dispersing pigment and an amino-containing compound. The addition of an amino-containing compound to the self-dispersing pigment can improve the reliability and performance of the ink in an inkjet printhead. The present invention also provides methods for making a surface modified pigment comprising associating a self-dispersing pigment with an amino-containing compound having no more than one primary amino group or one secondary amino group.



WO 2005/010105 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/22707

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : C09D 11/00; C08K 3/00, 5/16, 5/17, 5/34 US CL : 523/161; 524/385, 438, 714, 717, 718, 720, 722, 847. 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) U.S. : 523/161; 524/385, 438, 714, 717, 718, 720, 722, 847 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 practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,719,204 A (BEACH et al) 17 February 1998 (17.02.1998), see column 9, lines 7-39, the paragraph bridging column 9 to column 10, and the Abstract.	1, 5-15, 19, 20, 24-28, 37, 38 ----- 2-4, 16-18, 21-23
X,P --- Y,P	US 6,638,350 B2 (BUTLER et al) 28 October 2003 (28.10.2003), see column 2, lines 19-36 and column 1, lines 47-59.	1, 5-15, 19, 20, 24-28, 37, 38 ----- 2-4, 16-18, 21-23
X, P --- Y,P	US 2004/0127619 A1 (SUN et al) 01 July 2004 (01.07.2004), see the Abstract and paragraphs [0037] to [0040], [0035] and [0059].	1, 5-15, 19, 20, 24-28, 37, 38 ----- 2-4, 16-18, 21-23
Y	US 6,402,825 B1 (SUN) 11 June 2002 (11.06.2002), see the Abstract and column 2, lines 11-34 and 55-63.	2-4, 16-18, 21-23
☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.		
* Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance		"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means		"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search 11 July 2005 (11.07.2005)		Date of mailing of the international search report 02 AUG 2005
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Nathan M. Nutter Telephone No. 571-272-1700 DEBORAH A. THOMAS PARALEGAL SPECIALIST GROUP 1300

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/22707

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-28, 37 and 38

Remark on Protest

☐
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/22707

BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-28, 37 and 38, drawn to an inkjet ink and method of use thereof.

Group II, claim(s) 29-36, drawn to a method for producing a surface-modified pigment.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the invention of Group I is drawn to a composition and method of using that composition. Group II is drawn to a method of producing a separate and distinct composition, i.e. a pigment, and possesses distinct characteristics of its own.