

2013 (Ra) 10007, Appeal against the decision for the dismissal of the petition for a provisional disposition order based on patent right

(Decision in prior instance: Tokyo District Court 2011 (Yo) 22027)

Decision

Appellant: Samsung Electronics Co., Ltd.

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Main text

1. The appeal against the decision shall be dismissed.
2. The cost for this appeal shall be borne by the appellant.
3. The additional period for the special appeal against the decision or the appeal against the decision with permission to the Supreme Court shall be thirty (30) days.

No. 1 Gist of the appeal

1. The decision in prior instance shall be revoked.
2. The appellee is prohibited from the production, assignment, lease, import, or offering for the assignment or lease (including displaying for the purpose of assignment or lease) of each product specified in 1 and 2 of the List of Products attached hereto.
3. The appellee must release the possession of each of the products specified in 1 and 2 of the List of Products attached hereto and deliver them to the court execution officer.
4. The entire court costs for the first instance and appeal instance shall be borne by the appellee.

No. 2 Background

1. Summary of case

This is the case wherein the appellant (obligee) alleged that the appellee's (obligor's) production, assignment, import or other acts in relation to the products specified in the attached Lists of Products 1 and 2 (hereinafter referred to as the "Products") constitutes the infringement of the appellant's patent right under the Patent No. 4642898 for the invention titled "method and apparatus for transmitting/receiving packet data using pre-defined length indicator in a mobile communication system" (this patent shall be hereinafter referred to as the "Patent"; and the patent right as the "Patent Right"), and filed the petition for a provisional disposition order for an injunction against the

appellee's production, assignment, import, etc. of the Products and custody of infringing products by a court execution officer. The right sought to be preserved by this provisional disposition is the right to seek an injunction based on the Patent Right.

In the decision in prior instance, the court held that the Products fall within the technical scope of the invention pertaining to the Patent Right; however, the court dismissed the appellant's petition holding that the appellant's exercise of the right to seek an injunction based on the Patent Right constitutes the abuse of right. The appellant filed this appeal to challenge such decision.

2. Undisputed facts, etc. (the facts without any indication of prima-facie evidence are the well-known or undisputed facts, or the facts found from the entire import of hearings.)

(1) Parties

- A. The appellee is a limited liability company ("*godo kaisha*" under the laws of Japan) whose business objectives are sale, etc. of personal computers, hardware and software for computer-related devices, and ancillary devices for computers. The appellee implemented an absorption-type merger of Apple Japan K.K., a subsidiary company of Apple Incorporated, a U.S. corporation, (hereinafter referred to as "Apple Inc.") on October 30, 2011, and succeeded to the status of Apple Japan K.K. in this action (hereinafter the term "appellee" includes Apple Japan K.K. before the abovementioned absorption-type merger).
- B. The appellant is a South Korean corporation whose business objectives are manufacturing, sale, etc. of electric machine devices, communication and related machine devices, and their component parts.

(2) Patent Right

- A. The appellant (the name as it appears on the patent registry is "Samsung Electronics Company Limited") filed an international application for the Patent (the PCT international application number is PCT/KR2006/001699, its priority date is May 4, 2005, its priority country is South Korea, and the Japanese application number is Patent Application No. 2008-507565; hereinafter referred to as the "Patent Application") on May 4, 2006, and obtained the registration of establishment of the Patent Right on December 10, 2010 (Exhibits Ko No. 1 and No. 2).
- B. The claims of the Patent comprise Claims 1 to 14. Claims 1 and 8 read as follows (the invention of Claim 8 is hereinafter referred to as "Invention 1" and the invention of Claim 1 as "Invention 2," and these Inventions 1 and 2 shall be hereinafter collectively referred to as the "Inventions").

"[Claim 1] A method of transmitting data in a mobile communication system, comprising: a stage of receiving a service data unit (SDU) from a higher layer and determining whether the SDU is included in one protocol data unit (PDU); if the SDU is included in one PDU, a stage of configuring the PDU including a header and a data field, wherein the header includes a sequence number (SN) field, and a one-bit field indicating that the PDU includes the whole SDU in the data field without segmentation/concatenation/padding; if the SDU is not included in one PDU, a stage of segmenting the SDU into a plurality of segments according to the transmittable PDU size, and the data field of each PDU configuring a plurality of PDUs comprising one of said plurality of segments, wherein headers of the PDUs include an SN field, a one-bit field indicating the presence of at least one length indicator (LI) field and said at least one LI field; if the data field of the PDU includes an intermediate segment of the SDU, a stage, wherein the LI field is set to the pre-defined value indicating the presence in the PDU of an intermediate segment which is neither the first nor last segment of the SDU, and the PDU is sent to a receiver.

"[Claim 8] An apparatus for transmitting data in a mobile communication system, comprising: a transmission buffer for receiving a service data unit (SDU) from a higher layer, determining whether the SDU is included in one protocol data unit (PDU), and reconfiguring the SDU to at least one segment according to the transmittable PDU size; a header inserter for configuring at least one PDU including a serial number (SN) field and a one-bit field in a header, and said at least one segment in a data field; a one-bit field setter for setting the one-bit field to indicate that the PDU includes the whole SDU without segmentation/concatenation/padding in the data field, if the SDU is included in one PDU, and for setting the one-bit field to indicate the presence of at least one length indicator (LI) field, if the data field of the PDU includes an intermediate segment of the SDU; an LI inserter for inserting and setting an LI field after the one-bit field in said at least one PDU if the SDU is not included in one PDU, wherein if the data field of the PDU includes an intermediate segment of the SDU, the LI field is set to the pre-defined value indicating the presence in the PDU of an intermediate segment which is neither the first nor last segment of the SDU; and a transmitter for sending at least one PDU received from the LI inserter to a receiver."

- C. The constituent features of each of the Inventions are as follows (each of the constituent features shall be hereinafter referred to as "Constituent Feature A,"

"Constituent Feature B," etc.)

(A) Invention 1 (Claim 8)

- [A] An apparatus for transmitting data in a mobile communication system, comprising:
- [B] a transmission buffer for receiving a service data unit (SDU) from a higher layer, determining whether the SDU is included in one protocol data unit (PDU), and reconfiguring the SDU to at least one segment according to the transmittable PDU size;
- [C] a header inserter for constructing at least one PDU including a serial number (SN) field and a one-bit field in a header, and said at least one segment in a data field;
- [D] a one-bit field setter for setting the one-bit field to indicate that the PDU includes the whole SDU without segmentation/concatenation/padding in the data field, if the SDU is included in one PDU, and for setting the one-bit field to indicate the presence of at least one length indicator (LI) field, if the data field of the PDU includes an intermediate segment of the SDU;
- [E] an LI inserter for inserting and setting an LI field after the one-bit field in said at least one PDU if the SDU is not included in one PDU,
- [F] wherein if the data field of the PDU includes an intermediate segment of the SDU, the LI field is set to the pre-defined value indicating the presence in the PDU of an intermediate segment which is neither the first nor the last segment of the SDU;
- [G] and a transmitter for sending at least one PDU received from the LI inserter to a receiver.
- [H] an apparatus for transmitting data which comprises the features [B] to [G] above.

(B) Invention 2 (Claim 1)

- [I] A method of transmitting data in a mobile communication system, comprising:
- [J] a stage of receiving a service data unit (SDU) from a higher layer and determining whether the SDU is included in one protocol data unit (PDU);
- [K] a stage of constructing the PDU including a header and data field, if the SDU is included in one PDU, wherein the header includes a

sequence number (SN) field, and a one-bit field indicating that the PDU includes the whole SDU in the data field without segmentation/concatenation/padding;

[L] if the SDU is not included in one PDU, a stage of segmenting the SDU into a plurality of segments according to the transmittable PDU size, and the data field of each PDU constructing a plurality of PDUs comprising one of the plurality of segments, wherein headers of the PDUs include a SN field, at least a one-bit field indicating the presence of a length indicator (LI) field and said at least one LI field;

[M] if the data field of the PDU includes an intermediate segment of the SDU, a stage wherein the LI field is set to the pre-defined value indicating the presence in the PDU of an intermediate segment which is neither the first nor the last segment of the SDU;

[N] and the PDU is sent to a receiver.

[O] a method of transmitting data which comprises the features [J] to [N] above.

(3) Appellee's acts, etc.

A. The appellee is engaged in import and sale of the Products manufactured by Apple Inc.

B. (A) The Products satisfy Constituent Features A and H of Invention 1.

(B) The method of data transmission incorporated into the Products satisfies Constituent Features I and O of Invention 2.

C. The Products conform to the UMTS (Universal Mobile Telecommunications System) standard, which is the telecommunications standard developed by 3GPP (Third Generation Partnership Project). 3GPP is a private organization established for the purposes of the dissemination of the third-generation mobile telecommunication system or mobile telephone system (3G), as well as the international standardization of the related specifications (Exhibits Ko No. 3 to No. 5 and No. 11; the telecommunications standard developed by 3GPP may be hereinafter referred to as "3GPP Standards").

The UMTS standard, comprising of a large number of technical specifications, collectively refers to the third-generation mobile telecommunication system developed by 3GPP. The UMTS standard covers various wireless communication systems, such as the W-CDMA method (Wideband Code Division Multiple Access; Generally, the term "W-CDMA" is sometimes used

to mean the UMTS standard; however, the term "W-CDMA" in this judgment refers to the method specified in the 25 Series of 3GPP technical specification (hereinafter, technical specification is sometimes referred to as "TS")) and the LTE method (Long Term Evolution, as specified in the 36 Series of 3GPP TS).

(4) FRAND declaration for the Patent

- A. ETSI (European Telecommunications Standards Institute), one of the standard organizations which established 3GPP, provides the "Intellectual Property Rights Policy" as the guidelines for the treatment of intellectual property rights (IPRs).

The IPR Policy of ETSI (effective as of April 8, 2009) contains the following Clauses (Exhibit Otsu No. 12 and No. 161, the original text is English):

"3. Policy Objectives

3.1 It is ETSI's objective to create STANDARDS and TECHNICAL SPECIFICATIONS that are based on solutions which best meet the technical objectives of the European telecommunications sector, as defined by the General Assembly. In order to further this objective the ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS and TECHNICAL SPECIFICATIONS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD or TECHNICAL SPECIFICATION being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.

3.2 IPR holders whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS and TECHNICAL SPECIFICATIONS.

4. Disclosure of IPRs

4.1 each MEMBER shall use its reasonable endeavours, in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of ESSENTIAL IPRs in a timely manner. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.

4.3 The obligations pursuant to Clause 4.1 above are deemed to be fulfilled in respect of all existing and future members of a PATENT FAMILY if ETSI

has been informed of a member of this PATENT FAMILY in a timely manner.

6. Availability of Licenses

6.1 When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licenses on fair, reasonable and non-discriminatory ("FRAND") conditions under such IPR to at least the following extent:

- MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE;
- sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED;
- repair, use, or operate EQUIPMENT; and
- use METHODS.

The above undertaking may be made subject to the condition that those who seek licenses agree to reciprocate.

6.2 An undertaking pursuant to Clause 6.1 with regard to a specified member of a PATENT FAMILY shall apply to all existing and future ESSENTIAL IPRs of that PATENT FAMILY unless there is an explicit written exclusion of specified IPRs at the time the undertaking is made. The extent of any such exclusion shall be limited to those explicitly specified IPRs.

6.3 As long as the requested undertaking of the IPR owner is not granted, the COMMITTEE Chairmen should, if appropriate, in consultation with the ETSI Secretariat use their judgment as to whether or not the COMMITTEE should suspend work on the relevant parts of the STANDARD or TECHNICAL SPECIFICATION until the matter has been resolved and/or submit for approval any relevant STANDARD or TECHNICAL SPECIFICATION.

12. The POLICY shall be governed by the laws of France.

15. Definitions (Note: In this decision, the terms "essential," "IPR," "member" and "patent family" shall be used with the same meaning as ascribed in the following definitions.)

6. "ESSENTIAL" as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD

without infringing that IPR. For the avoidance of doubt in exceptional cases where a STANDARD can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered ESSENTIAL.

7. "IPR" shall mean any intellectual property right conferred by statute law including applications therefor other than trademarks. For the avoidance of doubt rights relating to get-up, confidential information, trade secrets or the like are excluded from the definition of IPR. ...

9. "MEMBER" shall mean a member or associate member of ETSI. References to a MEMBER shall wherever the context permits be interpreted as references to that MEMBER and its AFFILIATES. ...

13. "PATENT FAMILY" shall mean all the documents having at least one priority in common, including the priority document(s) themselves. For the avoidance of doubt, "documents" refers to patents, utility models, and applications therefor.

- B. (A) On December 14, 1998, the appellant made an undertaking (declaration) to ETSI that it was prepared to license its essential IPR relating to W-CDMA technology supported by ETSI as the UMTS standard on "fair, reasonable and non-discriminatory terms and conditions" (hereinafter referred to as the "FRAND Terms") in accordance with ETSI IPR Policy Clause 6.1 (Exhibit Otsu No. 5).
- (B) On August 7, 2007, the appellant, in accordance with ETSI IPR Policy Clause 4.1, notified ETSI of the number of the South Korean patent application which served as the basis for the priority claim for the Patent Application and the international application number of the Patent Application (PCT/KR2006/001699), and declared that the IPRs relating to these applications are or highly likely will be an essential IPR for the UMTS standard (such as TS 25.322), with a declaration that it was prepared to grant an irrevocable license in accordance with the licensing terms and conditions complying with ETSI IPR Policy Clause 6.1 (i.e. the FRAND Terms; and this declaration shall be hereinafter referred to as the "FRAND Declaration")(Exhibit Otsu No.13). The FRAND Declaration contained the provision that the validity, etc. thereof shall be governed by the laws of France, and the provision to make such undertaking subject to the condition that prospective licensees agree to reciprocate.

3. Parties' allegations

The parties' allegations are as specified in their respective written allegations. Therefore, the court cites these allegations.

No. 3 Court decision

1. Whether the Products fall within the technical scope of Invention 1

The court determines that the Products fall within the technical scope of Invention 1.

The reasons are as follows:

(1) Structures of Products

A. Whether the Products comply with Technical Specification V6.9.0

The appellant alleges that Invention 1 is the implementation of the "alternative E-bit interpretation" as set out in "3GPP TS 25.322 V6.9.0," the technical specification of 3GPP standards developed by 3GPP in September 2006 (hereinafter referred to as the "Technical Specification V6.9.0"), and that the Products complying with such technical specification fall within the technical scope of Invention 1.

First, the court determines whether the Products comply with the Technical Specification V6.9.0.

(A) Alternative E-bit interpretation

Subclauses 9.2.2.5, 9.2.2.8 and 9.2.8.1 of Technical Specification V6.9.0 (see Attachment "3 GPP TS25.322 V6.9.0(Summary) ") contain the following descriptions. [i] For the E-bit (extension bit) in the first octet of the PDU (UMD PDU) whose transmission mode is unacknowledged mode, either the "normal E-bit interpretation" or the "alternative E-bit interpretation" is applied depending on the higher layer configuration. [ii] Under the "alternative E-bit interpretation," the E-bit '0' contained in the first octet means that "the next field is a complete SDU, which is not segmented, concatenated or padded," whereas the E-bit '1' means that "the next field is a length indicator and an E-bit." [iii] The "length indicator" is used to indicate the last octet of each SDU (RLC SDU) ending within the PDU, unless the E-bit contained in the first octet indicates a "complete SDU not segmented, concatenated or padded." [iv] In the case where the "alternative E-bit interpretation" is configured, and a PDU (RLC PDU) contains a segment of an SDU but neither the first octet nor the last octet of this SDU, the 7-bit "length indicator" with value '111 1110' or the 15-bit "length indicator" with value '111 1111 1111 1110' shall be

used.

(B) Demonstration Test

- a. Considering prima-facie evidence (Exhibits Ko No. 21, No. 22 and No. 49), as well as the entire import of hearings, the court finds the following facts:
 - (a) A test for the Products was performed by Chipworks Inc., a Canadian corporation (hereinafter referred to as the "Demonstration Test"). In the Demonstration Test, a radio tester named "CMW500 universal radio communication tester" manufactured by Rohde & Schwarz, a German corporation, was used as the "base station emulator." CMW500 is a device supporting the W-CDMA method.
 - (b) Test 1 of the Demonstration Test was for the "case in which the PDU contains a complete SDU without segmentation/concatenation/padding," and performed under the conditions of "PDU Size: 488-bit, SDU size: 480-bit." Test 2 was the test to monitor the PDU as an "intermediate segment" excluding the first and last PDUs (e.g. the second PDU), and performed under the conditions of "PDU Size: 80-bit, SDU size: 480-bit."
 - (c) The results of the Demonstration Tests were as follows:
 - [i] In Test 1, the E-bit following the sequence number (SN) was '0,' and a PDU without a length indicator (LI) was output (Exhibit Ko No. 21, Figures 12 and 14).
 - [ii] In Test 2, the E-bit following the sequence number (SN) was '1,' and a PDU containing a pre-defined value '111110' as the length indicator was output (Exhibit Ko No. 21, Figures 13 and 15).
- b. The values of the E-bits and length indicator as indicated by the results of the Demonstration Test in a. above agree with the values obtained for the alternative E-bit interpretation as referred to in (A) above (Test 1 corresponds to (A)[ii] and [iii] above, and Test 2 corresponds to (A)[ii] and [iv] above, respectively). Therefore, the court finds the Products to be the implementation of the functions based on the alternative E-bit interpretation.
- c. In this regard, the appellee raises allegations that the

"Interpretation" section of the Demonstration Test results reads "next octet: data" and does not mention "a complete SDU without segmentation/concatenation/padding," and that therefore the Demonstration Test used the normal E-bit interpretation instead of the alternative E-bit interpretation.

However, for the alternative E-bit interpretation, if the E-bit is set to '0,' the bit sequence of the next field shows "data" of the SDU which comprise a "complete SDU without segmentation/concatenation/padding." Accordingly, the indication of "next octet: data" in the "Interpretation" section does not contradict the use of the alternative E-bit interpretation in the Demonstration Test.

Therefore, the appellee's allegations as mentioned above are groundless.

C. Summary

Based on the above, the court finds the Products to comply with Technical Specification V6.9.0 and have the structure implementing the functions based on the alternative E-bit interpretation.

(2) Technical significance of Invention 1

A. Matters disclosed by the description

Taking into consideration the wording of the scope of the claim of Invention 1 (Claim 8) and the statement of the "detailed explanation of the invention" of the description of the Patent (Exhibit Ko No. 2; the description and the drawing shall be hereinafter collectively referred to as the "Patent Description"), the court finds that the Patent Description discloses the following. [i] In relation to the mobile communication system supporting packet service (wireless data packet communication system), in order to provide VoIP service, which is a communication technology for transmitting voice frames generated from a voice codec in the form of voice packets using the Internet Protocol, there was a problem of unnecessary LI fields being inserted, which caused inefficient use of limited wireless resources, when using the RLC framing method in the VoIP communication system based on the conventional technology (operation for processing the RLC SDU received from the higher layer into a size appropriate for transmission through wireless channel) and when the size of an RLC PDU is defined according to the size of an RLC

SDU most frequently generated. Namely, although the majority of RLC SDUs are not segmented or concatenated and one RLC SDU is comprised of one RLC PDU, if the conventional RLC framing operation is applied, at least the length indicator (LI) field indicating the starting point and the LI field indicating the end point of the SDU are always required. [ii] The purpose of Invention 1 is to provide a device for using radio resources efficiently by reducing the header size of the RLC PDU (protocol data unit of radio link control layer), so as to solve the abovementioned problem of the conventional technology. [iii] Invention 1, as a means to achieve the abovementioned purpose, adopts the structure wherein the RLC PDU data field shows one-bit information that "one complete RLC SDU can be framed into one RLC PDU without segmentation/concatenation/padding" (i.e. the structure of Constituent Feature D which reads "setting the one-bit field to indicate that the PDU contains the whole of SDU without segmentation/concatenation/padding in the data field, if the SDU is included in one PDU"), and by doing so, eliminates the need to insert additional information showing segmentation/concatenation/padding of the RLC SDU (i.e. use of the "LI field"). Further, to this end, Invention 1 adopts the structure wherein the LI field set to the pre-defined new LI value indicates that the RLC PDU includes "only an intermediate segment of the RLC SDU which does not include the start or the end of the RLC SDU" (i.e. the structure of Constituent Feature D which reads "a one-bit field setter for setting the one-bit field to indicate the presence of at least one length indicator (LI) field, if the data field of the PDU includes an intermediate segment of the SDU" and the structure of Constituent Feature F which reads "the LI field is set to the pre-defined value indicating the presence in the PDU of an intermediate segment which is neither the first nor the last segment of the SDU"). By adopting these structures, Invention 1 enables the segmentation of the RLC SDU to reduce the header size, and thereby achieves the effect to enhance efficiency for the use of radio resources.

B. Relationship between Invention 1 and alternative E-bit interpretation

- (A) The structure and effect of Constituent Feature D of Invention 1 which reads "setting the one-bit field to indicate that the PDU contains the whole of SDU without segmentation/concatenation/padding in the data field, if the SDU is included in one PDU" (A.[iii] above) defines that, under the

alternative E-bit interpretation, if the E-bit contained in the first octet is '0,' it shows that the "next field is a complete SDU, which is not segmented, concatenated or padded" and that the LI is not used ((1)A.(A)[ii] and [iii] above). In addition, the structure of Constituent Feature D which reads "a one-bit field setter for setting the one-bit field to indicate the presence of at least one length indicator (LI) field, if the data field of the PDU includes an intermediate segment of the SDU" and the structure of Constituent Feature F which reads "the LI field is set to the pre-defined value indicating the presence in the PDU of an intermediate segment which is neither the first nor the last segment of the SDU" define that, under the alternative E-bit interpretation, if the PDU (RLC PDU) contains a segment of the SDU but does not contain either the first or the last octet of the SDU, the 7-bit "length indicator" with value '111 1110' or the 15-bit "length indicator" with value '111 1111 1111 1110' shall be used ((1)A.(A)[iv] above).

On the basis of these findings, the court finds Invention 1 to be the implementation of the alternative E-bit interpretation.

- (B) a. In contrast, the appellee relies upon the following arguments to allege that Technical Specification V6.9.0 contains no disclosure of Constituent Feature B: Constituent Feature B of Invention 1 which reads "to determine whether the whole of SDU is contained in one PDU" has a meaning "to determine whether the whole of SDU is contained in (completely matches) one PDU;" whereas, the statement of Subclause 4.2.1.2.1 of Technical Specification V6.9.0 which reads "segments the RLC SDU into UMD PDUs of appropriate size, if the RLC SDU is larger than the length of available space in the UMD PDU" means that the method as referred to therein aims at determination of the necessity of segmentation of the SDU and whether the size of the SDU is larger than the available space of the PDU (i.e. the size relation between the SDU and the PDU) and it is therefore different from the method to determine whether the whole of SDU is contained in (completely matches) one PDU.

In spite of such allegation by the appellee, Subclause 9.2.2.5 of Technical Specification V6.9.0 indicates that, under the "alternative E-bit interpretation," the E-bit '0' contained in the first octet means that "the next field is a complete SDU, which is not segmented,

concatenated or padded," whereas the E-bit '1' means that "the next field is a length indicator and an E-bit" (1.(1)A.(A)[ii] above)). These statements can be considered as defining the configuration of the E-bit as mentioned above, depending on the results of determination as to whether the whole of SDU is contained in (completely matches) the PDU (i.e. whether the SDU is a complete SDU, which is not segmented, concatenated or padded) as a precondition for such configuration. Therefore, these statements can be considered as disclosing the structure of Constituent Feature B to determine "whether the whole of SDU is contained in one protocol data unit (PDU)."

Based on the above, the court finds the abovementioned allegations of the appellee to be groundless.

- b. In addition, the appellee alleges that the structure of Constituent Feature D differs from the alternative E-bit interpretation as set out in Technical Specification V6.9.0, based on the following reasons: "the case where the SDU is included in one PDU" as referred to in Constituent Feature D includes all of the situations [i] where the SDU is padded, [ii] where the SDU is concatenated, and [iii] where the SDU is not segmented, concatenated or padded, and, accordingly, in order to satisfy Constituent Feature D, it is necessary that "the one-bit field is set to indicate that the PDU fully contains the SDU without segmentation/concatenation/padding" even in the case [i] or [ii] above; whereas, according to the alternative E-bit interpretation as set out in Technical Specification V6.9.0, the one-bit field is configured to indicate that the PDU contains a complete SDU only in the case [iii] above.

However, considering the wording of Constituent Feature D which reads "setting the one-bit field to indicate that the PDU contains the whole of SDU without segmentation/concatenation/padding in the data field, if the SDU is included in one PDU," as well as the statement of Paragraph [0022] and Figure 5A of the Patent Description, it is understood that the case where "the SDU is included in one PDU" as referred to in Constituent Feature D only means the case where "the PDU contains the whole of SDU without segmentation/concatenation/padding in the data field" (i.e. case [iii]

above), and not the case where the concatenated SDU is contained in the PDU or the case where the SDU is incorporated into PDU with padding. Therefore, the appellee's allegation is unacceptable as it fails to satisfy the conditions precedent.

(3) Whether the Products fall within the technical scope of Invention 1

A. As already mentioned in (3)B. of "Undisputed facts, etc.," the Products satisfy Constituent Features A and H of Invention 1.

Further, based on the findings that the Products comply with Technical Specification V6.9.0 and have a structure to implement the functions based on the alternative E-bit interpretation ((1)B. above), and that Invention 1 is the implementation of the alternative E-bit interpretation ((2)B.(A) above), the court finds the Products to satisfy Constituent Features B to G of Invention 1.

Based on the above, the court finds the Products to fall within the technical scope of Invention 1, as they satisfy all of the Constituent Features of Invention 1.

B. (A) On the other hand, the appellee alleges that the Products do not satisfy Constituent Features B and D, because Constituent Features B and D are not disclosed in Technical Specification V6.9.0.

However, as already mentioned in (2)B.(B) above, the appellee's allegation is groundless as it fails to satisfy the conditions precedent.

(B) In addition, the appellee alleges that, for the Products to be considered to fall within the technical scope of Invention 1, it is necessary to evidence that the Products implement all functions stated in the Constituent Features of Invention 1 on the real network; however, the alternative E-bit interpretation is only optional to the normal E-bit interpretation, and no evidence has been submitted which supports that the telecommunication service providers' networks are configured to allow the use of the alternative E-bit interpretation, and therefore that the Products do not fall within the technical scope of Invention 1.

However, as the Products satisfy all of the Constituent Features of Invention 1 and have the structure to implement the alternative E-bit interpretation, they are found to fall within the technical scope of Invention 1, and whether the telecommunication service providers' networks are actually configured to allow the use of the alternative E-bit interpretation is irrelevant to the issue of whether the Products fall within the technical scope of Invention 1.

(4) Summary

As mentioned above, the court finds the Products to fall within the technical scope of Invention 1. In addition, as Invention 2 is an invention for the data transmission method relating to the data transmission device of Invention 1, and these inventions have common structures (this is not disputed by the parties), the court finds that the structure of the data transmission method for the Products falls within the technical scope of Invention 2.

2. Abuse of right

Considering the circumstances of the case, the court determines the acceptability of the appellee's defense that the appellant's exercise of the right to seek an injunction for the production, assignment, etc. of the Products based on the Patent Right constitutes the abuse of right.

The court determines that the appellant's exercise of the right to seek an injunction based on the Patent Right constitutes an abuse of right and is therefore not permissible. The reasons are as follows:

(1) Governing laws

First, the court discusses the issue of the governing laws as the premises for the discussion of this case. It is understood that a claim for an injunction based on a patent right is determined in accordance with the laws of the country where such patent right is registered (Supreme Court judgment of September 26, 2002; *Minshu* Vol. 56, No. 7, at 1551). Therefore, this case should be governed by the laws of Japan.

(2) Exercise of the right to seek an injunction in cases where a FRAND declaration is made

A. Facts on which the decision is premised

Considering the totality of the undisputed facts, etc. as mentioned above, prima facie evidence and the entire gist of the hearings, the court finds the following facts.

(A) ETSI IPR Policy

- a. Outside Europe, the second-generation mobile telecommunication system (2G) specifications were inconsistent depending on the country. Even in the same country, different specifications were used and such specifications were not universally interoperable. The U.S., Japan and Europe respectively used different systems based on the non-interoperable standards. Against this backdrop, in 1998, international standards bodies, such as ETSI (European

Telecommunications Standards Institute), gathered to organize a standard body called 3GPP. The objectives of this 3GPP were the dissemination of the third-generation mobile telecommunication system (3G) for providing data communication service and multimedia service, in addition to conventional voice communication services, as well as the standardization of the related specifications.

- b. ETSI provides the IPR Policy as the guidelines for the treatment of IPR (intellectual property rights).

The standardization of technology is expected to have various effects, such as ensuring product interoperability, reduction in production and procurement costs, enhanced efficiency in research and development, and more opportunities for partnership with other companies. In addition, for end-users as well, standardization would have significance, such as more convenient products/services at cheaper product prices and service fees. On the other hand, the potential users of the essential patents for the standard seeking commercialization of a product may be exposed to various risks, such as the demand for an unreasonably high royalty by essential patent owners, or the loss of the investment for development of the standard-compliant products if the license turns out to be unavailable.

The ETSI IPR Policy aims to avoid such risks, promote the standardization and strike a balance between the needs of standardization for public use/such expectations and the protection of rights of IPR owners in the field of telecommunications (See "Policy Objectives" in Clause 3.1).

- c. The ETSI IPR Policy provides as follows:
 - (a) IPR Policy Clause 4.1 provides that each MEMBER shall use its reasonable endeavors, in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of ESSENTIAL IPRs in a timely manner, and that, in particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted. Clause 4.3 provides that the obligations pursuant to Clause 4.1 above are deemed to be

fulfilled in respect of all existing and future members of a PATENT FAMILY if ETSI has been informed of a member of this PATENT FAMILY in a timely manner.

- (b) IPR Policy Clause 6.1 provides that, when an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licenses on fair, reasonable and non-discriminatory (“FRAND”) terms and conditions under such IPR to at least the following extent: [i] MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE, [ii] sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED, [iii] repair, use, or operate EQUIPMENT, and [ii] use METHODS. Clause 6.1 also provides that the above undertaking may be made subject to the condition that those who seek licenses agree to reciprocate. Clause 6.2 provides that an undertaking pursuant to Clause 6.1 with regard to a specified member of a PATENT FAMILY shall apply to all existing and future ESSENTIAL IPRs of that PATENT FAMILY unless there is an explicit written exclusion of specified IPRs at the time the undertaking is made. Clause 6.3 provides that, as long as the requested undertaking of the IPR owner is not granted, the COMMITTEE Chairmen should, if appropriate, in consultation with the ETSI Secretariat use their judgment as to whether or not the COMMITTEE should suspend work on the relevant parts of the STANDARD or TECHNICAL SPECIFICATION until the matter has been resolved and/or submit for approval any relevant STANDARD or TECHNICAL SPECIFICATION.
- (c) IPR Policy Clause 15, paragraph 6 provides as follows: "ESSENTIAL" as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease,

otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR.

- (d) IPR Policy Clause 12 provides that the POLICY shall be governed by the laws of France.
- d. ETSI Guide on Intellectual Property Rights (IPRs) (Exhibits Otsu No. 16 and 162), which supplements the IPR Policy, provides as follows:
- (a) ETSI Guide on IPRs Clause 1.1 provides that the main characteristics of the Policy can be simplified as follows:
- Members are fully entitled to hold and benefit from any IPRs which they may own, including the right to refuse the granting of licenses.
 - It is ETSI's objective to create Standards and Technical Specifications that are based on solutions which best meet the technical objectives of ETSI.
 - In achieving this objective, the ETSI IPR Policy seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
 - The IPR Policy seeks to reduce the risk that investment in the preparation, adoption and application of the standards could be wasted as a result of an Essential IPR for a standard or technical specification being unavailable."
 - Therefore, the knowledge of the existence of Essential IPRs is required as early as possible within the standards making process, especially in the case where licenses are not available under fair, reasonable and non-discriminatory (FRAND) terms and conditions."
- (b) ETSI Guide on IPRs Clause 1.4 provides that the ETSI IPR POLICY defines rights and obligations for ETSI as an Institute, for its Members and for the Secretariat. Non-Members of ETSI also have certain rights under the Policy but do not have legal obligations. The "table" as referred to in this clause provides as follows:
- "Rights of members"
- to refuse the inclusion of own IPRs in the standards (*Clauses 8.1 and 8.2*).

- to be granted licenses on fair, reasonable and non-discriminatory terms and conditions in respect of a standard (*Clause 6.1*)"

"Obligations of Members"

- to inform ETSI about their own, and other people's Essential IPRs (*Clause 4.1*).

- owners of Essential IPRs are requested to undertake to grant licenses on fair, reasonable and non-discriminatory terms and conditions (*Clause 6.1*)"

"Rights of Third Parties"

- Third parties have certain RIGHTS under the ETSI IPR Policy either as owners of Essential IPRs or as users of ETSI standards or documentation:

- To be granted licenses on fair, reasonable and non-discriminatory terms and conditions in respect of a standard at least to manufacture, sell, lease, repair, use and operate, (*Clause 6.1*)"

(B) Background of the FRAND Declaration

- a. On December 14, 1998, the appellant made a declaration to ETSI that it was prepared to license its essential IPR relating to the W-CDMA technology, supported by ETSI as the UMTS standard, on "fair, reasonable and non-discriminatory terms and conditions" in accordance with ETSI IPR Policy Clause 6.1 (FRAND Terms) .
- b. On May 4, 2005, the appellant filed a South Korean patent application, which is the base of the priority claim of the Patent Application (Priority Claim No.: 10-2005-0037774). From May 9 to 13 of 2005, the appellant submitted to the 3GPP Working Group a change request form. Thereafter, the abovementioned change request was accepted. The alternative E-bit interpretation was adopted as one of the standards. The appellant filed the Patent Application on May 4, 2006, and obtained the registration of establishment of the Patent Right on December 10, 2010.
- c. On August 7, 2007, the appellant, in accordance with ETSI IPR Policy Clause 4.1, submitted to ETSI the document titled "Statement on IPR Information and Licensing Declaration", notifying that the IPRs relating to the South Korean patent application number, which served

as the basis of the priority claim for the Patent Application, and the international application number of the Patent Application (PCT/KR2006/001699) are or highly likely will be essential IPRs for the UMTS standard (such as TS 25.322). In this document, the appellant made an undertaking that it was prepared to grant an irrevocable license on the conditions complying with IPR Policy Clause 6.1 (FRAND Terms), to the extent to which such IPRs continue to be essential for the standards (FRAND Declaration).

(C) Role, etc. of the Patent

The Patent is an essential patent unavoidable for manufacturing and selling of, and using methods in relation to, the products complying with the "alternative E-bit interpretation" as set out in Technical Specification V6.9.0 of the UMTS standard.

It is a general practice of various types of standardization bodies to stipulate criteria for the treatment of IPRs, such as the ETSI IPR Policy, and require the members thereof to disclose their patent rights and other IPRs (hereinafter, the term "IPRs" refers to a patent right only) which would be essential for the standards developed respectively by such bodies. Further, such bodies usually require the members thereof to make a declaration to license the patent right under FRAND or RAND (reasonable and non-discriminatory) terms (the licensing declaration under the FRAND or RAND terms shall be hereinafter referred to as "FRAND declaration").

B. FRAND Declaration and exercise of the right to seek an injunction

(A) For an essential patent subject to a FRAND declaration (the patent for which a FRAND declaration is made is collectively referred to as the "Standard Essential Patent"), as mentioned below, allowing a claim for an injunction based on such patent without any restriction may run counter to the reliance on use of the prospective users of the standard, and may also result in the excessive protection of a patented invention. Allowing the patentee such claim is unreasonable as it has various detrimental effects, for example, discouraging the general public from using the technologies of the patented invention, and may hinder the "development of industry," which is the purpose of the Patent Act (Article 1 of the Patent Act).

Any party intending to manufacture or sell a standard-compliant

product would first look to the IPR guidelines of the relevant standardization body and confirm the availability of a FRAND license for the essential patent, such as the members' obligation of a FRAND declaration for an essential patent, before it makes an investment or commences the manufacturing and sale of such products. If the patentee is later allowed to seek an injunction under the Standard Essential Patent, it would be detrimental to the reasonable reliance on use of a party who made an investment for the manufacture or sales of the standard-compliant product in anticipation of availability of a FRAND license. Considering that a Standard Essential Patent owner voluntarily makes a FRAND licensing declaration on the premises that such patent would be made available to the standard users, and that the patent forming a part of the standard makes it possible for the owner to attract a wide range of potential licensees, it is not so necessary to allow the owner of the Standard Essential Patent to exercise the right to seek an injunction to maintain its dominance over the market, so long as such owner can obtain consideration for the FRAND license. Thus, considering these situations, allowing the owner to exercise the right to seek an injunction based on the Standard Essential Patent against parties willing to receive FRAND licenses would result in the excessive protection of such owner, discouraging the dissemination of the technologies of the patented invention, and consequently hinder the "development of industry," which is the purpose of the Patent Act (Article 1 of the Patent Act).

- (B) Next, the court discusses the above in more detail, in accordance with the facts of this court case.

A party intending to engage in the manufacturing, sale, etc. of a UMTS standard-compliant product would recognize that, among the patent rights essential for the manufacturing, sale, etc. of such product, at least those owned by ETSI members require the timely disclosure in accordance with ETSI IPR Policy Clause 4.1 and the FRAND licensing declaration under ETSI IPR Policy Clause 6.1. Such party would rely on the availability of a FRAND license through an appropriate negotiation with the patentee. Such reliance is worth protecting. Accordingly, in connection with the Patent subject to the FRAND Declaration, allowing the unconditional exercise of the right

to seek an injunction would be detrimental to the reliance of parties who manufacture or sell the UMTS standard-compliant product on the availability of such license.

Owing to such reliance of the UMTS standard users, the patent rights (including the Patent Right) incorporated into the UMTS standard can be widely disseminated among a large number of business enterprises in all part of the world. As a result, an owner of a Standard Essential Patent can benefit from royalty income, which would be unavailable if the patent was not adopted as part of the UMTS standard. In addition, a party which makes a FRAND declaration as required by the ETSI IPR Policy, including the appellant's FRAND Declaration, declares on a voluntary basis that it is prepared to grant an irrevocable license under the FRAND Terms. So, it is considered that such party does not anticipate the exercise of the right to seek an injunction to maintain its dominance over the market, so long as such party can obtain consideration for the FRAND license. For such party, it is not so necessary to allow the exercise of the right to seek an injunction to protect its dominance over the market.

Whenever parties intending to engage in the manufacturing, sale, etc. of any product complying with the UMTS standard, including the appellee, implements the UMTS standard, there is no choice but to work the Patent, and it is impossible for them to adopt alternative technology or to change the product design. Therefore, if the patentee is unconditionally allowed to exercise the right to seek an injunction based on the Patent Right, the standard users may be put into a situation where they are forced to pay a high royalty or to agree to extremely unfavorable license conditions which are not FRAND Terms, or to abandon the business project itself, so as to avoid the damage that may arise from such injunction. In addition, the UMTS standard contains a large number of patents owned by different owners (1800 or more patent families are declared as essential by 50 or more patentees). It is considered extremely difficult for a standard user to obtain the licenses in advance, after confirming whether each of such large number of patents is essential or not. Therefore, if the patentee is unconditionally allowed to seek an injunction based on the Standard Essential Patent, the use of the UMTS standard would become

practically impossible. Such situation would have a negative impact on the dissemination of the UMTS standard and run counter to the purpose of the ETSI IPR Policy aimed at the harmonization and dissemination of the communication standards. Further, if such situation arises, the general public would be unable to enjoy a variety of benefits which would be available if the harmonization and dissemination of communication standards was achieved.

In relation to a Standard Essential Patent, it is not appropriate to allow a party who made a FRAND declaration to exercise the right to seek an injunction based on the patent right against a party willing to obtain a license under the FRAND Terms.

- (C) Meanwhile, the injunction should be allowed against a party engaged in manufacturing, sales, etc. of an UMTS standard-compliant product without any intention of receiving a FRAND license, as such party with no intention of obtaining a FRAND license is not considered to comply with the standards relying upon the FRAND declaration, and the patentee would not be adequately protected if the exercise of right to seek an injunction even against such parties is restricted. Nevertheless, as allowing the patentee to exercise the right to seek an injunction involves potential adverse effects as mentioned above, scrutiny shall be made before determining that the prospective licensee has no intention of receiving a FRAND license.
- (D) Considering the totality of the above circumstances, the exercise of the right to seek an injunction based on the Patent Right by the appellant who made the FRAND Declaration would constitute the abuse of right (Article 1, paragraph (3) of the Civil Code) and therefore is not allowed, if the appellee successfully alleges and proves the fact of the appellant having made the FRAND Declaration and the appellee's intention of receiving a FRAND license.

- (3) Whether the appellee has an intention of receiving a FRAND license

The appellee alleges that Apple Inc. or itself is a willing licensee, namely, a party who has an intention of receiving a FRAND license for the Patent. The court discusses this point as follows:

A. Discussion

Considering the totality of prima facie evidence and the entire import of hearings, the court finds the following facts, in addition to those mentioned

in (2)A. above. [i] In the letter dated July 25, 2011, the appellant proposed to Apple Inc. a specific royalty rate as the condition for license of its Standard Essential Patent portfolio. [ii] Apple Inc., in its letter dated August 18, 2011, proposed the royalty rate cap. Apple Inc., in its letter dated March 4, 2012, made an offer for a license agreement, proposing to pay the royalty at a rate less than the prior proposal by several decimal fractions. Apple Inc., in its letter dated September 7, 2012, made a specific licensing proposal, including a proposal for a cross-license agreement. [iii] In response, the appellant only requested Apple Inc. to make a specific counterproposal if dissatisfied with the appellant's proposal. [iv] The appellant, in its letter dated September 14, 2012, made a proposal of reduction of the cap rate, which is the basis of calculation of the royalty. [v] The appellant, in its letter dated December 3, 2012, made a proposal to discount the initially proposed royalty rate by less than half. [vi] Apple Inc. and the appellant held conferences on December 12, 17 and 18 of 2012, when the appellant made some proposals, including a large lump-sum payment by Apple Inc., and Apple Inc. proposed a cross-license agreement for the UMTS standard essential patent portfolio. [vii] Apple Inc. and the appellant met on January 14, 2013, when Apple Inc. made a proposal of a royalty-free cross-license agreement. [viii] When Apple Inc. and the appellant held a conference on February 7, 2013, a draft agreement was prepared [.....] [ix] Even after these conferences, the appellant and Apple Inc. have had negotiations from time to time for various issues, including the conditions for the settlement of the dispute through an arbitration.

Considering the above situations, Apple Inc. and the appellee can be considered as the parties who have the intention of receiving a FRAND license, as Apple Inc. has made specific royalty rate proposals with a calculation basis several times, including the presentation of a royalty rate cap in its letter dated August 18, 2011, and held several conferences with the appellant for intensive licensing negotiation. There has been a material discrepancy in opinions between the appellant and Apple Inc. as to the appropriate royalty rate for a long time. Even so, the proposals made by Apple Inc. can be considered fairly reasonable, considering the fact that the parties are by nature in a conflict-of-interest situation as the prospective licensor and licensee, and that the royalty to be considered appropriate may vary depending on the different assessment of the essential nature or

significance of individual patent in terms of the UMTS standard, as there is no definite criteria for determining the FRAND royalty. In addition, as it is appropriate to consider that the appellant's attempt toward negotiation did not facilitate the execution of a license agreement with Apple Inc., the persistent and material discrepancy in the opinions between the parties does not immediately preclude the court from finding that Apple Inc. and the appellee have the intention of entering into a FRAND license agreement.

B. On the contrary, the appellant alleges that neither Apple Inc. nor the appellee can be considered to have an intention of receiving a license, because Apple Inc. intentionally obstructed the formation of a license agreement by making proposals favorable to itself without specifically identifying the licensed patents, and persistently showed an attitude that its proposed conditions are not inconsistent with FRAND Terms. However, in light of the purpose and significance of the development of the standards, scrutiny shall be made to determine that the appellee has no intention of receiving a FRAND license. As Apple Inc. and the appellant had a license negotiation as mentioned in A. above, the court finds the appellee to be the party who has an intention of receiving a FRAND license. Therefore, the appellant's allegation is unacceptable.

(4) Summary

Based on the above, the appellant's exercise of the right to seek an injunction based on the Patent Right constitutes an abuse of right (Article 1, paragraph (3) of the Civil Code) and is therefore impermissible.

3. Conclusion

On the premises of the foregoing, the court concludes that this petition should be dismissed without the need to discuss other points at issue, as the appellant failed to make a prima facie showing of the right sought to be preserved. The court therefore holds that this appeal should be dismissed, as the decision in prior instance which reached the same conclusion is appropriate. Therefore, the court renders the decision as mentioned in the main text.

May 16, 2014

Intellectual Property High Court, Special Division

Presiding Judge:	Toshiaki Imura
Judge:	Ryuichi Shitara
Judge:	Yoshinori Tomita
Judge:	Misao Shimizu
Judge:	Shinji Oda

(Attachment)

List of Products

1. "iPhone 4"
2. "iPad 2 Wi-Fi+3G model"

(Attachment)

3GPP TS25.322 V6.9.0(Summary)

1 「4.2.1.2 Unacknowledged mode (UM) RLC entities

Figure 4.3 below shows the model of two unacknowledged mode peer RLC entities when duplicate avoidance and reordering is not configured.]

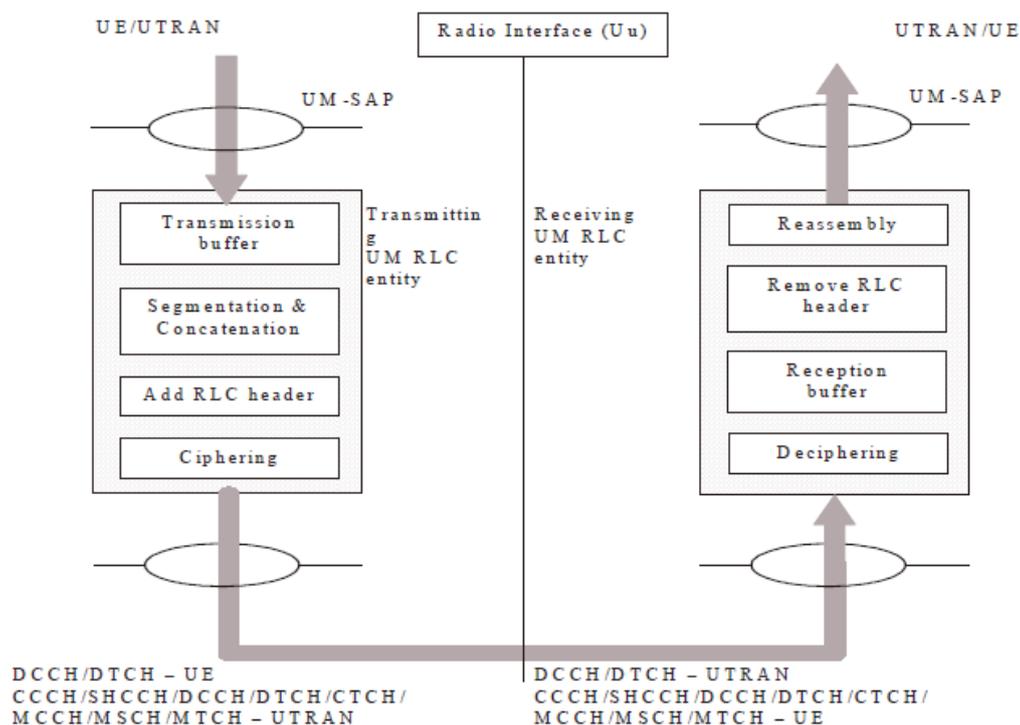


Figure 4.3a: Model of two unacknowledged mode peer entities configured for use with duplicate avoidance and reordering]

2 「4.2.1.2.1 Transmitting UM RLC entity

The transmitting UM-RLC entity receives RLC SDUs from upper layers through the UM-SAP. The transmitting UM RLC entity segments the RLC SDU into UMD PDUs of appropriate size, if the RLC SDU is larger than the length of available space in the UMD PDU.]

3 「9.2.1.3 UMD PDU

The UMD PDU is used to transfer user data when RLC is operating in unacknowledged mode. The length of the data part shall be a multiple of 8 bits. The UMD PDU header consists of the first octet, which contains the "Sequence Number". The RLC header consists of the first octet and all the octets that contain "Length Indicators".]

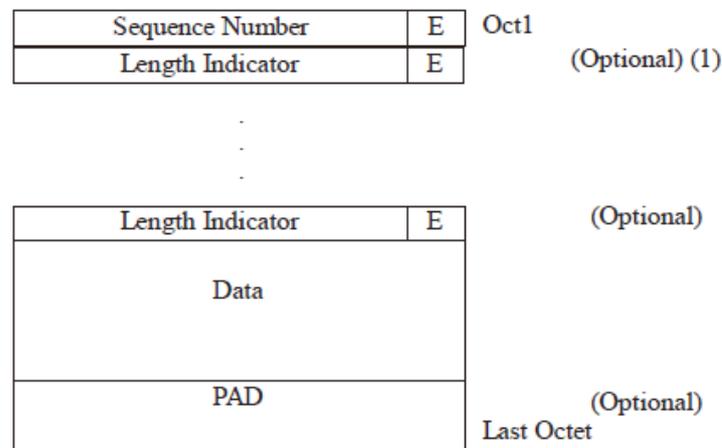


Figure 9.2: UMD PDU

4 「9.2.2.5 Extension bit(E)

Length:1bit.

The interpretation of this bit depends on RLC mode and higher layer configuration:

- In the UMD PDU, the "Extension bit" in the first octet has either the normal E-bit interpretation or the alternative E-bit interpretation depending on higher layer configuration. The "Extension bit" in all the other octets always has the normal E-bit interpretation.
- In the AMD PDU, the "Extension bit" always has the normal E-bit interpretation.

Normal E-bit interpretation:

Bit	Description
0	The next field is data, piggybacked STATUS PDU or padding
1	The next field is Length Indicator and E bit

Alternative E-bit interpretation:

Bit	Description
0	The next field is a complete SDU, which is not segmented, concatenated or padded.
1	The next field is Length Indicator and E bit

5 (1) [9.2.2.8 Length Indicator (LI)

Unless the "Extension bit" indicates that a UMD PDU contains a complete SDU which is not segmented, concatenated or padded, a "Length Indicator" is used to indicate the last octet of each RLC SDU ending within the PDU.]

(2) 「In the case where the "alternative E-bit interpretation" is configured for UM RLC and an RLC PDU contains a segment of an SDU but neither the first octet nor the last octet of this SDU:

-if a 7-bit "Length Indicator" is used:

-the "Length Indicator" with value "111 1110" shall be used.

-if a 15-bit "Length Indicator" is used:

- the "Length Indicator" with value "111 1111 1111 1110" shall be used.」