

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference N-RC074-14P	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. PCT/JP2015/056942	International filing date ( <i>day/month/year</i> ) 10 March 2015 (10.03.2015)	Priority date ( <i>day/month/year</i> ) 13 March 2014 (13.03.2014)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant RICOH COMPANY, LTD.			

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
<p>3. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<p align="center">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report 13 September 2016 (13.09.2016)</p>
	<p>Authorized officer</p> <p align="center">Yukari Nakamura</p> <p>e-mail: pt07.pct@wipo.int</p>

**PATENT COOPERATION TREATY**

**TRANSLATION**

From the  
INTERNATIONAL SEARCHING AUTHORITY

**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year)	0 2 . 0 6 . 2 0 1 5
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Applicant's or agent's file reference <b>N-RC074-14P</b>	<b>FOR FURTHER ACTION</b> See paragraph 2 below
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International application No. <b>PCT/JP2015/056942</b>	International filing date (day/month/year) <b>10 . 03 . 2015</b>	Priority date (day/month/year) <b>13 . 03 . 2014</b>
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International Patent Classification (IPC) or both national classification and IPC  
**B41J2/475 (2006.01) i, B41M5/337 (2006.01) i**

Applicant  
**RICOH COMPANY, LTD.**

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 43bis.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 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 66.1bis(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.

Name and mailing address of the ISA/JP	Date of completion of this opinion	Authorized officer
Facsimile No.		Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2015/056942

Box No. I      Basis of this opinion

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.  This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
  - a. (means)
    - on paper
    - in electronic form
  - b. (time)
    - in the international application as filed
    - together with the international application in electronic form
    - subsequently to this Authority for the purposes of search
4.  In addition, in the case that more than one version or copy of a sequence listing 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.
5. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No. PCT/JP2015/056942
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<b>Box No. V</b>	<b>Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</b>																		
1. Statement																			
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; padding: 2px;">Novelty (N)</td> <td style="padding: 2px;">Claims <u>1-14</u></td> <td style="width: 10%; text-align: right; padding: 2px;">YES</td> </tr> <tr> <td></td> <td style="padding: 2px;">Claims _____</td> <td style="width: 10%; text-align: right; padding: 2px;">NO</td> </tr> <tr> <td style="padding: 2px;">Inventive step (IS)</td> <td style="padding: 2px;">Claims <u>1-14</u></td> <td style="width: 10%; text-align: right; padding: 2px;">YES</td> </tr> <tr> <td></td> <td style="padding: 2px;">Claims _____</td> <td style="width: 10%; text-align: right; padding: 2px;">NO</td> </tr> <tr> <td style="padding: 2px;">Industrial applicability (IA)</td> <td style="padding: 2px;">Claims <u>1-14</u></td> <td style="width: 10%; text-align: right; padding: 2px;">YES</td> </tr> <tr> <td></td> <td style="padding: 2px;">Claims _____</td> <td style="width: 10%; text-align: right; padding: 2px;">NO</td> </tr> </table>	Novelty (N)	Claims <u>1-14</u>	YES		Claims _____	NO	Inventive step (IS)	Claims <u>1-14</u>	YES		Claims _____	NO	Industrial applicability (IA)	Claims <u>1-14</u>	YES		Claims _____	NO	
Novelty (N)	Claims <u>1-14</u>	YES																	
	Claims _____	NO																	
Inventive step (IS)	Claims <u>1-14</u>	YES																	
	Claims _____	NO																	
Industrial applicability (IA)	Claims <u>1-14</u>	YES																	
	Claims _____	NO																	
2. Citations and explanations:																			
<p>Document 1: JP 2013-111888 A (RICOH CO., LTD.) 10 June 2013, paragraphs [0077], [0096]-[0106], fig. 7 &amp; US 2013/0135425 A1 &amp; EP 2599634 A1 &amp; CN 103129157 A</p> <p>Document 2: JP 2011-025508 A (TOYO KANETSU SOLUTIONS KABUSHIKI KAISHA) 10 February 2011, paragraphs [0028]-[0034], fig. 1 to 3 (Family: none)</p> <p>Document 3: JP 10-138641 A (SONY CORP.) 26 May 1998, paragraphs [0016]-[0020], fig. 1 to 3 (Family: none)</p> <p>Document 4: JP 2009-214538 A (RICOH CO., LTD.) 24 September 2009, paragraph [0149] &amp; US 2009/0203521 A1 &amp; US 2012/0075402 A1 &amp; EP 2100743 A1 &amp; CN 101544141 A</p> <p style="text-align: center; padding: 10px 0;">The invention as in claims 1-14 is novel and involves an inventive step in relation to documents 1-4 cited in the ISR. Documents 1-4 do not disclose the feature of satisfying <math>A + 30 &gt; B</math> when A is the laser light absorbance of a recording unit that is provided in</p>																			

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2015/056942

**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

a transfer container and that records images when irradiated with laser light and B is the laser light absorbance of an image unit of the transfer container. Meanwhile, as a result of this feature, the invention of the present application exhibits the advantageous effect of preventing the visibility and the machine readability of a display image from lowering even when laser light that should be applied to the recording unit is applied to the image unit by mistake.

**Box No. VIII**      **Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The invention as in claim 1 is characterized in the absorbance A of the recording unit and the absorbance B of the image unit of the transfer container satisfy  $A + 30 > B$ . The "image unit" is stipulated to be "an image unit on which a display image is displayed". Therefore, in the invention as in claim 1, the relationship between the absorbance of the region in which the display image is displayed with respect to laser light and the absorbance of the recording unit satisfies the abovementioned formula.

Meanwhile, the description indicates that the absorbance B of the image unit is obtained by the equation  $B = 100 \times (1 - C/D)$ , C being the reflectance of the image unit and D being the reflectance of the non-image unit (see paragraphs [0026], [0103], [0105]-[0109], tables 1, 2). The description also indicates that by setting the absorbance B, which is obtained as described above, such that the absorbance B and the absorbance A of the recording unit satisfy the abovementioned formula, the visibility and the machine readability of the display image displayed on the transfer container can be prevented from lowering.

Here, what is obtained as the "absorbance B of the image unit" from the equation  $B = 100 \times (1 - C/D)$  is considered to be the absorbance of the display image on the image unit, in other words, of the display image layer constituted of ink and coloring agents, not the absorbance of the region in which the display image is

**Box No. VIII**      **Certain observations on the international application**

displayed. Furthermore, it is possible to understand that the display image layer is prevented from being scraped off by stipulating the absorbance of the display image layer.

Therefore, of the means for solving the problem to be solved described in Detailed Description of the invention, the feature of the "absorbance B of the image unit" being the absorbance of the display image layer constituted of ink and coloring agents obtained by the equation  $B = 100 \times (1 - C/D)$  using the reflectance C of the image unit and the reflectance D of the non-image unit is not reflected in the invention as in claim 1.

Furthermore, the feature of the "absorbance B of the image unit" being the absorbance of the display image layer constituted of ink and coloring agents obtained by the equation  $B = 100 \times (1 - C/D)$  using the reflectance C of the image unit and the reflectance D of the non-image unit is not reflected in claims 2-12, which cite claim 1 directly or indirectly, and claims 13 and 14.