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Datasheet for the decision of 14 July 2009

Case Number: T 1493/07 - 3.5.03

Application Number: 00958543.1

Publication Number: 1208694

IPC: H04M 17/00

Language of the proceedings: EN

Title of invention:
Charging for prepaid subscribers in a telecommunications system

Applicant:
Nokia Corporation

Opponent:
-

Headword:
Charging for prepaid subscribers/NOKIA

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step - main and auxiliary request (no)"

Decisions cited:
T 0641/00

Catchword:
-

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Case Number: T 1493/07 - 3.5.03

D E C I S I O N
of the Technical Board of Appeal 3.5.03
of 14 July 2009

Appellant: Nokia Corporation
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Decision under appeal: **Decision of the examining division of the European Patent Office posted 10 April 2007 refusing European patent application No. 00958543.1 pursuant to Article 97(1) EPC 1973.**

Composition of the Board:

Chairman: A. S. Clelland
Members: F. van der Voort
R. Moufang

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 00958543.1 (publication number EP 1208694), which was originally filed as international application PCT/FI00/00742 (publication number WO 01/17222 A).

II. The following document which was referred to in the decision under appeal is relevant to the present decision:

D1: GB 2 322 771 A.

III. With the statement of grounds of appeal the appellant filed claims of a main request and auxiliary requests I and II and submitted arguments in support. 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, alternatively, on the basis of the claims of auxiliary request I or II. Oral proceedings were requested.

IV. In a communication annexed to a summons to oral proceedings the board raised, without prejudice to its final decision, objections under Article 52(1) in combination with Article 56 EPC as well as under Articles 84 and 123(2) EPC in relation to, *inter alia*, claim 1 of each request.

V. In response to the board's communication, the appellant filed claims of an amended main request and an amended auxiliary request, which replaced all previous requests, and submitted arguments in support.

VI. Oral proceedings were held on 14 July 2009. 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, failing that, on the basis of the claims of the auxiliary request, both as filed on 12 June 2009 in response to the board's communication. After deliberation, the board's decision was announced.

VII. Claim 1 of the main request reads as follows:

"A method for customising the charging of subscribers in a telecommunications network, the method comprising the steps of:

maintaining subscriber information on at least one subscriber;

characterized by

defining at least two different tariff models, each model containing a tariff scheme defining what price to use when charging a call, the price being a function of at least a time definition defining a time interval, a first of said at least two different tariff models containing a first tariff scheme and a second of said at least two different tariff models containing a second tariff scheme having at least a different time definition than the first tariff scheme;

indicating in the subscriber information directly or indirectly which tariff model is to be used with this subscriber; and

charging (308) the subscriber according to the tariff scheme of the indicated tariff model."

Claim 1 of the auxiliary request reads as follows:

"A method for customising the charging of subscribers in a telecommunications network, the method comprising the steps of:

maintaining subscriber information on at least one subscriber;

characterized by

defining at least two different tariff models, each model containing a tariff scheme defining what price to use when charging a call, the price being a function of at least a weekday and a time definition defining a time interval, a first of said at least two different tariff models containing a first tariff scheme and a second of said at least two different tariff models containing a second tariff scheme having at least one different weekday and time definition than the first tariff scheme,

indicating in the subscriber information directly or indirectly which tariff model is to be used with this subscriber; and

charging (308) the subscriber according to the tariff scheme of the indicated tariff model."

Reasons for the Decision

1. *Inventive step - main request*

1.1 Both the examining division and the appellant considered D1 to represent the closest prior art. The board agrees.

1.2 More specifically, D1 discloses, using the language of claim 1 of the main request, a method of customising the charging of subscribers in a telecommunications network

(Fig. 1, page 8, lines 20 to 22), in which the method includes the step of maintaining subscriber information on at least one subscriber (page 11, lines 5 to 11, and Fig. 2, "relational data base 20/22") and the step of defining at least two different tariff models (page 8, table 1), each tariff model being identified by a subscription type and containing a tariff scheme defining what price, in terms of "cost units" n, is to be used when charging a call. The price is a function of at least a time definition which defines a time interval (page 8, table 1, "peak", "off-pk", and page 9, lines 7 to 9, "peak times", "off-peak times"). The method further includes the step of indicating in the subscriber information which tariff model is to be used with this subscriber (page 11, lines 7 to 11) and the step of charging the subscriber according to the tariff scheme of the indicated tariff model (page 11, lines 1 to 4, and page 13, lines 11 to 17). From page 8, table 1, it follows that the time definition ("peak", "off-pk") is the same for all subscription types 1 to 7.

The appellant argued that D1 did not disclose the step of defining at least two different tariff models, in which each tariff model contained a tariff scheme, since a tariff scheme indicated how to charge a call, whereas table 1 of D1 defined a price per call unit, in which the subscription type was only used for determining this price. Hence, in D1, the tariff model was exactly the same for all subscriptions.

The board disagrees. Claim 1 does not give the term "tariff model" any particular meaning other than that it contains a tariff scheme which defines what price is to be used when charging a call, in which the price is a

function of at least a time definition which defines a time interval. In D1, the specification in table 1 of different charges for some of the subscription types, in which the charges are a function of a time definition defining peak and off-peak times, implies that the way in which the respective calls are charged is different and, hence, that for different subscription types different tariff schemes and therefore different tariff models within the meaning of claim 1 are used.

1.3 The subject-matter of claim 1 of the main request therefore differs from the method disclosed in D1 in that the tariff scheme of a first one of the tariff models has a time definition which differs from the time definition of the tariff scheme of a second one of the tariff models.

The different time definitions offer, in comparison to the method disclosed in D1, the possibility of further diversifying the time-dependent charging of calls for different subscriptions.

1.4 However, replacing a known time definition for the purposes of charging a call by a subscriber in a telecommunications network by another, e.g. more refined, time definition is, in itself, purely a business consideration rather than a technical consideration. For example, in D1, it may be commercially advantageous to the network operator or the service provider to offer a time definition and corresponding charges to a subscriber who has a group subscription for up to fifty users, e.g. subscription type 7 in table 1, which differ from those applicable to a subscriber who merely has a subscription type for only up to two users, i.e.

subscription type 1.

Consequently, the aim of obtaining a different time definition for the purpose of different time dependent charging of calls for one of the subscription types compared to the other subscription types is an aim which is to be achieved in a non-technical field and is not excluded from appearing in the technical problem to be solved for the purpose of examining inventive step (following T 641/00, OJ EPO 2003, 352).

1.5 The technical problem when starting out from the disclosure of D1 may therefore be seen in implementing a time definition of the tariff scheme for one of the subscription types 1 to 7, which differs from the time definition for the other subscription types.

By way of example, in D1 the time definition "peak" and "off-peak" in table 1 may be replaced by a more refined time definition for subscription type 7 only, in which the new time definition consists of time intervals 0-8 hrs, 8-16 hrs, and 16-24 hrs, with corresponding cost units.

1.6 As to the technical implementation of the time definition of this example, the board notes the following:

In D1 a billing centre 16 (Fig. 1) of the telecommunications network includes a relational database application 20 which is associated with a data store 22 and a call rating application 24 which is associated with a tariff data store 26 (page 10, lines 4 to 9, and Fig. 2). The call rating application 24

retrieves data indicating the subscription type of the subscriber from the relational database 20/22 and standard tariff charges for that subscription type from the tariff data store 26 and thereby calculates the charge (page 13, lines 11 to 17).

Since the relational database application 20 and the call rating application 24 are software applications (page 10, lines 4 to 9), a person skilled in the art faced with the problem of technically implementing the above time definition for subscription type 7 would accordingly reprogram the call rating application 24, for example by defining further sets of nested if-then-else statements, and by storing the modified time definition and corresponding cost units for subscription type 7 in the tariff data store 26. These steps merely involve well-known routine programming techniques and do not therefore require inventive skill.

1.7 The appellant argued that if a person skilled in the art were to implement the modified time definition for subscription type 7 in D1, he would, in view of the database structure corresponding to table 1, amend the time definitions for all subscription types by replacing the "peak" and "off-pk" columns in table 1 by three columns, i.e. one for each of the time intervals 0-8 hrs, 8-16 hrs, and 16-24 hrs. A different call charging would then only be achieved in terms of different prices, i.e. different cost units, for the different subscription types. The claimed method, however, provided an alternative technical solution, in which the time definition defined for one subscription type differed from the time definition(s) for the other subscription types.

1.8 The board cannot accept this argument for the following reasons:

As admitted by the appellant, D1 does not disclose details of the technical implementation of table 1. In particular, the board notes that D1 does not disclose any technical details of a database structure which would correspond to table 1 and, consequently, the board sees no reason to assume that the teaching of D1 would lead the skilled person to implement the table in the specific way as suggested by the appellant. In the absence of these technical details, the skilled person would rather, when starting out from D1 and faced with the technical problem of implementing the revised table (see point 1.5 above), rely on his/her common general knowledge and, if necessary, consult other technical documents in order to find a solution. As set out above, this common general knowledge would directly lead the skilled person to arrive at the claimed subject-matter without exercising inventive skill.

It is further noted that the implementation as suggested by the appellant implies a reformulation of the technical problem, since the time definition would in that case remain the same for all subscription types. This reformulation implies that the solution as suggested by the appellant, when starting out from D1 and faced with the technical problem as presented to the skilled person purely on the basis of commercial considerations (see points 1.4 and 1.5 above), is more remote from the disclosure of D1 than the claimed solution.

1.9 The board therefore concludes that the subject-matter of claim 1 of the main request does not involve an inventive step (Articles 52(1) and 56 EPC). Consequently, the main request is not allowable.

2. *Inventive step - auxiliary request*

2.1 Claim 1 of the auxiliary request further specifies that the price to use when charging the call is also a function of at least a weekday and that the second tariff scheme has at least one different weekday than the first tariff scheme.

2.2 The appellant submitted that this amendment to claim 1 was made in order to meet an objection under Article 123(2) EPC as raised by the board in the communication annexed to the summons to oral proceedings.

The appellant argued that "adding the weekday to time definitions increases the complexity, and emphasize *[sic]* inventive skills of the programmer unless the last straightforward implementation of adding columns and redefining peak and off-peak columns to take into account the other business method definitions" and therefore concluded that the technical implementation of the claimed solution required inventive skills and fulfilled the requirements of Article 56 EPC.

2.3 The board cannot accept this argument. The addition of a weekday in the tariff schemes may, when starting out from D1, imply that modifications to table 1 are necessary, which are more complex than those required in order to arrive at the time definition referred to in claim 1 of the main request. However, the higher level

of complexity of the new business model as represented by the modified table does not imply that its technical implementation would require inventive skill. On the contrary, in the present case, a time definition including a weekday would be achieved by the skilled person using the same well-known programming techniques as referred to at point 1.6 above and does not therefore require inventive skill.

2.4 For this reason and the reasons as given in respect of the subject-matter of claim 1 of the main request (see point 1 above), the subject-matter of claim 1 of the auxiliary request does not involve an inventive step (Articles 52(1) and 56 EPC). Consequently, irrespective of whether or not the amendment to claim 1 of the auxiliary request meets the requirements of Article 123(2) EPC, the auxiliary request cannot be allowed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

D. Magliano A. S. Clelland