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**Datasheet for the decision  
of 19 November 2014**

**Case Number:** T 2330/10 - 3.5.03

**Application Number:** 03005944.8

**Publication Number:** 1389886

**IPC:** H04W76/02, H04L29/06, H04L12/56

**Language of the proceedings:** EN

**Title of invention:**  
Method for handling timers after an RLC reset or re-  
establishment in a wireless communications system

**Patent Proprietor:**  
Innovative Sonic Limited

**Opponent:**  
Telefonaktiebolaget LM Ericsson (publ)

**Headword:**  
Handling timers after an RLC reset/INNOVATIVE SONIC

**Relevant legal provisions:**  
EPC Art. 56, 108, 123(2)  
EPC R. 101(2)  
RPBA Art. 13(1)

**Keyword:**

Patent proprietor properly identified (yes) -  
change of legal entity (no) -  
admissibility of proprietor's appeal (yes)  
Main request: added subject-matter (yes)  
Auxiliary requests 1 and 2 - admissibility (no)  
Auxiliary request 3 - admissibility (yes)  
Auxiliary request 3 - inventive step (no)  
Auxiliary request 4 - inventive step (no)

**Decisions cited:**

G 0001/12, T 0231/97, T 2244/12, T 1458/12, T 0786/11

**Catchword:**



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Case Number: T 2330/10 - 3.5.03

**D E C I S I O N  
of Technical Board of Appeal 3.5.03  
of 19 November 2014**

**Appellant:** Innovative Sonic Limited  
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**Appellant:** Telefonaktiebolaget LM Ericsson (publ)  
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**Representative:** Hoffmann Eitle  
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**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
3 September 2010 concerning maintenance of the  
European Patent No. 1389886 in amended form.

**Composition of the Board:**

**Chairman** F. van der Voort  
**Members:** T. Snell  
R. Cramer

## **Summary of Facts and Submissions**

- I. This decision concerns appeals filed by the proprietor and the opponent against the decision of the opposition division concerning the maintenance of European patent No. EP 1 389 886 in amended form. For the sake of clarity, the terms "proprietor" and "opponent" will be used throughout this decision to designate the respective appellants.
  
- II. Opposition had originally been filed on the ground of Article 100(a) EPC (novelty and inventive step). The opponent subsequently cited a new ground of opposition pursuant to Article 100(c) EPC. In the impugned decision, the opposition division held that the ground for opposition pursuant to Article 100(c) EPC prejudiced the maintenance of the patent as granted. Further, claims 1 and 2 of auxiliary request 1 were found not to comply with Article 123(2) EPC, whereas claim 1 of auxiliary request 2 did not meet the requirement for novelty. The opposition division however found that the patent in amended form on the basis of the claim of auxiliary request 3 filed during the oral proceedings held on 7 April 2010 met the requirements of the EPC.
  
- III. A notice of appeal was received on 15 November 2010 on behalf of Innovative Sonic Limited (i.e. the proprietor's name) with an address in the British Virgin Islands. In the notice of appeal, it was requested that the impugned decision be set aside and that the patent be maintained as granted and the opposition rejected. Subsequently, together with the statement of grounds of appeal, the representative of the putative proprietor additionally requested as an auxiliary measure that the patent be maintained with

the claims as granted and the description and drawings indicated in the impugned decision. As further auxiliary measures, it was requested that the patent be maintained on the basis of claims of one of auxiliary requests 1 to 3 submitted with the statement of grounds of appeal. As a further auxiliary measure (hereinafter "auxiliary request 4"), it was requested that the patent be maintained in accordance with the impugned decision, i.e. that the opponent's appeal be dismissed.

- IV. In its notice of appeal, the opponent requested that the impugned decision be set aside and the patent revoked in its entirety.

Both parties conditionally requested oral proceedings.

- V. In a communication accompanying a summons to attend oral proceedings on 25 March 2014, the board gave a preliminary opinion that, inter alia, claims 1 and 2 as granted, claims 1 and 2 of auxiliary requests 1 to 3, and claim 1 of auxiliary request 4 did not meet the requirement of Article 123(2) EPC.

- VI. With a letter dated 14 February 2014, the opponent alleged that the appeal of the proprietor was inadmissible as the company identified as the appellant-proprietor had been discontinued when the appeal was filed. As evidence, a copy of a "Certificate of Discontinuance" issued under the British Virgin Island (BVI) Business Companies Act 2004 was filed. Although in other cases before the EPO involving Innovative Sonic Ltd it had apparently been argued that a simple change of address had occurred from the British Virgin Islands to Mauritius, the opponent cited pending cases T 2244/12 and T 1458/12 before Technical Board of Appeal 3.5.05, where a preliminary opinion had

been issued expressing the view that a simple change of address had not occurred as the company in Mauritius existed before the company in the British Virgin Islands ceased to exist.

- VII. With a letter dated 25 February 2014, the representative of the putative proprietor filed new auxiliary requests 5 to 7.

In the same letter, the representative of the proprietor advised the EPO of a purported change of address of the patent proprietor, previously located in the British Virgin Islands (BVI). It was requested to enter a new address of the patent proprietor, who was now located in Mauritius. As evidence, a copy of a "Certificate of Discontinuance" issued under the BVI Business Companies Act, 2004, was filed, as well as a "Certificate of Registration by Continuation" issued under the Mauritius Companies Act 2001. According to these documents, Innovative Sonic Limited was discontinued as a BVI business company with effect from 20 October 2010 and was registered by continuation as a private company in Mauritius with effect from the same date.

- VIII. Furthermore, with the letter dated 25 February 2014 the representative of the putative proprietor filed a copy of a letter dated 15 March 2013 by a Mauritius barrister at law, headed "Confidential - not to be published". According to the opinion given in this letter, no new legal entity was created but the company had continued to exist in another jurisdiction. The representative of the proprietor stated that this was a confidential document that was intended not to be published.

- IX. With a letter dated 14 March 2014, the opponent requested that it be provided with a copy of the "confidential document". It also contested the statements made by the representative of the proprietor and argued that the Mauritius company must be a different legal entity as it was already operative before 20 October 2010, evidenced by the fact that it filed a complaint for patent infringement in the US on 2 September 2010.
- X. The board cancelled the oral proceedings scheduled to be held on 25 March 2014 by a fax dated 18 March 2014, and indicated that the procedure would be continued in writing.
- XI. In a letter dated 20 March 2014, the proprietor agreed to the forwarding of the "confidential document" to the opponent, but requested that the document be kept as "confidential - not to be published".
- XII. In a communication accompanying a new summons to attend oral proceedings, the board indicated that the laws of the BVI and Mauritius apparently allowed for a legal person originally incorporated under the laws of the BVI to continue as the same legal person under the jurisdiction of Mauritius. However, the question remained as to how Innovative Sonic Limited as a Mauritian corporation could have filed a complaint before a US court on 2 September 2010 if, according to the documentation provided, it did not exist as such prior to 20 October 2010. The patent proprietor had so far failed to provide any explanation in this respect, and was invited to do so in advance of the oral proceedings scheduled, in order for the board to be able to decide on the admissibility of the appeal during the oral proceedings.

The board further advised that it was minded to reject the request for exclusion from file inspection in respect of the "confidential document" referred to above. However, until a final decision was taken, the document was provisionally excluded from file inspection.

The board reiterated the points raised in connection with Article 123(2) EPC set out in the earlier communication.

XIII. In a reply to the new summons, the proprietor withdrew the request for the "confidential document" to be excluded from file inspection. It also provided further arguments and explanations with respect to the admissibility of its appeal and compliance of the claims with Article 123(2) EPC. It stated that the identification of Innovative Sonic Limited as a Mauritian corporation in the complaint before a US court of 2 September 2010 had been a mistake.

XIV. Oral proceedings took place on 19 November 2014. At the oral proceedings, the proprietor filed new auxiliary requests 2 and 3 to replace those on file. Auxiliary requests 5 to 7 were withdrawn.

The proprietor requested that the decision under appeal be set aside and that the patent be maintained as granted, or, in the alternative, that the decision under appeal be set aside and that the patent be maintained in amended form with the claims as granted and a description in the version of the patent as upheld according to the decision of the Opposition Division (referred to in the following as the "alternative main request"), or that the patent be



maintained in amended form according to the claims of auxiliary request 1 as filed with the statement of grounds of appeal, or according to the claims of auxiliary request 2 or 3 as filed during the oral proceedings, or that the appeal by the opponent be dismissed and the patent be maintained in the version as upheld by the Opposition Division (auxiliary request 4).

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

After due deliberation, the chairman announced the board's decision.

XV. Claim 1 of the main request (i.e. claim 1 of the patent as granted) reads as follows:

"A method for handling timers in a wireless communication system according to the Universal Mobile Telecommunications System specification of the European Telecommunications Standards Institute, the method comprising:  
starting a Timer\_Poll\_Periodic timer for a Radio Link Control Acknowledge Mode, hereinafter called as RLC AM, entity;  
performing a reset procedure for the RLC AM entity; and  
restarting the Timer\_Poll\_Periodic timer in response to the Timer\_Poll\_Periodic timer expiring prior to completion of the reset procedure;  
**characterized in that** operation of the Timer\_Poll\_Periodic timer is maintained in response to the completion of the reset procedure."

Claim 2 of the main request (i.e. claim 2 of the patent as granted) reads as follows:

"A method for handling timers in a wireless communication system according to the Universal Mobile Telecommunications System specification of the European Telecommunications Standards Institute, the method comprising:  
starting a Timer\_Poll\_Periodic timer for a Radio Link Control Acknowledge Mode, hereinafter called as RLC AM, entity;  
performing a reset procedure for the RLC AM entity; and  
restarting the Timer\_Poll\_Periodic timer in response to the Timer\_Poll\_Periodic timer expiring prior to completion of the reset procedure;  
**characterized in that** the Timer\_Poll\_Periodic timer is restarted in response to the completion of the reset procedure."

XVI. Claims 1 and 2 of the "alternative main request" are the same as claims 1 and 2 of the main request.

XVII. Claim 1 of auxiliary request 1 is the same as claim 1 of the main request except that the characterising part reads:

**"characterized in that** a value of the Timer\_Poll\_Periodic timer is maintained and operation of the Timer\_Poll\_Periodic timer is maintained in response to the completion of the reset procedure."

Claim 2 of auxiliary request 1 is the same as claim 2 of the main request.

XVIII. Claims 1 and 2 of auxiliary request 2 are the same as claims 1 and 2 of the main request except that the following wording is added to the end of each claim:

", wherein the reset procedure is completed upon reception of a RESET ACK PDU when a RESET PDU has been transmitted."

XIX. Claims 1 and 2 of auxiliary request 3 are the same as claims 1 and 2 of auxiliary request 1 except that:

(i) the wording "wherein the RLC AM entity begins the reset procedure by sending a RESET PDU to a second RLC AM entity" is added after the feature "performing a reset procedure for the RLC AM entity"; and

(ii) at the end of the claim, the wording ", wherein the reset procedure is completed upon reception of a RESET ACK PDU from the second RLC AM entity by the RLC AM entity" is added.

XX. The sole claim of auxiliary request 4 reads:

"A method for handling timers in a wireless communication system according to the Universal Mobile Telecommunications System specification of the European Telecommunications Standards Institute, the method comprising:

starting a Timer\_Poll\_Periodic timer for a Radio Link Control Acknowledge Mode, hereinafter called as RLC AM, entity;

performing a reset procedure for the RLC AM entity; and restarting the Timer\_Poll\_Periodic timer in response to the Timer\_Poll\_Periodic timer expiring prior to completion of the reset procedure; and

restarting the Timer\_Poll\_Periodic timer in response to the completion of the reset procedure, wherein the reset procedure is completed upon reception of a RESET ACK PDU."

## **Reasons for the Decision**

1. *Admissibility of the proprietor's appeal*
  - 1.1 The opponent requested that the proprietor's appeal be held inadmissible. After hearing the parties on the issue at the oral proceedings, the board held that the appeal was admissible, for the reasons set out below.
  - 1.2 In order for an appeal to be admissible, the identity of the true appellant, i.e. the person on whose behalf the appeal was actually filed, must be established by expiry of the two-month period prescribed in Article 108, first sentence, EPC at the latest (G 1/12, Reasons for the decision, point 20).
  - 1.3 The legal person named in the notice of appeal was Innovative Sonic Limited, with an address in the BVI. The documents subsequently filed by the parties showed that at the time of filing the notice of appeal, Innovative Sonic Limited was no longer located in the BVI, but in Mauritius.
  - 1.4 The board has inspected both the BVI Business Companies Act, 2004, and the Companies Act, 2001, of the Republic of Mauritius.

Section 184 in Part X, headed "Continuation", of the BVI Business Companies Act, 2004, states: "... a company ... may ... continue as a company incorporated under the laws of a jurisdiction outside the Virgin Islands in the manner provided under those laws."

Section 296 of the Companies Act, 2001, of the Republic of Mauritius states under the heading "Registration and

continuation of company incorporated outside Mauritius": *"A company incorporated under the laws of any country other than Mauritius, may, where it is so authorised by the laws of that country, apply to the Registrar to be registered as, and continue as, a company in Mauritius as if it had been incorporated in Mauritius under this Act."*

The Board concludes from these provisions that both laws allow for a legal person originally incorporated under the laws of the BVI to continue as the same legal person under the jurisdiction of Mauritius. That means that the patent proprietor remained the same legal person while changing its registration and address from the BVI to Mauritius.

1.5 The opponent questioned whether the appellant-proprietor had nevertheless been properly identified, as the legal person was no longer at the address given in the notice of appeal when the appeal was filed. Furthermore, the opponent could not have known that the new address was in Mauritius before expiry of the two-month period.

1.6 There is however a difference between establishing the identity of an appellant and knowing the address where the appellant can be found.

This follows, e.g., from the fact that deficiencies concerning the indication of the appellant's name and address as prescribed by Rule 99(1)(a) EPC do not necessarily have to be remedied within the two-month time limit pursuant to Article 108 EPC, but can be remedied later following an invitation under Rule 101(2) EPC if there was a reason to issue such invitation. As the board had no reason to issue a

communication under Rule 101(2) EPC, there was no time limit within which the proprietor should at the latest have requested a correction of its address. Whether or not the opponent knew the appellant's new address by the end of the two-month period is therefore not relevant, nor is the degree of difficulty the opponent may have had in finding it out.

1.7 The notice of appeal was therefore filed on behalf of a clearly identified legal person that was party to the first instance proceedings. The board notes that this finding is also in line with the conclusions drawn in T 786/11, in which Board 3.5.05 held that "Innovative Sonic Limited" did not change its legal identity by being transferred to Mauritius (Reasons for the Decision, point 2.7).

1.8 The board therefore concludes that the appeal filed by the patent proprietor is admissible.

## 2. *Technical background*

2.1 The patent in suit concerns a method for handling timers in a wireless communications system according to the Universal Mobile Telecommunications System (UMTS) specification of the European Telecommunications Standards Institute (ETSI). It concerns in particular the handling of a "Timer\_Poll\_Periodic timer for a Radio Link Control Acknowledge Mode" (RLC AM).

2.2 A RLC AM entity forms part of the layer-based protocol model of a UMTS station. The specifications of two communicating peer RLC AM entities are set out in ETSI standard documents, three of which are relevant to these appeal proceedings:

3GPP TS 25.322 V3.11.0, cited in the description of the application as filed;

ETSI TS 125 322 V5.1.0, cited as document E1; and

ETSI TS 125 322 V3.2.0, cited as document E7.

2.3 As set out in the application as filed (cf. paragraph [0009]), the `Timer_Poll_Periodic` timer is used by an RLC AM entity to poll a peer RLC AM entity, which responds with a STATUS PDU (Protocol Data Unit). During normal data transfer operation, a poll is sent each time the timer expires, and the timer restarts (NB: references in this decision to the "application as filed" refer to the published application EP 1 389 886 A1).

2.4 An RLC AM entity is able to initiate a reset procedure. A reset procedure between first and second peer RLC AM entities proceeds by the first entity sending a RESET PDU to the second entity. The second entity responds with a RESET ACK PDU (cf. paragraph [0005] of the application as filed).

The present invention concerns the handling of the `Timer_Poll_Periodic` timer during the reset procedure.

3. *Main request - claim 1 - Articles 100(c) and 123(2) EPC*

3.1 Claim 1 as granted includes the feature: "operation of the `Timer_Poll_Periodic` timer is maintained in response to completion of the reset procedure" (board's underlining). The board notes that the claim is based on a combination of claims 1 and 3 as originally filed, in which, however, the underlined wording differs from the corresponding wording in claim 3 as originally

filed, which reads "... in response to the reset procedure".

- 3.2 In the board's view, the most plausible interpretation, on both technical and linguistic grounds, of claim 1 as granted with respect to the phrase "in response to completion" is that the step of maintaining the operation of the timer occurs after completion of the reset procedure. This interpretation is also in accordance with the patent specification in that, after completion of the reset procedure the transmitting RLC AM entity 14 of the first station 10 (see Fig. 1) maintains, i.e. does not stop, the operation of the timer (cf. col. 7, lines 33-37: "The reset procedure is then concluded when the RLC AM entity 14 receives a RESET ACK PDU. Upon reception of this RESET ACK PDU, the present invention [*sic*] method includes not stopping the Timer\_Poll\_Periodic timer.").

However, claim 1 as granted does not distinguish between the operation of the Timer\_Poll\_Periodic timer of the first RLC AM entity 14, which receives the RESET ACK PDU, and the Timer\_Poll\_Periodic\_Timer of the peer RLC AM entity 24, which sends the RESET ACK PDU. Hence, the claim also covers the operation of the RLC AM entity 24. Further, the board can find no basis in the application as originally filed for the step of maintaining (ie not stopping) the Timer\_Poll\_Periodic timer after the completion of the reset procedure for an RLC AM entity other than the first RLC AM entity. In this respect, it is noted that for the RLC AM entity 24 of the second station 20 the step of maintaining of (i.e. not stopping) the Timer\_Poll\_Periodic timer already occurs when the second RLC AM entity 24 receives the RESET PDU to begin the reset procedure (cf. col. 7, lines 53-57, of the application as filed:



"When the RLC AM entity 24 receives the RESET PDU to begin the reset procedure, the present invention [sic] method includes not stopping the Timer Poll\_Periodic timer or restarting the Timer\_Poll\_Periodic timer.", i.e. before completion of the reset procedure, since completion is after the transmission of the RESET ACK PDU (cf. col. 2, lines 27-30, of the application as filed: "From the perspective of the second station 20, the reset procedure begins upon reception of the RESET PDU, and ends after transmission of the RESET ACK PDU to the first station 10.").

Consequently, claim 1 as granted contains subject-matter which extends beyond the content of the application as filed.

3.3 The board understood the proprietor's counter-arguments to be as follows:

(i) Claim 1 uses essentially the same language as used in the description in connection with the prior art ETSI standards, referring to a generalisation of the first and second stations. In this respect, in paragraph [0006] of the description as filed, it is stated that "all timers ... are stopped for each peer RLC AM entity upon completion of the reset procedure for that entity". This is intended to embrace both the first and the second station. Consequently, "in response to completion" has to be understood not as "after completion", but as "in response to a trigger for completion", which, from the perspective of the second station, is the reception of the RESET PDU.

(ii) All events in the second station occur effectively at the same time. Consequently, it is not technically meaningful to distinguish between a beginning point and

a completion point of the reset procedure. It follows that the maintenance of the timer in the second station is also made "in response to completion of the reset procedure".

3.4 The board is however not convinced by these arguments. With respect to (i), the board considers that as long as claim 1 can be given a plausible interpretation which goes beyond the disclosure of the application as filed, subject-matter has been added. As explained above, this is the case here. With respect to (ii), the board notes that, contrary to the proprietor's assertion, the description as filed makes a clear distinction between the beginning and the end of the reset procedure, cf. e.g. col. 7, lines 36-39 and 44-46.

3.5 The board concludes that claim 1 as granted (i.e. claim 1 of the main request) does not meet the requirement of Article 123(2) EPC. Consequently, the ground for opposition pursuant to Article 100(c) EPC prejudices the maintenance of the patent as granted. The main request is therefore not allowable.

#### 4. *Alternative main request*

As the claims of this request are the same as those of the main request, it follows that this request is also not allowable.

#### 5. *Auxiliary request 1 - claim 1 - Article 123(2) EPC*

5.1 Claim 1 of auxiliary request 1 differs from claim 1 of the main request in that the wording "a value of the Timer\_Poll\_Periodic timer is maintained and" is added to the characterising part. This amendment however is

not relevant to the objection raised above, nor did the proprietor argue otherwise.

Consequently, claim 1 of auxiliary request 1 does not meet the requirement of Article 123(2) EPC either.

Hence, auxiliary request 1 is not allowable.

6. *Auxiliary request 2 - admissibility*

6.1 This request was filed during the oral proceedings and was based on previous auxiliary request 5 filed with the letter dated 25 February 2014. The characterising part of claim 1 reads:

"characterized in that operation of the Timer\_Poll\_Periodic timer is maintained in response to the completion of the reset procedure, wherein the reset procedure is completed upon reception of a RESET ACK PDU when a RESET PDU has been transmitted".

6.2 In accordance with Article 13(1) RPBA, "Any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted and considered at the Board's discretion. The discretion shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy". In line with the established case law of the boards of appeal, one of the criteria for admitting further amendments to a claim at a late stage of the appeal proceedings, in the present case during the oral proceedings, is whether or not the claim is *prima facie* allowable.

6.3 The opponent argued that the request should not be admitted at this late stage of the proceedings, *inter alia* as it *prima facie* lacked clarity and infringed Article 123(2) EPC. In this respect, the phrase "when a RESET PDU has been transmitted" did not clearly limit the claimed method, and it left open who or what transmitted the RESET PDU, extending the scope of protection to undisclosed embodiments. For example, the claim embraced a further network entity transmitting the RESET PDU. This request therefore introduced new problems and consequently did not advance the procedure further.

6.4 The proprietor argued that the claim limitations were clear when the claim was read in its entirety. In particular, it was clear that the same entity received the RESET ACK PDU as transmitted the RESET PDU.

6.5 The board however considers that the phrase "when a RESET PDU has been transmitted" at least *prima facie* infringes Article 123(2) EPC in not specifying which entity sends the RESET PDU. Consequently, the board did not admit auxiliary request 2 (Article 13(1) RPBA).

#### 7. *Auxiliary request 3 - admissibility*

7.1 This request was filed during the oral proceedings in response to the proprietor's hearing the board's view that auxiliary request 2 was not to be admitted. The opponent argued that an "iterative" way of filing requests during oral proceedings was contrary to the way oral proceedings should be conducted. In the opponent's view, the proprietor had a duty to file a comprehensive set of requests in advance of the oral proceedings. In particular, filing a request at 15.00 h during the oral proceedings was too late. Furthermore,

the subject-matter of the claim was *prima facie* not new, or at least did not involve an inventive step.

7.2 The board however considered that the request was a *bona fide* attempt to overcome the objections previously raised based on Articles 123(2) and 84 EPC. There was in particular no longer any *prima facie* case for infringement of Articles 123(2) and 84 EPC. As to whether or not the claim met the requirements for novelty and inventive step, these matters had not yet been discussed with respect to any request. Since the opponent had come prepared to discuss these issues in respect of previous requests, it was not placed at a disadvantage in this respect by being confronted with the new request only during the oral proceedings, since the issues were essentially still the same. Therefore, the board saw no reason not to admit the request purely on the grounds of its being filed during the afternoon of the oral proceedings. Consequently, the board exercised its discretion under Article 13(1) RPBA to admit the request.

#### 8. *Admissibility of document E7*

8.1 Document E7 was submitted to the opposition proceedings after the nine-month time limit for filing an opposition had expired, and was consequently late-filed. The document was admitted on the ground that the opposition division found it to be *prima facie* highly relevant, making use of its power under Article 114(1) EPC.

8.2 In these appeal proceedings, the proprietor requested that E7 be excluded from the proceedings essentially because the opposition division had used its discretion incorrectly to admit the document in view of the fact

that it disclosed an early, non-workable version of the standard which the skilled person would not have taken as a starting point for the present invention, and because, in any case, it was not more relevant than E1.

- 8.3 The board however notes that document E7 was admitted to the proceedings by the opposition division and consequently is part of the proceedings. The board understands the request to exclude E7 as a request that the opposition division's decision to admit the document be set aside. However, the board cannot see any reason for setting aside the decision to admit the document, since the opposition division has discretionary power under Article 114(1) EPC to admit late-filed documents considered by it to be *prima facie* highly relevant. The board does not consider that the reasons advanced by the proprietor demonstrate that the opposition division exceeded its power of discretion or used it in an unreasonable way. Whether, as argued by the proprietor, the document discloses a non-workable solution or is not more relevant than E1 are matters which require a detailed substantive investigation of the document. However, a prerequisite for such a detailed examination is that the document be admitted.

The proprietor's request to exclude E7 from these appeal proceedings is therefore rejected.

9. *Auxiliary request 3 - novelty and inventive step*

9.1 *Claim 1 - novelty*

- 9.1.1 The opponent alleged that the subject-matter of claim 1 of auxiliary request 3 was not new with respect to the disclosure of E7.

9.1.2 E7 discloses, using the language of claim 1, a method for handling timers in a wireless communication system according to the Universal Mobile Telecommunications System specification of the European Telecommunications Standards Institute, the method comprising:  
starting a Timer\_Poll\_Periodic timer for a Radio Link Control Acknowledge Mode, hereinafter called as RLC AM, entity (cf. page 33, paragraph 9.5 e) in combination with page 35, paragraph 9.7.1 7));  
performing a reset procedure for the RLC AM entity, wherein the RLC AM entity begins the reset procedure by sending a RESET PDU to a second RLC AM entity (cf. page 42, paragraphs 11.4.1 and 11.4.2).

This was not in dispute.

9.1.3 E7 is however silent on the behaviour of the timer during and following the reset procedure. The opponent argued that this silence implied that the timer behaved normally during and following a reset procedure, i.e. when it expired, it was simply restarted. Consequently, the remaining features of claim 1 were implicit, namely:

(a) restarting the Timer\_Poll\_Periodic timer in response to the Timer\_Poll\_Periodic timer expiring prior to completion of the reset procedure; and

(b) a value of the Timer\_Poll\_Periodic timer is maintained and operation of the Timer\_Poll\_Periodic timer is maintained [this is understood to mean that the timer continues to count normally without any jump in value] in response to the completion of the reset procedure, wherein the reset procedure is completed upon reception of a RESET ACK PDU from the second RLC AM entity by the RLC AM entity.

9.1.4 The board however disagrees that anything about the timer's behaviour during and after the reset procedure can be regarded as inherent from the disclosure of E7. Consequently, the board concludes that the subject-matter of claim 1 of auxiliary request 3 is new with respect to the disclosure of E7 (Articles 52(1) and 54 EPC).

9.1.5 The subject-matter of claim 1 is also new with respect to the disclosure of E1, since E1 discloses neither of the distinguishing features (a) or (b). The opponent in any case did not allege that the subject-matter of claim 1 was not new with respect to the disclosure of E1.

## 9.2 *Claim 1 - inventive step*

9.2.1 The closest prior art document with respect to the subject-matter of claim 1 is considered to be E7. The distinguishing features with respect to E7 are features (a) and (b) mentioned above in connection with novelty.

9.2.2 In the board's view, the technical problem to be solved starting out from E7 can be seen as how to effectively operate the Timer\_Poll\_Periodic timer during and following a reset procedure.

9.2.3 When seeking a solution to this problem, the skilled person would take note of the measures already disclosed in E7 for operating the Timer\_Poll\_Periodic timer in normal mode. In this respect, it is disclosed in E7 that timer-based polling for periodic status reports is carried out during normal operation by starting the Timer\_Poll\_Periodic timer and restarting it each time it expires (cf. page 35, paragraph 9.7.1



7)).

In the board's view, the most immediate solution to the above-mentioned problem that would occur to the skilled person starting out from E7 is the solution disclosed for normal operation, irrespective of whether a reset procedure has commenced or finished. This would have the result that firstly the timer would restart on expiry before completion of the reset procedure (feature (a)), and secondly that the Timer\_Poll\_Periodic timer would continue its normal operation after completion of the reset procedure (feature (b)). In so doing, the skilled person would arrive at a reset procedure as claimed in claim 1 of auxiliary request 3 without inventive skill.

9.2.4 The proprietor put forward the following main arguments, in particular during the oral proceedings:

(i) The skilled person would not start out from document E7 as it is a document with too few technical details to be a workable solution, and even suggests a dysfunctional reset procedure. In this respect, it contains no instructions for the skilled person how to discard PDUs and SDUs or how to assign sequence numbers after a reset. Consequently, the skilled person would have ignored E7 and instead started out from E1, which teaches that the timer should be stopped during the reset procedure.

(ii) If E7 discloses anything about the reset phase, it is that the timers are reset, i.e. stopped (cf. paragraph 9.1.2 b)), which corresponds to the explicit requirement of the later version of the standard, i.e. E1.

9.2.5 Re (i): In the board's view, the skilled person can start from any piece of prior art which has a close technical relationship to the problem to be solved. In particular, the skilled person would assume that any standard document issued by ETSI on the subject at issue would be a promising starting point. The board understands the proprietor to be alleging that the skilled person would have had a technical prejudice against starting out from E7 in view of the allegedly "dysfunctional reset procedure" and the fact that a newer version of the standard existed which teaches a different solution. However, merely because E7 does not define a fully worked-out reset procedure in all aspects does not in the board's view mean that it discloses a procedure which is dysfunctional. As regards the existence of E1, the board notes that this document was published at the earliest two months before the priority date of the present application. Consequently, in the board's view, it is too recent a publication to be considered as representing the established view of experts whose technical prejudice is to be overcome. Furthermore, in the board's view, the members of the standards body responsible for E1 plausibly themselves started out from E7 and could without inventive step equally have arrived at the subject-matter of claim 1 for the reasons given above. Plausibly, the solution disclosed in E1 was adopted since it apparently aims to control the Timer\_Poll\_Periodic timer in a more predictable way following a reset procedure, whereas merely maintaining the timer operation as claimed in claim 1, although simpler, would lead to less predictable results. The choice of a simpler solution with foreseeable disadvantages however in the board's view does not contribute to an inventive step.

Re (ii): The reference in E7 is a general statement concerning rather vaguely "all ... protocol timers of the peer RLC entity" (board's underlining). Consequently, this statement does not apply to the Timer\_Poll\_Periodic timer of the entity initiating the reset procedure.

Consequently, the board found the proprietor's arguments to be unconvincing.

### 9.3 *Claim 2 - novelty*

9.3.1 Although claim 1 is not allowable, meaning that auxiliary request 3 as a whole is not allowable, independent claim 2 of auxiliary request 3 is now considered due to its relevance to auxiliary request 4 (see below).

9.3.2 The subject-matter of claim 2 differs from the disclosure of either E7 or E1 in the features:

(a) restarting the Timer\_Poll\_Periodic timer in response to the Timer\_Poll\_Periodic timer expiring prior to completion of the reset procedure; and

(b) the Timer\_Poll\_Periodic timer is restarted in response to the completion of the reset procedure, wherein the reset procedure is completed upon reception of a RESET ACK PDU from the second RLC AM entity by the RLC AM entity.

9.3.3 Novelty was not in dispute because it was common ground that at least feature (b) was not disclosed in either E7 or E1.

### 9.4 *Claim 2 - inventive step*

9.4.1 The closest prior art in respect of the subject-matter of claim 2 is considered to be E1. The technical problem to be solved starting out from E1 is considered to be the same as given above in connection with claim 1, i.e. how to effectively operate the Timer\_Poll\_Periodic timer during and following a reset procedure.

9.4.2 In attempting to solve this problem, the skilled person would, in the board's view, find it obvious to incorporate distinguishing feature (a) for the same reasons as given in connection with claim 1. This feature therefore does not contribute to inventive step, nor did the proprietor argue otherwise.

9.4.3 The board also considers that the skilled person would also find it obvious to incorporate feature (b) for the following reasons:

The board interprets feature (b) to mean that the timer restarts from its original starting point, which is consistent with the meaning of the term "restart" as used in feature (a) of claim 2, namely "restarting the Timer\_Poll\_Periodic timer in response to the Timer\_Poll\_Periodic timer expiring prior to completion of the reset procedure". This was also the meaning ascribed to this feature by the proprietor.

In E1, as part of the reset procedure, the Timer\_Poll\_Periodic timer is explicitly stopped (cf. E1, paragraphs 11.4.4 and 9.5 e)). No further details are given.

However, although there is no indication in E1 as to how to proceed subsequently, the skilled person, in the

board's view, would immediately recognise that the Timer\_Poll\_Periodic timer would soon need to start operating again, since if no action were taken, the system would run into deadlock situations of the type explained in the patent in suit in paragraphs [0008] to [0013]. Although this would not necessarily mean that, after it was stopped, the timer would have to be reset to its original starting point, the board finds this to be the most obvious choice for the reason that the behaviour of the Timer\_Poll\_Periodic timer would then be more predictable than were it, for example, to start counting from the previous count value reached.

Consequently, the skilled person would incorporate distinguishing feature (b) without exercising inventive skill.

9.4.4 The proprietor argued essentially as follows:

(i) In E1, the timer is never restarted.

(ii) In accordance with document E1, the avoidance of a deadlock situation is not mandatory and, in any case, E1 gives no clear advice on how to avoid deadlock, so that E1 cannot lead to the claimed solution.

(iii) It had taken a long time before it was realised that stopping the timer in accordance with E1 would lead to deadlock. The skilled person would not have identified the source of the problem.

(iv) The solution benefited from an additional technical effect, namely that early polling would be avoided and that the first poll would occur at a predictable time.

9.4.5 Re (i) to (iii): The board notes that it is nowhere stated in E1 that the timer is never restarted. Consequently, the board finds no support in E1 for statements in the description of the patent in suit to this effect (cf. the description, col. 3, lines 47-51 and col. 4, lines 40-42). In the board's view, it is rather illogical that none of the timers mentioned in paragraph 9.5 of E1 would be restarted following re-establishment of the RLC AM entity after a reset procedure and doubts that this was the intention of the authors of E1, since this would mean, seemingly implausibly, that the use of timers would be abandoned as soon as the first reset occurred. In particular, as has been said, if the Timer\_Poll\_Periodic timer were not restarted a deadlock situation would eventually arise for the reasons explained in the description of the patent (cf. paragraphs [0009] and [0010]). Therefore the problem would present itself automatically and need to be solved. Further, the connection between stopping the timer and the running into deadlock situations would be evident to the skilled person, since a reason for using polling in the first place is to prevent such deadlock situations from occurring (cf. E1, page 48, line 8 and E7, page 35, lines 14-15). Finally, the proprietor has brought no evidence that the invention fulfilled a long-felt need, which in accordance with case law could possibly have supported the case for an inventive step.

Re (iv): Firstly, the board notes that the alleged additional technical effect is nowhere mentioned in the patent. Secondly, this effect results automatically by restarting the timer. In accordance with case law, neither speculative effects nor bonus effects resulting from a measure which is per se obvious, can support the

case for an inventive step (cf. eg T 231/97, points 5.7.5.2 and 5.7.5.3 of the reasons).

Consequently, the board finds the proprietor's arguments unconvincing.

- 9.5 The board concludes that the respective subject-matter of claim 1 and claim 2 of auxiliary request 3 does not involve an inventive step (Articles 52(1) and 56 EPC).

Auxiliary request 3 is therefore not allowable.

10. *Auxiliary request 4 - claim 1 - inventive step*

Claim 1 of auxiliary request 4 (cf. point XX above) defines features which are all part of claim 2 of auxiliary request 3. Consequently, for the reasons given in point 9.4 above, the subject-matter of claim 1 of auxiliary request 4 does not involve an inventive step either (Articles 52(1) and 56 EPC).

Auxiliary request 4 is therefore also not allowable.

11. *Conclusion*

As there is no allowable request, it follows that the decision under appeal is to be set aside and that the patent is to be revoked.

## **Order**

### **For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



G. Rauh

F. van der Voort

Decision electronically authenticated