

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 2014PF00203	FOR FURTHER ACTION		See item 4 below
International application No. PCT/JP2015/056842	International filing date (<i>day/month/year</i>) 09 March 2015 (09.03.2015)	Priority date (<i>day/month/year</i>) 14 March 2014 (14.03.2014)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant NTT DOCOMO, INC.			

<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 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 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 14 September 2016 (14.09.2016)</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)	28.04.2015
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Applicant's or agent's file reference 2014PF00203	FOR FURTHER ACTION See paragraph 2 below
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International application No. PCT/JP2015/056842	International filing date (day/month/year) 09.03.2015	Priority date (day/month/year) 14.03.2014
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International Patent Classification (IPC) or both national classification and IPC
H04W48/04 (2009.01) i, H04W4/08 (2009.01) i, H04W8/18 (2009.01) i, H04W48/02 (2009.01) i, H04W84/18 (2009.01) i, H04W88/18 (2009.01) i

Applicant
NTT DOCOMO, INC.

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.

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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 43*bis*.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:

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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																		
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>1-6</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 _____</td> <td style="width: 10%; text-align: right; padding: 2px;">YES</td> </tr> <tr> <td></td> <td style="padding: 2px;">Claims <u>1-6</u></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>1-6</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>1-6</u>	YES		Claims _____	NO	Inventive step (IS)	Claims _____	YES		Claims <u>1-6</u>	NO	Industrial applicability (IA)	Claims <u>1-6</u>	YES		Claims _____	NO	
Novelty (N)	Claims <u>1-6</u>	YES																	
	Claims _____	NO																	
Inventive step (IS)	Claims _____	YES																	
	Claims <u>1-6</u>	NO																	
Industrial applicability (IA)	Claims <u>1-6</u>	YES																	
	Claims _____	NO																	
2. Citations and explanations:																			
<p>Document 1: JP 2010-93508 A (NTT DOCOMO INC.) 22 April 2010, paragraphs [0021]-[0027], [0029]-[0041], [0048]-[0054], fig. 10 and 12 (Family: none)</p> <p>Document 2: JP 2006-345580 A (NTT DOCOMO INC.) 21 December 2006, paragraph [0043] (Family: none)</p> <p>Document 3: Sierra Wireless, 23.888 MTC access control by RAN clean up[online], 3GPP TSG-SA WG2#80 S2-103759, Retrieved from the Internet <URL: http://www.3gpp.org/ftp/tsg_sa/WG2_Arch/TSG_S2_80_Brunstad/Docs/S2-103759.zip>, 03 September 2010, page 2</p> <p>·Claims 1, 2, 5, and 6</p> <p style="padding-left: 40px;">The invention as in claims 1, 2, 5, and 6 does not involve an inventive step in the light of document 1 cited in the ISR.</p> <p style="padding-left: 40px;">Document 1 does not indicate that "if a communication request is received from the aforementioned</p>																			

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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

user device, then the question of whether or not the group to which the aforementioned user device belongs is subject to control is determined on the basis of the aforementioned group identification information and group identification information about control subjects designated from an operation system".

However, document 1 (paragraph [0041]) indicates that "in the use restriction information 801, (...) two incoming/outgoing call prohibition times (...) are associated with the mobile telephone 2 carried by a student belonging to a class identified with the class ID '302'. (...) The use restriction information having been thus set is registered from the Web server 14 (...) into an HLR 71 (described later)". Document 1 (paragraph [0049]) also indicates that "the HLR 71 is a database that stores user information about all mobile telephones 2 within an in-zone area where the service control station 7 has jurisdiction, (...) as well as the use restriction information, which indicates use restriction service content for the mobile telephones 2". Thus, document 1 indicates that use restriction information having a class ID (corresponding to the "group identification information" of the present application) is registered in the HLR (corresponding to the "user information management device" of the present application) from a Web server (corresponding to the "operation system" of the present application).

In consideration also of the fact that document 1 (paragraph [0051]) indicates that "if there is an outgoing call request from a mobile telephone 2 within the in-zone area, (...) the service control station 7 performs communication regulation processing for the

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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

mobile telephone 2 on the basis of the use restriction information stored in the HLR 71", the service control station (corresponding to the "regulation control device" of the present application) of document 1 is one that performs communication regulation processing on the basis of use restriction information that is set from the HLR. Therefore, it would be easy for a person skilled in the art to conceive of the aforementioned configuration where "if a communication request is received from the aforementioned user device, then the question of whether or not the group to which the user device belongs is subject to control is determined on the basis of the aforementioned group identification information and group identification information about control subjects designated from an operation system".

·Claim 3

The invention as in claim 3 does not involve an inventive step in the light of document 1 cited in the ISR.

In consideration of the fact that document 1 (paragraph [0041]) indicates that "the use restriction information having thus been set is passed on to the service control station 7 from the Web server 14, and registered in the HLR 71 (described later) by the service control station 7", document 1 is considered to suggest that the service control station 7 is provided with a "user information storage unit for storing group identification information and user identification information in association with one another".

Accordingly, it would be easy for a person skilled in the art to conceive of using this configuration.

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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

·Claim 4

The invention as in claim 4 does not involve an inventive step in the light of documents 1 and 2 cited in the ISR.

Document 2 (paragraph [0043]) indicates that "fig. 15 illustrates the principal functional configuration of the call connection service control device 20. If an outgoing call request containing group identification information (group ID) for identifying a group is received from the caller's communication device 70, then the group member acquisition unit 21, illustrated in fig. 15, (...)". Document 1 and document 2 share the function of performing connection control on mobile communication terminals belonging to the same group.

Consequently, it would be easy for a person skilled in the art to conceive of configuring the subscriber exchanger (corresponding to the "wireless access control device" of the present application) disclosed in document 1 so that a connection request received from a user device is made to contain the group identification information disclosed in document 2.