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**Datasheet for the decision  
of 12 June 2014**

**Case Number:** T 0786/11 - 3.5.05

**Application Number:** 05016910.1

**Publication Number:** 1641169

**IPC:** H04L1/18

**Language of the proceedings:** EN

**Title of invention:**

Enhanced SDU discard procedure for a special data segmentation  
in a wireless communication system

**Patent Proprietor:**

Innovative Sonic Limited

**Opponent:**

Telefonaktiebolaget L- M Ericsson (publ)

**Headword:**

SDU discarding/INNOVATIVE SONIC

**Relevant legal provisions:**

EPC Art. 54, 56, 84  
RPBA Art. 13(1), 13(3)

**Keyword:**

Respondent's identity - change of legal entity (no)  
Novelty - main request (no)  
Admission of first and second auxiliary requests - (yes)  
Clarity - first auxiliary request (no)  
Admissibility of challenging second auxiliary request - (yes)  
Inventive step - second auxiliary request (no)

**Decisions cited:**

G 0009/91, T 0079/96, T 2244/12

**Headnote:**

A legal entity moving completely from one country to another does not necessarily change its identity or cease to exist. The legal consequences depend rather on the national legal provisions concerned.

The laws of the British Virgin Islands (BVI) and of the Republic of Mauritius allow - under certain conditions - a legal entity registered as a company incorporated under BVI law to continue to exist as a company registered under the jurisdiction of Mauritius without any effect on its legal identity and thus on its party status (see point 2).



**Beschwerdekammern  
Boards of Appeal  
Chambres de recours**

European Patent Office  
D-80298 MUNICH  
GERMANY  
Tel. +49 (0) 89 2399-0  
Fax +49 (0) 89 2399-4465

Case Number: T 0786/11 - 3.5.05

**D E C I S I O N  
of Technical Board of Appeal 3.5.05  
of 12 June 2014**

**Appellant:** Telefonaktiebolaget L- M Ericsson (publ)  
(Opponent) 164 83 Stockholm (SE)

**Representative:** HOFFMANN EITLE  
Patent- und Rechtsanwälte  
Arabellastrasse 4  
81925 München (DE)

**Respondent:** Innovative Sonic Limited  
(Patent Proprietor) 2nd Floor, The Axis  
26 Cybercity  
Ebene 72201 (MU)

**Representative:** Hager, Thomas Johannes  
Hoefer & Partner  
Patentanwälte  
Pilgersheimer Strasse 20  
81543 München (DE)

**Decision under appeal:** **Decision of the Opposition Division of the  
European Patent Office posted on 25 January 2011  
rejecting the opposition filed against European  
patent No. 1641169 pursuant to Article 101(2)  
EPC.**

**Composition of the Board:**

**Chair** A. Ritzka  
**Members:** K. Bengi-Akyuerek  
D. Prietzel-Funk

## Summary of Facts and Submissions

- I. The appeal of the opponent is against the decision of the opposition division, posted on 25 January 2011, to reject the opposition filed against European patent No. 1641169 in view of the invoked opposition grounds of lack of novelty and inventive step (Article 100(a) EPC in conjunction with Articles 54 and 56 EPC).
- II. The following documents were *inter alia* cited by the opponent in the opposition proceedings in support of its objection that the claimed invention lacked novelty and inventive step:
- A1: WO-A-02/15510;
  - A2: "3GPP TS 25.322 V6.1.0 (2004-06)", Technical Specification, Release 6, pp. 1-78, June 2004;
  - A3: "Decision of Discarded SDUs from Discarded PDUs", Change Request, 3GPP TSG-RAN2 Meeting #37, Tdoc R2-031689, August 2003;
  - A4: "RLC SDU discard", TSG-RAN Working Group 2, TSGR2#4(99)407, Ericsson, pp. 1-2, May 1999.

In the decision under appeal, those documents were labelled D1 to D4 respectively.

- III. Notice of appeal was received on 28 March 2011. The appeal fee was paid on the same day and the statement setting out the grounds of appeal was received on 6 June 2011. The appellant requested that the patent be revoked on the grounds of lack of novelty (Article 54 EPC) in view of A1, and lack of inventive step (Article 56 EPC) in view of A1 or A4, the combination of A1 and A4, the combination of A4 and A3, and the combination of A2 and A3 with respect to claim 1 as

granted.

- IV. With a letter of reply dated 4 November 2011, the respondent (patent proprietor) filed counter-arguments in support of novelty and inventive step as regards claim 1 of the opposed patent.
  
- V. A summons to oral proceedings scheduled for 12 June 2014 was issued on 7 February 2014. In an annex to this summons, the board gave its preliminary opinion on the appeal pursuant to Article 15(1) RPBA. In particular, it stated that the subject-matter of claim 1 as granted did not seem to be novel over document A1 (Article 54 EPC).
  
- VI. With a letter of response dated 12 May 2014, the respondent advanced arguments on the question of novelty and inventive step regarding claim 1 as granted, together with further prior-art documents in support thereof, and filed a new set of claims according to an auxiliary request.

In addition, by another letter dated 12 May 2014 related to a list of European patent applications including the one corresponding to the present patent, the respondent requested that the address of the "applicant/patentee" be changed in two steps, firstly from

"INNOVATIVE SONIC LIMITED  
P.O. Box 957  
offshore incorporations centre  
Road Town, Tortola  
British Virgin Islands"

to

"INNOVATIVE SONIC LIMITED  
4<sup>th</sup> Floor Unicom Centre  
18N Frere Felix De Valois Street  
Port Louis  
Mauritius"

and then, as of February 2014,

to

"INNOVATIVE SONIC LIMITED  
2nd Floor, The Axis,  
26 Cybercity,  
Ebene 72201,  
Mauritius".

The respondent also submitted a "certificate of discontinuance" and a "certificate of registration by continuation" from the authorities of the British Virgin Islands and the Republic of Mauritius, respectively, as evidence that the above change constituted a mere change of address.

- VII. With a letter dated 5 June 2014, i.e. one week before the scheduled oral proceedings before the board, the appellant submitted that it did not recognise the company "Innovative Sonic Limited" incorporated in Mauritius, whether having an address in Port Louis or Ebene, as a party to the proceedings. It also filed a copy of the summons to oral proceedings of the present board, in a different composition, related to settled appeal case T 2244/12 (with identical parties) as evidence of doubts raised about the respondent's party status. Furthermore, it expanded upon the allowability of the claims as granted and the admissibility of the

auxiliary request under Article 114(2) EPC and Article 13(1), (3) RPBA as well as its allowability under Articles 84, 54, 56, and 123(3) EPC.

VIII. By fax of 11 June 2014, i.e. one day before the scheduled oral proceedings before the board, the respondent filed several exhibits (E1 to E8 and A to D) as evidence that the requested change of address did not constitute a change of the respondent's legal entity, without making any further comments thereon.

IX. Oral proceedings were held as scheduled, during which the respondent filed a new auxiliary request ("auxiliary request 1") as a second, additional auxiliary request and renamed the pending auxiliary request as first auxiliary request. The appellant requested that the new auxiliary request not be admitted into the proceedings. The party status of the respondent, the admissibility and allowability of the appeal and auxiliary requests were discussed.

The appellant's final request was that the decision under appeal be set aside and that the European patent be revoked.

The respondent's final request was that the appeal be dismissed, or that the patent be maintained on the basis of the claims of the auxiliary request submitted with the letter dated 12 May 2014 as a first auxiliary request, or on the basis of "auxiliary request 1", submitted during the oral proceedings before the board, as a second auxiliary request.

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

X. Claim 1 of the **patent** as granted reads as follows:

"A method for handling discarding of a sequence of service data units in an UMTS communications system, the sequence of service data units comprising at least a last discarded service data unit, in the following referred to as SDU, wherein a sender (300) decides to discard SDUs and performs a signalling thereof to a receiver (400), the method comprises the following steps:

checking whether a protocol data unit, in the following referred to as PDU, containing a length indicator of the last discarded SDU contains no new SDUs and when true, proceed with the following steps:

creating a move receiving window super field, in the following referred to as MRW SUFI;  
setting a  $N_{\text{LENGTH}}$  field of the MRW SUFI to 0;  
setting a last sequence number move receiving window field, in the following referred to as  $SN_{\text{MRW}_{\text{LENGTH}}}$ , to a sum of one plus a sequence number of the PDU containing the length indicator of the last discarded SDU; and  
issuing the MRW SUFI;

wherein the length indicator indicates an end position of the last discarded SDU; the  $SN_{\text{MRW}_{\text{LENGTH}}}$  indicates a sequence number of a PDU that contains a data segment of a SDU right after the last discarded SDU; setting the  $N_{\text{LENGTH}}$  field of the MRW SUFI to 0 indicates that the last SDU discarded ended in a PDU with sequence number  $SN_{\text{MRW}_{\text{LENGTH}}} - 1$  and that the first data octet in a PDU with sequence number  $SN_{\text{MRW}_{\text{LENGTH}}}$  is the first data octet of the SDU right after the last discarded SDU; and the MRW SUFI is used to signal the information of discarded SDUs."



Claim 1 of the **first auxiliary request** comprises all the features of claim 1 of the granted patent except that the checking step now reads (amendments underlined by the board):

"checking whether a protocol data unit, in the following referred to as PDU, containing a length indicator of the last discarded SDU, which does not contain a data segment of the last discarded SDU, contains no new SDUs and when true, proceed with the following steps:".

Claim 1 of the **second auxiliary request ("auxiliary request 1")** comprises all the features of claim 1 as granted and further adds the following feature:

"wherein the PDU containing the length indicator of the last discarded SDU does not contain a data segment of the last discarded SDU".

## **Reasons for the Decision**

1. The appeal is admissible.
2. *Respondent's identity*
  - 2.1 In response to the notice of the respondent to register a change of its address, the appellant disputed that after moving from the British Virgin Islands to Mauritius the respondent was still the same legal entity as before (cf. point VII above). The appellant argued that the company "Innovative Sonic Limited incorporated in the British Virgin Islands" had been discontinued and thus ceased to exist. Instead,

according to the appellant, a new company "Innovative Sonic Limited incorporated in Mauritius" was now replacing the former respondent, and the appellant was not willing to accept that.

2.2 The underlying facts as ascertained by the board, in particular from the certificates and exhibits filed by the respondent with its letters dated 12 May 2014 and 11 June 2014 (cf. points VI and VIII above), are as follows:

- On 25 August 2006, the respondent "Innovative Sonic Limited" was incorporated in the British Virgin Islands (with BVI Company Number 1047533; see e.g. exhibits A and B). This legal status of the respondent was also registered with the European Patent Office.

- On 6 July 2010, the sole shareholder of the company "Innovative Sonic Limited" resolved that the company would "discontinue its registration as a company incorporated in the British Virgin Islands and continue its existence as a company registered under the laws of Mauritius and incorporated under the Company Act" of Mauritius (see exhibit B, second page, first paragraph).

- On 6 August 2010, the "Registrar of Companies" in Mauritius issued a "certificate of registration by continuation" certifying that "Innovative Sonic Limited will be registered by continuation as a Private Company Limited by shares as from the date of deregistration of the company in its place of registration" (see "Annexure 1" of exhibit D).

- On 20 October 2010, according to the submitted "certificate of discontinuance (section 184)", the

"Registrar of Corporate Affairs" of the British Virgin Islands certified that, all the requirements of the BVI Business Companies Act 2004 with respect to continuation under the laws of a foreign jurisdiction having been complied with, Innovative Sonic Limited with BVI Company Number 1047533 "was discontinued in the British Virgin Islands as a BVI business company this 20th day of October, 2010".

- On 18 November 2010, according to the submitted "certificate of registration by continuation (section 299 of the Companies Act 2001)" the "Registrar of Companies" of Mauritius certified that "Innovative Sonic Limited is on and from the 20<sup>th</sup> day of October 2010 registered by continuation as a Private Company limited by shares".

2.3 The board considered the following provisions of the underlying legal texts, namely the **Business Companies Act, 2004 of the British Virgin Islands (BVI Business Companies Act 2004)** and the **Companies Act 2001 of Mauritius**, to be relevant for the present case:

2.3.1 According to *Article 184(1)* of the BVI Business Companies Act 2004, "*a company for which the Registrar would issue a certificate of good standing ... may, by a resolution of directors or by a resolution of members, continue as a company incorporated under the laws of a jurisdiction outside the Virgin Islands in the manner provided under those laws*". *Article 184(4)* of this Act further provides that the Registrar "*shall issue a certificate of discontinuance of the company*" which, according to paragraph (4A) of that article, is "*prima facie evidence*" that "*all the requirements of this Act in respect of the continuation of a company under the laws of a foreign jurisdiction have been*

*complied with" and that "the company was discontinued on the date specified in the certificate of discontinuance".*

2.3.2 The Companies Act 2001 of Mauritius provides in *"Part XXV - Transfer or registration" and "Sub-Part A - Registration and continuation of companies incorporated outside Mauritius as companies under this Act" under Article 296(1) that 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". Article 296(2) of this Act stipulates certain pre-conditions to be fulfilled in this respect. According to Article 299(1) of this Act, if the Registrar is "satisfied that the requirements for registration under this Part have been complied with", the Registrar will "enter on the register of companies the particulars of the company" and "issue a certificate of registration in the prescribed form". Moreover, by virtue of Article 299(2) of that Act, a "certificate of registration of a company issued under this section is conclusive evidence" that (a) all the requirements of this Act as to registration have been complied with, and that (b) the company is registered under this Act as from the date of registration specified in the certificate.*

2.4 Having considered the documents the respondent filed as evidence of its legal status, notably the exhibits and the corresponding certificates (cf. point 2.2 above), and having studied the applicable legal provisions of the British Virgin Islands and of the Republic of Mauritius (cf. point 2.3 above), the board cannot share the appellant's view that the legal entity of the

patent proprietor has changed, for the following reasons:

The cited legal provisions of the British Virgin Islands and Mauritius give a clear and direct answer regarding how to decide the question. These jurisdictions - other than many others - allow a legal entity to be transferred from one jurisdiction to the other without any effect on the legal entity's identity. The board has therefore concluded that the respondent did not change its legal identity and in particular did not cease to exist at any time. Rather, the company was "transferred" from the British Virgin Islands to Mauritius and continued as a legal entity under the laws of Mauritius to the effect explicitly set out by *Article 300(1)* of the Companies Act 2001 of Mauritius, namely that "*the registration of a company incorporated outside Mauritius under this Act shall not (a) create a new legal entity" and "(d) affect proceedings by or against the company"*. The same approach is reflected in *Article 300(2)* of the Act which reads:

*"Proceedings that could have been commenced or continued by or against the company incorporated outside Mauritius before registration under this Act may be commenced or continued by or against the company after its registration under this Act."*

- 2.5 The appellant submitted during the oral proceedings before the board that it had not been able to study the exhibits filed by the respondent only one day before. The board therefore dedicated an appropriate part of the oral proceedings to studying the exhibits together with the parties. The respondent also gave further explanations about the exhibits submitted. The board

additionally handed out print-outs of the relevant legal texts to the parties and explained its legal view in detail. The appellant responded to all explanations. Its right to be heard was thus fully respected.

2.6 To defend its position in substance, the appellant referred to another appeal case settled by the same board in a different composition, i.e. T 2244/12, where the respondent was also a party to the proceedings and requested registration of an address change from the British Virgin Islands (BVI) to Mauritius (cf. point VII above). In this regard, the appellant pointed out that the board dealing with that case came to the preliminary conclusion that, firstly, "Innovative Sonic Limited" incorporated under the law of the British Virgin Islands had "apparently ... ceased to exist" and, secondly, that "the replacement of the BVI entity by the Mauritian entity as a party in the present proceedings cannot reflect a mere change of an address" (cf. T 2244/12, board's communication under Article 15(1) RPBA, section 12.8).

However, it appears from said communication that the then deciding board reached its preliminary conclusion mainly on the basis of the documents presented in said case, in particular documents concerning an infringement action filed by a party called "Innovative Sonic Limited" against the defendant "Research in Motion Ltd." with the "United States District Court, Eastern District of Texas" on 2 September 2010. In the letter of complaint, the plaintiff "Innovative Sonic Limited" described itself as a "corporation organized and existing under the laws of the Republic of Mauritius". This implied, in that board's view, that different (related or unrelated) legal entities named "Innovative Sonic Limited" apparently coexisted in

different jurisdictions. However, that board did not take a final decision on this issue in case T 2244/12.

Nevertheless, in the light of the present evidence, the present deciding board examining the question *ex officio* and not being bound by communications sent with regard to other appeal cases, comes to a different conclusion. The board is of the opinion that the wording "corporation organized and existing under the laws of the Republic of Mauritius" had - at least at that point of time - no legal basis, since "Innovative Sonic Limited" under the law of the British Virgin Islands was discontinued only as from 20 October 2010. The board sees the wording as having been mistakenly used during a transitional period where the transfer had been arranged for but not yet fully executed. It can be assumed that during that period the respondent's legal status was not always entirely clear.

2.7 In conclusion, the board finds that the respondent "Innovative Sonic Limited" did not change its legal identity by being transferred to Mauritius. No change in the identity of the respondent has taken place due to the transfer.

2.8 In view of the above, the board has decided that the requested change of address represents a change of address only and does not denote a change of the legal entity of the respondent.

Having settled the matter of the respondent's party status, the board now turns to the substantive issues of the present case.

3. CLAIMS AS GRANTED

3.1 Article 52(1) EPC: Novelty and inventive step

In the board's judgment, claim 1 does not meet the requirements of Article 52(1) EPC in conjunction with Article 54 EPC, for the following reasons:

3.1.1 The opposed patent relates to an enhancement of the packet discarding algorithm of the prior art for discarding service data units (SDUs) transmitted from a wireless sender to a receiver via one or more packet data units (PDUs) in 3GPP-based networks. This enhancement is focused on the very specific scenario (dubbed "scenario F" by the respondent) that the last discarded SDU ("SDU1") fits perfectly into a PDU (e.g. with sequence number "SN = 0") so that the following PDU (with "SN=1"), which contains the length indicator (LI) of that last discarded SDU (i.e. "LI=0"), contains neither any data segment of the last discarded SDU nor any new SDU ("SDU2") but only padding data as commonly indicated by "LI=127" (see e.g. Fig. 7 of the patent). Under this scenario, the SDU discarding scheme according to the prior art would not adapt the sequence number which is associated with the PDU awaited by the receiver as next PDU (i.e. "SN\_MRW<sub>LENGTH</sub> = 1"), whereas the present invention according to the patent foresees incrementing the corresponding sequence number by one (i.e. "SN\_MRW<sub>LENGTH</sub> = 2"). This means however that the respective receiver in the prior-art scheme would wait for a PDU (corresponding to "SN = 1") which only contains padding data rather than useful information, while the scheme of the opposed patent ensures that the receiver waits for the next PDU (with "SN = 2") which thus avoids an unnecessary reset procedure, thereby saving bandwidth (cf. paragraphs [0021] to [0024] and



[0028] in conjunction with Fig. 7 of the patent). The latter is achieved essentially by the following checking step of claim 1 to be performed (see also Fig. 8, step 216 of the patent):

A) checking whether a PDU, which contains an LI of the last discarded SDU, contains no new SDUs (emphasis added),

before, in the affirmative, sending a Move Receiving Window Super Field (MRW SUFI) command from the sender to the receiver indicating that the SN\_MRW<sub>LENGTH</sub> field is to be set to a sum of one plus a sequence number of the PDU containing the length indicator of the last discarded SDU.

3.1.2 It was common ground in the written appeal procedure and during the oral proceedings before the board that all the features of claim 1 except feature A) are anticipated by A1. The assessment of novelty and inventive step as to the underlying subject-matter therefore centres on the question whether or not feature A) of claim 1 is disclosed in A1, notably at page 7, lines 13-18:

*"After the SDU discard procedure is triggered the MRW SUFI command ... is sent to the receiver, with the next AMD PDU to be sent to the receiver being the one pointed to in the MRW SUFI command by its field SN\_MRW<sub>LENGTH</sub>. This will be either the AMD PDU carrying the LI field of the discarded SDU or, in the case where the rest of the AMD PDU carrying the LI field of the discarded SDU is padding, the AMD PDU immediately following it."*

3.1.3 The opposition division found that A1 did not disclose feature A), since the expressions "no new SDUs" and "padding" were not exactly complementary to each other and the corresponding tests involved, i.e. the checking steps, were not technically the same (cf. appealed decision, section 5.1).

3.1.4 The board does not agree. Rather, the board considers that the relevant phrase at page 7, lines 15-18 of A1 stating

*"... in the case where the rest of the AMD PDU carrying the LI field of the discarded SDU is padding ..."*

falls within the broad ambit of feature A) of claim 1 and thus represents a specific implementation thereof, since the fact that the rest of the corresponding PDU is filled with padding bits means automatically that this PDU may not contain any other SDUs, i.e. that there are "no new SDUs" contained in that PDU. This technical correspondence between "padding" and "no new SDUs" is also corroborated by the opposed patent itself in a recurrent and consistent way (cf. column 6, lines 45-49; column 9, lines 42-45; column 10, lines 45-48 of the patent):

*"... PDU ... contains ... no new SDUs after SDU1 since its remainder is filled with padding ..."*

Therefore, contrary to the finding of the decision under appeal, the board judges that the above disclosure of A1 does indeed technically correspond to checking whether a PDU containing an LI of the last discarded SDU contains no new SDUs, in accordance with

feature A).

3.1.5 The respondent contested the above conclusion in the written procedure and the oral proceedings before the board along the following lines of argument:

(i) It conceded that the fact that the remainder of the corresponding PDU was filled with padding bits in a certain scenario automatically meant that this PDU could not contain any other SDUs. However, for comparing checking conditions like in feature A), it was not sufficient that *some* example scenarios had the same result, but it had to be shown that *all* possible scenarios had the same result, thus excluding any sample scenario having a different result. In fact, there was at least one scenario (referred to as "scenario G") where a PDU carrying the LI of the last discarded SDU contained neither new SDUs nor padding data and where the step of "checking whether a PDU containing an LI of the last discarded SDU contains no new SDUs" as claimed and the step of "checking whether a PDU containing an LI of the last discarded SDU is padding" as taught in A1 led to different results. This demonstrated that those checking steps provided different results corresponding to different solutions and thus defining different inventions, although both checking steps might have similar results in many cases.

(ii) The check for "no new SDUs" according to feature A) could be done in different ways and might not be restricted to whether or not padding was used. The recurrent phrase used in column 6, lines 45-49, column 9, lines 42-45, and column 10, lines 45-48 of the patent itself merely pointed to the fact that the skilled person would recognise that there was no new

SDU carried in a PDU when the remainder was filled with padding in the given example scenario, but did not exclude that the skilled person would also recognise that there was "no new SDU" when the remainder was filled, for example, with piggybacked information.

(iii) The statement "the rest of the AMD PDU ... is padding" according to the above passage of A1 (cf. point 3.1.2 above) did not necessarily mean that the remainder of the respective PDU carrying the LI field of the discarded SDU was padding, since the use of the term "rest" rather than "remainder" implied that - in addition to padding data - also a new, undiscarded SDU could arguably be included within the respective PDU.

3.1.6 As regards argument (i), the board notes that, in principle, it is entirely irrelevant for the assessment of novelty whether a specific embodiment of a prior-art document provides the same "result" as the solution claimed for each and every condition or scenario devisable, in particular for a scenario which is even not mentioned in the application or patent itself. Also, the argument that different results mean different solutions is not persuasive, since generally different solutions may well lead to the same result. Rather, the only question that matters in this respect is whether or not the disclosure of the respective prior-art document falls within the ambit of the claimed subject-matter. In view of the technical correspondence between checking for "no new SDUs" and checking for "padding data" in a PDU the disclosure of A1 according to page 7, lines 13-18 can indeed be read onto claim 1.

As to argument (ii) stating that the check for "no new SDUs" according to feature A) could be done in

different ways rather than only by checking for "padding data", the board considers that this statement immediately implies that the solution of feature A) covers a broader range than that of A1. This was not contested by the respondent at the oral proceedings before the board. From this and additionally considering that, when assessing novelty of the claimed subject-matter, an expression in a claim should be given its broadest technically sensible meaning (see e.g. T 79/96, point 2.1.3), the board comes to the conclusion that determining whether the same PDU contains - besides its header portion - only padding data according to A1, even if not being technically equivalent, at least falls within the terms of checking whether a respective PDU contains no new SDUs as claimed. In addition, even though "piggybacking" is nowhere disclosed in the patent, the board finds that checking for padding data as done in A1 still remains one possible option for implementing feature A) just like, for example, checking for piggybacked data to determine that there are no new SDUs carried in a PDU.

Concerning argument (iii), the board is convinced that, regardless of whether or not the terms "rest" and "remainder" are linguistically conterminous, the phrase "the rest of the AMD PDU ... is padding" according to A1, page 7, line 17 does not mean that the respective PDU may include a new, undiscarded SDU besides padding data by virtue of the teaching of A1, especially in view of the fact that also A1 attempts to avoid wasting radio resources by unnecessary re-transmissions of PDUs (see e.g. A1, page 2, line 17 to page 3, line 2). Thus, this argument cannot succeed either.

3.1.7 Hence, all the limiting features of claim 1 are considered to be disclosed in A1. In view of the above,

A1 takes away the novelty of the subject-matter of claim 1 (Article 54 EPC).

3.2 In conclusion, granted claim 1 is not allowable under Article 54 EPC.

#### 4. FIRST AUXILIARY REQUEST

Claim 1 of this request differs from claim 1 as granted in that the clause "which does not contain a data segment of the last discarded SDU" has been inserted into feature A) between the phrases "... PDU, containing a length indicator of the last discarded SDU" and "... contains no new SDUs ...".

##### 4.1 *Admission into the appeal proceedings*

This request was filed for the first time in response to the summons to oral proceedings before the board (cf. point VI above), i.e. at a relatively late stage of the overall procedure. The above amendment, taken from dependent claim 2 as granted, was purportedly made in reaction to the objections raised under Article 54 EPC in the board's communication under Article 15(1) RPBA in order to further limit the subject-matter of claim 1 to the specific scenario (i.e. "scenario F"; see point 3.1.1 above) that the last discarded SDU fits exactly into a PDU so that the following PDU, which contains the length indicator of that last discarded SDU, does not contain any data segment of the last discarded SDU but only padding data. Therefore, the corresponding amendment may objectively be considered as a serious attempt at this stage of the appeal proceedings to overcome the novelty objection raised by the board.

In view of the above, the board has decided to exercise its discretionary power to admit this request into the appeal proceedings under Article 13(1) and (3) RPBA.

#### 4.2 Article 84 EPC

Following the insertion of the phrase "which does not contain a data segment of the last discarded SDU" within the checking step according to feature A) of claim 1, the board agrees with the appellant that it is not clear whether "which" refers to the "PDU" or to the "length indicator" or to the "last discarded SDU" in feature A). Hence, the board holds that claim 1 lacks clarity.

4.3 In conclusion, the first auxiliary request is not allowable under Article 84 EPC.

#### 5. SECOND AUXILIARY REQUEST ("auxiliary request 1")

Claim 1 of this request differs from claim 1 as granted in that it further specifies, at the end of claim 1, that

B) the PDU containing the length indicator of the last discarded SDU does not contain a data segment of the last discarded SDU.

Feature B) is supported e.g. by Fig. 7 of the application as filed and the patent.

#### 5.1 *Admission into the appeal proceedings*

This request was filed for the first time during the oral proceedings before the board (cf. point IX above), i.e. at a very late stage of the appeal proceedings. The appellant requested that this auxiliary request not

be admitted into the appeal proceedings since it was late-filed and not clearly allowable under Article 54 and/or 56 EPC.

However, the board has decided to admit it in view of the following facts:

- 1) The request is to be considered as a direct and appropriate reaction to the objections under Article 84 EPC raised by the board with regard to the first auxiliary request (cf. point 4.2 above) at the oral proceedings before the board.
- 2) The amendment according to feature B) is taken from dependent claim 2 as granted.
- 3) Feature B) further clarifies and limits the underlying subject-matter in a convergent way.

Accordingly, this new request did not raise issues which the board or the appellant could not reasonably be expected to deal with without having to adjourn the oral proceedings. Therefore, the second auxiliary request was admitted into the appeal proceedings under Article 13(1) and (3) RPBA.

## 5.2 *Admissibility of challenging claim 1 as amended*

The respondent argued at the oral proceedings before the board that amended claim 1 according to this request could not be challenged since the appellant had not expressly and separately attacked the granted dependent claims as maintained, in particular dependent claim 2 as granted, in the statement setting out the grounds of appeal.



The board cannot follow this line of argument. It is established case law of the Enlarged Board of Appeal that the power of a board to examine and decide on the maintenance of a European patent under Articles 101 and 102 EPC depends upon the extent (i.e. the claimed subject-matter) to which the patent is opposed in the notice of opposition pursuant to Rule 76(2)(c) EPC (cf. G 9/91, OJ EPO 1993, 408). In the present case, it is apparent from the notice of opposition that an opposition was filed against the patent as a whole, i.e. against all the claims as granted. In addition, in the statement setting out the grounds of appeal the subject-matter of dependent claim 2 as granted (corresponding to "scenario F") was at least implicitly attacked (see e.g. page 5, last paragraph; page 10, penultimate paragraph; page 15, penultimate paragraph; page 20, seventh paragraph of the statement setting out the grounds of appeal).

The board also notes that it would be unreasonable to require from an appellant-opponent to attack in advance, i.e. in the statement setting out the grounds of appeal, claims that were not separately discussed by the opposition division and/or reasoned in the impugned decision. Accordingly, nowhere in the EPC is it provided that an opponent lodging an appeal against the decision to reject the opposition (or to maintain the patent in amended form) is not allowed to attack an independent claim amended later during the appeal proceedings by adding features of a dependent claim of the patent as maintained by the opposition division, merely because the dependent claim was not challenged explicitly or implicitly right from the outset of the appeal proceedings (i.e. with the notice of appeal or with the statement setting out the grounds of appeal). To the best of the knowledge of this board, there is

also no case law which would support such a requirement. The question is rather whether such an amendment to an opposed patent is admissible in itself. In this regard, the board has already given its conclusion in point 5.1 above. Certainly, in this new constellation, the appellant-opponent must be allowed an attack.

In view of the above, the board concludes that challenging claim 1 of the second auxiliary request is admissible.

5.3 Article 52(1) EPC: Novelty and inventive step

The board judges that claim 1 of this request does not meet the requirements of Article 52(1) EPC in conjunction with Article 56 EPC for the following reasons:

5.3.1 The feature analysis and observations set out in points 3.1.1 to 3.1.6 above concerning claim 1 as granted apply *mutatis mutandis* to claim 1 of this request.

5.3.2 The board concurs, however, with the respondent that A1 does not disclose feature B) in view of the passage on page 6, lines 24-25 reading "parts of the SDU being included in each of those PDUs", thus implying that A1 fails to consider the case (i.e. "scenario F") that a preceding PDU is exactly filled up with an SDU (in particular, the last discarded SDU) so that the subsequent PDU does not contain any data segment of an SDU (i.e. the last discarded SDU). Consequently, the subject-matter of claim 1 is novel over the disclosure of A1 (Article 54 EPC).

- 5.3.3 For the purpose of assessing inventive step, the crucial question to be answered is whether the skilled person starting from the teaching of A1 would apply the SDU discarding scheme of A1 to the scenario according to feature B) or, if not, how he would modify that scheme in order to tackle that novel scenario (i.e. "scenario F").
- 5.3.4 In this regard, the respondent argued that the skilled person would not apply the SDU discarding scheme of A1 to the scenario according to feature B), for the simple reason that this specific case is not considered at all in its disclosure. Rather, the person skilled in the art would realise that A2 dealt with "scenario F" (e.g. according to A2, page 30, lines 26-27) but came up with a solution different from that of claim 1.
- 5.3.5 The board notes first that the specific scenario according to feature B) has to be properly considered as a technical *constraint* in formulating the objective problem in connection with the "problem-solution approach" as generally applied. Hence, the objective technical problem may be regarded as "how to apply the conventional SDU discarding scheme of A1 to the scenario according to feature B)". The board considers that the skilled person in the field of mobile communication networks may have well been aware at the patent's priority date that this scenario constituted a possible, though quite specific and/or exotic, case depending solely on the variable sizes of the respective SDUs to be carried by one or more PDUs. The actual SDU sizes within certain system limits, however, cannot be controlled or changed during network operation by the network administrator. They mainly depend on the size of the content to be transmitted from the sender to the receiver. Therefore, the board

takes the view that the skilled person would first determine whether, in the event that the scenario according to feature B) is taken into account, the SDU discarding scheme described in A1 would lead to the desired outcome, i.e. that the discarded SDUs are properly indicated to the corresponding receiver while no PDU is unnecessarily re-transmitted (see A1, page 2, line 27 to page 3, line 2). In this regard, the skilled person would notice that, when the last discarded SDU fits exactly into a PDU, the following PDU would typically contain the length indicator of the last discarded SDU, namely "LI = 0". From the teaching according to page 7, lines 13-18 of A1 and his common general knowledge he would immediately deduce that, in the case where the rest of that PDU carrying the LI field of the discarded SDU is padding (i.e. commonly indicated by "LI = 127"), the next PDU to be sent to the receiver is the "PDU immediately following it". From this it directly follows that the PDU containing the length indicator of the last discarded SDU and padding data would not be sent to the receiver. This in turn corresponds exactly to the result achieved by the solution according to claim 1 of this request.

In conclusion, the skilled person would have nothing to change, in terms of the SDU discarding procedure taught in A1, to achieve the desired effect and come up with the solution according to claim 1. Hence, he has simply to apply one and the same algorithm to the specific scenario ("scenario F") without the slightest modification. Accordingly, the skilled person would have no motivation at all to modify the proposed scheme in order to accommodate that novel scenario based on feature B), let alone to use and apply the scheme of document A2, contrary to the assertion of the respondent. Hence, the subject-matter of claim 1 does

not involve an inventive step having regard to A1 and the skilled person's common general knowledge.

5.4 In summary, the second auxiliary request is not allowable under Article 56 EPC.

## Order

### For these reasons it is decided that:

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

The Registrar:

The Chair:



K. Götz-Wein

A. Ritzka

Decision electronically authenticated