Datasheet for the decision
of 9 November 2007

Case Number: T 1264/06 - 3.5.03
Application Number: 99307822.9
Publication Number: 0994634
IPC: H04Q 7/38

Language of the proceedings: EN

Title of invention:
Methods and apparatus for retransmission based access priority in a communications system

Applicant:
Lucent Technologies Inc.

Opponent:
-

Headword:
Retransmission based access priority/LUCENT

Relevant legal provisions:
EPC Art. 54, 84, 113(1), 123(2)
EPC R. 71(2)

Keyword:
"Novelty - main request (no)"
"Clarity - auxiliary requests (no)"
"Added subject-matter - auxiliary requests (yes)"
"Oral proceedings held in absence of appellant"

Decisions cited:
-

Catchword:
Case Number: T 1264/06 - 3.5.03

DECISION of the Technical Board of Appeal 3.5.03 of 9 November 2007

Appellant: Lucent Technologies Inc.
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Decision under appeal: Decision of the examining division of the European Patent Office posted 21 March 2006 refusing European application No. 99307822.9 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: A. S. Clelland
Members: F. van der Voort
M.-B. Tardo-Dino
Summary of Facts and Submissions

I. This appeal is against the decision of the examining
division refusing European patent application
No. 99307822.9 (publication number EP 0 994 634 A).

II. One of the reasons for the refusal was that the
subject-matter of independent claim 1 was not new in
the sense of Article 54(1) and (2) EPC having regard to
the disclosure of:

D2: US 4 534 061 A.

Further, it was held that the subject-matter of
independent claims 14 and 18 was not new having regard
to the disclosure of:

D1: US 5 729 542 A.

III. In the notice of appeal the appellant requested that
the decision be set aside and a patent granted. With
the statement of grounds of appeal the appellant filed
a set of claims by way of an auxiliary request and
submitted arguments in support, whilst the claims on
which the impugned decision was based were maintained
by way of a main request.

IV. The appellant was summoned to oral proceedings. In a
communication accompanying the summons, the board
raised, without prejudice to its final decision,
objections under Articles 84 and 123(2) EPC, as well as
under Article 52(1) in combination with Article 54 EPC,
in respect of various independent claims of both
requests.
In response to the board's communication the appellant filed by way of a main, a first auxiliary and a second auxiliary request, three sets of claims which replaced the sets of claims previously on file. Further, the appellant informed the board that it did not intend to attend the oral proceedings.

Oral proceedings were held on 9 November 2007 in the absence of the appellant. At the end of the oral proceedings and after deliberation, the board's decision was announced.

Claim 1 of the main request reads as follows:

"A method of access priority control in a remote terminal (2, 4) of a wireless communications system, characterized by the steps of:

assigning an access priority attribute to a first access request signal for transmission to a base station (6) in the wireless communications system, the access priority attribute being assigned from among a plurality of access priority attributes respectively associated with pre-established access priority classes; and

assigning to a subsequent access request signal for transmission an access priority attribute having a higher priority than a priority associated with the access priority attribute assigned to the first access request signal, if at least the first access request signal is not received by the base station."

Claim 1 of the first auxiliary request reads as follows:
"A method of access priority control in a remote terminal (2, 4) of a wireless communications system, CHARACTERIZED BY the step of:

assigning an access packet priority attribute and an access service priority attribute to each access request signal for transmission to a base station (6) in the wireless communications system, the access packet priority attribute being assigned from among a plurality of access packet priority attributes respectively associated with pre-established access packet priority classes and the access service priority attribute being assigned from among a plurality of access service priority attributes respectively associated with pre-established access service priority classes,

wherein if a given access request signal for transmission is not received by the base station, a subsequent access request signal for transmission is assigned an access packet priority attribute having a priority greater than or equal to a priority associated with the access packet priority attribute assigned to the given access request signal, based at least in part on the access service priority attribute."

Claim 1 of the second auxiliary request reads as follows:

"A method of access priority control in a remote terminal (2, 4) of a wireless communications system, CHARACTERIZED BY the step of:

assigning an access packet priority attribute and an access service priority attribute to a first access request signal for transmission to a base station (6)
in the wireless communications system, the access packet priority attribute being assigned from among a plurality of access packet priority attributes respectively associated with pre-established access packet priority classes and the access service priority attribute being assigned from among a plurality of access service priority attributes respectively associated with pre-established access service priority classes;

monitoring for receipt of an acknowledgement signal from the base station indicating receipt of the first access request signal;

incrementing a variable indicative of a number of access request transmission attempts made to the base station when the monitoring step indicates that a preceding access request has not been received by the base station; and

assigning to a subsequent access request signal for transmission an access packet priority attribute having a higher priority than a priority associated with the access packet priority attribute assigned to a preceding access request signal, if at least the preceding access request signal is not received by the base station and the access request transmission attempt variable is at least equal to a value associated with the access service priority attribute."

**Reasons for the Decision**

1. **Procedural matters**

1.1 The board considered it to be expedient to hold oral proceedings for reasons of procedural economy.
The appellant, which was duly summoned, had informed the board that it did not intend to attend the oral proceedings and, indeed, was absent. The oral proceedings were therefore held in the absence of the appellant (Rule 71(2) EPC).

1.2 In the communication accompanying the summons, objections under Articles 84 and 123(2) EPC and Article 52(1) EPC in combination with Article 54 EPC were raised in respect of the independent claims of both the main and the auxiliary request as pending at the time. The appellant was also informed that at the oral proceedings it would be necessary to discuss these objections and, consequently, could reasonably have expected the board to consider at the oral proceedings these objections in respect of the claim 1 of each of the requests as filed in reply to the board's communication. In deciding not to attend the oral proceedings the appellant chose not to make use of the opportunity to comment at the oral proceedings on these objections but, instead, chose to rely on the arguments as set out in the written submissions, which the board duly considered below.

1.3 In view of the above and the reasons set out below, the board was in a position to give at the oral proceedings a decision which complied with the requirements of Article 113(1) EPC.

2. Main request

2.1 Apart from a reference sign having been moved, claim 1 of the main request is identical to claim 1 of the
previous main request, i.e. as was considered by the examining division.

2.2 The subject-matter of claim 1 of the main request lacks novelty having regard to the disclosure of D2 for the following reasons:

2.3 D2 discloses a method of access priority control (col. 3, lines 3 to 8) in a remote terminal (e.g. a calling station 101, see Fig. 1) of a wireless communications system. The method (see Fig. 7, step 216) includes the step of assigning an access priority attribute, i.e. a "second priority", to a first control channel access request signal, i.e. a control packet, for transmission to a base station 30 (the called station) in the wireless communications system, by encoding the control packet using one bit at a predetermined location, in which the access priority attribute is assigned from among a plurality of access priority attributes respectively associated with pre-established access priority classes, see col. 8, lines 32 to 45. The method further includes the step of assigning to a subsequent access request signal for transmission an access priority attribute, i.e. a "first priority", having a higher priority than the priority associated with the access priority attribute assigned to the first access request signal, if no response is received, e.g. if the first access request signal is not received by the base station, and, hence, a retransmission is necessary, see col. 8, lines 39 to 42, col. 9, lines 54 to 57, and Fig. 7.

2.4 The appellant argued that D2 only disclosed a higher priority for packets retransmitted by a single user and
did not disclose an access priority attribute that was
assigned from among a plurality of access priority
attributes respectively associated with pre-established
access priority classes and that resulted in priority
differentiation among different users. Nor did D2
disclose that service providers could provide different
service classes to customers. Further, contrary to D2,
the access priority attributes referred to in the claim
were associated with pre-established access priority
classes and not necessarily with attributes of the
control packets.

The board does not find these arguments convincing. A
priority attribute assigned to the access request
signal as referred to in present claim 1 encompasses
the specific solution disclosed in D2 of including one
or more dedicated bits in the control packet which
define the priority of the control packet, see D2,
col. 8, lines 32 to 45. These bits are associated with
pre-established access priority classes, which are
referred to in D2 as "first" and "second" priorities.
Further, a differentiation among different users is
achieved in the method of D2 in that a user who has
made an unsuccessful attempt to access the control
channel is given a higher priority than a user who
attempts to access the control channel for the first
time, see D2, col. 3, lines 57 to 61, col. 5, lines 32
to 35, and col. 8, lines 32 to 45.

The board further notes that claim 1 is only concerned
with access priority and does not refer to service
providers providing different service classes to
customers, i.e. service priority.
2.5 The board therefore concludes that the subject-matter of claim 1 of the main request lacks novelty having regard to the disclosure of D2 (Articles 52(1) and 54 EPC) and, consequently, that the main request is not allowable.

3. First auxiliary request

3.1 Claim 1 of the first auxiliary request does not comply with the requirements of Articles 84 and 123(2) EPC for the following reasons:

3.2 In claim 1 it is unclear to which feature the final wording "based at least in part on the access service priority attribute" relates. It could, for example, relate to whether or not an access packet priority attribute is assigned to the subsequent access request signal or to whether the assigned priority is greater than or equal to the priority associated with the access packet priority attribute assigned to the given access request signal. Hence, claim 1 is unclear.

3.3 The appellant argued that the additional features of claim 1 of the first auxiliary request were disclosed in the application as originally filed at page 22, line 15, to page 23, line 19 (see paragraphs [0054] and [0055] of the application as published), the relevant parts of which read as follows:

"Note that an access service priority (ASP) class may also be defined in addition to the APP [board's note: access packet priority] feature. Those requests with highest ASP, say class 0, will automatically increase their failed access requests' APP with each reattempt.
Those with lower ASPs adjust the APP of their failed attempts less aggressively. For example, ASP class 1 may increase the APP of an access request only after it fails twice."; and

"If ASP is used, then parameters ASP and $S_j$ are also transmitted by the base station and received and stored by the remote terminal. $S_j$ represents the number of retransmissions required for class $j$ before the APP of the access requests, from that class $j$, will be updated. Thus, while $K_i$ relates to the APP priority class and [sic] $S_j$ relates to the ASP priority class. For example, for ASP = 0, 1, 2; $S_0 = 1, S_1 = 3, S_2 = 5.$"

3.4 In the board's view, however, the claim covers an embodiment in which for a given, e.g. lowest, access service priority attribute no adjustment of the APP is made at all. The above parts of the description disclose however that an adjustment is always made, the amount of which is determined by the ASP. Nor could a basis for this embodiment be found in any of the other parts of the application as originally filed.

3.5 Further, as described in paragraphs [0054] to [0056] of the application as published, whether or not the priority of the subsequent access request signal is set to be greater than or equal to the access packet priority (APP) of the given access request signal is solely determined by the access service priority attribute $S_j$, see also Fig. 10, steps 1022 and 1028. The wording of present claim 1 is however broader ("based at least in part on the access service priority attribute" (board's emphasis)).
3.6 Claim 1 of the first auxiliary request is thus based on an undisclosed intermediate generalization and does not therefore comply with the requirements of Article 123(2) EPC.

3.7 For the sake of argument, if it were assumed that claim 1 complied with Articles 84 and 123(2) EPC and that, in line with the appellant's interpretation, the access service priority attribute determined the priority of the access packet priority attribute assigned to the subsequent access request signal, the board notes that at the priority date of the application in suit, the use of different Quality of Service (QoS) grades or priorities for data traffic of different classes of users, e.g. depending on their billing levels, was well-known, see, e.g., D1, col. 1, lines 30 to 40, and the present application as published, paragraph [0010]. D1, like D2, is concerned with a method of access priority control in a remote terminal of a wireless communication system, see the abstract. Hence, if a person skilled in the art, starting out from D2, were faced with the problem of expanding the priority scheme disclosed in D2 in order to take into account different pre-established user classes, it would have been obvious to him/her to accordingly set the priority bits in the control packet (see point 2.3 above) additionally on the basis of the user class, thereby assigning both an access packet priority attribute and an access service priority attribute to the control packet. In doing so, the skilled person would thereby have arrived at the claimed subject-matter without inventive skill. The subject-matter of claim 1 would therefore not involve an inventive step (Articles 52(1) and 56 EPC).
3.8 For the above reasons, the first auxiliary request is not allowable.

4. Second auxiliary request

4.1 Claim 1 of the second auxiliary request does not comply with the requirements of Articles 84 and 123(2) EPC for the following reasons:

4.2 Claim 1 includes the feature that "the access request transmission attempt variable is at least equal to a value associated with the access service priority attribute" (board's emphasis). The expression "at least equal to" is ambiguous, since it could mean "greater than or equal to", "smaller than or equal to", "greater or smaller than or equal to". Claim 1 is therefore not clear.

4.3 The appellant argued that the additional features of claim 1 of the second auxiliary request were disclosed in the application as originally filed at page 22, line 15, to page 23, line 19 (see paragraphs [0054] and [0055] of the application as published) and in claims 6 and 7. However, whereas claims 6 and 7 as originally filed indeed provide a basis for the monitoring and incrementing steps, a basis for the last feature of claim 1 concerning the comparison of the access request transmission attempt variable with a value associated with the access service priority attribute can not be found in the application documents as originally filed. More specifically, the access request transmission
attempt variable, which according to claim 1 is indicative of a number of access request transmission attempts made to the base station, is referred to in the description as variable no_tx (see paragraph [0057]). This variable is compared to $K_i$, which is the maximum number of retransmission attempts for each APP class (see col. 17, lines 39, 40, 48 and 49, Fig. 10, and claim 8 of the application as published). According to claim 1, however, this variable is compared to "a value associated with the access service priority attribute". In relation to access service priority, the description only refers to parameters ASP, $S_j$ and a variable adj (see col. 17, lines 43 to 45 and col. 18, lines 17 and 18), none of which is compared to the variable no_tx, see also Fig. 10, step 1022, which shows that adj is only compared to $S_j$. Nor do the claims as originally filed provide a basis for the claimed comparison.

4.4 Claim 1 of the second auxiliary request does not therefore comply with Article 123(2) EPC.

4.5 For the above reasons, the second auxiliary request is not allowable.

5. It follows that none of the requests on file can be allowed.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

D. Magliano A. S. Clelland