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**D E C I S I O N**  
**of 30 March 2006**

**Case Number:** T 0584/04 - 3.5.03

**Application Number:** 95927388.9

**Publication Number:** 0771500

**IPC:** H04L 12/28

**Language of the proceedings:** EN

**Title of invention:**

Network interfacing apparatus and method

**Applicant:**

ALLIED TELESYN INTERNATIONAL CORP.

**Opponent:**

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**Headword:**

Network Interfacing Apparatus/ALLIED TELESYN INTERNATIONAL

**Relevant legal provisions:**

EPC Art. 56

**Keyword:**

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

**Decisions cited:**

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**Catchword:**

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Case Number: T 0584/04 - 3.5.03

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.03  
of 30 March 2006

**Appellant:** ALLIED TELESYN INTERNATIONAL CORP.  
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**Representative:** Fiener, Josef  
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**Decision under appeal:** Decision of the examining division of the  
European Patent Office posted 30 October 2003  
refusing European application No. 95927388.9  
pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** A. Clelland  
**Members:** F. van der Voort  
M.-B. Tardo-Dino

## Summary of Facts and Submissions

- I. This appeal is against the decision of the examining division to refuse European patent application 95 927 388.9 (EP 0 771 500), which was published as international application WO 96/03822 A pursuant to Article 158(1) EPC.
- II. The reason for the refusal was that the subject-matter of independent claims 1 and 11 of a main request and of claim 1 of an auxiliary request did not involve an inventive step (Articles 52(1) and 56 EPC) having regard to the disclosure of the following documents:
- D1: US 5 177 788 A; and
- D2: US 5 311 593 A.
- III. In the statement of grounds of appeal the appellant implicitly requests that the impugned decision be set aside and that a patent be granted either on the basis of claims 1 to 15 as filed with letter of 13 February 2002 (main request) or on the basis of claims 1 to 10 filed in the course of the oral proceedings before the examining division (auxiliary request).
- IV. The appellant was summoned by the board to oral proceedings. In a communication accompanying the summons, the board gave a reasoned preliminary opinion that the subject-matter of claims 1 and 11 of the main request and claim 1 of the auxiliary request lacked an inventive step (Articles 52(1) and 56 EPC).

- V. With fax letter dated 28 March 2006 the appellant was informed about a change in the composition of the board.
- VI. With fax letter dated 29 March 2006 the appellant informed the board that he would not attend the oral proceedings.
- VII. Oral proceedings were held on 30 March 2006 in the absence of the appellant. After deliberation, the board's decision was announced.
- VIII. Claim 1 of the main request reads as follows:

"A network interfacing apparatus comprising:

a plurality of working ports (34), not directly connected to each other, coupled to a plurality of nodes (22);

a repeater (36) for coupling to the working ports (34);

an address table (40; 86) for storing addresses of said working ports (34);

an attachment port (30) coupled to a network for receiving an incoming information packet therefrom, and sending an outgoing information packet thereto, said incoming packet containing a destination address;

an incoming packet controller (38) coupled to said address table (40, 86), said attachment port (30), said repeater (36), and said working ports (34) through said repeater (36), said controller (38) determining whether said destination address matches any of the addresses stored in said address table (40), and in response to a destination address match, said controller (38) sending said incoming packet to said working ports (34);

a packet scrambler (82) coupled to the incoming packet controller (38) for providing a scrambled information packet so that in response to a destination address match, the corresponding working port (34) receives the incoming information packet and at least one other working port (34) receives the scrambled information packet; and

an outgoing packet controller (42) coupled to said address table (40; 86), said attachment port (30), said repeater (36), and said working ports (34) through said repeater (36), said outgoing controller (42) receiving said outgoing information packet from one of said working ports (34), and determining whether an outgoing address contained in said outgoing packet matches any of the addresses stored in said address table (40, 86), and if no outgoing address match is found, said controller (42) sending said outgoing packet to said network via said attachment port (30), characterized by:

a cascade interface (100) for coupling external working ports (34) to said repeater (36) to increase the number of working ports (34) interfaced by said apparatus."

Claim 1 of the auxiliary request differs from claim 1 of the main request in that reference signs "36" and "100" are replaced by "36a" and "100a", respectively, and in that the characterising feature is replaced by:

"a cascade interface (100a) for coupling external working ports (34b) of another apparatus (20b) having a second cascade interface (100b) via a bidirectional data line (310) connecting these two cascade interfaces (100a and 100b) to said repeater (36a) to increase the

number of working ports (34b) interfaced by said apparatus (20a)."

## **Reasons for the Decision**

1. *Inventive step (main and auxiliary requests)*
  - 1.1 Claim 1 is delimited with respect to D1, see the appellant's letter of 13 February 2002. The description acknowledges D1 at page 2. The board sees no reason to question this acknowledgement and considers that D1 (see, in particular, Figs. 3 to 5) discloses a network interfacing apparatus including the features of the preamble of claim 1 of both requests.
  - 1.2 The characterizing portion of claim 1 of the main request defines a cascade interface for coupling external working ports to the repeater to increase the number of working ports interfaced by the apparatus.
  - 1.3 The problem underlying the claimed subject-matter may thus be seen in increasing the number of working ports the network interfacing apparatus disclosed in D1 is able to interface (see also the application as published, page 4, lines 2 to 6, and page 11, line 27 to page 12, line 3). The formulation of this problem does not contribute to an inventive step, since it is fully in line with the common ongoing pursuit of increasing the capabilities of existing networks, such as the local area network (LAN) of D1.

1.4 According to D1, Fig. 3 and col. 5, lines 49 to 52 and 65 to 67, the transmit ports 60, 61 of the repeater 46 of the LAN are connected to input ports of further repeaters "DEPT C RPTR.", "DEPT D RPTR.". No information on further connections, if any, to these further repeaters is given.

However, in relation to "a typical LAN set up" (Fig. 1 and col. 1, lines 18 to 35), it is stated that repeaters are devices which regenerate LAN signals received at the repeater input and then output the regenerated signals to individual stations or nodes and that repeaters thus extend the maximum network radius.

1.5 Hence, when faced with the above-mentioned problem, a skilled person would apply this teaching given in relation to Fig. 1 to the network of Fig. 3 by coupling additional individual stations via the further repeaters "DEPT C RPTR.", "DEPT D RPTR." to the network including repeater 46 in order to extend the maximum network radius. The number of working ports interfaced by the network interfacing apparatus would thereby be increased, each of these further repeaters constituting then a cascade interface as defined in claim 1 of the main request. Hence, the skilled person would arrive at the subject-matter of claim 1 of the main request without the exercise of any inventive skill.

1.6 Claim 1 of the auxiliary request adds the features that the external working ports belong to another apparatus which also includes a cascade interface, that the two cascade interfaces are connected by means of a bidirectional data line, and that the first cascade

interface is suitable for coupling the external working ports via the bidirectional data line.

1.7 However, in D1, since each repeater operates bidirectionally, i.e. supports data transmission and data reception (see col. 5, lines 35 to 40 and Fig. 3 (transmit/receive ports 42a, 44a, 46a) and col. 7, lines 13 to 22 and Fig. 4 (receive/transmit ports 1-N)), it would have been obvious to a skilled person to connect the repeater 46 to the above-mentioned further repeaters by means of bidirectional data lines and, in order to even further extend the maximum network radius, to couple the further repeaters to yet further repeaters of other apparatuses in the same way. The external working ports of the latter repeaters would then be coupled via the former repeaters and the bidirectional data lines to the repeater 46. The skilled person would thus arrive at the subject-matter of claim 1 of the auxiliary request without the exercise of any inventive skill.

1.8 With the statement of grounds of appeal the appellant submitted two arguments in support of an inventive step, the first being the fact that **D2** was not cited in the search report against claim 6 as originally filed, on which the characterizing portion of claim 1 of the present requests was based, and the second that a corresponding US patent had been granted which included claims broadly identical to the present claims and wherein both D1 and D2 were taken into consideration. The first argument is however not relevant to the reasoning given above, which is based on **D1**. The second argument is in itself of no relevance to the



examination of a European patent application. The arguments are therefore not convincing.

- 1.9 It follows that the subject-matter of claim 1 of the main and auxiliary requests lacks an inventive step (Articles 52(1) and 56 EPC).
2. In view of the above, neither of the requests on file can be allowed.

## **Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:

D. Magliano

A. S. Clelland