Datasheet for the decision of 28 January 2016

Case Number: T 2458/11 - 3.5.03
Application Number: 07015218.6
Publication Number: 2020794
IPC: H04L29/06
Language of the proceedings: EN
Title of invention: Method for operating a moving network

Applicant:
Siemens Aktiengesellschaft

Headword:
Moving network/SIEMENS

Relevant legal provisions:
EPC Art. 123(2)

Keyword:
Amendments - added subject-matter (yes)
Case Number: T 2458/11 - 3.5.03

DECISION
of Technical Board of Appeal 3.5.03
of 28 January 2016

Appellant: Siemens Aktiengesellschaft
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 6 July 2011 refusing European patent application No. 07015218.6 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman F. van der Voort
Members: A. Madenach
P. Guntz
Summary of Facts and Submissions

I. The present appeal arises from the decision of the examining division refusing European patent application No. 07015218.6, published as EP 2 020 794 A1, on the ground that the subject-matter of independent claim 1 did not involve an inventive step (Articles 52(1) and 56 EPC).

II. In the notice of appeal the appellant requested that the decision under appeal be set aside and that a European patent be granted on the basis of the request on which the impugned decision was based. As an auxiliary measure, oral proceedings were requested.

III. In a communication pursuant to Article 15(1) RPBA accompanying a summons to oral proceedings, the board gave its preliminary opinion, inter alia raising objections under Article 84 EPC. Further, the appellant was asked to provide a basis for the amendments in claims 1 and 23 (Article 123(2) EPC).

IV. With a letter dated 10 December 2015, the appellant submitted independent claims of a main request to replace the claims of the previous request, and independent claims of an auxiliary request. An internet article "Enabling Network Mobility: A Survey of NEMO" by Paul Moceri, dated 5 September 2006, was submitted to illustrate the use of the term "Standard Routing" in the art.

V. Oral proceedings were held on 28 January 2016.

During the oral proceedings, the appellant filed claim 1 of a new main request and claim 1 of a new auxiliary request.
The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claim 1 of the new main request or, in the alternative, on the basis of claim 1 of the new auxiliary request, both claims as filed during the oral proceedings, supplemented by the respective independent claims 21 and 23 as filed with the letter dated 10 December 2015 and dependent claims 2 to 20 and 22 as originally filed.

After deliberation by the board, the decision was given.

VI. Claim 1 of the main request reads:

"A method for operating a moving network (MO) comprising a mobile router (MR) assigned to a home agent (HA) in a home network (HN) and a plurality of network nodes (LFN, LMN) belonging to the moving network (MO) and wherein the moving network (MO) is attachable to different networks comprising the home network (HN) and foreign networks (FN) via the mobile router (MR) by using a mobility protocol, wherein:
three different groups of addresses are provided for assigning them to nodes attaching to the moving network (MO);
- a first group of addresses for network nodes (LFN) belonging to the moving network (MO) and being unable to change their attachment to the moving network (MO), said network nodes (LFN) being further called local fixed nodes (LFN);
- a second group of addresses for network nodes (LMN) belonging to the moving network (MO) and being able to change their attachment to the moving network, said
network nodes (LMN) being further called local mobile nodes (LMN); 
- a third group of addresses for network nodes (VMN) not belonging to the moving network (MO) and being able to attach to the moving network (MO), said network nodes (VMN) being further called visiting mobile nodes (VMN); 
- packets from and to a local fixed node (LFN) are routed by the mobile router (MR) according to MIP/NEMO Routing, if the mobile router (MR) is attached to a foreign network 
- packets from and to a local mobile node (LMN) are routed by the mobile router (MR) according to MIP/NEMO Routing if the mobile router (MR) is attached to a foreign network 
- packets from and to a visiting mobile node (VMN) are routed by the mobile router (MR) without performing MIP/NEMO Routing."

Claim 1 of the auxiliary request additionally includes the following feature:

"- packets from and to a local mobile node (LMN) are routed by the mobile router (MR) without performing MIP/NEMO Routing if the mobile router (MR) is attached to its home network (HN)".

In view of the reasons for the decision given below it is not necessary to reproduce here the further independent and dependent claims.
Reasons for the Decision

1. Amendments (Article 123(2) EPC)

1.1 Claim 1 of both the main request and the auxiliary request comprises, inter alia, the feature "packets from and to a visiting mobile node (VMN) are routed by the mobile router (MR) without performing MIP/NEMO Routing".

1.2 The appellant argued that this feature, which was not part of claim 1 as originally filed, is based on paragraphs [0044] and [0046] of the application as published. These paragraphs read as follows:

"In scenario (d), the network node MNN is attached to the foreign moving network having the mobile router MRy. This foreign moving network is also attached to a foreign network, namely FN1. As a consequence, the network node acts as a visiting mobile node and runs its MIP client. Furthermore, as the network node is a visiting mobile node, the mobile router MRy does not perform MIP/NEMO routing for this node and uses standard IP routing instead."

and

"In scenario (f), the mobile network node MNN is attached to the moving network having the mobile router MRy, thus acting as a visiting mobile node. Consequently, the mobile node runs the MIP client. The mobile router MRy is attached to its home network HNy and, thus, performs standard routing without using the MIP/NEMO Protocol."
Hence, these paragraphs each describe alternative scenarios for the mobile router, one in which it is attached to a foreign network and one in which it is attached to its home network. In both scenarios, when routing signals from a visiting mobile node, the mobile router does not perform MIP/NEMO ("Mobile Internet Protocol/Network Mobility Basic Support Protocol") routing and uses standard IP routing instead (scenario (d)) or performs standard routing without using the MIP/NEMO protocol (scenario (f)). Further, in both scenarios, the mobile network node (MNN) acts as a visiting mobile node (VMN) and runs its MIP client, which, according to the board's understanding, is essential for a VMN to achieve data transmission (cf. paragraphs [0004] and [0048] of the application as published).

1.3 Leaving aside the question of whether or not the omission of the formulation "uses standard IP routing" or "performs standard routing" already leads to subject-matter which extends beyond the content of the application as filed, considering the appellant's arguments (see point 1.4 below), the above feature (cf. point 1.1) contains subject-matter which extends beyond the content of the application as filed. In the board's view, the original application discloses the routing of data packets to and from visiting mobile nodes only in connection with the visiting mobile node running its MIP client. Omitting this functionally directly linked feature, namely that the visiting mobile node runs its MIP client, thus amounts to an unallowable intermediate generalisation.

1.4 The appellant argued that claim 1 was directed to a method of operating a moving network comprising a mobile router. Consequently, for the operation of the
network it did not matter which state the visiting mobile node was in, and in particular it did not matter whether or not it ran its MIP client.

The board is not convinced. Even if it were, in principle, possible to operate a moving network in such a way that its mobile router did not perform MIP/NEMO routing regardless of whether or not the VMN attached to it ran its MIP client, the appellant has failed to convince the board that such a scenario was originally disclosed. On the contrary, in the board's view, in order to achieve the object of the present invention, i.e. enabling easy and flexible data transmission for moving networks (paragraph [0004] of the application as published), a MIP routine must be performed at some point in the transmission path extending from the VMN via the MR of the moving network to the home agent of the home network, in order to achieve data transmission. Otherwise, no movable connection and, hence, no data transmission for a moving network between a VMN and the home agent of the VMN's home network would be achieved.

In this respect, the situation is further complicated by the fact that the feature in question may also be understood such that "without performing MIP/NEMO Routing" applies not only to the routing performed by the mobile router but also to the routing of packets from and to a visiting mobile node. This would imply that the VMN does not run a MIP client, which is in clear contradiction to the disclosure in paragraphs [0044] and [0046] of the application as published.

1.5 The board therefore concludes that omitting from the above-mentioned feature (cf. point 1.1) the feature that the VMN runs its MIP client does not comply with
the requirement of Article 123(2) EPC. This deficiency applies to claim 1 of both requests.

2. As there is no allowable request, the appeal is to 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