

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43*bis*.1)

To:

see form PCT/ISA/220

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/GB2007/000296

International filing date (day/month/year)  
30.01.2007

Priority date (day/month/year)  
28.02.2006

International Patent Classification (IPC) or both national classification and IPC  
INV. B41M5/50  
ADD. B41M5/52

Applicant  
EASTMAN KODAK COMPANY

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application



2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

<p>Name and mailing address of the ISA:</p>  <p>European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016</p>	<p>Date of completion of this opinion</p> <p>see form PCT/ISA/210</p>	<p>Authorized Officer</p> <p>Martins Lopes, Luis</p> <p>Telephone No. +31 70 340-2889</p> 
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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of:
  - the international application in the language in which it was filed
  - a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material:
    - on paper
    - in electronic form
  - c. time of filing/furnishing:
    - contained in the international application as filed.
    - filed together with the international application in electronic form.
    - furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**Box No. II Priority**

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1.  The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43*bis*.1 and 64.1) is the claimed priority date.
2.  This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	<u>1-25</u>
	No: Claims	.
Inventive step (IS)	Yes: Claims	<u>1-25</u>
	No: Claims	
Industrial applicability (IA)	Yes: Claims	<u>1-25</u>
	No: Claims	

2. Citations and explanations

see separate sheet

**Re Item V.**

Reference is made to the following documents:

- D1 : US 2005/179759 A (YOSHIDA YOSHIO [JP] ET AL) 18 August 2005 cited in the application  
D2 : US 6 855 382 B2 (BARCOCK RICHARD ANTHONY [GB] ET AL BARCOCK RICHARD ANTHONY [GB] ET AL) 15 February 2005 cited in the application  
D3 : US 6 502 935 B1 (BARCOCK RICHARD [GB] ET AL) 7 January 2003

1. Document D1 discloses an inkjet receiver comprising, on a support, an underlayer comprising mainly silica (e.g. 80% in all Examples) as an inorganic pigment, which is coated in an amount of about 5 g/m<sup>2</sup> and, thereon, a recording layer comprising mainly alumina (between 50 and 90 % in the Examples) as an inorganic pigment, which is coated in an amount of about 19 g/m<sup>2</sup>. D1 aims at providing an inkjet recording sheet with the same gloss as that of a silver halide photograph, having good ink absorption and print density, good recorded image storage properties, and good recorded image mechanical resistance.

From this, the subject-matter of independent claim 1 differs in that: (i) the top layer has a laydown of inorganic pigment of only 0.5 to 10 g/m<sup>2</sup>; (ii) the underlayer has a laydown of inorganic pigment of 10 to 40 g/m<sup>2</sup>; and (iii) the underlayer contains silica gel and/or fumed silica.

In view of these differences, claim 1 is novel against D1.

2. Document D2 discloses an inkjet receiver comprising, on a support, an underlayer comprising 100% (amorphous - see c.3, line 3) silica (see Table 1) as an inorganic pigment, which is coated in an amount of about 18 g/m<sup>2</sup> and, thereon, a recording layer comprising 100% (amorphous - see c.2, line 59) alumina as an inorganic pigment, which is coated in an amount of about 20 g/m<sup>2</sup>. D1 aims at providing an inkjet recording sheet showing high gloss, high colour density, light stability, a large toning range and high image resolution, short drying time, good water resistance and good ink absorption.

From this, the subject-matter of independent claim 1 differs in that: (i) the top layer has a laydown of inorganic pigment of only 0.5 to 10 g/m<sup>2</sup>; and (ii) the underlayer contains silica gel and/or fumed silica.

In view of these differences, claim 1 is novel against D2.

3. Document D2 discloses an inkjet receiver comprising an underlayer containing mainly barium sulphate, and a top layer containing mainly alumina (laydown of 15 to 20 g/m<sup>2</sup>). Claim 1 is thus novel against D3.

4. Independent claims 21, 24 and 25 are directly related to claim 1. These claims are thus novel against any of D1 to D3.

5. Taking either D1 or D2 as the closest prior art, the objective problem to be solved can be defined as stated in the application, i.e. to provide universal media (i.e., suitable for pigment inks and dye inks), where the use of alumina is limited to the minimum, thus making slimmer media, while maintaining good imaging characteristics. None of D1 or D2 does disclose or suggest that a layer construction as specified in claim 1, would provide the desired imaging characteristics (high gloss, high absorption rate, etc...). Both D1 and D2, as well as D3, use thicker alumina-containing layers as top layer to achieve similar effects, namely for obtaining high gloss media (see e.g. D1, §10). The layer construction of claim 1 is also not derivable from general knowledge. For the above reasons, the invention involves an inventive step.