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Datasheet for the decision of 6 February 2020

Case Number: T 1232/17 - 3.5.05

Application Number: 06008830.9

Publication Number: 1718017

IPC: H04L12/64

Language of the proceedings: EN

Title of invention:
Method and apparatus for polling transmission status in a wireless communication system

Patent Proprietor:
Innovative Sonic Limited

Opponent:
Telefonaktiebolaget L M Ericsson (publ)

Headword:
Polling by using non-acknowledged packets /INNOVATIVE SONIC

Relevant legal provisions:
EPC Art. 54, 56, 83, 84, 87(1), 123(2), 123(3)
EPC R. 103(1)(a)

Keyword:

Novelty - main request (yes)
Inventive step - main request (yes)
Sufficiency of disclosure - main request (yes)
Claims - clarity - main request (yes)
Priority - same invention (yes)
Amendments - added subject-matter (no) - broadening of claim (no)
Reimbursement of appeal fee - (no)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

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Case Number: T 1232/17 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 6 February 2020

Appellant I: (Patent Proprietor)	Innovative Sonic Limited 2nd Floor, The Axis 26 Cybercity Ebene 72201 (MU)
Representative:	Grünecker Patent- und Rechtsanwälte PartG mbB Leopoldstraße 4 80802 München (DE)
Appellant II: (Opponent)	Telefonaktiebolaget L M Ericsson (publ) 164 83 Stockholm (SE)
Representative:	Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 21 March 2017 concerning maintenance of the European Patent No. 1718017 in amended form.**

Composition of the Board:

Chair	A. Ritzka
Members:	P. Cretaine
	D. Prietzel-Funk

Summary of Facts and Submissions

I. This appeal is against the interlocutory decision of the opposition division, dispatched on 21 March 2017, to maintain European patent No. 1 718 017 in amended form according to the claims of auxiliary request 1. The opposition was based on the grounds of Article 100(a), (b) and (c) EPC and the priority was considered not to be valid (Article 87(1) EPC). The opposition division held that a main request, corresponding to the claims as granted, did not meet the requirements of Article 123(2) EPC. The opposition division decided that auxiliary request 1 met the requirements of Articles 83, 84, 123(2) and (3) EPC and that the subject-matter of its claims was novel (Article 54 EPC) and involved an inventive step (Article 56 EPC), having regard to the disclosure of

A1: 3GPP TS 25.322 V6.3.O (2005-03), "3rd Generation Partnership Project; Technical Specification Group Radio Access Network, Radio Link Control (RLC) protocol specification (Release 6)", March 2005.

Since the opposition division decided that the priority was valid, the document

A5: 3GPP TSG-RAN2 Meeting #47 Tdoc R2-051263, Athens, Greece, Change request, Title: "Selecting a PDU to transmit a poll", 3 May 2005,

was considered as not belonging to the prior art (Article 54(2) EPC).

II. The patent proprietor's notice of appeal was received on 19 May 2017 and the appeal fee was paid on the

same day. The statement setting out the grounds of appeal was received on 31 July 2017. The appellant (patent proprietor) requested that the decision be set aside, that the opposition be rejected and that the patent be be maintained on the basis of the claims as granted (main request). Oral proceedings were requested on an auxiliary basis.

III. The opponent's notice of appeal was received on 31 May 2017 and the appeal fee was paid on the same day. The statement setting out the grounds of appeal was received on 31 July 2017. The appellant (opponent) requested that the decision be set aside, the patent be revoked, and the appeal fee be reimbursed pursuant to Rule 103(1)(a) EPC by reason of substantial procedural violations. The appellant (opponent) also submitted the following document which had been indicated, but not filed, with its notice of opposition:

A6: 3GPP TS 25.322 V5.10.0 (2005-03), Technical Specification, Release 5, pages 1 to 78, March 2005.

The appellant (opponent) also made comments that the patent proprietor's auxiliary requests 2 to 4 filed in the first instance proceedings should not be admitted into the appeal proceedings and were not allowable.

Oral proceedings were requested on an auxiliary basis.

IV. By letter dated 15 December 2017, the patent proprietor responded to the opponent's statement setting out its grounds of appeal. In particular, the patent proprietor provided arguments why auxiliary request 1 underlying the decision to maintain the patent was entitled to the claimed priority (Article 87(1) EPC) and met the requirements of Articles 83, 84, 123(2) and (3), 54 and

56 EPC. The patent proprietor further requested not to admit A6 into the appeal proceedings.

V. By letter dated 18 December 2017, the opponent responded to the patent proprietor's statement setting out its grounds of appeal. The opponent further requested that the patent proprietor's appeal be dismissed and provided arguments why the main request was not entitled to the claimed priority (Article 87(1) EPC) and did not meet the requirements of Articles 83, 123(2), 54 and
56 EPC.

VI. A summons to oral proceedings was issued on 17 July 2019. In a communication dated 25 July 2019, the board indicated the points which would be discussed during the oral proceedings and made observations without prejudice to it's final decision pursuant to Article 17(2) RPBA 2007.

VII. With a letter of response dated 20 December 2019, the opponent provided arguments in support of its case and requested that document A6 be admitted into the proceedings.

VIII. With a letter of response dated 2 January 2020, the patent proprietor provided arguments in support of its case and requested that A6 be not admitted into the proceedings. The patent proprietor also stated that auxiliary requests 2 to 4 submitted before the opposition division were also on file in appeal.

IX. Oral proceedings were held on 6 February 2020. After the Chair announced the board's conclusions that the main request was not allowable under Article 123(2) EPC and that auxiliary request 1 fulfilled the requirements

of Article 123(2) and (3), 84, 83, 54 and 56 EPC, the patent proprietor withdrew its appeal.

The opponent requested that the decision under appeal be set aside and the patent be revoked, and that the appeal fee be reimbursed.

At the end of the proceedings, the decision of the board was announced.

X. Claim 1 of auxiliary request 1 (claims underlying the opposition division's decision to maintain the patent) reads as follows:

"A method for polling transmission status in a wireless communications system comprising:
determining whether a predefined condition is true when no packet is scheduled for transmission or retransmission (102) and a poll had been triggered (104) and polling is not prohibited (106); and
selecting and retransmitting one packet that has been transmitted to poll a receiver end if it was determined that the predefined condition is true;
characterized in that the predefined condition is whether there is at least one packet that has been transmitted (108), not yet discarded (110), and not yet acknowledged (108) in a buffer of the transmission end at the transmission end."

Auxiliary request 1 further comprises an independent claim directed to a corresponding device (claim 3).

Reasons for the Decision

1. Admissibility of the appeal

The appeal of the opponent complies with the provisions of Articles 106 to 108 EPC and is therefore admissible.

2. Since the patent proprietor withdrew its appeal, only the request of the opponent concerning auxiliary request 1, is to be dealt with.
Claim 1 of auxiliary request 1 includes the following features:

(1) A method for polling transmission status in a wireless communications system comprising:
(2) determining whether a predefined condition is true when no packet is scheduled for transmission or retransmission and a poll had been triggered and polling is not prohibited;
(3) selecting and retransmitting one packet that has been transmitted to poll a receiver end if it was determined that the predefined condition is true;
(4') wherein the predefined condition is whether there is at least one packet that has been transmitted, not yet discarded, and not yet acknowledged in a buffer of the transmission end at the transmission end.

3. Article 123(2) EPC

3.1 It was common ground in the oral proceedings that for assessing the compliance of amendments with Article 123(2) EPC, the so-called "gold standard" established in the case law of the boards of appeal (decision of the Enlarged Board of Appeal dated 30 August 2011, G 2/10) should be used, i.e. it has to be examined whether an amendment may be derived by a skilled person directly and unambiguously, using common

general knowledge, from the whole of the original disclosure.

3.2 The opponent argued that there was no basis in the application as filed for combining in feature (4') the wording "in a buffer of the transmission end", used in claim 1 as filed, with the wording "at the transmission end". In its view, the originally filed application merely disclosed that packets to be selected for polling could be retrieved by the transmission end, which did not imply a limitation of the location of these packets at the transmission end.

However, the board notes that the application documents describe that the transmitter, i.e. the transmission end, not only retrieves the packets, but transmits and retransmits them to the receiver, selects them and discards them from its buffer, and polls the receiver using retransmitted packets (see for instance page 5, lines 1 to 13). The board thus holds that the skilled person would not artificially construe the wording "buffer of the transmission end" as meaning that the buffer of the transmitter, storing the packets which are handled by the transmitter, is not located within the transmission end.

3.3 The opponent argued that the originally filed application documents did not describe that the condition in features (2), (3) and (4') was a "predefined condition", i.e. that it was either defined in advance of carrying out the method of claim 1 or in advance of encountering the need to determine whether the condition is true. In its view, the condition might well be defined dynamically, for example only when the situation introduced by the term "when" in feature (2) was encountered, and might be specified in run-time

without having to define it in the program code beforehand.

The board however agrees with the patent proprietor that while the checking of the condition and the determination whether the condition is true are done on the fly, the definition of the condition "whether there is at least one packet that has been transmitted, not yet discarded, and not yet acknowledged" is done before hand, making the condition predefined. Indeed, although the term "predefined" is not used in the originally filed documents, the condition is set before starting the claimed polling method and is thus described clearly in advance of the determination step defined in feature (3), i.e. before selecting and retransmitting a packet for polling (see for instance page 7, lines 4 to 11; page 15, lines 5 to 13). This is corroborated by the fact that the procedure 10, corresponding to the claimed method, is written into a storage device (firmware) of a communication device as a program code (see page 15, lines 1 to 4). Accordingly, the naming of the condition as a "predefined condition" may be derived by a skilled person directly and unambiguously from the whole of the original disclosure.

3.4 The opponent argued in writing that there was no basis in the application as filed for omitting in claim 1 the wording "if it was determined that the at least one packet exists" prior to selecting a packet to poll the receiver end. However, the board holds that, on the basis of the originally filed application documents and its own common general knowledge, the skilled person will regard the feature of discarding a packet to mean that the packet is no longer stored in the transmission buffer and this understanding has been shared as well by the opponent during the course of the oral

proceedings. Thus, the sub-condition "packet ... not yet discarded ... in a buffer of the transmission end" of feature (4') has to be construed as meaning that there is at least a packet that has not yet been removed from the buffer of the transmitter and thus that this packet still exists in that buffer. Therefore, omitting in claim 1 the above-mentioned wording does not contravene Article 123(2) EPC.

3.5 For these reasons the board holds that auxiliary request 1 meets the requirements of Article 123(2) EPC.

4. Article 123(3) EPC

The opponent objected that the protection conferred by claim 1 was extended with respect to the protection conferred by claim 1 as granted. The reason thereof was that in claim 1, if there was at least one packet that had been transmitted, not yet discarded, and not yet acknowledged at the transmission end but not in a buffer thereof, that packet might be not selected for polling, whereas in claim 1 as granted, such a packet was selected for polling.

However, the board agrees with the patent proprietor that the change in the sub-condition from "at the transmission end" in claim 1 as granted to "in a buffer of the transmission end at the transmission end" in claim 1 of auxiliary request 1 does not lead to the situation that claim 1 of auxiliary request 1 covers embodiments which are not covered by claim 1 as granted. Indeed, the polling method according to claim 1 of auxiliary request 1 restricts, with respect to claim 1 as granted, the selection of packets for polling to packets which are in a buffer. The board thus holds that there is no extension of scope

resulting from these limitation and that auxiliary request 1 meets the requirements of Article 123(3) EPC.

5. Article 84 EPC

5.1 Firstly, the opponent argued that it was unclear whether the wording "in a buffer of the transmission end" referred to a particular buffer or to any buffer. According to the opponent, if it referred to a particular buffer, it was unclear which particular buffer was meant. In that case, a packet could have been discarded from a first buffer but still existed in a second buffer of the transmission end, which rendered the sub-condition whether there was a packet not yet discarded in a buffer of the transmission end ambiguous. Further according to the appellant, if the wording "in a buffer of the transmission end" referred to a single buffer, the meaning of the sub-condition whether there was a packet not yet discarded in a buffer of the transmission end was still obscure since the difference between a packet not yet discarded in a buffer compared to a packet simply existing in the buffer was not clearly derivable from the wording of the claim. In that respect, the opponent pointed at Figure 3 which showed that the buffer 312 was for SDUs and not for PDUs, i.e. packets, in contradiction with paragraph [0016] of the patent specification which described that PDUs were discarded from the buffer 312, thus making it unclear whether buffer 312 was the buffer meant in claim 1.

However, the board agrees with the patent proprietor that the skilled person would understand that the buffer referred to is a buffer for holding packets that have been transmitted by the transmission end which are waiting for acknowledgement and that no ambiguity

results from the wording "a buffer of the transmission end". With respect to Figure 3 and paragraph [0016], the board also agrees with the patent proprietor that the description in paragraph [0016] is clear and has precedence over the teaching of Figure 3.

5.2 Secondly, the opponent argued that the wording "in a buffer of the transmission end at the transmission end" was not concise and rendered claim 1 unclear.

The board agrees with the patent proprietor that there is no unclarity in using a wording which clearly defines that the buffer is both belonging to the transmission end and located at the transmission end.

5.3 Thirdly, the opponent argued that it was ambiguous in claim 1 whether the term "in a buffer of the transmission end" referred to the verb "is" in "whether there is at least one packet", to the verb "acknowledged" in "not yet acknowledged", or to the verb "discarded" in "not yet discarded".

The board agrees with the patent proprietor that the alleged above-mentioned ambiguity was already present in
claim 1 as granted so that raising a clarity objection in that respect is precluded in opposition proceedings. Anyway, the board holds that the wording "in a buffer of the transmission end" defines a location, so that the skilled person would clearly understand that it refers to the verb "is" since the other wording "not yet discarded" and "not yet acknowledged" relate to the status of a packet and not to its place of storage. This understanding is also clearly supported by the description as a whole (see in particular the

paragraphs [0018] and [0019] of the patent specification).

5.4 Fourthly, the opponent argued in writing that, if the wording "in a buffer of the transmission end" were considered as referring to the verb "not yet discarded", claim 1 would be unclear. In the opponent's view, this interpretation would lead to consider that packets could be at the same time in a buffer and already discarded from the buffer, rendering the condition set out in feature (4') unclear. The opponent pointed at paragraph [0016] of the patent specification which disclosed such a situation, i.e. initiating a procedure for discarding some PDUs stored in a buffer but not immediately discarding them from the buffer.

However, as mentioned in point 5.3 above, the board holds that the wording "in a buffer of the transmission end" clearly refers to "whether there is" in claim 1.

5.5 For these reasons, the board judges that claim 1 meets the requirements of Article 84 EPC.

6. Article 83 EPC

6.1 Firstly, the opponent argued that the skilled person would not be able to carry out the method of claim 1 over the whole claimed range, in particular in the transparent and unacknowledged modes of transmission. In the opponent's view, claim 1 could not be considered as being limited to the acknowledgement mode since this mode was defined only as a particular embodiment in dependent claim 2 and since the only reference to any acknowledgement in claim 1 was in the wording "not yet acknowledged" which however equally applied to packets in the unacknowledged mode.

However, the board agrees with the patent proprietor that the
claimed invention concerns the acknowledged mode and that the problem the invention serves to solve does not arise in unacknowledged mode or in transparent mode (see paragraphs [0004] and [0005] of the patent specification). Further, as pointed out by the patent proprietor, determining as an element of a condition whether a packet has not been acknowledged makes absolutely no sense in a mode where there are no acknowledgements. It is further to be noted that feature (4') of claim 1 refers to "not yet acknowledged" packets and not to simply "not acknowledged packets", the use of the term "yet" indicating that an acknowledgement is foreseen for the packets. Moreover, the board agrees with the patent proprietor that the reference to the acknowledged mode in dependent claim 2 is of no consequence for the assessment of claim 1 in respect of sufficiency of disclosure.

6.2 Secondly, the opponent argued that feature (3) of claim 1 defined selecting one packet for polling, when the condition of feature (4') was fulfilled, without specifying that the selected packet has not been discarded. In the opponent's view, this led to situations where the method of claim 1 may select a discarded packet for polling, the retransmission of which being however not disclosed in the patent specification.

In that respect, the board agrees with the opposition division and the patent proprietor that the patent proposes a solution to the problem of avoiding a transmitter being unable to successfully execute a

polling procedure and directly links this situation with the status of the packets according to the standard specification
3GPP TS 25.322 V6.3.0 (2005-03), i.e. document A1, at the priority date (see paragraphs [0005] to [0008] of the patent specification, in particular the first sentence of paragraph [0008]: "In some cases, all PDUs stored in a buffer of the transmitter are discarded before being acknowledged, and an error occurs when selecting a PDU to poll"). The skilled person would thus immediately recognize that feature (3) refers to packets fulfilling the condition of feature (4') so that the question of how to retransmit a discarded packet does not arise.

6.3 Thirdly, the opponent objected that the description did not describe a way of carrying out the claimed invention since the single described embodiment, which was illustrated by Figure 1, was not enabled. In its view, discarding a packet from a buffer meant that the packet was no longer in the buffer. Considering this, the opponent argued that it was not disclosed how to determine whether a packet had been discarded in contrast to determining whether there was a packet in a buffer. The opponent pointed at steps 108 and 110 of Figure 1 and objected that, when the outcome of step 108 was "Yes", this implied that there was a packet that had been transmitted and not yet acknowledged in a buffer, such a packet being also not discarded. The outcome of step 110 could thus only be "Yes", so that the skilled person would no be able to understand, and thus to carry out, the branch "No" in step 110.

During the oral proceedings, the patent proprietor convincingly explained that, in the context of the standard 3GPP TS 25.322 to which the patent is

referring, discarding a packet from a buffer was not to be equated with discharging a packet from a buffer. Indeed, the standard document A1 explicitly describes a discarding process. From section 11.6 and Figure 11.6 of A1, it can be seen that in this process discarding a PDU, i.e. a packet, means not only to discharge the PDU from the sender's buffer, but to first determine that the PDU should be discharged from the sender's buffer (se section 11.6.2), then to inform the receiver accordingly by sending the discard information with a message (see "MRW SUFI" in section 11.6.2), and only upon reception of a message from the receiver (see "MRW_ACK SUFI" in section 11.6.2), the sender actually discharges the PDU from the sender's buffer (see section 11.6.4). Thus, the skilled person understands that a discarded packet has a state in which it is still present in the buffer but is marked as discarded, before it is actually discharged from the buffer. Therefore, in this case, the determination whether a packet exists in the buffer leads to a different result than the determination whether this packet is discarded so that the skilled person would have no problems in carrying out the determination whether a still existing packet is discarded or not.

6.4 For these reasons, the board holds that the patent, as amended according to auxiliary request 1, meets the requirements of Article 83 EPC.

7. Article 87(1) EPC

The opponent objected that the claimed subject-matter according to auxiliary request 1 did not enjoy the right of priority of the US provisional application US 60/594,697.

7.1 The opponent argued in writing that the priority document disclosed three parts of one alleged invention and that there was no basis for isolating the second part from the other two parts. However, the board agrees with the decision in point 36 that the disclosure in pages 11 to 16 of the priority document represents an invention on its own which is considered to be the basis for the claimed subject-matter according to auxiliary request 1.

7.2 The opponent further argued that there was no basis in the priority document for omitting in claim 1 of auxiliary request 1 that the packet was an AMD-PDU. In the opponent's view, dependent claim 2 comprised this feature, so that operating the system in acknowledged mode had to be considered only as a particular embodiment of the subject-matter of claim 1.

However, the board holds that determining as an element of a condition in claim 1 whether a packet has not been acknowledged makes absolutely no sense in a mode where there are no acknowledgements. It is further to be noted that feature (4') of claim 1 refers to "not yet acknowledged" packets and not to simply "not acknowledged packets, the use of the term "yet" indicating that an acknowledgement is foreseen for the packets. Moreover, the reference to the acknowledged mode in dependent claim 2 is of no consequence for the assessment of the priority right for claim 1.

7.3 The opponent has argued that the priority document did not provide a basis for the feature of retransmitting a packet present in feature (3) of claim 1. In its view, the priority document only disclosed scheduling a packet for retransmission, not positively retransmitting a packet. In that respect, the opponent

also argued that the sections "Background" and "Problems of the prior arts" in pages 11 and 12 of the priority document did not form part of the description of the invention in the priority document.

However, the board holds that the disclosure of pages 11 to 16 of the priority document, including the sections "Background" and "Problems of the prior arts" which represent the context of the invention and relate to the problem to be solved, implicitly disclose that a packet selected and scheduled for polling is retransmitted. In particular, the skilled person would clearly understand from the section "Advantage of the invention" on page 16 that the procedure involves not only scheduling of a packet but also its retransmission since it is therein mentioned that "radio resource may be wasted".

7.4 The opponent further argued that there was no basis in the priority document for having the condition defined in feature (4') of claim 1 checked in only one step. In its view, the priority document disclosed a single non-optional way of checking the condition by having two successive steps, each checking a part of the condition(see page 15, Figure 2, steps 130 and 235).

However, the board agrees in substance with the decision in point 41. In that respect, the quoted Figure 2 defines a method of checking a condition, this condition being whether a packet has the attributes of having been transmitted, not yet acknowledged, and not discarded. The fact that the checking of this condition is shown as being performed in two successive steps in the flow-chart of Figure 2 does not change the terms of the condition, namely the attributes which are checked

and which are the same as the ones defined in feature (4') of claim 1.

7.5 The opponent argued that there was no basis in the priority document for the feature "in a buffer of the transmission end". In its view, no buffer was mentioned in the flow-chart of Figure 2 in page 15 and the passage in page 12, lines 2 to 3 quoted in the decision was related to the discussion of problems in the prior art rather than to the invention per se.

The board is not convinced by these arguments. Firstly, the passage "Problems of the prior art" defines the context of the invention wherein packets for polling are tentatively selected in the buffer of the transmitter. Secondly, this interpretation is corroborated by the wording "These PDUs are discarded from the buffer of the transmitter" on page 15 of the priority document.

7.6 Lastly, the opponent argued that there was no basis in the priority document for the subject-matter of claim 3 of auxiliary request 1. In its view, carrying out the method of claim 1 as a computer implemented method is not necessarily implied by the disclosure in the priority document since some transmitters used in wireless communication systems could implement some functionalities by using integrated circuits for example.

The board is not convinced by these argument. The skilled person would understand that the procedure disclosed in the priority document for selecting packets to carry a polling bit, using a transmitter window size defined by a number of bits, is implemented by computer. This is corroborated by the fact that the

procedure is shown on Figure 2 of page 15 as a typical program flowchart.

Therefore, the board holds that the subject-matter of claim 3 of auxiliary request 1 is implicitly disclosed in the priority document.

7.7 For these reasons, the board judges that the priority based on US 60/594,697 is validly claimed (Article 87(1) EPC) and that the claimed subject-matter has an effective filing date of 29 April 2005.

8. Article 54 EPC

8.1 Prior art

The opponent raised in writing novelty objections based on documents A1 or A5. However, since A5 has been published in May 2005, after the effective filing date of the patent, it does not belong to the prior art under Article 54(2) EPC.

8.2 It was common ground in the oral proceedings that features (1) to (3) of claim 1 according to auxiliary request 1 are already known from A1, in particular from section 9.7.1 and from lines 3 to 12 in section 11.3.2 on page 65.

As to feature (4'), the opponent argued that it was implicitly disclosed by the wording "if there is at least one PDU that has been transmitted and has not yet been acknowledged" in page 65, line 6 of A1. In its view, the wording "there is at least one PDU" meant that a packet existed, and thus had not been discarded, at the transmission end. The opponent thus considered that discarding a packet meant discharging it

immediately from the buffer, so that there was no intermediate state for a packet between the existing state and the discarded state. Furthermore, according to the opponent, an existing non-acknowledged packet waiting for retransmission had to be stored in a portion of the memory of the sender, thus at the transmission end and necessarily in a buffer of the transmission end.

However, the board agrees with the argument provided by the patent proprietor in writing and during the oral proceedings. In the context of the application, which is the standard disclosed in A1, the existence of a packet in a buffer does not imply that the packet has not yet been discarded according to a discarding procedure (see point 6.3 above). In other words, a discarded packet can still exist in a buffer and the check whether a packet is in a buffer, as disclosed in A1, does not equate the check of feature (4') whether a packet has not yet been discarded in a buffer. Figure 1, step 110, clearly shows that a check whether a packet had not been discarded was performed among packets in a buffer of the transmitter.

Moreover, although A1 discloses a transmission and a retransmission buffer for buffering packets (see Figure 4.4), the check for the condition "if there is at least one PDU that has been transmitted and has not yet been acknowledged" is not disclosed to be performed with respect to such a buffer. A1 does not at all describe where exactly the presence of a transmitted but not yet acknowledged packet would be checked for. Further, the patent proprietor plausibly argued that the skilled person would understand that the check could be accomplished by checking for metadata or other information on transmitted packets whether these

packets have been acknowledged, and not by checking for the presence of packets in a buffer of the transmission end.

For these reasons, the board judges that the subject-matter of claim 1 according to auxiliary request 1 is novel having regard to the disclosure of D1 (Article 54 EPC).

9. Article 56 EPC

9.1 The opponent based its argumentation mainly on the same assumptions and interpretations of terms as for the novelty discussion. In its view, the test disclosed in A1, page 65, line 6 was a test for presence of a packet in a buffer, so that the problem of avoiding unnecessary polling by trying to retrieve packets discharged from the buffer was already solved in A1.

9.2 The board is not convinced for the following reasons.

The subject-matter of claim 1 according to auxiliary request 1 differs from the disclosure of A1 in that the check whether there is a packet that has been transmitted and not yet acknowledged is performed:
- in a buffer of the transmission end at the transmission end, and
- comprises the further condition that the packet has not yet been discarded.

The technical effects of these distinguishing features are that a packet selected for polling by the transmitter is both present in the buffer of the transmitter and not the subject of an on-going discarding procedure.

The objective technical problem can thus be formulated, as proposed by the proprietor and stated in paragraph [0001] of the patent specification, as how to avoid a transmitter being unable to successfully execute a polling procedure to a receiver.

The skilled person would derive from A1, in particular from the polling procedure disclosed in section 11.3.2, that packets that have been transmitted and have not yet been acknowledged are in principle held in a buffer of the transmitter. The skilled person would thus not be incited to consider further checks whether such a packet actually exists in the buffer and has not been yet discarded, i.e. is not the subject of a discarding procedure.

The board thus judges that the subject-matter of claim 1 according to auxiliary request 1 involves an inventive step having regard to the disclosure of A1 (Article 56 EPC).

10. Conclusion

Auxiliary request 1 meets the requirements of Articles 123(2), 123(3), 83, 84, 54 and 56 EPC. Thus, the opponent's appeal has to be dismissed.

The opponent's request for reimbursement of the appeal fee is not allowable under Rule 103(1)(a) EPC as the opponent's appeal is not allowable.

Order

For these reasons it is decided that:

The appeal of the opponent is dismissed.

The Registrar: The Chair:

T. Buschek A. Ritzka

Decision electronically authenticated