

**Internal distribution code:**

- (A)  Publication in OJ  
(B)  To Chairmen and Members  
(C)  To Chairmen  
(D)  No distribution

**D E C I S I O N**  
**of 21 July 2006**

**Case Number:** T 0156/05 - 3.5.03

**Application Number:** 97305272.3

**Publication Number:** 0821507

**IPC:** H04L 12/28

**Language of the proceedings:** EN

**Title of invention:**

Protocol converter and router for multi-mode wireless data communications

**Applicant:**

LUCENT TECHNOLOGIES INC.

**Headword:**

Wireless protocol converter/LUCENT

**Relevant legal provisions:**

EPC Art. 123(2)

**Keyword:**

"Added subject-matter - no"

**Decisions cited:**

-

**Catchword:**

-



Case Number: T 0156/05 - 3.5.03

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.03  
of 21 July 2006

**Appellant:** LUCENT TECHNOLOGIES INC.  
600 Mountain Avenue  
Murray Hill, New Jersey 07974-0636 (US)

**Representative:** Sarup, David Alexander  
Lucent Technologies NS UK Limited  
5 Mornington Road  
Woodford Green, Essex IG8 0TU (GB)

**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 23 November 2004  
refusing European application No. 97305272.3  
pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** A. S. Clelland  
**Members:** D. H. Rees  
M.-B. Tardo-Dino

## Summary of Facts and Submissions

- I. This is an appeal from the decision of the examining division, dispatched on 23 November 2004, to refuse patent application number 97 305 272.3, publication number 0 821 507. The reason given for the refusal was that the application did not meet the requirements of Article 123(2) EPC in that independent claims 1 and 6 contained subject-matter which extended beyond the content of the application as filed. It was additionally stated that if the claimed subject-matter were to be amended to overcome the objection under Article 123(2) EPC it would not involve an inventive step.
- II. Notice of appeal was filed and the fee paid on 19 January 2005. A statement setting out the grounds of the appeal was submitted in a letter dated 24 and received 26 January 2005.
- III. The appellant requests that the decision be set aside and a patent granted. The text on the basis of which grant is requested has not been explicitly specified; however, the text as refused is as follows:
- claims 1 to 6 received with a letter dated 31 December 2003 and received on 5 January 2004;
- description pages  
4, 5, 7 and 8 as originally filed;  
1 to 3, 6 and 9 submitted on 3 January 2002;
- drawing sheets  
1 and 2 as originally filed.

The independent claims read as follows:

"1. A method for enabling end-to-end data communications across a plurality of data networks (107) between at least one wireless communications device (108) and at least one fixed communications device (101), said method including the steps of:  
a first converting step, converting a first data message of a first wireless network protocol to a second data message of a second wireless network protocol;  
a first sending step, sending the second data message from the wireless communications device to a wireless network;  
a second converting step, converting the second data message of the second wireless network protocol to a third data message of a fixed communication device protocol;  
a second sending step, sending the third data message from the wireless network across a wired network to the fixed communications device.

6. A method for enabling end-to-end data communications across a plurality of data networks (107) between at least one wireless communications device (108) and at least one fixed communications device (101), said method including the steps of:  
converting a first data message of a wired network protocol to a second data message of a first wireless network protocol;  
sending the second data message to said wireless communications device; and

converting the second data message of the first wireless network protocol to a third data message of a second wireless network protocol."

### **Reasons for the Decision**

1. The invention concerns communication between two devices ("wireless communications device" 108 and "fixed communications device" FTD 101 in Figure 1) using both a wireless and a fixed network, for example "Network A" and "LAN" in Figure 1. The description discusses the possibility of using any one of a plurality of networks for the wireless transmission (networks "A" to "X" in Figure 1), but only one wireless transmission step is disclosed, i.e. there is no sequence of wireless transmissions in the "end-to-end data communications".
2. Current independent claim 1 specifies "converting a first data message of a first wireless network protocol to a second data message of a second wireless network protocol." Claim 6 includes an equivalent feature. The impugned decision is not completely clear on this point but it appears that the examining division concluded that this implied there was a wireless message received, converted and sent wirelessly again, so that the claim required a sequence of two wireless communication steps. Since such a sequence was not disclosed the claimed features constituted added subject-matter.
3. In the statement of grounds of appeal the appellant points to two specific disclosures:

"The end-processor routes the ATCS data message to the protocol converter. Since protocol conversion is needed, the user data is extracted by the protocol converter from the ATCS frame and put into a CDPD frame that has necessary CDPD network information. The CDPD frame is then routed by the protocol converter to the CDPD RF modem ..." (column 6, lines 30 to 37 of the published application);

"Although the invention is described here by using the ATCS-CDPD description, it is clear that it is not limited in scope to these two wireless data networks, but can be applied to a plurality of wireless data networks to enable wireless data communications across a plurality of wireless data network protocols irrespective of the wireless protocol usable by the fixed communications device or the end processor of the wireless communications device," (column 6, lines 50 to 58).

Thus, it is argued, the application discloses a conversion from the ATCS wireless data network protocol to the CDPD wireless data network protocol.

4. A wireless message will normally conform to a number of protocols, a so-called "protocol stack". The role of an RF modem is to convert individual symbols prepared by the sending device into radio signals, i.e. to implement the "physical layer" according to the standard ISO OSI 7-layer reference model of network communications. It is therefore clear, on reflection, that a sending device must first format the message according to the higher layers of the OSI model, in particular it must internally create "frames", the term

normally used for the entities at the "data link layer", which is the next layer above the physical layer. Thus a frame will be passed from the element of the sending device which formulates it to the RF modem. The frame has been formatted according to the wireless data link layer protocol. Thus this frame is a "data message of a first wireless network protocol" even though it is being transported within the device. In the present application an element of the device formulates an ATCS wireless data frame which is passed to a protocol converter which takes the content of this frame and reformulates it as a CDPD wireless data frame. This is disclosed in the passages cited by the appellant and the board concludes that the skilled person would understand the claimed feature objected to by the examining division in this sense.

5. Thus this feature does not contain subject-matter which extends beyond the content of the application as filed, and the decision to refuse the application is unfounded. The additional comments made by the examining division on the subject of inventive step relate to the hypothetical case where the feature objected to has been removed. Hence the argument does not apply to the actual claimed subject-matter.
  
6. Although the board does not agree with the reasons given in the decision to refuse the application, it does not appear to the board that the application is presently in a state appropriate for grant of a patent. Since it is not the role of a board of appeal to act as an alternative examining division the application must be remitted to the examining division for further prosecution.

**Order**

**For these reasons it is decided that:**

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

The Registrar:

The Chairman:

D. Magliano

A. S. Clelland