

**Internal distribution code:**

- (A) [ - ] Publication in OJ
- (B) [ - ] To Chairmen and Members
- (C) [ - ] To Chairmen
- (D) [ X ] No distribution

**Datasheet for the decision  
of 19 August 2021**

**Case Number:** T 2834/18 - 3.5.05

**Application Number:** 07000933.7

**Publication Number:** 1777864

**IPC:** H04L1/16, H04L1/18, H04L29/08

**Language of the proceedings:** EN

**Title of invention:**

Method for handling timers after an RLC reset or re-establishment in a wireless communications system

**Applicant:**

Innovative Sonic Limited

**Headword:**

Handling of a "Timer\_Discard" timer for an RLC of a UMTS wireless communications system

**Relevant legal provisions:**

EPC Art. 54(2), 56

**Keyword:**

Novelty - state of the art  
Inventive step - after amendment

**Decisions cited:**

T 2330/10, T 0113/00



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

Boards of Appeal of the  
European Patent Office  
Richard-Reitzner-Allee 8  
85540 Haar  
GERMANY  
Tel. +49 (0)89 2399-0  
Fax +49 (0)89 2399-4465

Case Number: T 2834/18 - 3.5.05

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.05**  
**of 19 August 2021**

**Appellant:** Innovative Sonic Limited  
(Applicant) 2nd Floor, The Axis  
26 Cybercity  
Ebene 72201 (MU)

**Representative:** Hoefler & Partner Patentanwälte mbB  
Pilgersheimer Straße 20  
81543 München (DE)

**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 16 July 2018  
refusing European patent application No.  
07000933.7 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chair** A. Ritzka  
**Members:** P. Tabery  
E. Mille

## **Summary of Facts and Submissions**

- I. The appeal is directed against the examining division's decision dated 16 July 2018 refusing European patent application No. 07000933.7.
- II. The application under scrutiny is a divisional application of earlier (parent) application EP 03005944.8 filed on 17 March 2003.
- III. The examining division decided that the application did not fulfil the requirements of Articles 54(2) and 56 EPC (main request and auxiliary request) as well as Article 84 EPC (auxiliary request).
- IV. The documents referred to by the examining division included:
- D1** ETSI: "Universal Mobile Telecommunications System (UMTS), RLC Protocol Specification (3GPP TS 25.322 V5.1.0 Release 5)", June 2002, XP002262982
- E7** ETSI: "Universal Mobile Telecommunications System (UMTS), RLC Protocol Specification (3GPP TS 25.322 V3.2.0 Release 1999)", March 2000, XP014008727
- V. In its statement setting out the grounds of appeal, the appellant (applicant) requested that a patent be granted on the basis of the claims of the main request or the auxiliary request.
- VI. In a communication pursuant to Article 15(1) RPBA, the board set out its provisional opinion on the case. The board concurred with the examining division in its opinion that the main request did not meet the

requirements of Article 56 EPC. With respect to the auxiliary request, the board considered that it did not meet the requirements of Articles 84 and 56 EPC.

VII. In a reply dated 19 July 2021, the appellant submitted a new main request and new auxiliary requests 1 to 9.

VIII. Oral proceedings were held on 19 August 2021. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claim submitted as auxiliary request 5 (sole request).

IX. The **sole claim** of the **sole request** comprises the following features (as labelled by the board):

A method for handling a Timer Discard timer in a Radio Link Control Acknowledged Mode, called RLC AM hereinafter, entity, in a wireless communications system,

(1) wherein the Timer\_Discard timer is started upon reception of a Service Data Unit, called SDU hereinafter, from upper layer and the SDU is discarded if the Timer Discard timer expires before the SDU is positively acknowledged, comprising:

(2) receiving an SDU and starting the Timer\_Discard timer associated with the SDU;

(3) performing a reset procedure for the RLC AM entity; and

characterized by:

(4) upon reception of RESET PDU or RESET ACK PDU, not stopping the Timer\_Discard timer if the SDU is not discarded.

## Reasons for the Decision

1. The application concerns the handling of a "*Timer\_Discard*" timer for a Radio Link Control Acknowledge Mode (RLC AM) entity of a UMTS wireless communications system.

2. Admissibility (Article 13(1) RPBA)

The sole claim according to the sole request differs from the sole claim of the main request considered in the impugned decision in that alternative 'b)' has been deleted. Furthermore, the two-part form has been rectified.

Since the amendment addresses the preliminary view of the board and involves an inventive step, the board decides to admit the sole request into the proceedings.

3. Novelty (Article 54(1) EPC)

In line with the impugned decision and as argued by the appellant, the board holds that document **E7** does not disclose feature (4) of the claim (i.e. the former alternative 'a)'), which thus constitutes the distinguishing feature. The board finds that document **E7** explicitly discloses that the "*RESET PDU is used ... to reset all ... protocol timers*" (see item b) in section 9.1.2 on page 18). This is clearly different from "*not stopping*" the timer.

The subject-matter of the **claim** is therefore novel.

4. Inventive step (Article 56 EPC)

4.1 Closest prior art

In the statement setting out the grounds of appeal, the appellant argues that document **D1**, rather than document **E7**, should be regarded as the closest prior art. It

also adds that document **D1** supersedes the preceding versions of the same standard, including document **E7**. It argues that the skilled person would not start from an older version, since that would give rise to a risk of non-compliance with the standard.

In the impugned decision, the examining division followed the reasoning provided by the board of appeal in section 9.2.5 of decision T 2330/10 concerning the parent application.

This board is not convinced by the appellant's argument and confirms the reasoning provided on the same question in decision T 2330/10. In particular, this board considers that the skilled person would assume that any standard document issued by ETSI on the subject under discussion here would be a promising starting point. The board notes that standardisation bodies might revert to a superseded version of a standard if later developments turn out to be disadvantageous. Furthermore, the board notes that *"the state of the art shall be held to comprise everything made available to the public ... before the date of filing of the European patent application"* (Article 54(2) EPC). Therefore, what is claimed may also be examined for an inventive step based on an earlier prior-art document, such as document **E7** (in line with decision T 0113/00, item 3.7).

As a consequence, the board considers it necessary to establish whether the claimed subject-matter would have been obvious to the skilled person in view of either of documents **D1** or **E7**.

#### 4.2 Technical effect and objective technical problem

In the impugned decision, the examining division formulated the technical problem to be solved starting from document **E7** as *"how to effectively operate the*

*Timer\_Discard timer during and following a reset procedure".*

The appellant argues that the cited prior art discloses that this timer is reset during a reset procedure (see document **E7**, item b) in section 9.1.2 on page 18) and thus stopped. The appellant adds that other mechanisms for implementing the discarding of SDUs if retransmissions fail are also disclosed (see document **E7**, section 9.7.3 on page 36). Since these other mechanisms are not relying on timers, they are unaffected by the reset procedure. Thus, the technical effect achieved by the distinguishing feature is the same as in document **E7**, i.e. that in the context of a reset procedure pending PDUs are discarded to avoid buffer overflow if retransmissions fail. The resulting objective technical problem should be formulated as *"how to provide an alternative procedure such that, in the context of a reset procedure, pending PDUs are discarded to avoid buffer overflow if retransmissions fail"*.

The board notes that document **E7** does indeed disclose that, during a reset procedure, all timers are reset (see document **E7**, item b) in section 9.1.2 on page 18). That implies stopping them, i.e. terminating their operation. In line with what has been presented by the appellant, the board considers that the objective technical problem may be formulated as *"how to provide an alternative procedure such that, in the context of a reset procedure, pending PDUs are discarded to avoid buffer overflow if retransmissions fail"*.

#### 4.3 Obviousness

The appellant emphasises that document **E7** discloses a mechanism for discarding PDUs to avoid buffer overflow if retransmissions fail without using a timer at all. This mechanism is thus unaffected by the reset



procedure. Moreover, the skilled person has no motivation to act against the teaching of document **E7** that all timers are to be reset/stopped during a reset procedure. Therefore, the skilled person would not arrive at the distinguishing feature without employing inventive skill.

The board considers that the skilled person could have recognised that, when performing the reset procedure, it is only necessary to reset specific timers in order to achieve synchronisation of the RLC entities; the latter is described as being the purpose of the RLC reset procedure. Moreover, the skilled person could have realised that the above problem existed and considered solving it by not stopping the "*Timer\_Discard*" timer, in addition or as an alternative to what is disclosed in document **E7**. However, document **E7** does not give the skilled person any pointer relating to this problem or the claimed solution. On the contrary, document **E7** discloses resetting the timer, which implies stopping it, i.e. the opposite of distinguishing feature (4). In view of the above, the skilled person would not arrive at the distinguishing features without employing inventive skill. Therefore, the subject-matter of the claim involves an inventive step over what is known from document **E7**.

- 4.4 The feature distinguishing the subject-matter of claim 1 from document **E7** also distinguishes it from document **D1**. Document **D1** likewise does not mention any pointer in respect of the claimed solution. Therefore, the board finds that the subject-matter of the claim involves an inventive step over what is known from document **D1** as well.
- 4.5 In view of the above, the **sole request** is allowable.
- 5. Consequently, the appeal is allowable.

## Order

### For these reasons it is decided that:

The decision under appeal is set aside and the case remitted to the examining division, with the order to grant a patent on the basis of the sole claim of auxiliary request 5 filed by the appellant with their letter dated 19 July 2021, description and drawings to be adapted.

The Registrar:

The Chair:



K. Götz-Wein

A. Ritzka

Decision electronically authenticated