Datasheet for the decision
of 7 May 2009

Case Number: T 1450/06 - 3.5.03
Application Number: 98942297.7
Publication Number: 1000503
IPC: H04M 15/00

Language of the proceedings: EN

Title of invention:
Method and system for global communications network management and display of market-price information

Applicant:
Anip, Inc.

Headword:
Global communications network management/ANIP

Relevant legal provisions:
EPC Art. 56

Relevant legal provisions (EPC 1973):
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Keyword:
"Inventive step (no - all requests)"

Decisions cited:
-

Catchword:
-
Case Number: T 1450/06 - 3.5.03

DECISION
of the Technical Board of Appeal 3.5.03
of 7 May 2009

Appellant: Anip, Inc.
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Composition of the Board:
Chairman: A. S. Clelland
Members: T. Snell
R. Moufang
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 98942297.7, with international publication number WO-A-99/11051.

The refusal was based, inter alia, on the ground that the subject-matter of claim 1 did not meet the requirement of inventive step pursuant to Article 52(1) in combination with Article 56 EPC.

II. The appellant filed a notice of appeal against the above decision. Subsequently, the appellant filed a statement of grounds together with claims of a main request and first to third auxiliary requests to replace the claims on file.

Oral proceedings were conditionally requested.

III. In a communication accompanying a summons to oral proceedings the board gave a preliminary opinion that, inter alia, the subject-matter of claim 1 of each request did not involve an inventive step with respect to document WO-A-94/28683 (cited in the supplementary European search report and referred to in this decision as D3) in combination with common general knowledge.

IV. In a fax letter received 30 April 2009, the appellant announced that it would not attend the oral proceedings.

V. Oral proceedings were held on 7 May 2009 in the absence of the appellant. After due deliberation, the board
announced its decision at the end of the oral proceedings.

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

"A system for establishing connections among a plurality of telecommunications networks, the system comprising:

(a) a server node (56) operable to:
receive service offers comprising a plurality of parameters including rate information and a terminating location from service providers;
receive service requests for purchase of telecommunications services from a plurality of buyers, each request comprising a plurality of parameters including rate information and a terminating location; and
match the service requests to a portion of one or more service offers based on the parameters specified by the buyers and the service providers; and

(b) a telecommunications node (46) in communication with the server node (56) operable to facilitate routing of telecommunications traffic between buyers' and providers' telecommunications networks to fulfill the matched service requests."

VII. Claim 1 of the appellant's **first auxiliary request** reads as follows:

"A system for establishing connections in one or more telecommunications networks for a plurality of telecommunications service providers, the system comprising:
(a) a server node (56) operable to:
receive from the service providers service
offers comprising a plurality of parameters including
rate information and a terminating location, each offer
constituting an offer to sell telecommunications
services for a route connecting a pair of locations in
one of the telecommunications networks;
receive from the service providers service
requests for purchase of telecommunications services,
each request comprising a plurality of parameters
including rate information, and a terminating location;
match the service requests to a portion of one
or more service offers based on the parameters
specified;
and
(b) a telecommunications node (46) associated with a
telemcommunications switch in the one or more networks
and operable to facilitate the routing of
telemcommunications traffic among the service providers’
networks to fulfill the matched service requests."

VIII. Claim 1 of the appellant's second auxiliary request
reads as follows:

"A system for establishing connections in one or more
telemcommunications networks for a plurality of
telemcommunications service providers, the system
comprising;
(a) a server node (56) operable to:
receive from the service providers service offers
comprising a plurality of parameters including
rate information and a terminating location;
determine available communication routes, including multiple leg routes involving two or more service providers, based on the service offer information; receive from a plurality of buyers service requests for purchase of telecommunications services, each request comprising a plurality of parameters including rate information and a terminating location; and match the service requests to a portion of one or more service offers based on the parameters specified by the buyers and the service providers; and (b) a telecommunications node (46) operable to facilitate routing of telecommunications traffic among the service providers' networks to fulfil the matched service requests."

IX. Claim 1 of the appellant's third auxiliary request reads as follows:

"A system for establishing connections in one or more telecommunications networks for a plurality of telecommunications service providers, the system comprising;
(a) a server node (56) operable to: receive from the service providers service offers comprising a plurality of parameters including rate information, a terminating location and a service parameter; determine available communication routes, including multiple leg routes involving two or more service providers, based on the service offer information; receive from the service providers service requests for purchase of telecommunications services, each request
comprising a plurality of parameters including rate information, a terminating location and a service parameter; and match the service requests to a portion of one or more service offers based on at least one of the rate information, the terminating location and the service parameter; and (b) a telecommunications node (46) operable to facilitate routing of telecommunications traffic among the service providers' networks to fulfil the matched service requests."

**Reasons for the decision**

1. **The appellant's requests**

The board understands, although not explicitly stated, that the appellant requests that the impugned decision of the examining division be set aside and a patent granted on the basis of the claims of the main request, or, if the board should not accede to the main request, on the basis of the claims of one of the first to third auxiliary requests, all as filed with the statement of grounds.

2. **Absence of the appellant at the oral proceedings**

2.1 The board arranged oral proceedings in accordance with the conditional request of the appellant (Article 116(1) EPC). The appellant was duly summoned but announced that it would not be attending the oral proceedings. The board decided to continue the oral proceedings in
the absence of the appellant (Rule 115(2) EPC and Article 15(3) RPBA).

2.2 In accordance with Article 15(3) RPBA, the board shall not be obliged to delay any step in the proceedings, including its decision, by reason only of the absence at oral proceedings of any party duly summoned who may then be treated as relying only on its written case.

2.3 Given that the board's decision is essentially based on the same reasoning as in the communication, the appellant's right to be heard has been met and the board is thus in a position to issue a decision complying with Article 113(1) EPC.

3. Main request - claim 1 - inventive step

3.1 The present application relates to a system for establishing connections among a plurality of telecommunications networks. In connection with the problem to be solved, the description of the present application states in the sentence bridging pages 2 and 3 that "It would be desirable to provide a way for dynamic routing in response to rate [NB: charging rate] changes so as to pass the savings on to the consumer. There is also a need to provide telephone companies with means to dynamically purchase and sell blocks of telephone connection bandwidth".

3.2 The system defined in claim 1 of the main request comprises a server node operable to match service requests from buyers [eg local networks] for purchase of telecommunications services and service offers originating from service providers [eg long-distance
carriers], whereby the service requests and offers include rate information and a terminating location. The system comprises further a telecommunications node connected to the server node for routing telecommunications traffic to fulfil the matched service requests.

3.3 In the board's view D3 (which was cited by the board by virtue of its power under Article 114(1) EPC) represents the closest prior art, since D3 is concerned with solving a similar problem to the above, cf. page 2, line 38 - page 3, line 5, which states: "the present invention provides a mechanism for extremely effective resource allocation in which any potential telecommunications service supplier is able to propose a price which reflects the instantaneous amount of capacity available, thus matching telecommunications services users to available communications capacity, (even if only briefly available)".

3.4 D3 discloses several embodiments for solving this problem. The board considers that the "Seventh Embodiment" disclosed on pages 27-29, which is a modified version of the "Sixth Embodiment (cf. pages 24-27), comes closest to the presently claimed subject-matter.

3.5 With respect to the "Sixth Embodiment", the following is stated (cf. page 24, lines 15-32):

"However, the situation may often arise that a telecommunications or other service provider has a surplus of available capacity. The same may equally be true of a user of telecommunication
services (for example, a multinational company) who has purchased a capacity in excess of their requirements.

Accordingly, in this embodiment, telecommunications resources are periodically offered as being available, and telecommunication users make competing bids for the available resources. This embodiment is more useful where the user of telecommunications services is a large scale user, with a relatively constant demand (at some level) for telecommunication services, rather than a private individual or other small end-user.

For example, this embodiment is applicable to the situation described with reference to Figure 1 in the first embodiment, in which [a] plurality of long distance networks 2a-2c offer services to a plurality of local networks 1a-1c."

Referring to Figs. 1, 14 and 15 of D3, in this embodiment the long distance networks 2a-2c (service providers) each comprise a selector device 820 which periodically derives available capacity on the respective long distance network and communicates this information to the local networks (page 24, lines 33-35 and page 25, lines 10-12). The local networks 1a-1c each comprise a bidding device 812 which returns a price bid to the selector devices of the long distance networks (page 25, lines 20-26). The selector devices compare the price bids and return an acceptance signal to the selected local network (page 25, lines 26-30).
3.6 The "Seventh Embodiment" operates in a similar way to the sixth embodiment in that the long distance networks 2a-2c each comprise a selection device, and the local networks 1a-1c each comprise a bidding device. In this embodiment, however, the selection device operates more in the manner of an auction, whereby the long distance networks make price offers to the local networks, which in turn decide whether to bid or not in the form of an acceptance signal. The long distance networks then select the local network which bids first (cf. Figures 17a and 17b).

3.7 Implicitly, both embodiments include control of switches in the telecommunications networks 1a-1c and 2a-2c of Fig. 1 to route the telecommunications traffic from the local to the long distance networks in accordance with the outcome of the bidding process.

3.8 In view of the above, using the language of claim 1, the "Seventh Embodiment" of D3 discloses a system for establishing connections among a plurality of telecommunications networks, the system comprising:

(a) a node (Fig. 1; 1a-1c) operable to:

receive service offers comprising a plurality of parameters including rate information from service providers ("long distance networks");

[a node (2a-2c) operable to] receive service requests for purchase of telecommunications services from a plurality of buyers; and
[wherein the system is operable to] match the service requests to a portion of one or more service offers based on the parameters specified by the buyers and the service providers; and

(b) a telecommunications node operable to facilitate routing of telecommunications traffic between buyers' and providers' telecommunications networks to fulfil the matched service requests (implicit).

3.9 The subject-matter of claim 1 differs from the "Seventh Embodiment" of D3 in that

(i) a server node is provided which is in communication with the telecommunications node (b) and operable to receive the service offers and the service requests, and carry out the function of matching the service offers with the service requests; and

(ii) the received service offers and requests comprise a plurality of parameters including rate information and a terminating location.

3.10 In D3, the functionality of matching the offers and the requests is distributed between the "selection devices" situated at the provider networks and the "bidding devices" situated at the requesting local networks. In other words, in D3 the offering service providers negotiate directly with the requesting local networks, whereas in accordance with claim 1 an intermediary ("broker") is provided in the form of a server node.

The solution adopted in D3 requires a large number of signalling connections between the various requesting
and providing nodes of the network, which increases with the number of networks involved.

3.11 The problem to be solved, starting out from D3, is therefore considered as being to simplify the signalling arrangements necessary for implementing the matching of service requests with service offers between a plurality of requester and provider telecommunications networks.

3.12 This problem is solved in a further embodiment of D3 ("Fifth Embodiment") by using a central data base performing a broker function (cf. page 22, line 14 - page 23, line 2). Although this embodiment is mainly directed at the sale of video on demand, it also mentioned as being applicable to the earlier embodiments in which telecommunications services are provided (page 23, lines 3-8). In the board's view, the skilled person would appreciate that the provision of a central data base, or "server node", is equally applicable to the "Seventh Embodiment" in order that the service providers and buyers need only communicate with a single location rather than with multiple providers/buyers (cf. D3, page 22, lines 14-19).

The board also observes that in the description of the present application, it is proposed that the server node may be implemented either as a single node or as a distributed network of servers, and that components of the distributed network may be incorporated in the nodes of the telecommunications network (cf. page 9, lines 33-37). No special significance in the description is attached to the use of a single server node rather than using distributed processing.
In view of the above, the board concludes that the skilled person starting out from the seventh embodiment of D3 would not require inventive skill to modify this arrangement by providing a server node acting as broker. Evidently, the server node must be in communication with a telecommunication node to facilitate routing. Hence, distinguishing feature (i) does not contribute to an inventive step.

3.13 Claim 1 further requires that the service requests and the service offers include a "plurality of parameters including rate information and a terminating location" (cf. distinguishing feature (ii)).

In this respect, it already follows from D3 that the service offers include rate (ie price) information. In the board's view, it would also be obvious to the skilled person based on common general knowledge that the service requests, ie "bids", may also include rate information, eg as disclosed in the "Sixth Embodiment", or in order to confirm acceptance of a particular rate. Moreover, when using a central server node as a broker, both the service offers and the service requests may obviously include data indicating the terminating location (eg a country code) of the long-distance connection in order that the broker be able to match service offers with the desired requests. Hence these aspects do not contribute to inventive step either.

3.14 In view of the above, the board concludes that the subject-matter of claim 1 of the main request does not involve an inventive step (Articles 52(1) and 56 EPC).
4. **First auxiliary request - claim 1 - inventive step**

4.1 Claim 1 of the first auxiliary request differs from claim 1 of the main request in that (i) the system for establishing connections in one or more telecommunications networks is for a plurality of telecommunications service providers, (ii) each service offer constitutes an offer to sell telecommunications services for a route connecting a pair of locations in one of the telecommunications networks, and (iii) the telecommunications node of feature (b) is associated with a telecommunications switch (board's underlining).

4.2 Features (i) and (iii) are disclosed in D3, Figs. 1 and 2.

In respect of feature (ii), in D3 (cf. page 3, lines 7-14) the following is stated: "In fact, the invention may also be applied within a single telecommunications network where multiple routes between points of the network are available; each exchange or switching centre in the network, and the links between, can effectively act as a cost centre and when there is the option of switching a message through to several different exchanges or switching centres, each may issue a price signal, the message being switched on the route offering the lowest price" (board's underlining).

In the view of the board, a link is a route connecting a pair of locations in one of the telecommunications networks. Hence D3 discloses the concept of issuing an offer to sell telecommunications services for a route connecting a pair of locations in one of the telecommunications networks.
Therefore, the board concludes that the subject-matter of claim 1 of the first auxiliary request does not involve an inventive step either (Articles 52(1) and 56 EPC).

5. **Second auxiliary request - claim 1 - inventive step**

5.1 Claim 1 of the second auxiliary request differs from claim 1 of the main request essentially in that the server node is additionally operable to determine available communication routes, including multiple leg routes involving two or more service providers, based on the service offer information.

However, referring to the same passage of D3 (cf. page 3, lines 7-14) mentioned in connection with the first auxiliary request, it is apparent that D3 envisages the determination of multiple leg routes based on service offer information, since each individual link (ie "leg") of the route may issue a price signal ("offer"), whereby the skilled person would understand that a complete route is generally made up of multiple legs. As regards the requirement for "two or more service providers", each "cost centre" mentioned in D3, including individual legs of the route, can be considered as a different "service provider".

Therefore, the board concludes that the subject-matter claim 1 of the second auxiliary request does not involve an inventive step either (Articles 52(1) and 56 EPC).
6. Third auxiliary request - claim 1 - inventive step

6.1 Claim 1 of the third auxiliary request differs from claim 1 of the second auxiliary request in that the service offers and the service requests comprise, in addition to rate information and a terminating location, a "service parameter".

However, in D3 several additional service parameters are proposed (cf. page 8, line 33 - page 9, line 2).

Therefore, the subject-matter of claim 1 of the third auxiliary request does not involve an inventive step either (Articles 52(1) and 56 EPC).

7. The arguments of the appellant in the statement of grounds are based on starting out from D1 as closest prior art. In this respect, the appellant comments as follows:

"D1 is directed to a different problem from that of the present invention. D1 assists a single user to minimize costs of various calls under different costplans offered by telephone carriers. In contrast, the present invention is directed to the problem of how to optimally route traffic among carriers of disparate networks based on service requests and offers received independently from buying and selling service providers. Because of the nature of the system of D1, there is no motivation to consider this problem nor is any solution provided."
The present invention solves the optimal routing problem by minimising the physical connections between multiple buyers and sellers networks through the provision of an overlay network comprising a server node and a telecommunications node, which co-operate with a plurality of telecommunications networks to match a plurality of buyers and sellers and then dynamically route telecommunications traffic between the networks via optimised communications paths, see page 29, lines 8-24."

The board has considered whether these arguments apply to D3. In this respect, the first point made by the appellant with regard to D1 that a different problem is concerned is moot, since, as explained above, D3 provides a solution to essentially the same problem as set out here by the appellant. With regard to the appellant's second point, ie minimising the physical connections by using a single server node, the board has explained above why, starting out from D3, the skilled person would arrive at the claimed solution without inventive skill. Hence, the board finds these arguments unconvincing.

8. As claim 1 of each request is not allowable, the requests as a whole are not allowable. As there is no allowable request, it follows that the appeal must be dismissed.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

D. Magliano A. S. Clelland