Datasheet for the decision
of 18 April 2012

Case Number: T 1077/08 - 3.5.05
Application Number: 03726823.2
Publication Number: 1504392
IPC: H04L 29/06
Language of the proceedings: EN
Title of invention: Paid access to a local area network
Applicant: Thomson Licensing
Headword: Pay access to LAN using billing agent/THOMSON LICENSING

Relevant legal provisions (EPC 1973): EPC Art. 56
Keyword: "Inventive step - no"
Decisions cited: -
Catchword: -
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DECISION
of the Technical Board of Appeal 3.5.05
of 18 April 2012

Appellant: Thomson Licensing
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Composition of the Board:
Chairman: A. Ritzka
Members: P. Cretaine
G. Weiss
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division dispatched 25 January 2008, refusing European patent application No. 03 726 823.2. The decision was based on the ground that the independent claims of the main and auxiliary requests did not involve an inventive step having regard to the disclosure of D2: WO 00/76249.

II. Notice of appeal was submitted on 27 March 2008 and the appeal fee was paid on the same day. The statement setting out the grounds of appeal was submitted on 3 June 2008. Both documents were filed by fax with confirmation copy.

III. The appellant (applicant) requested that the decision under appeal be set aside and that a patent be granted based, as a primary request, on claims 1 to 12 filed on 5 December 2007 at the oral proceedings before the examining division, or, as a secondary request, on claims 1 to 8 filed with the statement setting out the grounds of appeal.

IV. In a communication accompanying a summons to oral proceedings to be held on 18 April 2012, the board gave its preliminary opinion that the subject-matter of the claims according to both requests did not involve an inventive step, having regard to the disclosure of D2 taken in combination with D5: EP 0 765 068.
V. With a letter of reply dated 16 March 2012, the appellant requested that it be allowed under Rule 4 EPC to use French during the oral proceedings. The appellant did not provide any arguments in response to the Article 56 EPC 1973 objections raised by the board.

VI. At the oral proceedings held as scheduled on 18 April 2012, the appellant withdrew its secondary request filed with the statement setting out the grounds of appeal.

VII. The appellant thus requests that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 12 filed on 5 December 2007 as sole request.

VIII. Claim 1 of that request reads as follows:

"A method for providing access to a Local Area Network (LAN), comprising the successive steps of:

receiving (100) in the LAN (20) a request from a user for access, the request including identification of a Billing Agent (26) that maintains an account debited in accordance with access charges incurred by the user;

querying (102, 106) the Billing Agent (26) to obtain its authenticating certificate and forwarding (110) the certificate to the user;

receiving (120) from the user a Personal Identifier (PIN) encrypted in accordance with the Billing Agent’s authenticating certificate;"
forwarding (121) PIN to the Billing Agent (26) for authentication, and upon successful authentication;

granting (126, 132) the user access to the LAN while the billing agent debits the user's account for such access."

The request includes a further independent claim 9 seeking protection for a corresponding apparatus.

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

Reasons for the Decision

1. The appeal is admissible.

2. Inventive step

2.1 Prior art

D2 discloses a method for mobile internet access (see Figure 2) comprising the following steps:
- a mobile terminal user sends an access request to a router in a wireless LAN,
- the router sends an IP address routing prefix to the mobile terminal which builds an IP address based on it,
- the mobile terminal user sends e-cash together with his IP address to a control point connected to the router,
- the control point contacts the e-cash provider to check the amount and authenticity of the e-cash,
- upon successful check of the e-cash, the control point transmits an authorisation message to the router for allowing access to the internet through the wireless LAN to the mobile terminal user. Alternatively, the mobile terminal user may send a password or certificate instead of e-cash, to be checked by a foreign network operator.

D5 discloses a system (see Figure 1) wherein a user accesses the internet (102) through a LAN (113) connected to a web server (114), (see column 5, lines 22-24). In one embodiment (see column 7, lines 18 to 21; column 8, lines 26 to 32; Figures 8-10 in combination with column 10, lines 3 to 37), the user first accesses an internet service provider (107) over the internet, and the provider then provides the user with a 900 number to call for billing the access to the internet. The user then clicks on an icon of its telephone company and is connected to a telephone confirmation screen which requests the user to provide the 900 number, its ID and its billing telephone number with associated telephone company password, the latter (telephone number and company password) being encrypted with the telephone company's public key. The user-entered information is transmitted to the telephone company which decrypts the telephone number and the telephone company password with its private key, thereby authenticating the user. The telephone company then dials the 900 number, charges the user for the call and credits the provider. A provider's screen is then made accessible to the user.

2.2 D2 represents the closest prior art since it discloses a method and apparatus having a similar purpose to the
claimed invention, i.e. providing user pay access to a LAN, and uses an entity external to the LAN for billing purposes.

In that respect, D2 discloses, expressed in terms of the essential features of claim 1 of the present sole request, a method for providing access to a Local Area Network (see D2, page 6, lines 8 to 11) comprising the successive steps of:
- receiving in the LAN a request from a user for access (see D2, page 7, lines 1 to 21: the user contacts a LAN through one of its routers and sends it an amount of e-cash), the request including identification of a Billing Agent (see D2, page 7, lines 17 to 28: it is implicit from this passage that the request with transmitted e-cash identifies the bank responsible for the e-cash since the bank has to be contacted by the router; the bank represents a billing agent since it will transfer an amount corresponding to the e-cash to the account of the LAN provider),
- querying the billing agent to authenticate the e-cash and, upon successful authentication of the e-cash by the billing agent, granting the user access to the LAN (see D2, from page 7, line 26 to page 8, line 5) for a time duration or a data amount corresponding to the amount of the e-cash (page 8, lines 16 to 19).

The differences between the subject-matter of claim 1 of the present sole request and the disclosure of D2 are that, in the former:

a) the billing agent maintains an account debited in accordance with access charges incurred by the user, and
b) the LAN queries the billing agent to obtain its authenticating certificate and forwards the certificate to the user, the user sends to the LAN its PIN encrypted in accordance with the certificate, the LAN forwards the PIN to the billing agent for authentication, and upon successful authentication the user is granted access to the LAN and the billing agent debits the user's account.

The technical effects of these distinguishing features are that:
- the user is freed of the necessity of resending an e-cash payment when the time or data amount bought with its previous e-cash payment is exhausted; and
- payment is secure since the use of the user's PIN ensures that only the user can order its account to be debited, and since the PIN is transmitted in encrypted form to the billing agent which is the only entity able to decrypt it.

Based on these technical effects, the objective technical problem can be expressed as how to ensure a flexible and secure payment for LAN access. The board notes that the appellant agreed with that formulation of the objective technical problem.

Starting from D2 as closest prior art and trying to solve this problem, the skilled person would look into prior-art documents related to network pay access in general and not only to LAN pay access since the problem is not linked to the size of the area covered by the network to which access is requested.
The skilled person would then come across document D5 which relates to a billing system for internet access. In particular D5 teaches (see column 10, lines 3 to 37) that the user, while requesting access to the internet network through an Internet Service Provider (ISP), enters its billing telephone number and associated telephone company password, both encrypted with the telephone company's public key, in a telephone confirmation screen. The user-entered information is transmitted to the telephone company which decrypts the user's phone number and password by applying its private key to authenticate the user. If the user is authenticated, the telephone company dials the ISP's 900 billing number and charges the user for the call and credits the ISP. The billing agent defined in claim 1 of the present sole request can thus be read as the telephone company of the scheme in D5. It is implicit in D5 that the identification of the telephone company is sent by the user to the network, since the user-entered information has to be sent to the telephone company by the network (see from column 7, line 57 to column 8, line 12). D5 further describes (see column 10, lines 12 to 17) that the user's billing telephone number and associated telephone company password (which is equivalent to the user's PIN defined in claim 1 of the present sole request) are automatically encrypted with the telephone company's public key. The features that the network queries the certificate of the billing agent and forwards it to the user for encrypting its PIN are thus not explicitly disclosed by this passage of D5. However, they appear to be readily derivable for the skilled person who would consider them as an obvious alternative, especially since the term "automatically" could be
interpreted equally as meaning having the password encrypted at the user's appliance.

Therefore, by applying the teaching of D5 in respect of a pay network access scheme to the LAN access method of D2, the skilled person would arrive at a LAN access method as defined in claim 1 without the exercise of inventive skills. For these reasons, having regard to the prior art of D2 and D5 in combination, claim 1 of the present sole request does not meet the requirements of Article 56 EPC 1973.

Independent claim 9 contains the same features as claim 1 but expressed in terms of a claim for an apparatus. Therefore claim 9 also fails to meet the requirements of Article 56 EPC 1973.

2.3 The appellant argued at the oral proceedings that the user's request in D2 does not include an identification of a billing agent which maintains an account of the user, as required by claim 1. D2 however teaches that a control point within the LAN contacts the e-cash provider in order to authenticate and ensure the sufficiency of the received e-cash (see for instance page 2, last paragraph). The control point within the LAN is thus able to identify an e-cash provider which issued the received e-cash. In the board's judgment, the e-cash provider represents a billing agent, since the payment relies on it. Moreover, the above-mentioned feature of D2 also implies that an identification of the e-cash provider has been received by the control point. The feature that the billing agent maintains an account is disclosed by D5 (see paragraph 2.2 above).
The appellant further argued at the oral proceedings that the alleged invention preserves the anonymity of the user vis-à-vis the accessed LAN since the user does not have to send any unencrypted identification data to the LAN. The board notes however that the billing methods according to D2 and D5 likewise do not involve sending unencrypted identification data from the user to the accessed network.

The appellant also argued at the oral proceedings that the skilled person would not consider combining D5 with D2 since D5 relates to pay internet access relying on a further telephone connection between the user and the billing agent (its telephone company), whereas D2 deals with local area network pay access to the internet, thereby not necessitating any telephone connection. As mentioned in paragraph 2.2 above, the board judges that the skilled person would combine D5 with D2. In particular, the board considers that the payment scheme defined by the alleged invention is entirely independent from the technical aspect of the network access itself. Moreover, the method according to claim 1 relies also on the existence of a connection between the network and the billing agent. It is also to be noted that the embodiment of D5 on which the argumentation of the board is based (see column 7, lines 18 to 36 and column 8, lines 26 to 32) does not rely on a direct telephone connection, but rather on an internet connection, between the user and its telephone company.

The board is also not convinced by the appellant's argument that the 900 call payment in D5 does not represent the debiting of a user's account. In that
respect, the board judges that, by having the 900 number called by the server of the user's telephone company and the account of the user at the telephone company being thereupon charged for the internet access (see for instance column 7, lines 32 to 36), an account of the user is debited in accordance with access charges incurred by the user, as required by claim 1.

2.4 There being no allowable request, the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar

The Chair

K. Götz

A. Ritzka