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**D E C I S I O N**  
**of 12 June 2006**

**Case Number:** W 0004/06 - 3.5.03

**Application Number:** PCT/EP04/009375

**Publication Number:** WO 2006/021223 A

**IPC:** H04L 29/06

**Language of the proceedings:** EN

**Title of invention:**  
Resource Management

**Applicant:**  
Telefonaktiebolaget LM Ericsson

**Opponent:**  
-

**Headword:**  
Resource Management/ERICSSON

**Relevant legal provisions:**  
PCT Art. 17(3)(a), 19.1  
PCT R. 13.1, 13.2, 40.2(c)

**Keyword:**  
-

**Decisions cited:**  
W 0003/94, W 0017/03, W 0017/04

**Catchword:**  
-



**Case Number:** W 0004/06 - 3.5.03

**International Application No.** PCT/EP04/009375

**D E C I S I O N**  
**of the Technical Board of Appeal 3.5.03**  
**of 12 June 2006**

**Applicant:** Telefonaktiebolaget LM Ericsson  
S-16483 Stockholm (SE)

**Representative:** Tonscheidt, Andreas  
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**Decision under appeal:** Protest according to Rule 40.2(c) of the Patent Cooperation Treaty made by the applicants against the invitation (payment of additional fees) of the European Patent Office (International Searching Authority) dated 11 May 2005 .

**Composition of the Board:**

**Chairman:** A. S. Clelland  
**Members:** A. J. Madenach  
C. Holtz

## Summary of Facts and Submissions

- I. On 21 August 2004 the applicant filed the international patent application PCT/EP04/009375.
- II. On 11 May 2005 the European Patent Office acting as International Search Authority (ISA) issued a reasoned communication under Rule 40.1 PCT informing the applicant that it considered the international application to be in non-compliance with the requirements of unity of invention (Rule 13.1, 13.2 and 13.3 PCT) and invited the applicant to pay additional fees.

The ISA considered that the international application comprised the following two groups of inventions which were not linked together by a single inventive concept, namely:

Group 1: claims 1-16, 20, 21, 23-25: Maintaining resource usage counts through reports from user of resources;

Group 2: claims 17-19, 22, 26: Use of a charging unit to charge for resource usage.

The ISA argued that the subject-matter of claim 1, insofar as it could be understood, was not novel with regard to the disclosure of

D1: US 2003/0128676 A

and concluded that the groups of claims were not linked by common or corresponding special technical features in the sense of Rule 13.2 PCT and defined two different

inventions not linked by a single general inventive concept.

- III. In response to the communication under Rule 40.1 PCT, the applicant paid the additional fee under protest on 13 June 2005.

In a letter of 9 June 2005, the applicant submitted a new set of claims and argued that the characterising feature of amended claim 1 formed the special technical features linking the two inventions identified by the ISA. These features, including in particular an update procedure for updating a resource usage measure under consideration of current and past values of the resource usage measure, were considered to be novel and inventive in the light of D1.

In a further letter of 29 June 2005, the applicant declared that the amendments to the claims submitted with letter dated 9 June 2005 did not affect the question of unity. Accordingly, the arguments submitted in favour of unity applied to both the amended and the original set of claims.

- IV. With communication of 7 December 2005 a review panel of the ISA as provided for under Rule 40.2(c) PCT held that the objection of lack of unity of 11 May 2005 was justified. The protest fee as provided for in Rule 40.2(e) PCT was paid on 14 December 2005.

- V. An international search report was issued on 7 December 2005.

VI. Independent claim 1 of the international application as originally filed reads:

"Method for management of a resource for a communication network having a resource owner (RO) providing the resource and at least one resource user (RU) using the resource characterised in that resource broker (RB) for managing the resource is introduced and performs following steps

- initiating a resource usage measure (TTL) and,
- obtaining user's usage measure (Keep Alive, InterestMsg) informing about the expected usage of the resource by the at least one resource user and,
- performing an update procedure for updating the resource usage measure (TTL) with the user's usage measure (Keep Alive, InterestMsg) by means of a cumulative algorithm taking into account current and past values of the resource usage measure (TTL) and,
- performing a checking procedure for checking the resource usage measure with a result indicating the necessity to perform a resource management action and,
- performing the resource management action according to the result of the checking procedure."

Dependent claim 17 of the international application as originally filed reads:

"Method according to one of the claims 1 to 16 characterised in that an additional interface is introduced to exchange information with a charging entity."

## Reasons for the Decision

1. The present protest relates to an invitation by the ISA to pay additional fees under Rule 40.1 PCT.

According to Article 155(3) EPC and Rule 105(3) EPC, the Boards of Appeal are responsible for deciding on a protest made by an applicant against an additional fee charged by the European Patent Office under the provisions of Art. 17(3) a) of the PCT.

The invitation is based on the ISA's objection of lack of unity of invention (Rule 13.1 PCT) arising as a result of an objection that the subject-matter of original claim 1 lacked novelty with respect to the disclosure of D1. It was argued that there was no technical relationship involving one or more of the same or corresponding technical features in the sense of Rule 13.2 PCT between the subject-matter of the groups of claims set out at point II above. The objection of lack of unity of invention is thus a *posteriori*, i.e. based on the results of the international search report.

2. According to Article 19.1 PCT, the claims of the international application may be amended after receipt of the international search report.

Following established case law (see W 3/94 and this board's earlier decision W 17/04, not published in the OJ, point 2 of the reasons), only the original claims which are the subject of the finding of lack of unity are relevant on deciding on a protest. All new claims are therefore disregarded in the present decision.

The board understands the applicant's letter of 29 June 2005 as meaning that the arguments brought forward in favour of the unity of the invention in the applicant's letter of protest of 9 May 2005 were also intended to apply to the original set of claims. The board accepts that this is the case and thus considers the applicant's protest to be accompanied by a reasoned statement, arguing that the international application complies with the requirement of unity of invention as required by Rule 40.2(c) PCT.

- 3.1 Claim 1 of the application is directed to a method for management of a resource for a communication network having a resource owner providing the resource, at least one resource user using the resource, and a resource broker for managing the resource. The board interprets a resource broker as an entity which manages the resource.

D1 as the closest prior art identified by the ISA relates to the same technical field (see paragraphs [0005], [0006] and [0024], with the network corresponding to the resource owner and the subscriber and terminal corresponding to the resource user).

- 3.2 According to D1 the resource broker (session management function in paragraph [0024]) for managing the resource performs the steps of obtaining a user's usage measure, having information about the expected usage of the resource by the at least one resource user (paragraph [0024]: "request of the terminal"), updating the resource usage measure with the user's usage measure by means of a cumulative algorithm, which the board

understands as any process taking into account current and past values of the resource usage measure (paragraph [0024] and claim 12: "adjusting the keep-alive of the ... session"), checking the resource usage measure with a result indicating the necessity to perform a resource management action (monitoring in paragraph [0024]), the resource management actions thereafter being performed according to the result of the checking procedure (paragraph [0024]: according to the monitoring result).

The board considers that any iterative method of the type disclosed in paragraph [0024] of D1 must implicitly comprise an initiation step.

- 3.3 The applicant in essence argued that D1 did not teach the provision of an update procedure for updating a resource usage measure and performing a resource management action if the current resource usage measure requires it.

In this respect, the board observes that the resource usage measure, which relates to the effective usage of a resource as opposed to the expected usage by a user - the user's usage measure - can be compared to the "keep-alive" of a predetermined session in paragraph [0024] of D1. This "keep-alive" is adjusted, and thus updated, on the basis of monitoring as to whether there is data to be transmitted to/from a terminal or to/from a service node. The resource usage measure of D1 can thus be said to be updated by taking into account its previous, i.e. past, value as well as its monitored current value in the form of an (unspecified) algorithm.

- 3.4 As a result, the board concurs with the ISA's provisional opinion that the subject-matter of original claim 1 lacks novelty with respect to the disclosure of D1.
- 4.1 According to Rule 13.2 PCT, the requirement of unity of invention is fulfilled only when there is a technical relationship among different groups of inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.
- 4.2 In the present instance, the features in common between the inventions claimed in claims 1 and 17 are those of claim 1, which however cannot be considered as special technical features in accordance with Rule 13.2 PCT since they are known from D1 and therefore do not make a contribution over the prior art.
- 4.3 Apart from a direct correspondence of technical features such a correspondence could exist based on the problems to be solved by the features of the claims forming the groups of inventions (see W 17/03, not published, point 2.4 of the reasons). In the present instance, claim 1 can be said to relate to the problem of maintaining usage counts based on current and past values of the resource usage measure. The dependent claims of the first group of inventions relate to various embodiments for achieving this object. Claim 17 and all further claims of the second group of

inventions, however, relate to the further problem of charging the resource usage to the user. The board fails to see the required correspondence between these two problems, and indeed the applicant has not brought forward any arguments in favour of such a correspondence.

4.4 Since the special technical features of the two groups of inventions do not show the correspondence required by Rule 13.2 PCT there is a lack of unity between these two groups in the sense of Rule 13.1 PCT. The protest is accordingly rejected.

## **Order**

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

The protest is rejected.

The Registrar

The Chairman

D. Magliano

A. S. Clelland