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

Case Number: T 2072/10 - 3.5.03

Application Number: 05028728.3

Publication Number: 1804478

IPC: H04M15/00, H04M17/00

Language of the proceedings: EN

Title of invention:

Optimised reservation of charges for multiple communication services and/or service types

Applicant:

Telefonaktiebolaget LM Ericsson (publ)

Headword:

Reservation of charges for multiple communication services/
ERICSSON

Relevant legal provisions:

EPC Art. 84, 123(2)
RPBA Art. 13(1)

Keyword:

Claim 1 - clarity - main and auxiliary request (no)
Late-filed auxiliary requests V and VI -
not clearly allowable - inadmissible

Decisions cited:

Catchword:



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Chambres de recours**

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Case Number: T 2072/10 - 3.5.03

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

Appellant: Telefonaktiebolaget LM Ericsson (publ)
(Applicant) 164 83 Stockholm (SE)

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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 1 April 2010 refusing European patent application No. 05028728.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

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

Summary of Facts and Submissions

- I. This appeal is against the decision of the examining division refusing European patent application No. 05028728.3, with publication number EP 1804478 A.

The refusal was essentially based on the grounds that the subject-matter of claim 1 of a main request was not new and that the subject-matter of claim 1 of an auxiliary request did not involve an inventive step. However, as part of the reasoning in respect of claim 1 of the main request, the examining division also raised objections with respect to clarity under Article 84 EPC.

- II. The appellant filed a notice of appeal against the above decision. New sets of claims of respectively a main request and an auxiliary request were filed together with a statement of grounds of appeal.

Oral proceedings were conditionally requested.

- III. In a communication accompanying a summons to oral proceedings, the board gave a preliminary opinion in which objections under Article 84 EPC and Article 52(1) EPC in combination with Article 56 EPC were raised against claim 1 of each request.

- IV. In response to the board's communication, the appellant filed claims of three further auxiliary requests, numbered II to IV, together with supporting arguments.

- V. Oral proceedings were held on 19 September 2014. In the course of the oral proceedings, the appellant withdrew auxiliary requests II to IV and filed two new auxiliary requests, numbered as auxiliary requests V and VI.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request or, in the alternative, on the basis of the claims of the auxiliary request, both requests as filed with the statement of grounds of appeal, or on the basis of the claims of auxiliary requests V or VI as filed during the oral proceedings.

At the end of the oral proceedings, after due deliberation, the chairman announced the board's decision.

VI. Claim 1 of the appellant's **main request** reads as follows:

"Method of executing a real-time charging session in a charging system being interfaced to at least one communication network, comprising the step:

- initiating a fund reservation with respect to at least two services and/or at least two service types used for a single service; and

CHARACTERIZED BY

- reserving funds for service delivery to the at least two services and/or for the at least two service types such that deviations between predicted fund use-up times are minimized; by

- arranging services before fund reservation according to a prerequisite succession for service delivery, wherein the prerequisite succession defines at least one pre-requisite service that needs to be provided prior to at least one higher succession invoking service, and further at least one higher succession invoking service;

- identifying an amount of at least one first

preferred fund for the at least one pre-requisite service in view [sic] pre-established knowledge on service characteristics of the at least one pre-requisite service;

- identifying an amount of at least one second preferred fund for the at least one higher succession invoking service in view [sic] pre-established knowledge on service characteristics of the at least one higher succession invoking service;
- comparing a sum of the amount of the at least one first preferred fund and the amount of the at least one second preferred fund against an overall available fund;
- reserving the first preferred funds for the at least one pre-requisite service and the at least one higher succession invoking service when the sum of the amount of the at least one first preferred fund and the amount of the at least one second preferred fund is lower or equal than the overall available fund; and
- splitting funds between at least one pre-requisite service and the at least one higher succession invoking service and according to related service type(s) using a pre-determined fund splitting optimisation when the sum of the amount of the at least one first preferred fund and the amount of the at least one second preferred fund is higher than an overall available fund."

VII. Claim 1 of the **auxiliary request** is the same as claim 1 of the main request, except that the wording "wherein the prerequisite succession defines at least one pre-requisite service that needs to be provided prior to at least one higher succession invoking service" is replaced by "wherein the prerequisite succession defines at least one higher prioritized pre-requisite service that needs to be provided prior to at

least one higher succession invoking service having a lower priority" (board's emphasis).

VIII. Claim 1 of **auxiliary request V** reads as follows:

"Method of executing a real-time charging session in a charging system being interfaced to at least one communication network, comprising the step:

- initiating a fund reservation with respect to at least two services and/or at least two service types used for a single service; and

CHARACTERIZED BY

- arranging services before fund reservation according to a predetermined sequence for service delivery, wherein the predetermined sequence defines at least one higher prioritised prerequisite service that needs to be provided prior to at least one higher succession invoking service having lower priority, and further the at least one higher succession invoking service;

- identifying an amount of at least one first preferred fund for the at least one prerequisite service in view *[sic]* pre-established knowledge on service characteristics of the at least one prerequisite service;

- identifying an amount of at least one second preferred fund for the at least one higher succession invoking service in view *[sic]* pre-established knowledge on service characteristics of the at least one higher succession invoking service;

- comparing a sum of the amount of the at least one first preferred fund and the amount of the at least one second preferred fund against an overall available fund;

- when the sum of the at least one first preferred fund and the at least one second preferred fund is higher than the overall available fund, reserving funds for

service delivery to the at least one prerequisite service and the at least one higher succession invoking service by using a predetermined fund splitting optimisation that depends on historical service use data;

identifying an amount of at least one first minimum fund for the at least one pre-requisite service, if any, in view of pre-established knowledge on service characteristics of the at least one pre-requisite service,

identifying an amount of at least one second minimum fund for the at least one higher order invoking service in view [sic] pre-established knowledge on service characteristics of the at least one higher order invoking service,

comparing the amount of the at least one first minimum fund and the amount of the at least one second minimum fund against the generated fund splitting result, reserving the at least one first minimum fund for the at least one pre-requisite service, if any, and reserving the at least one second minimum fund for the at least one higher succession invoking service when the generated fund splitting result covers the amount of the at least one first minimum fund and the amount of the at least one second minimum fund and, otherwise, rejecting the request for fund reservation, checking all running services surveilled by flow based control during continuation of a charging session for fund re-authorization using a report on service usage provided through one operation."

- IX. Claim 1 of auxiliary request VI is the same as claim 1 of auxiliary request V except that the wording "such that deviations between predicted fund use-up times are minimized" is inserted after the wording "... reserving funds for service delivery to the at least one

prerequisite service and the at least one higher succession invoking service".

Reasons for the Decision

1. Claim 1 - main request - clarity

1.1 In essence, claim 1 concerns a method of reserving funds for a plurality of services provided in a communications systems (e.g. in a pre-paid system), where the total available fund is limited.

1.2 The first feature of the characterising part of claim 1 reads:

(a) "reserving funds for service delivery to the at least two services and/or for the at least two service types such that deviations between predicted fund use-up times are minimized;", followed by the term "by".

The remaining features of the characterising part of claim 1 use partially obscure terms from a linguistic and technical viewpoint, eg "prerequisite succession", "pre-requisite service", and "higher succession invoking service". These terms have been interpreted by the board in order to make sense of the claim, taking into account the appellant's explanations at the oral proceedings. In this respect, the board understands the method to comprise essentially the following additional steps:

(b) determining an order of priority for the services to be provided, whereby there are at least first and second services;

(c) identifying an amount of a first fund for the first service based on pre-established knowledge of the service characteristics of the first service;

(d) identifying an amount of a second fund for the second service based on pre-established knowledge of the service characteristics of the second service;

(e) comparing the amount of the first and second funds with a total available fund;

(f) reserving the funds [as determined in (c) and (d)] if the combined total is less than or equal to the total available fund;

(g) splitting the funds [as determined in (c) and (d)] between the first and the second services using a pre-determined fund splitting optimization when the combined sum is higher than the total available fund.

1.3 This claim is based on claims 1 to 5 as originally filed. However, the board notes that there is a discrepancy between present claim 1 and claims 1 to 5 as originally filed, in that the term "by" following the first feature of the characterising part has been introduced instead of the wording "(further) compris[ing] the step(s)" used in dependent claims 2-5 as originally filed. Notwithstanding a doubt here as to compliance with Article 123(2) EPC, the board interprets claim 1 to mean that by steps (b) to (g), a fund reservation is arrived at such that deviations between predicted fund use-up times are minimized (feature (a)).

1.4 The board finds claim 1 to be unclear within the meaning of Article 84 EPC as it is ambiguous how the step of reserving funds "such that deviations between predicted use-up times are minimized" interacts with the remaining features (b) to (g) of the claim. In this respect, the board notes that none of the steps (b) to

(g) per se relate to a minimization of the deviation between predicted fund use-up times. Therefore, it is not clear which of the steps is limited in such a way that this goal is achieved. In the board's view, this limitation could plausibly concern the steps of reserving the first and second funds (steps (c) and (d)). However, it is unclear whether this limitation additionally applies to the step of performing a pre-determined fund splitting optimization (step (g)). Alternatively, it may be only step (g) which is limited so as to minimize the deviation between predicted use-up times. It follows that the subject-matter for which protection is sought is not clearly defined, contrary to Article 84 EPC.

1.5 At the oral proceedings, in response to the board's objection, the appellant principally provided merely an explanation of the claim illustrated by a hypothetical case of a video service provided together with a voice service. The voice service is more important than the video and hence can be prioritised when determining how to split funds if insufficient funds are available. However, this explanation is not relevant to the board's objection set out above.

1.6 The board concludes that claim 1 of the main request does not comply with Article 84 EPC. The main request is therefore not allowable.

2. *Claim 1 - auxiliary request - clarity*

Claim 1 of the auxiliary request differs from claim 1 of the main request only in that the prerequisite service which is to be provided prior to the at least one higher succession invoking service has a higher priority than the at least one higher succession

invoking service, and in that the at least one higher succession invoking service has a lower priority. However, this difference has no impact on the objection of lack of clarity raised in connection with claim 1 of the main request.

The board concludes that claim 1 of the auxiliary request does not comply with Article 84 EPC. The auxiliary request is therefore not allowable.

3. *Auxiliary requests V and VI - admissibility*

3.1 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 in the course of the oral proceedings, is whether or not the claim is clearly allowable.

3.2 In the board's judgement, claim 1 of the new main request is not clearly allowable for the reasons set out below.

3.3 Claim 1 of the auxiliary request V no longer includes the feature:

"reserving funds for service delivery to the at least two services and/or for the at least two service types such that deviations between predicted fund use-up

times are minimized" (i.e. feature (a) referred to above, point 1.2).

Apart from this feature, claim 1 of the first auxiliary request is essentially based on claims 1 to 5 as originally filed together with the text in paragraphs [0050] to [0057] of the description (reference is made to the application as published).

In the board's view, the application as filed does not provide a basis for a new claim 1 omitting the above feature.

In the first place, since the omitted feature was one of the two main features of independent claims 1 and 18 as originally filed, it is evident that these claims themselves do not provide a basis for this feature to be excised.

As to the description, the board notes that paragraphs [0050] to [0057] are explicitly based on Figs. 2, 4 and 5. In this respect, Fig. 4 is said to show a detailed diagram of the charging unit shown in Fig. 2, and Fig. 5 to show a flowchart of operation for the charging unit shown in Fig. 4 at the start of a charging session. However, prior to this passage of the description, it is stated also that "Fig. 3 shows a flowchart of operation for the charging unit shown in Fig. 2" (cf. paragraph [0044], whereby the charging unit executes a step S14 "to reserve funds for service delivery to the at least two services and/or for the at least two service types such that deviations between predicted fund use-up times are minimized" (cf. paragraph [0047])). The skilled person reading this passage, particularly in the light of the claims as filed, would conclude that the embodiment described in

paragraphs [0050] to [0057] describes a charging unit which is not an alternative to that described in connection with Fig. 3, but implicitly includes the limitations of Fig. 3, in particular feature (a) referred to above.

This is corroborated by the "Summary of the Invention" in paragraphs [0007] to [0009] ("*The method comprises a step of initiating a fund reservation with respect to at least two services and/or at least two service types used for a single service. Subsequent hereto there is executed a step to reserve funds for service delivery to the at least two services and/or for the at least two service types such that deviations between predicted fund use-up times are minimized.*" and "*As fund resources are reserved [such that] the predicted fund use-up times deviation is minimized, related feedback from charged services occurs essentially at the same time.*"). In the board's view, these passages convey the impression that this feature is fundamental to the invention.

It is further noted that the omitted feature is not implicitly comprised in the remaining features of claim 1, i.e. those based on claims 2 to 5 as originally filed and paragraphs [0055] to [0057] of the description, since these features do not *per se* lead to the deviations between predicted fund use-up times being minimized.

The board thus concludes that the above-mentioned feature (a) is no longer comprised in claim 1, either explicitly or implicitly, and that the application as filed provides *prima facie* no basis for its omission. Claim 1 of auxiliary request V therefore *prima facie* does not comply with Article 123(2) EPC.

3.4 Claim 1 of auxiliary request VI differs from claim 1 of auxiliary request V in that "feature (a)" has partly been re-incorporated into the claim, however, in a different context as compared with the claims as originally filed, since the wording "such that deviations between predicted fund use-up times are minimized" is now included as part of former feature (g) (see point 1.2 above).

However, in the board's view, the application as filed does not *prima facie* provide a direct and unambiguous basis for this amendment, contrary to Article 123(2) EPC.

In respect of claims 1 to 5 as originally filed, the board notes that there is no direct causal link between the minimization of the deviations between predicted use-up times defined in the characterising part of claim 1 and the fund splitting optimisation feature of claim 5. Consequently, the claims as originally filed do not provide support within the meaning of Article 123(2) EPC, nor did the appellant argue otherwise.

Instead, the appellant argued that the passage of the description in paragraphs [0069] to [0072], which describes a "third option to operate the fund splitting unit", provides support.

This passage describes a specific algorithm for adaptively modifying the fund split factor on the basis of historical use data. The algorithm refers to the costs used by and assigned to "A" and "B", which are assumed to represent two services. However, there is no direct and unambiguous disclosure apparent to the board which links this algorithm to the feature that

deviations between predicted fund use-up times are minimized, as required by claim 1. Therefore, the board finds the appellant's argument to be unconvincing.

The board thus concludes that claim 1 of auxiliary request VI *prima facie* does not comply with Article 123(2) EPC either.

3.5 As claim 1 of each of the late-filed auxiliary requests V and VI *prima facie* does not comply with Article 123(2) EPC, the board did not admit these requests to the proceedings (Article 13(1) RPBA).

4. *Conclusion*

As all requests on file are either not allowable or not admissible, it follows that the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



G. Rauh

F. van der Voort

Decision electronically authenticated