Date	March 28, 2016	Court	Intellectual Property High Court, Second Division
Case number	2015 (Ne) 10029		
– A case in which the court adopted an in-camera trial for making a decision on the appellant's claim seeking an order to submit documents regarding a case where parties disputed over whether the provision of mobile phone communication services, etc. by the appellee falls under the technical scope of the appellant's patent rights for a communication network operating method and a communication system.			

References: Article 70, Article 102, and Article 105, paragraphs (1) to (3) of the Patent Act

Number of related rights, etc.: Patent No. 4696179

Summary of the Judgment

1. Background, etc.

The appellee (plaintiff), who provides mobile phone communication services under the name of FOMA (the "Appellee's Services"), filed this action against the appellant (defendant) that holds the patent right in question (Patent No. 4696179) (the "Patent Right"), seeking a declaratory judgment on the non-existence of the obligation to compensate for damages based on tort and the obligation to return unjust enrichment, alleging that the act of having provided said services, etc. using the Appellee's Services' communication network operating method, which is related to access control to a random access channel (RACH), or the communication system (together with said method, they are referred to as the "Appellee's Method, etc.") does not infringe the Patent Right.

The court of prior instance dismissed the appellant's claim for an order to submit documents, holding that there is no need for the examination of evidence, and it upheld the appellee's claim by holding that the method, etc. in question does not fall under the technical scope of the Appellee's Method, etc. Dissatisfied with this decision, the appellant filed an appeal.

2. Issue

The issue of this case is whether the provision of services, etc. using the Appellee's Method, etc. falls under the technical scope of the Patent Right.

The appellant contested the structure of the Appellee's Method, etc. as follows. The appellant principally alleged that, even if the Appellee's Method, etc. has a structure as alleged by the appellee, the Appellee's Method would fall under the technical scope of the Patent Right according to the interpretation of the "access threshold" of the patent in question as asserted by the appellant (the "Principal Claim"). Furthermore, the

appellant alternatively alleged that, even if the "access threshold" is interpreted in a way as alleged by the appellee, in the Appellee's Method, etc., the system information structured in System Information Blocks (SIB) 5 and 7 is defined to be A [Note by the court: Although the original text of the judgment does not include the description "A," this summary uses this code for readers' convenience as some access restriction parts are included. Note that SIBs 5 and 7 include N and AC-to-ASC mapping information.] or is structured in a way that allows the appellee's internal network to constitute A (the "Alternative Claim").

The appellant demanded the submission of the following documents possessed by the appellee, in order "to prove said act of infringement" (Article 105, paragraph (1) of the Patent Act): [i] the source code and BTS manual of the call processing application program; [ii] the source code and manual of the RNC program; and [iii] the source code, manual, etc. of the station data, etc. used and produced by the BTS.

3. Court decision regarding an order to submit documents

(1) Necessity for the examination of evidence

While the necessity for an order to submit documents is decided based on Article 181, paragraph (1) of the Code of Civil Procedure, such an order for "proving an act of infringement" is often in great need in patent litigation cases, such as the case where an object is under the control of the other party and there is no way to obtain it and the case where the invented method does not leave any trace concerning the use of said method in an object. On the other hand, as litigations of this sort are often disputed among competing parties and the subject that needs to be proved in such litigations is often directly related to trade secrets, the party that is compelled to respond to such litigation is subject to a great disadvantage should such litigation be filed for an abusive purpose with an eye to accessing said information or should it be an exploratory lawsuit filed without any positive proof. For this reason, a right holder that seeks an order to submit documents is usually required to make a prima facie showing of reasonable doubt for an act of infringement from the viewpoint of preventing abusive and exploratory lawsuits. Since an order to submit documents is used as a means to gather evidence necessary for proving an act of infringement for which a person bears the burden of proof, said person is not required to make a prima facie showing of said act of infringement itself, which is a factum probandum of the lawsuit case, when seeking an order to submit documents; rather, it is found to be sufficient if said person makes a prima facie showing of reasonable doubt for the existence of said act of infringement to an extent that the doubt for an abusive or exploratory claim is eliminated. It is understood that the scope of said prima facie showing should be

determined individually for each case bearing in mind various factors, including whether it is necessary to examine the document in question and the significance of such necessity, the difficulty of proving of the matter in question, whether there is any alternative evidence, and the status of otherwise establishing proof.

Looking at this case from this point of view, [...] although the results of the experiment were consistent with the results asserted by the appellee (indeed, A is not sent), the subject that the appellant needs to prove in its alternative claim is, when considering the meaning of the "access threshold" of the patent in question, that the Appellee's Method, etc. has a system structure that is capable of indeed sending A. Said experiment results that are already submitted merely show the status of the signals of SIB5 or SIB7 captured during the experiment. If the Appellee's Method, etc. has a structure to allow the internal network to constitute A under limited conditions, it would not be easy to detect the experiment results that capture such status in a timely manner. Furthermore, the subject that needs to be proved as stated above is defined as a question of what setting the structure of the Appellee's Method, etc. can achieve, and the evidence for this question is unevenly held by the appellee's side. Moreover, although said experiment results conform with the facts asserted by the appellee, it does not mean that the appellee has sufficiently proved the opposing fact and thus the necessity for the examination of evidence cannot be denied.

Furthermore, the Appellee's Services comply with the 3GPP specifications, whereas said specifications provide for a RACH overload prevention system. The constituent features in question are satisfied if all of said specifications are complied with; the constituent features in question are not satisfied if ●(omitted)●.

In addition, taking into account the status of the proving of the appellant's allegations so far, it is possible to find that there is reasonable doubt for an act of infringement and thus the necessity for the examination of evidence cannot be denied.

(2) Legitimate reason

The appellee alleged that all of the documents in question (the "Documents") belong to the domain of the appellee's trade secrets and thus they have a legitimate reason to refuse their submission. However, the existence of a legitimate reason is determined by comparing and balancing the disadvantage that the owner suffers by disclosing the documents (the level of protection that the documents require as a secret) and the disadvantage that the party seeking an order to submit documents suffers due to the non-provision of the documents (necessity for the documents as an evidence). When conducting such comparison, the documents' value as evidence for proving an act of infringement must be considered, because the level of protection that

the documents require as a trade secret becomes relatively high when it turns out that the other party uses a structure different from the petitioner's patented invention, whereas the level of protection they require as a trade secret becomes relatively low when it turns out that the other party is using a structure that falls under the technical scope of the petitioner's patented invention. The level of protection as a secret should be decided bearing in mind whether there was any protective order issued (Article 105-4 and subsequent provisions of the Patent Act) and the scope of such order, and whether there was any non-disclosure agreement concluded, the scope of the parties of such agreement, its validity, etc., in addition to the content and nature of the trade secret, and the significance of expected disadvantages caused by the disclosure.

Based on these grounds, the court adopted an in-camera trial and examined whether there is any legitimate reason to refuse the submission of documents as follows.

Specifically, the court made a decision on the presentation of documents based on Article 105, paragraph (2) of the Patent Act regarding a part of the Documents for which the court determined it necessary to conduct an in-camera trial as a result of considering the following: [i] the level of difficulty for the court to compare the necessity for the protection as a trade secret and the necessity as evidence for the purpose of determining whether there is any legitimate reason to refuse the submission of documents; [ii] significance as a trade secret; [iii] burdens on the other party; and [iv] the difficulty of disclosure, etc. (Specifically, these are Documents 1 and 2 (manuals concerning BTS and RNC) and the documents included in Document 4 that describe technical conditions, including technical specifications, etc., which refer to AC-to-ASC mapping and the conditions regarding the setting of the value of N.) These documents were presented to the court in the presence of the counsel for the appellee and its employees. As a result, the court confirmed that the content of the documents falls under the appellee's trade secret, while it did not find any description that underlines the effectiveness of the documents as evidence for proving an act of infringement through the disclosure of the parts concerning access control in the Appellee's Method, etc. In light of the fact that the parties concluded a non-disclosure agreement, in addition to the findings above, the court determined that the level of protection that these documents require as a trade secret surpasses the necessity for these documents as an evidence. The court encouraged the appellee to voluntarily submit a part of the presented documents to the court since information contained therein was already included in the appellee's allegations in the written brief and it was considered to be possible for the appellee to submit them without disclosing any new

trade secrets. Subsequently, the appellee submitted said documents at a later date.

Judgment rendered on March 28, 2016
2015 (Ne) 10029, Appeal Case of Seeking Declaratory Judgment on Absence of Right to Claim Damages Based on Patent Right (the court of prior instance: Tokyo District Court, 2012 (Wa) 11459)
Date of conclusion of oral argument: February 15, 2016

Judgment

Appellant (Defendant): IPCOM GmbH & Co. KG
Appellee (Plaintiff): NTT DOCOMO Inc.

Main text

1. The appeal in question shall be dismissed.
2. The appellant shall bear the cost of the appeal.
3. The additional period for filing a final appeal or a petition for acceptance of final appeal against this judgment shall be 30 days.

Facts and reasons

The abbreviations of terms and the meaning thereof shall follow those used in the judgment in prior instance in addition to those added in this judgment.

No. 1 Object of appeal

1. The judgment in prior instance shall be revoked.
2. The appellee's claims shall be dismissed.

No. 2 Outline of the case

1. In this case, the appellee (plaintiff), who is providing a third-generation mobile phone communication service using a W-CDMA method called "FOMA" (the "plaintiff's service"), alleged against the appellant (defendant), who holds the patent right in question (the "Patent Right"; Patent No. 4696179; registered on March 4, 2011), that the acts including the provision of the abovementioned service by using the operation method of a communication network or the communication system used in the plaintiff's service in relation to the access control on random access channel (RACH) (hereinafter the relevant method and system shall be referred to as the "plaintiff's method" and "plaintiff's system," respectively, while they will also be collectively referred to as the "plaintiff's method, etc.") do not constitute infringement of the Patent Right. Based on this allegation, the plaintiff sought a declaratory judgment on the absence of the

obligation to compensate for damages and return unjust enrichment based on tort.

In the judgment in prior instance, the court upheld the plaintiff's claims by finding that the plaintiff's method, etc. do not fall within the technical scope of the invention covered by the Patent Right and thus the defendant filed the appeal in question (the "Appeal").

2. Facts on which the decision is premised.

In addition to the addition and correction stated in (1) below, the facts are as stated in Part No. 2 "1. Facts on which the decision is premised" under the "Facts and reasons" in the judgment in prior instance.

(1) Addition and correction to the judgment in prior instance

(omitted)

(2) The constituent features of the inventions in question (hereinafter referred to as the "Constituent Features" and the "Inventions," respectively) can be reproduced as follows.

[Claim 9] (Invention 1)

A: An operation method of a communication network which is provided with at least one base station (100) and is comprised as a mobile radio network, wherein:

B: said base station deploys a radio cell in which at least two mobile stations (5, 10, 15, 20) exist;

C: said base station (100) transmits an information signal and access authorization data (55) to said at least two mobile stations (5, 10, 15, 20); and

D: said information includes information as to which of said mobile station (5, 10, 15, 20) the authority to make transmission to the base station on the communication channel (30), which can be used in common by multiple mobile stations, is assigned;

E: and in said operation method, said access authorization data (55) contains access threshold bits (S3, S2, S1, S0) for the access threshold value (S) and access class information (Z3, Z2, Z1, Z0) for the user classes of multiple mobile stations (5. 10, 15, 20);

F: said access authorization data (55) is prepared to allow, in the following manner, the mobile stations (5, 10, 15, 20) to access the communication channel (30) which can be used in common, that is:

F1: said access authorization data is prepared to enable the mobile station, which belongs to a user class whose member access class bit has the first value, to access the communication channel regardless of the access threshold value (S); and

F2: the mobile station, which belongs to the user class whose member access class bit

has the second value, must perform an access threshold evaluation wherein said access threshold value (S) is compared with a random number or pseudo-random number (R) in order to detect the access authority of said mobile station to the communication channel, and the access authority to the communication channel is assigned to at least one mobile station (5. 10, 15, 20) based on the comparison results;

G: an operation method of a communication network which can be characterized by the constituent features mentioned in A to F2 above.

[Claim 22] (Invention 2)

A: A communication system having a communication network comprised as a mobile radio network, at least one base station (100) that deploys a radio cell and signaling channel (25), wherein;

B: the base station (100) transmits through said signaling channel (25) an information signal to the mobile stations (5, 10, 15, 20) that exist in said radio cell; and

C: the information as to which authority is assigned to the corresponding user class (35, 40) in order to make transmission on the communication channel which can be used in common by multiple mobile stations is notified to each mobile station (5, 10, 15, 20) which belongs to one of the user classes (35, 40) by the operation stated in B. above;

D: and in said communication system, the base station transmits access authorization data (55) together with the information signal;

E: said access authorization data contains access threshold bits (S3, S2, S1, S0) for the access threshold value (S) and access class information (Z3, Z2, Z1, Z0) for the user classes (35, 40) of multiple mobile stations (5, 10, 15, 20);

F: said access authorization data (55) is prepared in such manner that:

F1: the mobile station, which belongs to the user class whose member access class bit has the first value, can access the communication channel regardless of the access threshold value (S); and

F2: the mobile station, which belongs to a user class whose member access class bit has the second value, must perform an access threshold evaluation wherein said access threshold value (S) is compared with a random number or pseudo-random number (R) in order to detect the access authority of said mobile station to the communication channel and the access authority to the communication channel is assigned to at least one mobile station (5. 10, 15, 20) based on the comparison results;

G: a communication system characterized by the constituent features mentioned in A to F2 above.

(omitted)

No. 3 Court decision

This court determines that the judgment in prior instance which upheld the plaintiff's claims is proper and that the Appeal lacks legal basis for the following reasons.

1. Regarding whether or not the principal allegation should be accepted (Issue (1)A)

(1) The defendant alleges that, according to the statements in the scope of claims of the Inventions, the "access threshold value" can be understood to distinguish the two groups of the mobile stations and to have a predetermined influence on the mobile station of one of the groups and thus, the "access threshold value" should be interpreted by clarifying the specific method of recognizing the access threshold value in the mobile station which receives it and the specific influence of access threshold on the mobile station.

However, Invention 1 (Claim 9) is an invention of "an operation method of a communication network which is provided with at least one base station (100) and is comprised as a mobile radio network." In the operation method of a communication network, the base station "deploys a radio cell" (Constituent Feature B) and "transmits an information signal and access authorization data (55)" (Constituent Feature C). Thus, in defining the meaning of the "access threshold value," it is appropriate to understand it from the standpoint of the operation method of a communication network which includes a base station and is comprised as a mobile radio network. In addition, Invention 2 (Claim 22) is a "communication system having a communication network comprised as a mobile radio network, at least one base station (100) which deploys a radio cell and signaling channel (25)" and thus, similarly, it is appropriate to define the meaning of the "access threshold value" from the standpoint of the "communication system."

Moreover, the operation method of a communication network or the communication system should be understood in the mechanism wherein each element fulfills the communication function as a whole while organically influencing each other as a radio communication network and thus, it is impossible to make an interpretation to decide whether or not the relevant value is an "access threshold value" based on the recognition by each mobile station and influence caused thereon for each "value" transmitted from the base station.

(2) Therefore, the "access threshold value" is examined below based on the abovementioned standpoint.

A. In light of the statements in the scope of claims of the Inventions, it is stated as follows in Constituent Features F, F1 and F2: [i] all of the mobile stations that exist in

the radio cell are broadly classified into the following two types, i.e. a mobile station (first mobile station) which belongs to a user class whose member access class bit has the first value (first user class) and a mobile station (second mobile station) which belongs to a user class whose member access class bit has the second value; and [ii] while the first mobile station is enabled to access the communication channel regardless of the access threshold value, the second mobile station must perform an access threshold evaluation wherein the access threshold value is compared with a random number, etc. and must be assigned the access authorization based on the results of such comparison in order to access the communication channel. As such, the "access threshold value" can be understood to be a value which is compared with a random number, etc. and leads to the assignment of access to the communication channel "based on the comparison results" in the second mobile station, in other words, a value which is dependent on the results of the comparison of the size between the value and a random number, etc. and which leads to an assignment or non-assignment of the access authority in accordance with the result of such comparison. In addition, according to the ordinary understanding of the term "threshold value," it is generally recognized to mean "a minimum value of the size or strength of an action necessary to cause a remarkable reaction to a system" (Kōjien, fifth edition) or "a minimum value of a physical quantity which is added to cause reactions, etc. or the changing point thereof" (Jōhō Tsūshin Shingo Jiten (Dictionary of New Words in the Information and Communication Field) 2002 edition) (Exhibits Ko 3 and 4). In light of the literal interpretation of the term "threshold value," the term "access 'threshold value'" can be understood as a minimum value to bring about assignment of the access authority in the comparison and evaluation of the size between a random number, etc. and the access threshold value that are conducted for the purpose of detecting whether the mobile station has the access authority to the communication channel, in other words, a value which could be a diverging point to decide whether or not to allow access.

As such, for example, if the possible value of the random number, etc. falls within the range of $0<R<1$, the value smaller than 0 or the value which is 1 or larger are not included in the possible range of the random number, etc. and the decision to allow or disallow access is necessarily made without the need to compare the relevant value with the random number, etc. Moreover, such value cannot serve as a diverging point to determine whether or not to allow access and thus cannot be regarded as the "access threshold value." When the possible value of the random number, etc. falls within the range of $0 \leqq R<1$ and it is set to allow access when the result of the comparison between the access threshold value (S) and the random number, etc. is $R \geqq S$, the value smaller

than 0 or the value which is 1 or larger do not fall within the possible range of the random number, etc. and thus it is inevitably decided to allow or disallow access. Moreover, the value 0 would result in inevitably allowing access as a result of deciding to allow access when the formula R≧S is applicable, without the need to make a comparison between the relevant value and the random number, etc. Thus, such value cannot serve as a diverging point to decide whether or not to allow access in any event and thus cannot be regarded as the "access threshold value."

Accordingly, when the "access threshold value" is a fixed value, in order to have the relevant value serve as a diverging point to decide whether or not to allow access in an operation method of a radio communication network or a communication system, it should at least be a value which would be selected from the possible range of the random number, etc.

B(A) Invention 1 (Claim 9) contains statements which read "said base station (100) transmits an information signal and access authorization data (55) to said at least two mobile stations (5, 10, 15, 20)" (Constituent Feature C) and "said access authorization data (55) contains access threshold bits (S3, S2, S1, S0) for the access threshold value (S) and access class information (Z3, Z2, Z1, Z0) for the user classes of multiple mobile stations (5, 10, 15, 20)" (Constituent Feature E) while Invention 2 (Claim 22) contains statements which read "the base station transmits access authorization data (55) together with the information signal" (Constituent Feature D) and "said access authorization data contains access threshold bits (S3, S2, S1, S0) for the access threshold value (S) and access class information (Z3, Z2, Z1, Z0) for the user classes (35, 40) of multiple mobile stations (5, 10, 15, 20)" (Constituent Feature E). It is shown that the "access threshold value" is a value corresponding to the access threshold bit which is transmitted to the mobile station from the base station and that the "access threshold value" is calculated in the mobile station based on the transmitted access threshold bit (accordingly, it can be rephrased that the "access threshold value" is a value which is transmitted to the mobile station from the base station and then calculated). In the abovementioned statements, it is only stated that the value which is the access threshold bit transmitted in a "bit" form is calculated as the "access threshold value," that is to say, the value is recalculated to one which can be compared with the random number, etc. Specifically, these statements do not specify whether the "access threshold bit" expressed in a bit form is a fixed value or a value which can be changed by selecting from among the possible range of values that can be expressed in a bit form.

(B) The detailed explanation of the invention contains the following statements.

[0027]

The additional dispersion of the access authority to RACH 30 through part of the mobile stations 5, 10, 15 and 20 is achieved by transmitting access threshold value S on BCCH 25. Figure 2 illustrates the block circuit diagram of the first mobile station 5. […] The method of the present invention is explained in the following parts using the first mobile station 5 as an example. In this step, the second mobile station 10, the third mobile station 15 and the fourth mobile station 20 have the same structure as that explained in Figure 2. The first mobile station 5 receives an information signal transmitted via BCCH 25 by its transceiving unit 65. This information signal contains access threshold value S which is supplied to evaluation unit 60. Evaluation unit 60 subtracts the random number or pseudo-random number R before the first mobile station 5 accesses RACH 30 and then inspects whether or not this random number or pseudo-random number is at least the same as access threshold value S. Only in that case will access to RACH 30 be allowed. In this step, for example, it is true that access threshold value S consists of intervals of {0, 1…n+1} while the random number or pseudo-random number consists of intervals of {0, 1…n}. This allows restriction of the use of RACH 30 by all of the mobile stations 5, 10, 15 and 20 with the access threshold value, S=n+1. In other words, access to RACH 30 is inhibited. […]

[0028]

[…] In this reference example, access threshold value S, i.e. 2^4=16, is transmitted to mobile stations 5, 10, 15 and 20 from the network provider by four access threshold bits S3, S2, S1 and S0. In this step, the same access threshold value S is transmitted to all mobile stations 5, 10, 15 and 20 via BCCH 25. Access threshold value S can be adjusted relatively large or small according to the instant occurrence of communication traffic in the remote communication network. In other words, access threshold value S is adjusted in a variable manner. […]

[0044]

The information signal is transmitted at favorable regular intervals from base station 100 to mobile stations 5, 10, 15 and 20 at predetermined times. The network provider can allow or block each mobile station 5, 10, 15 or 20 to access RACH in accordance with the aforementioned method by depending on the occurrence of communication traffic in the remote communication network and thus depending on the expected load of RACH 30. Since the occurrence of communication traffic in the remote communication network changes with time, the expected load of RACH 30 also changes with time. Accordingly, access to RACH usually uses the bit pattern assignment which has been correspondingly changed based on different times and is assigned to various mobile stations 5, 10, 15 and 20.

(C) According to the statements in paragraph [0027] mentioned above, it has been presented as one of the working examples of the Inventions that, when the possible range of the random number, etc. R is {0, 1 … n}, access threshold value S may have the value that falls within the range of {0, 1 … n+1}. Among this range, it is shown that, when access threshold value S has the value n+1, access of all mobile stations is blocked no matter which value that falls within the abovementioned range the random number, etc. has. In addition, it is stated in the same paragraph that access is allowed when the formula R≧S is applicable. Thus, it can be understood that, when the access threshold value has the value of 0, all mobile stations will be allowed to access the communication channel no matter which value that falls within the abovementioned range the random number, etc. has. In other words, since the value n+1 or 0 is not excluded from the possible range of the "access threshold value" as stated above in the relevant method or communication system, it is stated that the "access threshold value" includes the following values: [i] those that exceed the possible range of the random number, etc., i.e. {0, 1…n}, and are always larger than the random number, etc., resulting in disallowance of access by every second mobile station; and [ii] those that are the same or always smaller than the random number, etc., resulting in the allowance of access by every second mobile station no matter what value the random number, etc. has.

As such, it would be impossible to interpret that, when the access threshold value does not have a value that falls within the possible range of the random number, etc., such access threshold value will be excluded from the scope of the "access threshold value" since such interpretation would be a limited interpretation excluding the working example stated in the Description.

(D) On the other hand, the abovementioned paragraphs [0028] and [0044] show that the access threshold value can be adjusted in a large or small value, in other words, it can be set in a variable manner in accordance with the occurrence of a communication traffic in the remote communication network and that the access threshold value can be changed over different times by depending on the occurrence of the communication traffic in the remote communication network and eventually on the expected load of RACH 30.

As described above, it can be understood that access threshold value S is not always transmitted and calculated as a fixed value in the relevant method or communication system; it could be a value obtained by transmitting and calculating a specific numerical value as a value selected from the range of {0, 1 … n+1}; and it could also be changed by depending on certain events such as communication traffic.

(E) Yet, the fact that it is possible to select "n+1," which is a value that disallows every

access by the second mobile station, or "0," which is a value that allows every access by said mobile station, as the access threshold value in the relevant method or communication system does not mean that the relevant value will be regarded as the access threshold value even in the case where the access threshold value can only have the value "n+1" or "0," in other words, where the access threshold value is fixed to have these values. More specifically, the access threshold value refers to "a minimum value of the size or strength of an action necessary to cause a remarkable reaction to a system" or "a minimum value of a physical quantity which is added to cause reactions, etc. or the changing point thereof" as stated above. Thus, when the numerical value, which is compared with the random number, etc. of a mobile station that belongs to the user class whose access class bit has the second value, is, for example, set to have a value which is always larger or smaller than the random number, etc. in the communication system and the mobile station is constantly allowed or blocked to access the communication channel, such value cannot be regarded to fall under the category of the "access threshold value" because, no matter what numerical value the random number, etc. has in the relevant communication method or system, it would never serve as a diverging point to allow or disallow access by the second mobile station. In other words, in order to have the relevant numerical value regarded as the "access threshold value," such numerical value must include in its selection a value which can serve as a diverging point to decide whether or not to allow access by the second mobile station.

In addition, the Description shows no examples wherein the "access threshold value" does not include a value which can serve as a diverging point to allow or disallow the second mobile station to access the communication channel in the range of the numerical values that can be selected, in other words, any examples where every mobile station is always allowed or disallowed to access the communication channel in the relevant communication method or communication system.

C. This fact is supported by the technical meaning of the Inventions stated below.

(A) The Description contains the following statements in addition to those stated above.

[Technical field]

[0001]

The present invention relates to a method to set the access authority to at least one mobile station in a communication network, a mobile station, an operation method of a communication network comprised as a mobile station, and a communication system, wherein multiple user classes are differentiated.

[0004]

A number of mobile stations that are activated in a mobile communication network

transmit information to a base station through a remote communication channel. At that time, there is a risk for the communication from various mobile stations to collide on the communication channel. The problem to be solved by the present invention is to avoid such collision and to realize effective access to the communication channel by mobile stations so as to enable communication between mobile stations and the base station.

[Means to solve the problem] […]

[0007]

The operation method of a communication network which is provided with at least one base station and is comprised as a mobile radio network of the present invention is comprised as follows:

In a method wherein said base station deploys a radio cell in which at least two mobile stations exist:

Said base station transmits an information signal and access authorization data to said at least two mobile stations;

The relevant information includes information as to which mobile station to which the authority to make transmission to the base station on the communication channel, which can be used in common by multiple mobile stations, is assigned;

Said access authorization data includes access threshold bits for the access threshold value and access class information for the user classes of multiple mobile stations;

Said access authorization data is prepared in a manner so as to allow access by the mobile station to the communication channel that can be used in common in the following manner, in other words, it is prepared to enable the mobile station, which belongs to a user class whose access class bit has the first value, to access the communication channel regardless of the access threshold value;

The mobile station which belongs to a user class whose access class bit has the second value must perform an access threshold evaluation wherein said access threshold is compared with the random number or pseudo-random number in order to detect the access authority of the relevant mobile station to the communication channel and the access authority of at least one mobile station to the communication channel is assigned by depending on the comparison results.

[0008]

Moreover, the communication system, which has a communication network comprised as a mobile radio network, at least one base station that deploys a radio cell and signaling channel, is comprised as follows:

In a communication system wherein the base station transmits an information signal

to the mobile station that exists within said radio cell, via said signaling channel;

Information as to which authority is assigned to the corresponding user class in order to make transmission on the communication channel which can be used in common by multiple mobile stations is notified to each mobile station that belongs to one of the user classes;

The base station transmits access authorization data together with the information signal;

Said access authorization data contains access threshold bits for the access threshold value and access class information for the user classes of multiple mobile stations;

The aforementioned access authorization data is prepared so as to enable the mobile station, which belongs to the user class whose access class bit has the first value, to access the communication channel regardless of the access threshold value;

The mobile station, which belongs to a user class whose access class bit has the second value, must perform an access threshold evaluation wherein the aforementioned access threshold value is compared with the random number or pseudo-random number in order to detect the access authority of the relevant mobile station to the communication channel and the access authority to the communication channel is assigned to at least one mobile station based on the comparison results.

[Technical advantage of the invention]

[0009]

The method to set access authority for at least one mobile station in a communication network, a mobile station, an operation method of a communication network comprised as a mobile station, and a communication system, that have the structure of an independent claim, achieves random distribution of access authority to the remote communication channel in relation to one or more mobile stations through the transmission of an access threshold bit and access class information to at least one mobile station and the receipt of the access threshold bit and access class information by the mobile station. This access control requires little transmission capacity to transmit information signals and is capable of reducing the risk of collision of communication from various mobile stations on the communication channel.

[0011]

In the evaluation unit of at least one mobile station, it is inspected whether or not the access authorization data contains access authority information provided with access class information for at least one predetermined user class. If the access authorization data contains such information, access to a communication channel by at least one mobile station is allowed by depending on the access class information for the relevant

user class based on an assumption that at least one mobile station belongs to at least one predetermined user class. In this way, even if a mobile station is not allowed to access the relevant communication channel based on the random distribution using the access threshold value, the mobile station of a predetermined user class per se would be allowed to use the remote communication channel. In this way, for example, mobile stations of emergency services such as the police or the fire station can be assigned to such predetermined user class. This user class can access the remote communication channel on a priority basis without depending on the random distribution.

[0020]

In this step, the remote communication service must be requested by a network provider through base station 10 by a corresponding mobile station. Normally, the remote communication service is requested or accessed by mobile stations 5, 10, 15 and 20 through RACH 30. Usually, communication is transmitted to base station 100 from multiple mobile stations via RACH 30. In this way, communication of various mobile stations mutually collide. Accordingly, base station 100 confirms the communication which has been normally received. Based on this confirmation, the base station reversely transmits the reasonable confirmation or receipt information to the mobile station whose communication was normally received by the base station on another channel which is not illustrated in Figure 1 (e.g. paging channel).

[0021]

With respect to the case where the communication of a mobile station collides with the other communication on RACH 30, this communication is not normally received by base station 100, and thus, base station 100 cannot reversely transmit the confirmation information to the corresponding mobile station. Accordingly, the mobile station usually transmits communication anew to base station 100 via RACH 30 after a predetermined period of time has passed from the time when it has failed to receive confirmation information from base station 100. In this way, RACH 30 is likely to be overloaded. Requests started by users using corresponding mobile stations for the remote communication service are restricted due to the restriction of the transmission capacity.

[0022]

Overload of RACH 30 can be avoided in the following manner. Specifically, it can be avoided if the network provider restricts access to RACH for mobile stations 5, 10, 15 and 20 as in the initial stage. In this step, access to RACH is temporarily or continuously allowed on a priority basis for the predetermined user class of the mobile station. According to the working example shown in Figure 1, first user class 35 is established and this user class includes first mobile station 5 and second mobile station

10. Moreover, second user class 40 is established and this user class includes third mobile station 15 and fourth mobile station 20. However, a specific user class can be established for each mobile station. In addition, user classes with different numbers of mobile stations can also be established. Furthermore, two or more mobile stations can be established for one user class. The network provider enables each mobile station to access RACH by depending on its belongingness to one or two user classes 35 and 40. In other words, both mobile stations 5 and 10 of first user class 35 are assigned the same authority with respect to the transmission on RACH. Similarly, the same authority for transmission on RACH is assigned to mobile stations 15 and 20 of second user class 40.
[0039]

In the working example of the present invention shown in Figure 3c, third bit pattern 55 having an information signal is transmitted to mobile stations 5, 10, 15 and 20 from base station 100 and the bit length is 13 bit. […] The following bit sequence shall be examined as one of the examples: "1000 0110 011 01." This means that access threshold value of S=8 is selected, the mobile station of first user class 35 and the mobile station of the fourth user class, which is not illustrated in Figure 1, are allowed to access RACH without depending on the evaluation of access threshold value S or, possibly, priority threshold value P, and the mobile stations of second user class 40 and the third user class, which is not illustrated in Figure 1, are not allowed to access RACH without the evaluation of access threshold value S and, possibly, priority threshold value. […]

(B) Based on the abovementioned statements, the problem to be solved by the Inventions is to realize effective access to the communication channel by the mobile stations by avoiding any collision which is likely to occur between communication from various mobile stations on the communication channel at the time when numerous mobile stations that are activated in a mobile communication network transmit information to the base station through a remote communication channel. In order to solve this problem, all of the mobile stations that exist in the radio cell are broadly classified into two types, i.e. a mobile station that belongs to the user class whose access class bit has the first value (first mobile station) and a mobile station that belongs to the user class whose access class bit has the second value (second mobile station), and then the first mobile station is enabled to access the communication channel regardless of the access threshold value while the second mobile station is required to perform an access threshold evaluation wherein the access threshold value is compared with the random number, etc. and to receive assignment based on the results of such comparison, in order to access the communication channel. Specifically, the structures stated in Claim 9 (Invention 1) and Claim 22 (Invention 2) are adopted. Even if the first mobile station is

not allowed to access the relevant communication channel based on the random distribution using the access threshold value, the mobile station of a predetermined user class per se is allowed to use the remote communication channel. Thus, for example, priority access to the remote communication channel without depending on the random distribution can be realized by assigning mobile stations of emergency services such as the police or the fire station to such predetermined user class. In addition to this system, the Inventions have provided a mechanism to avoid overload of RACH by comparing the access threshold value and the random number, etc. and allowing access based on the results of such comparison in the second mobile station, and thereby dispersing the case where access authority is allowed and restricting the mobile stations which are allowed to access the communication channel.

In light of this technical meaning, if an access threshold bit is transmitted to constantly allow access to the communication channel with respect to every second mobile station in the radio cell in the relevant communication method, etc., every mobile station will constantly be allowed access to the communication channel in the communication method, etc., which means it would be impossible to control access authority and to disperse the case where access will be allowed so as to avoid the risk of collision of communication on the communication channel. Accordingly, such communication method, etc. has a structure which can, by no means, solve the problem of the Inventions. In addition, if an access threshold bit is transmitted to every second mobile station in the radio cell so as to constantly block access to the communication channel in the relevant communication method, etc., it would be a method wherein access is constantly disallowed for every second mobile station and there is no case where communication will be allowed. Such structure would constantly intercept the communication of the mobile station of the users that do not belong to the priority class, resulting in a fruitless method as a communication service.

As described above, it is impossible to interpret that the "access threshold value" includes a structure to constantly allow or disallow access by the second mobile station in light of the technical meaning of the Inventions.

D. Based on the abovementioned findings, the "access threshold value" of the Inventions can be understood to mean a value which is transmitted from the base station to a mobile station and calculated in an operation method of a radio communication network or a communication system and which includes in its selection a value that can serve as a diverging point to decide whether or not to allow access to the communication channel by the mobile station by depending on the results of the comparison with the random number, etc.

(3) Regarding the defendant's allegation

A. The defendant alleges that, according to the statements in the scope of claims, the meaning of the "access threshold value" of the Inventions should be understood to mean "a value which is transmitted from the base station to a mobile station, compared with the random number to enable the mobile station to detect its access authority to the communication channel, and is used to assign the access authority to the communication channel to the mobile station according to the evaluation results."

However, as stated in (1) above, the "access threshold value" cannot be interpreted based on the recognition by each mobile station and influence caused thereon. In addition, even if the mobile station which received individual access authorization data compares the transmitted value with the random number, etc. as an actual operation, if the transmitted value is at least a value which cannot fall within the possible range of the random number, etc., the assignment of access authority would not be decided "based on the comparison results," and thus the abovementioned allegation cannot be accepted.

In addition, the defendant alleges that mobile stations are supposed to operate in compliance with 3GPP standard. Yet, in the 3GPP standard, its flowchart (see page 9 of the judgment in prior instance) shows that "Pi" and "R" are compared in size with respect to the mobile station which belongs to ASC0 (the "first mobile station" in the Inventions) and as a result, "P_0" always becomes 1 and thus access is always allowed. It must be said that it lacks coherence for the defendant to regard that an "access threshold evaluation" has been carried out by the fact that a comparison with […] the value "P_i" […] has been formally carried out in the second mobile station while refusing to regard that access authority has been granted to the first mobile station by depending on the results of the comparison between the value "P_0" and the random number, etc. in relation to the abovementioned operation in the mobile stations.

B(A) The defendant makes the following allegations by mentioning Claims 13, 14, 20 and 21, which are dependent claims of Invention 1 (Claim 9): Changing the access threshold value according to the communication traffic or time is not an element that constitutes Invention 1 and thus the specific time and method of setting the specific value of the access authorization data including the access threshold bit are not the elements of Invention 1; In addition, changing the access authorization data by depending on the communication traffic is nothing but one of the embodiments of Invention 1 and thus, it is impossible to interpret the meaning of the term, "access threshold value," of the Inventions in a limited manner from the viewpoint of the specific time and method of setting the value.

However, the above interpretation of the term "access threshold value" has been made by interpreting the statements in the scope of claims based on the general meaning of "threshold value" and taking into account the statements in the Description instead of interpreting the term in a limited manner from the viewpoint of the specific time and method of setting the value. Thus, the allegation mentioned above is inappropriate.

Accordingly, the defendant's allegation mentioned above does not affect the abovementioned interpretation of the term "access threshold value."

(B) The defendant also alleges that the possibility of continuously allowing access by mobile stations of all user classes on a priority basis is not eliminated and that it has been stated with respect to Claim 19 that access will be "continuously allowed on a priority basis" for every user class.

However, the following invention is stated in Claim 19 as a dependent claim of Invention 1: "a method stated in any one of Claims 9 to 18 wherein access to communication channel (3) which can be used in common is temporarily or continuously allowed on a priority basis for only a specific user class of [the/a] mobile station." This invention can be recognized to be an invention based on the statements in the Description which reads "access to RACH is temporarily or continuously allowed on a priority basis for only a predetermined user class of the mobile station, for example" ([0022]). In addition, the abovementioned statement means that access to the communication channel is temporarily or continuously allowed for the first mobile station which has been assigned to the first user class in the Inventions and thus such statement cannot be regarded as a statement which is directly related to whether or not the structure of constantly allowing or blocking every second mobile station which has been assigned to the second user class to access the communication channel is included in the technical scope of the Inventions.

In addition, the Inventions can be recognized to include in their technical scope the step of "continuously" allowing access for every user class. However, "continuing" in terms of time and constantly allowing with no exceptions are different issues and thus, the defendant's allegation is also inappropriate in this regard.

C. Furthermore, the defendant alleges that S=n+1 and S=0 fall under the category of the access threshold value which clearly shows that every mobile station is allowed or blocked to access the communication channel, and thus it is unacceptable to exclude such mode stated in the working example through the interpretation of claims, based on paragraph [0027] of the Description.

However, the statement contained in paragraph [0027] reads "access threshold value S consists of the interval {0, 1…n+1}." This statement is nothing but a statement

showing that S=n+1, which restricts access by every second mobile station, or S=0, which allows access by every second mobile station, may be included as one of the possible ranges of the access threshold value. Said paragraph contains no statement describing that S=n+1 or S=0 is adopted as a fixed value and that the value which does not fall within the possible range of the random number, etc. would be included in the "access threshold value."

The defendant further alleges, on the basis of paragraph [0028], that as long as access threshold value S can have 16 kinds of values and 16 groups are prepared, it is natural to understand that cases where access by every group is allowed and cases where access by every group is disallowed are reasonably expected.

However, the statement contained in paragraph [0028] which reads "when access threshold value S may have 16 different kinds of values, a maximum of 16 access classes can be assigned to mobile stations 5, 10, 15 and 20" can be recognized as a disclosure of a structure wherein the groups of mobile stations for which allowance or disallowance of access changes can be correlated to a maximum of 16 access classes by using the step of setting 16 kinds of values for access threshold value S. These 16 kinds of access threshold values may include the structure wherein a mobile station will be included in a group for which every access is allowed or a structure wherein a mobile station will be included in a group for which every access is disallowed. However, said paragraph also contains a statement which describes that access threshold value S would be changed in addition to the abovementioned statements; it does not show a structure wherein every mobile station is constantly allowed or disallowed to access the communication channel. Therefore, such statements do not affect the abovementioned interpretation of the term "access threshold value."

D. The defendant alleges that the technical meaning of the Inventions can be found in the provision of a new structure wherein two groups are established, i.e. a mobile station for which access is allowed regardless of the access threshold value and a mobile station for which access is allowed by depending on the results of the comparison between the access threshold value and the random number, etc., instead of the step of establishing a consequent difference in the probability of access being allowed between the first mobile station and the second mobile station or the step of avoiding actual collision by using the relevant mechanism. Based on this allegation, the defendant further alleges that it cannot be said that the Inventions have no technical meaning even in the case where access by every second mobile station is always blocked or the case where access by every second mobile station is always allowed.

However, as stated in (2)C(B) mentioned above, the technical meaning of the

Inventions can be found in the provision of a mechanism to avoid overload of RACH by the following steps: [i] the step of allowing the first mobile station to access the communication channel regardless of the access threshold value while allowing the second mobile station to access the communication channel only if an access threshold evaluation wherein the access threshold value and the random number, etc. are compared is performed and an assignment based on the results of such comparison is made, in order to avoid the risk of collision of communication from mobile stations on the communication channel and to realize effective access to the communication channel by mobile stations; and [ii] the step of allowing the first mobile station to access the remote communication channel on a priority basis without depending on the random distribution while allowing the second mobile station to access the remote communication channel by depending on the results of the comparison between the access threshold and the random number, etc. and thereby limiting the mobile station for which access would be allowed. Accordingly, while the Inventions do not actually avoid collision of communication from a mobile station at the time of transmission of the access authorization data, those with a fixed structure, wherein the mobile station for which access is allowed is not limited and overload of RACH cannot be avoided, and access by the second mobile station is constantly allowed, do not have the technical meaning of the Inventions. Meanwhile, the defendant alleges that "the problem to be solved by the Inventions is to provide a new mechanism that enables operations that avoid collision." Yet, a mechanism that always allows access by the second mobile station as stated above would not be able to carry out operations to avoid such collision and thus the abovementioned allegation cannot be accepted in this regard as well.

(4) As described above, it can be understood that the "access threshold value" of the Inventions is a value which is calculated by being transmitted from the base station to a mobile station in an operational method of a radio communication network or a communication system and which includes in its selection a value which could serve as a diverging point to decide whether or not to allow the mobile station to access the communication channel by depending on the results of the comparison with the random number, etc. The principal allegation made by the defendant is based on the premise that […] the mobile station is assigned […] and N is […] in the plaintiff's method, etc. Yet, in such case, […] would not be included in the possible numerical range of the random number, etc. and thus such value cannot serve as a diverging point to decide whether or not to allow the mobile station to access the communication channel by depending on the results of the comparison with the random number, etc. nor can it fall under the category of "access threshold value."

Accordingly, the plaintiff's method, etc. cannot be found to fall within the technical scope of the Inventions and the principal allegation made by the defendant cannot be accepted.

2. Regarding whether or not alternative allegation 1 is appropriate (Issue (1)B)

(1) As stated in 1(4) above, the "access threshold value" of the Inventions does not fall within the technical scope of the Inventions unless it includes in the possible selection of "access threshold value" a value which could serve as a diverging point to decide whether or not to allow a mobile station to access the communication channel based on the results of the comparison with the random number, etc. in an operation method of a radio communication network or a communication system.

Accordingly, in alternative allegation 1, the defendant must at least prove that the plaintiff's method, etc. is provided with a systemic structure which can actually transmit N […] (hereinafter referred to as the "structure alleged in alternative allegation 1").

The defendant argues that alternative allegation 1 should be accepted based on the following allegations: According to 3GPP standard, the "access authorization data" includes N consisting of 3 bit while N is structured to realize transmission by any whole number which falls between 1 to 8. Even if it is structured in the manner of […] as alleged by the plaintiff, said program can be changed by the plaintiff at any time at its discretion.

However, even if a bit form is selected as the method of transmitting the numerical value of N, it cannot be said that a systemic structure to actually transmit […] N […] is provided. In addition, as stated above, the Inventions are an operation method of a radio communication network or a communication method, which should be understood in the mechanism wherein each element fulfills the communication function as a whole while organically influencing each other as a radio communication network. Thus, it should be said that the operation method of the radio communication network or the communication method is formed by including the applications introduced, and therefore, the abovementioned allegation stating that […] is satisfied including the possibility of changing the program cannot be accepted.

(2) Based on the abovementioned findings, the court will examine whether or not the plaintiff's method, etc. is provided with a systemic structure which can actually transmit N […] (structure alleged in alternative allegation 1).

According to the evidence submitted (Exhibits Otsu 4, 19 and 63), the following facts are found: the defendant conducted a test to receive SIB transmitted in the plaintiff's service on three occasions (on September 13, 2011, which was about half a year before this appeal was filed (Exhibit Otsu 4), on September 27, 2013, while the

proceedings of the prior instance were pending (Exhibit Otsu 19) and on June 7, 2015, while this instance was pending (Exhibits Otsu 58-1 and 63)) by using a terminal in which a 3GPP test program is installed and a method of receiving the communication signal transmitted from the terrestrial public mobile communication network assigned to the plaintiff and analyzing such data using signal analysis software (hereinafter the tests will be referred to as the "first test" and the like in the order they were conducted). The defendant analyzed the results of such tests and in every test, N=1 was detected.

The plaintiff […], the results of the tests showing that […] the value N was [….] conform with this allegation.

Based on the abovementioned findings, all of the evidence submitted in this case is insufficient to find that the plaintiff's method, etc. is provided with the structure alleged in alternative allegation 1 (the order for submission of documents which has been claimed to prove the existence of the structure alleged in alternative allegation 1 has been dismissed as mentioned below).

Accordingly, alternative allegation 1 made by the defendant cannot be accepted.

3. Regarding whether or not alternative allegation 2 is appropriate (Issue (1)C)

(1) In light of the meaning of the "access threshold value" stated in 1(4) above, even if the plaintiff's method, etc. is not provided with a systemic structure which can actually transmit N […], as there is no dispute regarding the fact that, in the plaintiff's method, etc., transmission is carried out by SIB5 […], the element of the "access threshold value" contained in the Constituent Features is satisfied, if the plaintiff's method, etc. is provided with a systemic structure which can actually transmit AC-to-ASC mapping which would be set up to have any AC correlated […] (hereinafter referred to as the "structure alleged in alternative allegation 2").

Therefore, the defendant must prove that the plaintiff's method, etc. is provided with the abovementioned structure.

In this regard, the defendant alleges that alternative allegation 2 should be accepted for the following reasons: even if AC-to-ASC mapping is set up by […] as alleged by the plaintiff, it is […] and is an instruction per se given by the plaintiff to the plaintiff's system and thus setting up AC-to-ASC mapping is […].

However, as stated above, the Inventions are an operation method of a radio communication network or a communication method which should be understood in the mechanism wherein each element fulfills the communication function as a whole while organically influencing each other as a radio communication network. Thus, even if it was possible to […] based on the plaintiff's instruction, it merely means that it can be formed as a different communication method and a communication system and the

plaintiff's method, etc. cannot be found to be actually provided with such a structure on the system and therefore, the abovementioned allegation cannot be accepted.

(2) Based on the abovementioned findings, this court will examine whether or not the plaintiff's method, etc. is provided with a systemic structure which can actually transmit AC-to-ASC mapping which is set up to have any AC correlated […] (structure alleged in alternative allegation 2).

According to the results of the first and second tests conducted by the defendant (Exhibits Otsu 4 and 19), AC-to-ASC mapping can be found to have shown […] mapping as shown below.

AC	0-9	10	11	12	13	14	15
ASC	1	0	0	0	0	0	0

On the other hand, according to the results of the third test in which the defendant extracted the following results (Exhibit Otsu 58-1 and 63) that have been submitted in this instance, it prima facie shows that the plaintiff's method, etc. is provided with a systemic structure to transmit AC-to-ASC mapping which is set up to have any AC correlated […] and, in fact, transmission […] had been carried out.

	AC	0-9	10	11	12	13	14	15
ASC	(1)	0	0	5	2	0	6	5
	(2)	6	0	1	4	4	0	0
	(3)	0	0	5	2	0	6	5
	(4)	7	6	0	1	4	4	0

Examining this point, while the second test was carried out in the presence of a doctor of engineering and a report thereof was made, the third test was carried out and a report thereof was made by the counsel attorney without the presence of a technical expert. Since the tests were carried out using a terminal in which a 3GPP test program is installed and a method of receiving the communication signal transmitted from the terrestrial public mobile communication network assigned to the plaintiff and analyzing such data using signal analysis software, the reliability of the results of the tests cannot be promptly denied by the mere absence of a technical expert. However, the first report in question (the "First Report"; Exhibit Otsu 58-1) which was initially submitted was, in fact, inadequate since it presented something which was not SIB5 transmitted from the plaintiff's network as the information assigned to the plaintiff while lacking sufficient information to confirm the meaning of the reception information which was shown in the results of the prior tests, and thus the second report in question (the "Second Report"; Exhibit Otsu 63), in which the format for reporting the results of the same test

has been changed, was submitted again. In light of such circumstances, it is difficult to consider that the First Report was prepared by accurately receiving the information transmitted from the plaintiff's service and sufficiently examining whether or not to report each piece of information and thus, its reliability must be said to be inferior to that of the second test. In addition, the Second Report has some defects such as the inclusion of data in TDD (time division duplex) system, which is not used in the plaintiff's method, etc., and statements that do not conform with 3GPP standard, as well as some mutual inconsistency between test data. Moreover, although these defects have been pointed out by the plaintiff, the defendant has failed to provide reasonable explanation. Furthermore, in regard to the correspondence relationship between ASC and AC in the test results, ASC=0, which has the highest priority, is assigned to AC0 to AC9, which are normally assigned to general mobile stations, as stated above, while inferior priority is set up for other terminals which originally have high priority; the reliability is open to question in light of the details of the numerical figures per se.

In this regard, the defendant alleges that there is no rule to always assign AC0 to AC9 to general mobile stations in 3GPP standard. However, even if it was true, the defendant itself has not alleged that the results of the first and second tests are not reliable, and thus it can be found that said signal was transmitted at the time of the tests. In addition, in light of the fact that there are no disputes based on 3GPP standard and between the parties that ASC0 has the highest priority, there will be no reasonable explanation for assigning in the third test an inferior class to the mobile station which was assigned the highest priority class in the first and second tests.

Based on the abovementioned findings, the reports in question cannot be recognized to have reported the results of accurately receiving the information transmitted from the plaintiff's service and cannot serve as the grounds to find that the plaintiff's method, etc. is provided with the structure alleged in alternative allegation 2.

(3) The order for submission of documents which was claimed to prove the existence of the structure alleged in alternative allegation 2 has been dismissed after going through the proceedings of the procedures for presenting documents based on Article 105, paragraph (2) of the Patent Act (hereinafter referred to as the "in-camera proceedings") as stated below. Yet, according to the document which was prepared by partially blacking out the document presented at the time of the in-camera proceedings and was later submitted to the manufacturer under the title of "Summary on the Access Service Class" (Exhibit Ko 27), it can be found that […] is set up in each cell and that there are no statements regarding different settings or […] with respect to the plaintiff's method, etc.; it is suggested that the plaintiff's method, etc. conforms with the plaintiff's

allegation.

Accordingly, alternative allegation 2 made by the defendant cannot be accepted.

4. Regarding the order for submission of documents

(1) The defendant filed a motion seeking submission of the source codes of the call processing application program used and manufactured in the BTS held by the plaintiff, BTS manual, source code and manual for RNC program and other source code such as the station data and manual, etc. in order to prove that the plaintiff's method, etc. is provided with the structures alleged in alternative allegations 1 and 2, in other words, to prove the act of infringement, based on Article 105, paragraph (1) of the Patent Act (hereinafter referred to as the "Motion"). The documents related to the Motion mostly overlap with those subject to the order for submission of documents claimed in the prior instance, but such claim has already been dismissed in the prior instance.

In order to have the court issue the order for submission of documents under Article 105, paragraph (1) of the Patent Act, it is required that examination of evidence must be carried out and that there are no reasonable grounds for refusing the submission of the relevant documents. As such, this court will examine these points, respectively, in the following part.

(2) Regarding the identification of documents required to be submitted

First of all, the documents required to be submitted by the defendant in a written motion for order for submission of documents dated April 3, 2015 are those stated as 1 to 6 in the written motion as "Indication of documents" (hereinafter they are referred to as "Claimed Document 1" and the like). As a result of the clarification of the indication of these documents by the plaintiff, they can be organized as follows. The manuals stated in Claimed Documents 1 and 5 are found to be equivalent to the "[…] manual […]" which was later clarified by the plaintiff, while the manuals contained in Claimed Documents 2 and 4 are found to be equivalent to "[…] manual." Accordingly, in the end, the documents required to be submitted can be summarized as follows: [i]: "[…] manual […]"; [ii] "[…] manual […]"; [iii] […] manuals, etc. stated in Claimed Document 3; [iv] the technical specification and collection of technical conditions which have been submitted by the plaintiff to the manufacturers of RNS and BTS used in the plaintiff's system with respect to them; [v] all source codes of the "call processing application program" used in BTS or manufactured; and [vi] all source codes of the "RNC program" used in RNC or manufactured (hereinafter the documents mentioned above shall be referred to as "Document [i]" and the like and all of the documents shall be collectively referred to as the "Documents").

(3) Regarding the necessity of examination of evidence

The determination on the necessity of examination of evidence is based on Article 181, paragraph (1) of the Civil Code. There are not a few cases where it is necessary to issue an order for submission of documents "to prove the act of infringement" in a patent lawsuit such as the case where the subject matter is under the control of the other party and there is no means to obtain it or the case of process inventions where no trace of the process is left in the product. On the other hand, these kinds of lawsuits are often disputed between competing parties or are those wherein the subject matter to be proved is directly connected to trade secrets, creating large disadvantages to the other party who is forced to contest a suit against an abusive motion which is made for the very purpose of accessing the relevant information or an exploratory motion which is not based on convincing evidence. As such, from the viewpoint of preventing any abusive or exploratory motion from being made, normally, the right holder seeking an order for submission of documents should be required to prove, prima facie, that a reasonable suspicion can fairly be found. Yet, in light of the fact that the order for submission of documents per se is used by the person who bears the burden of making allegations and showing proof for the act of infringement as the means to collect evidence that is necessary to make such proof, it can be construed that the prima facie proof of the act of infringement itself, which is a fact that must be proved in the lawsuit, is not required but instead it would be sufficient if it is proved, prima facie, that a reasonable suspicion had occurred with respect to the existence of the act of infringement to an extent that the suspicion of an abusive or exploratory motion would be eliminated. In addition, it is construed that the extent of such prima facie proof should be determined based on each case by taking into consideration various circumstances including the necessity and extent of examination of the documents, difficulty of proving the relevant matters, existence or absence of alternative evidence and other situations of proof.

With respect to this case, as stated above, according to the evidence (Exhibit Ko 16 and Exhibits Otsu 4, 19, 58-1 and 63), in either tests carried out by the defendant and the plaintiff, N is […] in the plaintiff's method, etc. Moreover, as stated above, according to the evidence (Exhibits Otsu 4 and 19), ASC is […] in the AC-to-ASC mapping of the plaintiff's method, etc. As stated above, no other appropriate test results that are different from this have been submitted.

However, in light of the meaning of the "access threshold value" stated above, the subject matter which should be proved by the defendant in alternative allegation 1 is that the plaintiff's method, etc. is provided with a systemic structure which can actually transmit N […] (structure alleged in alternative allegation 1) while the subject matter to be proved by the defendant in alternative allegation 2 is that the plaintiff's method, etc.

is provided with a systemic structure which can actually transmit AC-to-ASC mapping which is set up to have any AC correlated […] (structure alleged in alternative allegation 2). As such, even if the test results as mentioned above have already been submitted, they only show the state of the signal of the relevant SIB5 or SIB7 which had been grasped at the time of the tests. Moreover, if the plaintiff's method, etc. was provided with the structure wherein N […] in a limited case, it cannot be said that a result which grasps this circumstance in a timely manner can be easily detected. In addition, the abovementioned subject matters which should be proved are issues on the specific structures provided in the plaintiff's method, etc. and thus, the evidence thereof is unevenly held by the plaintiff. Moreover, while the abovementioned test results are consistent with the facts alleged by the plaintiff, they have not been proved by the plaintiff that N […] or ASC is […]. Thus, the necessity to examine evidence cannot be denied on the grounds that the plaintiff has sufficiently and successively proved facts to the contrary.

Furthermore, the plaintiff's service is based on 3GPP standard which defines a mechanism to control overload of RACH (Section 1(3)C under Part No. 2 in the judgment in prior instance). If the mechanism is followed entirely, the Constituent Features will be satisfied while if […], the Constituent Features will not be satisfied.

In addition to the abovementioned findings, taking into account the state of making allegations and showing proof by the defendant, although a reasonable suspicion for an act of infringement can be found prima facie, the necessity to carry out examination of evidence cannot be denied.

Yet, among the documents included in Document [iv], those that are not relevant to the specification of the setup conditions for AC-to-ASC mapping and the value of N are not related to proving the act of infringement and thus it is unnecessary to carry out examination of evidence and the relevant parts should be dismissed.

(4) Regarding the reasonable grounds for refusing submission of documents

The plaintiff alleges that it has reasonable grounds to refuse submission of the Documents on the grounds that they are all trade secrets of the plaintiff. The determination on the existence or absence of reasonable grounds should be made by balancing the disadvantages to be suffered by the holder of the documents as a result of their disclosure (the degree of protection of the documents as secrets) and the disadvantages to be suffered by the movant of the order for submission of documents as a result of the documents not being submitted (necessity of documents as evidence). When it becomes clear that the other party is using a structure different from that of the patented invention of the movant based on the documents, the degree of protection of

trade secrets becomes relatively high while, when it becomes clear that the other party is using a structure that falls within the technical scope of the patented invention of the movant, the degree of protection of the documents as trade secrets becomes relatively low and thus the degree of usefulness of the documents as evidence which can be used to prove the act of infringement should be taken into consideration. Moreover, in determining the degree of protection of documents as secrets, circumstances such as whether or not an order for confidentiality (Article 105-4 and the following provisions of the Patent Act) has been issued, the scope of matters subject to such order, whether or not a confidentiality agreement, etc. has been entered into, the scope of parties to the agreement and the effectiveness of such agreement should be taken into consideration in addition to the contents and nature of the trade secrets and degree of assumed disadvantages due to the disclosure thereof.

Therefore, this court examined whether or not there are reasonable grounds to refuse submission of documents, by adopting in-camera proceedings as follows.

Specifically, this court determined to cause the person possessing documents to present such documents based on Article 105, paragraph (2) of the Patent Act for part of the documents for which the court determined that in-camera proceedings are necessary (specifically, the documents stating the technical conditions such as the technical specification stating the setup conditions for AC-to-ASC mapping and value of N, among Documents [i], [ii] and [iv]), by taking into account the difficulty of determination by the court regarding the balance between the necessity of secret protection and necessity of documents as evidence in the determination on reasonable grounds, the degree of confidentiality of the documents as trade secrets, the degree of burden to be borne by the other party and the difficulty of the disclosure itself. The court then received such presentation of documents in the presence of the counsel attorney and employees of the plaintiff. As a result, while it could be confirmed that the relevant contents fall under the category of the plaintiff's trade secrets, no statements could be found which could serve as a basis to find that the relevant documents are useful as evidence to prove the act of infringement as a result of the disclosure of the parts related to access control in the plaintiff's method, etc. and thus, the court determined that the degree of protection of the documents as secrets outweighs the degree of necessity of the documents as evidence by also taking into consideration the fact that a confidentiality agreement had been entered into between the parties.

Among the documents disclosed, the documents related to the setup conditions of AC-to-ASC mapping included in Documents [iv] contained information which was already alleged by the plaintiff in the brief and which the court determined possible to

submit in a form without including any newly disclosed secret information. Thus, the court encouraged the plaintiff to voluntarily submit them and as a result, they were submitted as a specification submitted by the plaintiff to the manufacturer under the title of "Summary on the Access Service Class" (Exhibit Ko 27) after the secret parts were blacked out.

(5) Regarding other documents

The source codes contained in Documents [v] and [vi] have high confidentiality as trade secrets and it is obvious that ordering the plaintiff to submit them and having the defendant analyze them would cause huge disadvantages to the plaintiff. In addition, Documents [iii] are manuals that are actually used by the plaintiff and are found to be confidential as trade secrets based on their contents and thus the degree of necessity of them as evidence cannot be found to outweigh the degree of necessity to keep them confidential at the time of conclusion of the oral argument.

Although the abovementioned documents have not been dealt with in the in-camera proceedings, the determination on the necessity of examination of evidence is left to the discretion of the court as the determination on whether or not to accept them as evidence (Article 181 of the Code of Civil Procedures) and is carried out while forming the determination in accordance with the progress of the lawsuit. In addition, taking into consideration the contents of Exhibit Ko 27, which was later submitted, this court determined that reasonable grounds could be well found as a result of the balancing at the time of conclusion of the oral argument without the need to deal with them in in-camera proceedings.

(6) Based on the abovementioned findings, the plaintiff is found to have "reasonable grounds" to refuse submission of the documents for the parts of the Motion related to Documents [i] through [iii], the abovementioned part of Documents [iv] (parts for which presentation of documents were requested) and Documents [v] and [vi], while it is unnecessary to examine evidence for the remaining parts of Documents [iv]. Therefore, the Motion lacks legal basis and thus has been dismissed at the date of conclusion of oral argument.

No. 4 Conclusion

Accordingly, the Appeal lacks legal basis and thus will be dismissed and the judgment shall be rendered in the form of the main text.

Intellectual Property High Court Second Division

Presiding judge: SHIMIZU Misao

Judge: NAKAMURA Kyo

Judge: NAKABU Yuki