Datasheet for the decision of 10 November 2011

Case Number: T 1655/10 - 3.5.01
Application Number: 04737836.9
Publication Number: 1634195
IPC: G06F 17/30, H04L 9/00, G06F 17/27, G06F 3/023
Language of the proceedings: EN
Title of invention: Configurable information identification system and method
Applicant: Nuance Communications, Inc.
Opponent: -
Headword: Information identification/NUANCE COMMUNICATIONS
Relevant legal provisions: EPC Art. 123(2)
Relevant legal provisions (EPC 1973): -
Keyword: "Added subject-matter - yes"
Decisions cited: -
Catchword: -
Case Number: T 1655/10 - 3.5.01

DECISION
of the Technical Board of Appeal 3.5.01
of 10 November 2011

Appellant: Nuance Communications, Inc.
(Applicant)
1 Wayside Road
Burlington, MA 01803 (US)

Representative: Zimmermann, Tankred Klaus
Schoppe Zimmermann
Stöckeler Zinkler & Partner
Patentanwälte
Hermann-Roth-Weg 1
82049 Pullach bei München (DE)

Decision under appeal: Decision of the Examining Division of the European Patent Office posted 1 April 2010 refusing European patent application No. 04737836.9 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: S. Wibergh
Members: W. Chandler
D. Prietzel-Funk
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division to refuse the European patent application No. 04737836.9. It concerns retrieving information from a portable device, such as a mobile phone or a PDA.

II. The examining division decided that claim 1 of the main and first auxiliary request was unclear (Article 84 EPC); in particular, the selection of the types of data based on input from the user in the data-type software module feature (called objection 4 by the appellant) and its interaction with the selection based on the environment (objection 6). In the main and first to third auxiliary requests, either claim 1 or claim 3 were judged not to be based on any originally filed embodiment and thus violated Article 123(2) EPC (objection 1). The deletion of the feature that the types of data were selected based on input from the user in the fourth and fifth auxiliary requests was also judged to violate Article 123(2) EPC (objection 7).

III. In the statement setting out the grounds of appeal, the appellant filed a new main request corresponding to the refused fourth auxiliary request. The first to fifth auxiliary requests contained various permutations of the disputed features. The appellant also made an auxiliary request for oral proceedings.

IV. In the communication accompanying the summons to oral proceedings, the Board summarised the issues to be discussed and tended to agree with the examining division about the issues of clarity and added-matter.
V. In a reply, the appellant filed a sixth auxiliary request based on the fifth auxiliary request in an attempt to clarify the feature of the data-type software module. In a subsequent letter, dated 20 October 2011, the appellant filed a single main request, corresponding to the previous sixth auxiliary request, and withdrew all previous requests. It was stated that neither the applicant nor the representative were to attend the oral proceedings.

VI. At the oral proceedings, which took place in the appellant's absence, the Board discussed the appellant's request. At the end of the proceedings, the Chairman announced the Board's decision.

VII. Claim 1 of the sole request reads as follows:

"A mobile device information identification system for providing a mobile device user with information corresponding to keys pushed by the user before the user is finished entering all the key pushes needed to complete the desired entry comprising:

a mobile device comprising:

a key pad containing a plurality of keys, each key having a plurality of symbols associated with said key, said symbols selected from among a group of symbols consisting of letters, numbers, and combinations of letter and numbers;

a display device;

a processor configured for executing a platform-framework software module (10) which includes executable instructions to receive an input sequence from a user via said key pad, the input sequence comprising a sequence of signals resulting from the
user pressing a keys [sic] from among the plurality of keys;

    a plurality of databases, each having a
database type consisting of a database of phone numbers,
a database of universal resource locators, a database
of names of human beings, a database of names of
locations, a database of addresses, and one or more
language dictionaries;

    a platform-aware software module (25) which
includes executable instructions which, when executed
by said processor, identifies an environment in which
the user is providing said input sequence, the
environment being selected from among an internet
browser and a dialer used to input a telephone number;

    a data-type software module (13) which
includes executable instructions which, when executed
by said processor, identifies types of data that might
be returned to the user based on whether or not the
input sequence corresponds with an entry in one or more
of said plurality of databases and associating the
database type of a corresponding input sequence entry
with a data-type including phone numbers, universal
resource locators, names of human beings, names of
locations, and addresses;

    a service-descriptor software module (16)
which includes executable instructions which, when
executed by said processor, identifies valid actions
corresponding to each identified type of data the valid
actions being selected from a list of possible actions
and the valid actions including searching a database of
phone numbers, searching a database of universal
resource locators, searching a database of names of
human beings searching a database of names of locations,
and searching a database of addresses;
a first information-search software module (19) which includes executable instructions which, when executed by said processor, identifies a first set of information corresponding to a first one of the identified valid actions by parsing a database corresponding to a first of the types of data to identify information for the first set; and

a second information-search software module (22) which includes executable instructions which, when executed by said processor, identifies a second set of information corresponding to a second one of the identified valid actions by parsing a database corresponding to a second of the types of data to identify information for the second set;

wherein said processor is configured for ordering said first sets of information and said second sets of information on said display based the [sic] environment identified by said platform-aware software module such that the set of information at the top of the display is more easily accessed by the user than the other set of information, thereby allowing quicker access to environment compatible information."

VIII. The appellant argued essentially as follows:

The data-type software module did not select types of data in a traditional sense; rather, the data-type software module prioritized the presentation of the data in the display based on the platform on which a user was entering text. For example, suppose a user had a smartphone that had a phone dialing application and an internet browser. Suppose further that the smartphone had a standard 12-button keypad with combinations of numbers and
letters on each key (i.e. 2, A, B, C) and that the user's address book contained a contact with the following phone number: (668) 439-9999.

Now suppose that the user entered the following input: "6, 6, 8, 4, 3." On a standard 12-button keypad, this sequence could be disambiguated in a large variety of ways. First, the sequence could simply have meant "66843." Alternatively, the sequence might have meant "movie" (6=M, 6=O, 8=V, 4=I, and 3=E) or "motif" (6=M, 6=O, 8=T, 4=I, and 3=F).

The gist of the invention was that the system ordered the presentation of possible meanings of the sequence (6, 6, 8, 4, 3) based on what platform was being used. Depending on whether the user was running a browser or a dialer, as identified by the platform-aware software module, the platform-framework software module would order the potential results, (i.e. 66843, movie, motif) based on the valid actions that were associated with the data types of those potential results. Accordingly, the potential results that were most likely to be chosen, as determined by various modules, were presented first, thereby allowing the user to avoid numerous unlikely results.

Reasons for the Decision

1. The appeal complies with the requirements referred to in Rule 99(2) EPC and is therefore admissible.

   The application

2. In general agreement with the appellant's explanation of the invention (see above), the description explains
at paragraph [12] that the object of the invention is to guess in advance what information the user wants to retrieve from the mobile device based on the user's key pushes (combination of keyboard disambiguation and predictive editing/anticipatory dialling). The description gives the example of pressing twice the digit "2" on a mobile phone keyboard, which also usually represents the letters "A", "B", and "C". This results in the display of a list of phone numbers that start with "22" and a list of words that start with "AB", "AC", "BA", "BC", "CA" and "CB". This is achieved by a collection of different "software modules".

3. The "platform-framework software module" (paragraphs [10] and [11]) receives the user's key presses and coordinates the activities of the other software modules. However, there is no further information in the description as to how this is done.

4. Paragraph [13] states that the "data-type software module", which is key to this appeal, identifies types of data that might be returned to the user. The types of data might be phone numbers, URLs, or names. It is stated that "the types of data may be selected from a list of possible types of data based on input from the user". The description gives no further details of this "selection", in particular the user's, or any other agent's, role in it. This led to the examining division's clarity objection 4, with which the Board agreed in the communication.

5. The "service-descriptor software module" (paragraph [14]) works out what actions may be validly performed on the identified type of data. Thus if the data is
identified as a possible telephone number, a search of a phone number database is possible. If it is a name, a search of a name database is possible. The description states that the valid actions "may be selected from a list of possible actions", but again, without giving any further details.

6. The "first [or second] information-search software module[s]" (paragraphs [15] and [16]) identify a first/second set of information corresponding to the valid actions identified (and also selected?) by the previous step.

7. A "user interface" (paragraph [17]) shows the results of the searches (sets of information) at different parts of the display such that one set (representing the most likely meaning of the input sequence) "is more easily accessed by the user" than the other. This is achieved by putting it at the top of the display and the other set at the bottom and also putting the cursor at the top, i.e. near and ready to use the first set of results.

8. The "platform-aware software module" (paragraph [18]) is said to cause the above-mentioned data-type software module to identify the data type according to the environment, e.g. phone dialler or internet browser, in which the user is providing input. The description states that if the environment is a dialler, phone number data types have "preference". This allows the user to be provided with phone numbers in a manner that makes it easier to select the desired number. The description states that the previously defined data-type software module may "select types of data based on
the environment". This is an additional qualification on selecting the types of data and raises the question of how these two criteria work together to select the type of data, which was the basis of the examining division's clarity objection 6.

9. Moreover, the division considered that since the combination of the two criteria for selecting the data-types was not explicitly described in the application, but only by virtue of claim 3 being dependent on claim 1, only that particular combination was originally disclosed. Thus the amendment to claim 1 adding examples, like those mentioned above, from the description to the specification of each software module resulted in a new combination that was not originally disclosed. This led to the examining division's extension of subject-matter objection 1.

10. There are other modules and aspects, but these are not relevant to the appeal.

The "data-type software module"

11. In response to the Board's communication, the appellant has tried to overcome clarity objections (4) and (6) by amending the claimed function of the data-type software module. Now, instead of reciting that the identification of the types of is "based on input from the user" and/or "based on the environment", it is "based on whether or not the input sequence corresponds with an entry in one or more of [the databases on the user's device]". In other words, the module is supposed to identify the possible data type of the sequence being input depending on the data already stored in the
device. According to the appellant if, for example, the disambiguated input sequence "66843" matched entries in three databases: the list of phone numbers, one or more language dictionaries (i.e. "movie" or "motif"), and a list of URLs (i.e. www.movietimes.com), the data-type software module would identify three data types: phone numbers, language, and URLs.

12. This explanation is eminently plausible. In fact, it explains one of the difficulties, expressed in the communication, that the Board had with the data-type software module, namely that if automatic, it was not clear how a data "type" could be selected at this stage in the processing (before any searching of data in the device had been carried out). The problem in the Board's view, however, is that the mode of operation described by the appellant is simply not supported by the original application. The appellant gives the support for the amendment as paragraph [13]. However, this paragraph only recites practically verbatim the original feature and does not mention the databases at all, let alone determining whether the sequence corresponds to an entry in one of them. Furthermore, the Board is unable to find any support for this mode of operation anywhere else in the original application. In fact, it even seems to contradict the disclosure because, as mentioned above, according to the description the first and second information-search software modules actually search for the data after the data types have been identified. Thus, this amendment contravenes Article 123(2) EPC.

13. Furthermore, the Board agrees with the examining division's objection 7 that deleting the feature that
the selection is "based on input by the user" also contravenes Article 123(2) EPC. This is because the feature was contained in original claim 1, and there is no embodiment, or any other basis for a system without it.

**The ordering of information**

14. The appellant has also amended the feature at the end of claim 1 relating to the ordering of the first and second sets of information based on the environment. The appellant explains that this is the gist of the invention, namely that the potential results that are most likely to be chosen are presented first. The feature now recites that the sets of information are ordered based on the environment subject to the condition "such that the set of information at the top of the display is more easily accessed by the user than the other set of information, thereby allowing quicker access to environment compatible information". However, as mentioned above, according to the description at paragraph [0017], easier access is obtained by the joint condition of putting the first set of information at the top of the display and nearer to the cursor. Since the claim fails to indicate either of these essential features, it contravenes Article 84 in conjunction with Rule 43(1),(3) EPC.

15. The Board adds that the problems in the present case arise from a fundamental lack of clarity in the application, especially the lack of comprehensive embodiments illustrating the nature and the interplay between the various "software modules", the function of essentially all of which is introduced by the words
"[the] module may have..."

The Board had searched for possible solutions, but pointed out in its communication that the problems appeared practically impossible to overcome. So it has proved to be.

16. Accordingly, claim 1 of the sole request is not allowable (Articles 84 and 123(2) EPC), so that the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek S. Wibergh