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**Datasheet for the decision
of 9 October 2008**

Case Number: T 1356/04 - 3.5.04

Application Number: 01936725.9

Publication Number: 1300016

IPC: H04N 7/173

Language of the proceedings: EN

Title of invention:

Systems and methods for characterizing television preferences
over a wireless network

Applicant:

Nokia Corporation

Headword:

-

Relevant legal provisions:

RPBA Art. 13

Relevant legal provisions (EPC 1973):

EPC Art. 84, 56

Keyword:

"Admissibility of amendments after summons to oral proceedings
(yes)"

"Clarity (yes - after amendments)"

"Inventive step (yes - after amendment)"

Decisions cited:

-

Catchword:

-



Case Number: T 1356/04 - 3.5.04

D E C I S I O N
of the Technical Board of Appeal 3.5.04
of 9 October 2008

Appellant:

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Representative:

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Decision under appeal:

**Decision of the Examining Division of the
European Patent Office posted 5 July 2004
refusing European application No. 01936725.9
pursuant to Article 97(1) EPC 1973.**

Composition of the Board:

Chairman: F. Edlinger
Members: M. Paci
T. Karamanli

Summary of Facts and Submissions

- I. The appeal is against the decision of the examining division refusing European patent application No. 01 936 725.9, which was filed as an international patent application and published as WO 02/05557 A2.
- II. The following documents, cited as prior art in the decision under appeal, are relevant to the present decision:
- D1: WO 99/04568 A1 and
D3: US 5 600 364 A.
- III. The decision under appeal was based on the grounds that independent claims 1, 20 and 24 according to each of the applicant's three requests lacked clarity (Article 84 EPC 1973) and that, even if their subject-matter were understood in the more limited manner intended by the applicant, it would in any case not involve an inventive step (Article 56 EPC 1973) having regard to the disclosure of D3 and the skilled person's common general knowledge.
- IV. In a communication accompanying the summons to oral proceedings the board expressed doubts as to the presence of an inventive step concerning the subject-matter of the independent claims of several requests filed with the statement of grounds of appeal.
- V. In reply the appellant filed several new requests comprising further amendments of the claims. During the oral proceedings held on 9 October 2008 before the board the appellant (applicant) withdrew all previous

requests then on file and filed a single new request comprising a set of amended claims and amended description pages.

VI. The appellant's single request is that the decision under appeal be set aside and that a patent be granted in the following version:

- Description: pages 1, 5 and 7 to 12 as published and pages 2, 2a, 3, 4 and 6 filed during the oral proceedings;
- Claims: Nos. 1 to 36 filed during the oral proceedings;
- Drawings: sheets 1/2 and 2/2 as published.

VII. Independent claims 1, 20 and 24 read as follows:

"1. A method of providing television program signals to a plurality of television receivers (80) of a plurality of users through a first communication path provided by a television signal transmission system (70), the method comprising informing a network server (40) of user preferences, the method being characterized in that it comprises the further steps of:
registering users who are currently viewing a particular program into the network server (40) in response to receiving registration information from wireless data terminals (10) adapted for communication with the Internet (30) via a separate second communication path provided by the Internet (30), the registration information being sent only by wireless data terminals of users who select to register to exert through their wireless data terminals as viewers of said program some control on TV programming;

finding in said network server (40) that a demographic group of users is registered into the network server as current viewers of the particular program based on said registration information received from the wireless data terminals (10) of users who registered via the second communication path and user preferences;

in response to said finding, modifying or augmenting the TV programming (50) in said network server (40), according to the user preferences of said demographic group of users; and

forwarding the modified or augmented TV programming to the television signal transmission system (70) for transmission of the modified or augmented TV programming by the television signal transmission system (70) to the plurality of television receivers (80) via the first communication path."

"20. A system for providing television program signals to a plurality of users, which system comprises a plurality of television receivers (80) for receiving television program signals provided by a television signal transmission system (70) through a first communication path, data terminals (10) connected to a network server (40) through a separate second communication path, and means for informing the network server (40) of user preferences, the system being characterized in that

the data terminals comprise wireless data terminals (10) adapted for communication with the Internet (30) for enabling users who want to exert some control on the TV programming (50) to select to register with the network server (40) via said second

communication path as users currently viewing a particular program, and

the network server (40) is adapted

to register in a database (44) said users of the wireless data terminals (10) who registered through their wireless data terminals as users currently viewing the particular program based on registration information communicated from the wireless data terminals (10) of those users only who registered through their wireless data terminals via the second communication path provided by the Internet (30),

to find if a demographic group of users is registered into the network server as current viewers of the particular program based on said registration information received from the wireless data terminals (10) of the users registered via said second communication path and user preferences,

in response to finding the demographic group, to modify or augment TV programming (50), according to the user preferences of said demographic group of users, and

to forward the modified or augmented TV programming to the television signal transmission system (70) for transmission of the modified or augmented TV programming to the plurality of television receivers (80) via the first communication path."

"24. A network server (40) for controlling transmission of television program signals provided by a television signal transmission system to a plurality television receivers (80) through a first communication path,

wherein users of the plurality of television receivers have data terminals (10) connected to the network server (40) through a separate second communication path, the network server comprising means for processing information of user preferences, characterized in that the data terminals are wireless data terminals and the network server (40) comprises means (44) for enabling the users of wireless data terminals (10) to select to register as current viewers of a particular program to exert some control on TV programming (50) in response to registration information communicated only from wireless data terminals (10) of users who registered through their wireless data terminals and connected to the Internet (30) via the second communication path provided by the Internet (30), and

means for finding if a demographic group of users is registered with the network server as current viewers of the particular program based on said registration information received from the wireless data terminals (10) of users who registered through their wireless data terminals via the second communication path and user preferences, for modifying or augmenting TV programming (50), in response to finding the demographic group of users, according to the user preferences of said demographic group of users, and for forwarding the modified or augmented TV programming to the television transmission system (70) for transmission of the modified or augmented TV programming to the plurality of television receivers (80) via the first communication path."

Claims 2 to 19, 21 to 23 and 25 to 36 are each dependent on one of claims 1, 20 and 24.

VIII. The examining division's reasoning in the decision under appeal with respect to the claims then on file, insofar as it is relevant to the present decision, can be summarised as follows.

Several expressions relied upon in the independent claims, namely "... a data terminal (10) connected... through a separate second communication path...", "... logging users of data terminals (10) into a network server..." and "... finding... that a demographic group of users is logged on..." cannot be clearly understood in the limited manner intended by the applicant (these expressions also cover switching on a set top box, logging it as an active terminal and registering polling responses). The resultant doubt renders at least the independent claims unclear (Article 84 EPC 1973).

Moreover, even under the more limited interpretation intended by the applicant, the subject-matter of these claims would lack inventive step (Article 56 EPC 1973) based upon the disclosure of D3 taken together with the skilled person's common general knowledge.

The main difference with respect to D3 is the provision of wireless terminals logging in via an independent return channel operating over a separate communication link, such as the Internet.

The skilled person is well aware as part of his common general knowledge that most households having access to interactive TV facilities also have access to an independent telephone network. Also, that real time

communication via, for example, the Internet was a well-known part of the commonly known state of the art at the priority date of the application. Therefore the skilled person, faced with the problem of enhancing the available information as to the current state of viewer preferences and of overcoming the inherent time lag in establishing actual viewer preferences by way of polling, would inevitably consider requesting, for instance, live feedback via, for example, the Internet or any other commonly known server-based messaging system from the viewers actually watching. The use of such an extremely well-known communication infrastructure as the Internet can only be considered as a matter of routine design choice for a skilled person wishing to collect a more up-to-date picture of the preferences of demographic groups actually using the system at any given moment in time.

D1 is also referred to as evidence that separate wireless communication channels were already commonly used in the context of providing viewer feedback.

- IX. The appellant essentially argued as follows regarding the independent claims according to his final single request before the board of appeal.

Clarity

The claims have been clarified to overcome the examining division's objections of lack of clarity.

Inventive step

D3 represents the closest prior art. The polling of set-top boxes by the head end in D3, even if performed on a real-time basis (i.e. every 10 minutes; see D3, column 37, lines 18 to 20), is not the same as the active registering of users according to the present invention. The invention as defined in independent claims 1, 20 and 24 requires that users viewing a particular program take the active step of registering with a network server. This is an essential difference from the polling system of D3 which essentially collects historical viewing data. In D3 the polling of set-top boxes is done automatically by the head end and there is no user initiated registration. The active user registration according to the invention guarantees that the registered users are actually viewing a particular program, as opposed to polling set-top boxes which could be left switched on while nobody was watching. There is no suggestion in D3 of having a user initiated registration. The wireless data terminals communicate via another communication system to that of the television signal transmission system, and therefore no modification of the existing television signal transmission systems is required. The invention can be used by users with ordinary telephone sets, including those which are not connected to satellite, cable or digital TV signal transmission systems.

D1 discloses a remote control device for a consumer broadcast television receiver which allows users to wirelessly communicate with a remote central processing station and to wirelessly receive TV programming-related information from the central processing station.

However the TV program signals received by the television receiver are not changed and the additional information is not received by the television receiver but by the remote control device.

Thus even the combined teachings of D3 and D1 would not lead to the claimed invention.

Reasons for the Decision

1. The appeal is admissible.

Admissibility of the amended claims and amended description pages filed during the oral proceedings

2. According to Article 13(1) RPBA (Rules of Procedure of the Boards of Appeal, OJ EPO 2007, 536), any amendment to a party's case after it has filed its grounds of appeal may be admitted and considered at the board's discretion. The discretion shall be exercised in view of *inter alia* the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy. Article 13(3) RPBA further specifies that amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the board in the present *ex parte* case cannot reasonably be expected to deal with without adjournment of the oral proceedings.

The board noted that the amendments filed during the oral proceedings overcame objections of lack of clarity raised earlier and that they added no significant complexity to the case. For these reasons the board

decided to exercise its discretion under Article 13(1) and (3) RPBA to admit these amendments.

Amendments (Article 123(2) EPC)

3. The amendments made to the claims have a basis in the application as filed (see in particular original claims 1 and 6, figure 1, page 4, lines 11 to 28, page 5, lines 23 to 27, page 6, lines 3 to 26, and page 7, lines 1 to 14).

The board is therefore satisfied that the requirements of Article 123(2) EPC are met.

Clarity (Article 84 EPC 1973)

4. In the decision under appeal the examining division objected that several features in the independent claims were so vaguely and ambiguously worded that they covered features disclosed in D3, such as registering responses from the central polling of set top boxes. These objections of lack of clarity related essentially to the second communication path and to the "logging" of users into the network server.

These features have been reworded in the present set of claims. Further clarifications and limitations have been added. All three independent claims 1, 20 and 24 now specify that the wireless data terminals register with the network server via a separate second communication path provided by the Internet, and that the registration information is sent only by the wireless data terminals of users who select to register through their wireless data terminals as currently

viewing a particular program to exert some control on TV programming.

The board thus considers that the objections under Article 84 EPC 1973 in the decision under appeal have been overcome and that the claims are clear and supported by the description.

Inventive step (Article 56 EPC 1973)

5. Claim 1 - obviousness in view of D3 and common general knowledge

5.1 It has not been disputed that D3 represents the closest prior art.

D3 discloses a method of providing television program signals to a plurality of television receivers via set-top terminals (220, see figures 1 and 3) of a plurality of users through a first communication path provided by a television signal transmission system (see media 216 in figure 3). A network server (see network controller 214 in figure 3), located upstream of the first communication path, manages the configuration of the set-top terminals and processes signals received from the set-top terminals (see column 10, lines 58 to 62). Among other things, the network server polls the set top terminals and monitors their automatic poll-back responses (see column 10, lines 62 to 66). According to one embodiment, each television receiver is polled on a "real-time basis", i.e. every 10 minutes, in order to gather information on the category of the television program currently being watched (see column 37, lines 12 to 20). The network server includes a database

storing demographic information about the users (see figure 12 and from column 29, line 54, to column 30, line 28). The network server then uses the viewer's demographic information and his viewing habits for performing on-the-fly programming changes such as selecting a package of advertisements best adapted to the audience (see, for instance, column 4, lines 50 to 54, column 16, lines 10 to 21, and column 38, lines 40 to 45).

- 5.2 The method of claim 1 thus differs from the disclosure of D3 by at least the following features:
- (a) the data terminals are wireless;
 - (b) the wireless data terminals send registration information via a separate second communication path provided by the Internet and
 - (c) the registration information is sent only by the wireless data terminals of users who select to register to exert through their wireless data terminals as viewers of a particular program some control on TV programming.
- 5.3 All three features contribute to solving the objective technical problem of improving the characterisation of television information related to a user's preferences for programming, advertising and other content (see page 2, lines 10 to 13, of the application as filed).
- 5.4 Feature (c) requires that users viewing a particular program take the active step of registering with a network server. The user-initiated registration embodied in feature (c) guarantees that the registered users are actually viewing a particular program, as opposed to merely polling set-top boxes of all

subscribers or merely those which are switched on but that nobody might be watching. This is an essential difference from the system of D3 in which the polling of set-top boxes is done automatically by the head end. There is no suggestion in D3 of having a user-initiated registration. The set-top boxes of D3 automatically reply to the network server without any involvement of the users. Since wireless data terminals (see feature (a)) send the registration information via the Internet (see feature (b)), the users do not necessarily need to buy any additional equipment for registering with the network server and exerting control on TV programming. The existing television equipment can be used for receiving the modified or augmented TV programming.

5.5 The examining division essentially argued that it was obvious to use wireless communication as an alternative to wired communication and a well-known communication infrastructure such as the Internet to reduce the time lag and to improve the collection of polling data. However, for the reasons set out under point 5.4 above, these features are neither disclosed nor suggested in combination with the user-initiated registering (feature (c)) as it is now specified in claim 1.

5.6 The method of claim 1 is therefore not obvious in view of the disclosure of D3 alone or in combination with common general knowledge.

6. Claim 1 - obviousness in view of D3 and D1

6.1 D1 discloses (see, in particular, figure 3) a method of broadcasting television signals from a central processing station (420) to a plurality of users, each

user having a television receiver (405) and a remote control device (417). The remote control device allows the user to wirelessly receive TV programming-related information from the central processing station and to display it on the screen of the remote control device (see, for instance, figure 4). The user can also use the remote control device for wirelessly communicating with the remote central processing station (420), such as for buying an advertised product.

6.2 According to D1 however, all the additional information received by the user is displayed on the screen of the remote control, not on the television screen. The TV program signals transmitted over the broadcast channel to the television receivers are not modified or augmented by the feedback provided by the user with his remote control device.

6.3 Moreover, in contrast to the method of claim 1, the additional information sent by the central processing station via the remote control devices need not be the same for all users because each remote control device is uniquely identified by its identification number (see HUUID on page 13, third paragraph).

6.4 For the above reasons, the method of claim 1 is not rendered obvious by the combined teachings of D3 and D1.

7. Claims 20 and 24 - Obviousness

7.1 The system of claim 20 and the network server of claim 24 have features essentially corresponding to the steps of the method of claim 1. Accordingly, their

subject-matter is also not rendered obvious by the available prior art.

8. Dependent claims

Claims 2 to 19, 21 to 23 and 25 to 36, are all dependent on one of claims 1, 20 and 24. Therefore their subject-matter is also not rendered obvious by the available prior art.

9. For the above reasons the board concludes that the decision under appeal has to be set aside, and that a patent is to be granted on the basis of the appellant's single request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to grant a patent in the following version:
 - Description: pages 1, 5 and 7 to 12 as published and pages 2, 2a, 3, 4 and 6 filed during the oral proceedings;
 - Claims: Nos. 1 to 36 filed during the oral proceedings;
 - Drawings: sheets 1/2 and 2/2 as published.

The Registrar:

The Chairman:

L. Fernández Gómez

F. Edlinger