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# Datasheet for the decision of 5 May 2011

Case Number:	Т 1917/07 - 3.5.05
Application Number:	99309563.7
Publication Number:	1011241
IPC:	H04L 29/06

Language of the proceedings: EN

# Title of invention:

Wireless access to packet-based networks

# Applicant:

LUCENT TECHNOLOGIES INC.

Headword: Wireless access/LUCENT

#### Relevant legal provisions:

EPC Art. 52(1), 54, 56, 84, 111(1), 123(2) RPBA Art. 13(1)

Relevant legal provisions (EPC 1973): EPC Art. 106, 107, 108

## Keyword:

"Inventive step - no (main and first auxiliary requests)"
"Clarity - no (first auxiliary request)"
"Admission of late-filed request - no (second auxiliary
request, not clearly allowable)"
"Clarity and support by the description - yes (third auxiliary
request)"
"Remittal to department of first instance - yes"

#### Decisions cited:

J 0010/07

#### Catchword:

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Beschwerdekammern

Boards of Appeal

Chambres de recours

**Case Number:** T 1917/07 - 3.5.05

# DECISION of the Technical Board of Appeal 3.5.05 of 5 May 2011

Appellant:	LUCENT TECHNOLOGIES INC.	
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 29 June 2007 refusing European patent application No. 99309563.7 pursuant to Article 97(1) EPC 1973.

Composition of the Board:

Chair:	Α.	Ritzka
Members:	P.	Corcoran
	D.	Prietzel-Funk

# Summary of Facts and Submissions

- I. This is an appeal against the decision of the examining division, dispatched on 29 June 2007, refusing the European patent application No. 99 309 563.7, publication No. EP 1 011 241.
- II. The decision under appeal was based on a set of claims 1 to 7 filed with the letter of 4 December 2006. The examining division found that claim 1 was not allowable due to lack of an inventive step in the light of the following document:
  - D3: R. Cáceres & V. N. Padmanabhan: "Fast and scalable wireless handoffs in support of mobile Internet audio", MOBILE NETWORKS AND APPLICATIONS, vol.3, no.4, pages 351-363, Baltzer Science Publishers BV, NL, 1998, ISSN 1383-469X.
- III. Notice of appeal was received at the EPO on 15 August 2007 with the appeal fee being paid on the same date. The written statement setting out the grounds of appeal was received at the EPO on 26 October 2007. With the statement setting out the grounds of appeal the appellant filed a new main request and an auxiliary request.
- IV. In the written statement setting out the grounds of appeal the appellant submitted that the claimed invention was patentable over D3, arguing inter alia that the Mobile IP protocol referred to in D3 did not provide for a home agent using a single care-of address (the claimed "second address") to tunnel packets to a mobile node that was no longer attached to base

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stations within the home domain. According to the appellant, the Mobile IP protocol either used multiple care-of addresses, i.e. one for each new point of attachment or had no means of forwarding/tunneling packets when a mobile device changed its point of attachment within a local subnet or else bypassed a home agent using so-called "route optimisation".

- V. In a communication accompanying a summons to oral proceedings to be held on 5 May 2011 the board gave its preliminary opinion that the appellant's requests were not allowable.
- VI. In said communication objections under Articles 84 and 123(2) EPC were noted with respect to the main and auxiliary requests.
- VII. Claim 1 of the main request was interpreted in the light of the description as seeking protection for a method according to which a wireless device having a home agent and a home address in its home domain was assigned a care-of address when it attached itself to a network via a base station in a foreign domain such that the assigned care-of address retained its validity as long as the wireless device remained within the same foreign domain even if the base station through which it was attached to the network changed.
- VIII. Based on the foregoing interpretation, the board was of the preliminary opinion that claim 1 of the main request lacked novelty or at least an inventive step, in particular having regard to the disclosure of D3. A similar objection was raised against claim 1 of the auxiliary request.

- IX. Referring to the appellant's submissions concerning the alleged differences between the claimed invention and the Mobile IP protocol (cf. IV above), the board noted that the use of a single care-of address to tunnel packets to a mobile node appeared to be restricted to the particular case where the mobile node remained within its current foreign domain. As soon as the mobile node moved to another foreign domain, a new care-of address would have to be assigned. Hence, the board was of the opinion that the present application would also require multiple care-of addresses for mobile nodes which crossed foreign domain boundaries.
- X. The board further noted that it was not inclined to concur with the interpretation of the Mobile IP standard given in the application according to which the mobile device was required to notify the home agent of its associated care-of address regarding its new point of attachment following each handoff of a mobile device to a base station not attached or linked via a node hosting the home agent (cf. published application: [0002]).
- XI. In the context of its observations concerning the Mobile IP standard, the board made reference *inter alia* to the following document cited in D3:
  - D6: C. Perkins, Editor, "IP mobility support", Internet Engineering Task Force (IETF), Request for Comments 2002, , pp.1-79, October 1996.

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D6 is cited as reference [22] in D3 and is also mentioned in the application (cf. published application: [0002]).

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- In the board's opinion the Mobile IP standard did not XII. require the home agent to be notified of the mobile device's associated care-of address following each handoff to a base station in a foreign subnet. According to D3, the standard only required a mobile device to send a location update message to a home agent in its home subnet whenever it changed the IP subnet to which it was attached (cf. D3: 3.1 Hierarchical mobility management, fourth paragraph thereof). With respect to D6, it was noted that said document related to the Mobile IP standard and that the board could not identify therein any disclosure of a requirement for the mobile device's care-of address to be changed every time the base station attachment of the device changed within a given subnet.
- XIII. With a letter of reply dated 5 April 2011, the appellant filed two further auxiliary requests.
- XIV. With a further letter dated 3 May 2011, the appellant enclosed a complete set of all the claim sets that it wished to have discussed at the oral proceedings.

These claim sets were as follows: A main request comprising claims 1 to 7 as submitted with the letter of 26 October 2007. A first auxiliary request comprising claims 1 to 7 as submitted with the letter of 26 October 2007. A second auxiliary request comprising claims 1 to 7 as submitted with the letter of 3 May 2011.

A third auxiliary request comprising claims 1 to 4 as submitted with the letter of 5 April 2011. A fourth auxiliary request comprising claims 1 to 10 as submitted with the letter of 3 May 2011. A fifth auxiliary request comprising claims 1 to 14 as submitted with the letter of 3 May 2011. A sixth auxiliary request comprising claims 1 to 9 as submitted with the letter of 5 April 2011.

XV. At the oral proceedings held as scheduled on 5 May 2011, the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request, or alternatively on the basis of the first or second auxiliary requests, all of said requests corresponding to those submitted with the letter of 3 May 2011, or alternatively on the basis of a third auxiliary request filed during oral proceedings.

> The main request and first auxiliary request submitted with the letter of 3 May 2011 correspond to the main request and first auxiliary request submitted with the letter of 26 October 2007, i.e. the written statement setting out the grounds of appeal. The third auxiliary request was filed during oral proceedings as auxiliary claim set "3a" and is an amended version of the third auxiliary request filed with the letter of 3 May 2011 which was initially submitted as an auxiliary request with the letter of 5 April 2011.

XVI. Claim 1 of the main request reads as follows: "A method of providing wireless access to a packetbased network, said method CHARACTERIZED BY:

defining a first domain (domain 1), said first
domain including a first group of base stations (BS5,
6 & 7);

providing a home agent (152) for a wireless device (114) within said first domain;

assigning a first address for delivery of a plurality of packets to said wireless device, said first address utilized when said wireless device is attached to said packet-based network through a base station included within said first domain;

receiving, at said home agent, a second address for said wireless device when said wireless device is attached to said packet-based network through any one of a number of base stations (BS8) excluded from said first domain; and

tunneling said plurality of packets from said home agent to the same second address through any one of a number of base stations excluded from said first domain."

XVII. Claim 1 of the first auxiliary request reads as follows: "A method of providing wireless access to a packetbased network, said method

CHARACTERIZED BY:

defining a first domain (domain 1) within a subnet, said first domain including a first group of base stations (BS5, 6 & 7);

providing a home agent (152) for a wireless device (114) within said first domain;

assigning a first address for delivery of a plurality of packets to said wireless device, said first address utilized when said wireless device is attached to said packet-based network through a base station included within said first domain; receiving, at said home agent, a second address for said wireless device when said wireless device is attached to said packet-based network through any one of a number of base stations (BS8) within the same subnet excluded from said first domain; and

tunneling said plurality of packets from said home agent to the same second address through any one of a number of base stations excluded from said first domain within the same subnet".

XVIII. Claim 1 of the second auxiliary request reads as follows:

"A method of providing wireless access to a packetbased network (100), said method comprising the steps of:

defining a first domain (DOMAIN 1), said first
domain including a first group of base stations (BS5;
8S6; BS7);

providing a home agent (HA; 152) for a wireless device (114) within said first domain (domain 1);

assigning a first address for delivery of a plurality of packets to said wireless device (114), said first address utilized when said wireless device (114) is attached to said packet-based network (100) through a base station (BS5; BS6; BS7) included within said first domain (DOMAIN 1);

using a singular second address for said wireless device (114) when said wireless device (114) is attached to said packet-based network (100) through a base station of a second domain (DOMAIN 2) excluded from said first domain; and

tunneling said plurality of packets from said home agent (HA; 152) to said second address for said wireless device (114) if said wireless device (114) is attached to said packet-based network (100) through said base station (BS8) of the second domain (DOMAIN 2) excluded from said first domain (DOMAIN 1), and maintaining host based routing for the plurality of packets to said wireless device (114) in the second domain by updating router and base station routing table entries via path setup messages".

XIX. Claim 1 of the third auxiliary request (filed as auxiliary claim set "3a" during oral proceedings before the board) reads as follows:

> "A method of providing wireless access to a packetbased network, said method comprising:

defining a first domain (domain 1), said first
domain including a first group of base stations (BS5,
6 & 7);

providing a home agent (152) for a wireless device (114) within said first domain:

assigning a first address for delivery of a plurality of packets to said wireless device, said first address utilized when said wireless device is attached to said packet-based network through a base station included within said first domain;

receiving, at said home agent, a second address for said wireless device when said wireless device is attached to said packet-based network through one of a plurality of base stations (BS8) in a second, foreign domain (domain 2);

tunneling said plurality of packets from said home agent using said second address for said wireless device provided said wireless device is attached to said packet-based network through one of the plurality of base stations in the second domain and when said wireless device is handed off from an old link with a first base station of the second domain to a new link with a second base station of the second domain,

updating routing table entries of routers in said second domain whose interfaces for packet delivery have changed due to the handoff of the wireless device within the second domain if a sequence number included in path setup messages in response to the handoff indicates that an existing routing table entry is less current than information element fields of the path setup message, wherin [*sic*] the sequence number is incremented for each handoff in the second domain".

XX. In its letter dated 3 May 2011 and during oral proceedings before the board the appellant made submissions relating to alleged differences between the claimed invention and the prior art of D3.

> In particular, it was submitted by the appellant that the claimed invention was based on the use of base stations with "layer 3" routing capabilities whereas the base stations of D3 were "layer 2" type devices which relied on link-layer routing rather than the use of IP protocol routing.

The appellant further submitted that the claimed invention used a single foreign agent per domain whereas D3 proposed a hierarchical concept using multiple levels of foreign agents.

XXI. At the end of the oral proceedings the chair announced the board's decision.

# Reasons for the Decision

 The appeal complies with the provisions of Articles 106 to 108 EPC 1973 which are applicable according to J 10/07 (cf. Facts and Submissions, item III. above). Therefore it is admissible.

#### Main request

- 2. Claim 1 preliminary observations
- 2.1 Claim 1 of the main request is directed towards a method of providing wireless access to a packet-based network. The first three steps of the claimed method, viz. defining a first domain, providing a home agent for a wireless device within said first domain and assigning a first address for delivery of a plurality of packets to said wireless device to be utilized when the wireless device is attached to the packet-based network through a base station within the first domain, relate to the provision of a home domain hosting a home agent for the mobile device and the assignment of a home address which is used to identify the device regardless of its point of attachment to the network such that packets destined for the mobile device are routed initially to the home domain substantially as disclosed, for example, in [0005] and [0011] of the published application.
- 2.2 The further steps of the method of claim 1, viz. receiving a second address for the wireless device and tunneling the plurality of packets from the home agent to the second address, relate to the assignment of a care-of address to the mobile device when it is

attached to the network via a base station in a foreign domain and the use of this address to forward packets destined for the mobile device using a protocol for packet tunneling substantially as disclosed, for example, in [0007], [0020] and [0023] of the published application.

- 2.3 The board notes that the claim wording relating to the second address, in particular the use of the expression "any one of a number of base stations excluded from said first domain" suggests that the same care-of address is used in respect of attachment to any base station outside the first domain. From the description, however, it is to be understood that a care-of address which is assigned upon attachment to a foreign domain only retains its validity as long as the wireless device is attached to the network via a base station in the same foreign domain and that a new care-of address will be assigned when the wireless device moves across the domain boundary to another foreign domain (cf. published application: [0007], [0020], [0023]).
- 2.4 With respect to formulation of claim 1 concerning "tunneling said plurality of packets from said home agent to the same second address <u>through</u> any one of a number of base stations excluded from said first domain" (emphasis added), the board notes that it cannot identify any disclosure in the application to the effect that delivery of packets to the wireless device comprises the tunneling of the packets <u>through</u> a base station as recited in the aforementioned claim formulation.

In the board's judgement, this formulation must be interpreted in the light of the description (cf. for example [0101] to [0104] of the published application) as specifying that, when the wireless device is attached to the network through any one of a number of base stations in the current foreign domain, data packets are tunnelled from the mobile device's home agent to its current foreign agent for delivery to the wireless device using the same second address, i.e. the care-of address assigned when the wireless device makes its initial attachment to the foreign domain.

## 3. Article 52(1) EPC

- 3.1 Notwithstanding the observations under 2.3 and 2.4 above, the matter for which protection is sought according to claim 1 of the main request is found to be defined with sufficient clarity to permit the question of compliance with the novelty and inventive step requirements of the EPC to be decided upon.
- 3.2 D3 relates to a handoff scheme for wireless devices, i.e. "mobile hosts" which communicate with base stations over wireless links (cf. D3: p.353, left-hand col., first paragraph). The handoff scheme of D3 is designed to be compatible with the Mobile IP standard (cf. D3: Abstract; p.351, right-hand col. second paragraph).

The reference to a "home subnet" (cf. D3: p.353, 3. Mobility management architecture, third paragraph) is judged to constitute an implicit disclosure of defining a first domain including a first group of base stations as recited in claim 1. The cited passage of D3 also refers to a home agent which is judged by the board to constitute an implicit disclosure of providing a home agent as recited in the claim.

In the board's judgement, assigning a first address for delivery of a plurality of packets to said wireless device as recited in claim 1 is implicit in the references to a home subnet and a home agent for the mobile device, particularly in view of the fact that D3 aims to provide a scheme that is compatible with the Mobile IP standard which prescribes the assignment of a home address to a mobile device (cf. D6: Section 1.5. New Architectural Entities; Section 1.6 Terminology, entry for "Home Address"). On this basis, D3 is found to disclose a method of providing wireless access to a packet-based network which comprises, at least implicitly, the first three steps of the method of claim 1 (cf. 2.1 above).

- 3.3 The further steps of the method of claim 1 relate to the provision of a "care-of address" which is assigned to the mobile device when it is attached to the network via a base station in a foreign domain and which is used to forward packets to the mobile device using a protocol for packet tunneling (cf. 2.2 above).
- 3.4 According to D3, a second address (i.e. a care-of address) is notified to the mobile device's home agent when the mobile device is attached to the network through any one of a number of base stations in a foreign domain and data packets are forwarded from the home agent to the current foreign agent for delivery to the mobile device using the second address (cf. D3: p.353, 3. Mobility management architecture, third

paragraph). In particular, D3 discloses the assignment of a care-of address to a mobile device ("mobile host") when it attaches itself to the network in a foreign domain ("foreign subnet") which, in turn, implies attachment to the network through any one of a number of base stations excluded from the first domain (i.e. the mobile device's "home subnet"). On this basis, D3 is found to disclose receiving a second address for the wireless device as recited in claim 1.

- 3.5 D3 discloses forwarding packets from the home agent to the second address but does not, however, specify the use of "tunneling" as recited in claim 1. In the absence of a direct and unambiguous disclosure relating to the employment of a tunneling protocol, the board finds that this feature of claim 1 is novel over the disclosure of D3.
- 3.6 In the present context, "tunneling" means encapsulating packets and routing them to a decapsulating agent which decapsulates them and delivers them to their ultimate destination (cf. D6: Section 1.6 Terminology, entry for "Tunnel"). As acknowledged in the application (cf. published application: [0002] and [0101]) and as may be confirmed by referring to D6 (cf. D6: Abstract; 1.5. New Architectural Entities; Section 4.1, first paragraph)), such "tunneling" is a known technique which is used in the context of the Mobile IP standard when forwarding packets from a home agent to a care-of address.
- 3.7 In the board's judgement, employing a tunneling protocol when forwarding packets from a home agent to a care-of address for a wireless device attached to a

foreign domain represents an obvious design option in the context of the handoff scheme of D3, in particular when it is taken into account that said document aims to provide a scheme that is compatible with the Mobile IP standard. Hence, the board concludes that the skilled person starting from D3 would not require the exercise of inventive skill to arrive at the subjectmatter of claim 1.

- 4. Observations re appellant's submissions
- 4.1 The appellant's submissions concerning alleged differences between the subject-matter of claim 1 of the main request and D3 (cf. Facts and Submissions, item XX. above) failed to convince the board for the reasons which follow.
- 4.2 Concerning the submissions to the effect that the base stations of D3 are "layer 2" type devices which rely on link-layer routing rather than the use of IP protocol routing, it is first of all noted that such differences as are alleged to exist between the claimed invention and the disclosure of D3 in this respect are not expressed in any discernible form in the wording of claim 1.

Moreover, D3 states explicitly that the base stations disclosed therein are "network layer routers", i.e. "layer 3" devices in the terminology used by the appellant in its submissions, rather than "link-layer bridges", i.e. "layer 2" devices in the appellant's terminology, (cf. D3: p.351, right-hand col. second paragraph). D3 further discloses that the base stations comprise routing table entries for the mobile hosts and an IP module (cf. D3: p.354: right-hand col., items 2 and 4.; p.355, 4.1 Base station).

The board thus concludes that there is no objective basis in D3 which would support the assertions of the appellant to the effect that the base stations of disclosed in said document are "layer 2" type devices.

4.3 Concerning the submissions to the effect that the claimed invention uses a single foreign agent per domain whereas D3 proposes a hierarchical concept using multiple levels of foreign agents, it is first of all noted that such differences as are alleged to exist between the claimed invention and the disclosure of D3 in this respect are not expressed in any discernible form in the wording of claim 1.

> Moreover, D3 states that each subnet may have one or more subnet foreign agents (cf. D3: p.353, 3.1 Hierarchical mobility management, fifth paragraph). On this basis the board judges that D3 includes within the scope of its disclosure embodiments in which there is only one foreign agent per subnet (or "domain" in the terminology of the present application according to which the terms "domain" and "subnet" are substantially conterminous, cf. observations under 6.1 below).

4.4 The appellant referred to the proposal in D3 to provide a hierarchy of foreign agents in a "domain". However, this is in the particular context of a situation where a plurality of subnets form part of a single "administrative domain" and where it is desired to make movement between subnets within the same administrative domain transparent to the home domain (cf. D3: p.353, 3.1 Hierarchical mobility management). The term "administrative domain" as used in the context of D3 thus has a somewhat different meaning from the term "domain" as used in the present application where it is essentially conterminous with the term "subnet" (cf. observations under 6.1 below).

Furthermore, the board notes that the disclosure of D3 does not exclude arrangements in which there is only one subnet per administrative domain and which would thus require only a single foreign agent per "administrative domain" rather than a hierarchy of foreign agents.

- 4.5 On the basis of the preceding observations the board concludes that even if the use of a single foreign agent per domain had been explicitly specified in the wording of claim 1, such a specification would not have changed its findings with respect to the question of inventive step.
- 5. In view of the foregoing, the subject matter of claim 1 of the main request is found to lack an inventive step. Consequently, the request is not allowable.

First auxiliary request

#### 6. Article 84 EPC

6.1 Claim 1 of the first auxiliary request specifies "defining a first domain ... within a subnet". According to [0005] of the published application, domains are typically defined to incorporate a subnet having a plurality of base stations. According to

[0017], each domain is in effect a local subnet. The terms "domain" and "subnet" are thus used in a substantially conterminous manner in the present application.

- 6.2 There is no apparent disclosure of "defining a first domain ... within a subnet". In the board's judgement, this formulation is unclear. Moreover, the subsequent references in the claim to "the same subnet" lead to additional clarity problems.
- 6.3 In particular, the specification in the context of receiving a second address that the wireless device is attached to the network "through any one of a number of base stations ... within the same subnet excluded from <u>said first domain</u>" (emphasis added) is unclear. The apparent intention is to specify that the device is attached through a plurality of base stations in a second, i.e. foreign, subnet but because there is only one antecedent subnet defined in the claim, viz. the subnet specified in relation to the first domain the expression "within the same subnet excluded from said first domain" is semantically confusing.

Similar considerations apply to the expression "any one of a number of base stations excluded from said first domain <u>within the same subnet</u>" (emphasis added) as used in the context of the tunneling step of the claim.

# 7. Article 52(1) EPC

7.1 To the extent that the aforementioned semantic unclarities in claim 1 are disregarded, said claim effectively seeks protection for substantially the same subject-matter as claim 1 of the main request. Consequently the objection raised against claim 1 of the main request (cf. 3. above) also applies against claim 1 of the first auxiliary request.

8. In view of the foregoing, claim 1 of the first auxiliary request is found not to comply with the clarity requirements of Article 84 EPC and, insofar as the subject-matter of said claim can be understood, it is found to lack an inventive step. The request is therefore not allowable.

#### Second auxiliary request

9. The second auxiliary request was filed at a very late stage of the proceedings, i.e. with the letter of 3 May 2011. Said request is therefore to be considered as an amendment to the party's case which may only be admitted and considered at the board's discretion (Article 13(1) RPBA).

# 10. *Claim 1*

10.1 Claim 1 introduces new subject-matter with respect to the corresponding claims of the requests submitted with the statement of the grounds of appeal and the letter dated 5 April 2011. In particular, the concluding feature of claim 1 of the request specifies "maintaining host based routing for the plurality of packets to said wireless device (114) in the second domain by updating router and base station routing table entries via path setup messages". 10.2 Although the term "host-based routing" is used in the description, for example in [0007], [0022] and [0029] to [0031], there is no identifiable explanation as to what exactly it means and hence, the technical limitation which it implies cannot be determined in a reliable manner from the disclosure. Neither did the appellant provide any evidence that said term was an established term of art whose meaning would have been self-evident to the skilled person in the given context. Therefore, in the board's judgement, the meaning of the term "host based routing" in the given context is unclear (Article 84 EPC).

- 10.3 With respect to the inventive step requirement of Article 52(1) EPC, it is noted that a specification comprising an unclear term such as "host based routing" (cf. observations under 10.1 above) cannot be relied on to distinguish the claimed invention from the prior art.
- 10.4 It is further noted in this regard that D3 discloses that a foreign agent can maintain per-mobile host routing entries (cf. D3: paragraph bridging p.353 and 354) and that handoff protocol messages are exchanged in order to update routing table entries when handoff between base stations occurs (cf. D3: p.354, 3.2 Local handoff protocol, in particular items 2. and 4. in the right-hand col. of p.354 relating to the creation and deletion of routing table entries). In the absence of any explanation in the present application as to what exactly the "host based routing" implies in technical terms, the board judges that the maintaining of permobile host routing entries as disclosed in D3 can be construed as a form of "host based routing" inasmuch as

it is a method of routing based on information pertaining to the mobile host.

Similarly, although D3 does not use the term "path setup messages", the board judges that the handoff protocol messages disclosed in D3 can be construed as a form of "path setup messages" inasmuch as they are messages used to set up the routing path to the mobile host by updating the routing table entries during a handoff between base stations.

Hence, despite the differences in terminology, the board could not identify any effective difference at a substantive level between the final feature of claim 1 and the aforementioned disclosure of D3 concerning the maintaining of per-mobile host routing entries and the updating of routing table entries during a handoff between base stations using handoff protocol messages.

11. Claim 1 of the second auxiliary request thus introduces new subject-matter which is not clearly allowable. In view of the request having been filed at such a late stage in the proceedings and having particular regard to the need for procedural economy, the board decided to exercise its discretion under Article 13(1) RPBA by not admitting this request into the proceedings.

Third auxiliary request

12. The third auxiliary request which was filed during oral proceedings before the board is an amended version of an earlier request which was initially filed with the letter of 5 April 2011 (cf. Facts and Submissions, items XIV. and XV. above). Claim 1 of the present

version of the request additionally incorporates a number of amendments submitted in response to the board's observations during oral proceedings. Taking into account that the initial version of the request had been submitted in a timely manner prior to the oral proceedings and being satisfied that the aforementioned amendments overcame its objections under Article 84 EPC and did not infringe Article 123(2) EPC, the board decided to exercise its discretion under Article 13(1) RPBA by admitting this request into the proceedings.

#### 13. Article 84 EPC

- 13.1 The first four steps of the method of claim 1 of the third auxiliary request, viz. defining a first domain, providing a home agent for a wireless device within said first domain, assigning a first address for delivery of a plurality of packets to said wireless device, and receiving, at said home agent, a second address for said wireless device, recite subject-matter substantially similar to the corresponding steps of claim 1 of the main request and are judged to differ only in that the wording used in the present claim 1 includes a number of minor clarifying amendments. Support for these claim features can be found in [0005], [0007], [0011] and [0020] of the published application.
- 13.2 The claimed method further comprises a tunneling step for which a basis is found in [0023] of the published application. The specification relating to the wireless device being handed off from an old link with a first base station of the second domain to a new link with a second base station of the second domain is supported by [0095] of the published application.

- 13.3 The final step of the claimed method relates to updating routing table entries of routers in said second domain whose interfaces for packet delivery have changed due to the handoff of the wireless device within the second domain as disclosed in [0055] of the published application. The qualifying clause "if a sequence number included in path setup messages in response to the handoff indicates that an existing routing table entry is less current than information element fields of the path setup message, wherin [*sic*] the sequence number is incremented for each handoff in the second domain" finds support in [0065], [0066], [0080] and [0083] of the published application.
- 13.4 In view of the foregoing, the board is satisfied that claim 1 of the third auxiliary request defines the matter for which protection is sought in a manner compliant with the clarity and support requirements of Article 84 EPC.

# 14. Article 123(2) EPC

14.1 Having regard to the fact that the passages of the description providing a basis for the amendments to claim 1 of the request form part of the originally filed application documents, the board is also satisfied that said amendments do not infringe Article 123(2) EPC.

# 15. Remittal

15.1 Claim 1 of the third auxiliary request includes subject-matter relating to path setup messages which

include sequence numbers that are incremented each time the mobile device is handed off (cf. [0065] and [0066] of the published application) and that are used in the context of updating routing table entries (cf. [0080] and [0083] of the published application). This subjectmatter was introduced into claim 1 for the first time in an auxiliary request filed with the letter of 5 April 2011 and was further amended during oral proceedings before the board (cf. Facts and Submissions, items XV. above).

15.2 Under the given circumstances, the board judges that it would not be appropriate for the question of compliance with the further requirements of the EPC, in particular the inventive step requirement thereof, to be decided upon in the context of the present appeal proceedings. The board therefore decides to exercise its discretion under Article 111(1) EPC to remit the case to the department of first instance for further prosecution.

# Order

# For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- The case is remitted to the department of first instance for further prosecution.

The Registrar:

The Chair:

K. Götz

A. Ritzka