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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))

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(54) Title: INK SET, INK SYSTEM AND METHOD FOR PRINTING AN IMAGE

(57) Abstract: An ink set includes a light magenta ink and a dark magenta ink. The light magenta ink includes an effective amount of a pigment having a red/green lambda cutoff ranging from about 585 nm to about 600 nm, and reflecting at least about 14% of blue light at a wavelength of about 470 nm when measured at a density at which the light magenta ink provides a maximum magenta chroma. The dark magenta ink includes an effective amount of a pigment having a red/green lambda cutoff greater than or equal to about 605 nm.



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A. CLASSIFICATION OF SUBJECT MATTER*C09D 11/02(2006.01)i, B41J 2/01(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)

IPC C09D

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 since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CAS (ONLINE), DELPHION, eKIPASS(KIPO internal)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/0075925 A1 (JOHN L. STOFFEL et al.) 13 Apr. 2006 See the abstract, paragraphs [0018]~[0020], [0027]~[0030], [0036], and [0053 and claims 1-41	1-22
A	US 2005/0284329 A1 (CHRISTIAN JACKSON et al.) 29 Dec. 2005 See the abstract, paragraphs [0050]~0056] and claims 1-25	1-22
A	US 2007/0046751 A1 (TOMOYO HAMAJIMA et al.) 01 Mar. 2007 See the abstract, columns 3-8, and claims 1-12	1-22
A	US 6715869 B1 (RICHARD C. REEM et al.) 06 Apr. 2004 See the whole document	1-22
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 Further documents are listed in the continuation of Box C. See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006-0075925 A1	13.04.2006	EP 1645604 A2 JP 2006-117931 A US 2006-075925 A1	12.04.2006 11.05.2006 13.04.2006
US 2005-0284329 A1	29.12.2005	None	
US 2007-0046751 A1	01.03.2007	US 7377970	27.05.2008
US 6715869 B1	06.04.2004	EP 1422072 A1 EP 1422072 B1 JP 2004-169032 A	26.05.2004 20.12.2006 17.06.2004
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