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**Datasheet for the decision
of 7 November 2012**

Case Number: T 1996/07 - 3.5.01

Application Number: 03252154.4

Publication Number: 1359516

IPC: G06F 17/28

Language of the proceedings: EN

Title of invention:
Processing character information

Applicant:
FUJITSU LIMITED

Opponent:
-

Headword:
Time dictionary/FUJITSU

Relevant legal provisions:
EPC Art. 52(1)
RPBA Art. 13(3)

Relevant legal provisions (EPC 1973):
EPC Art. 56

Keyword:
"Inventive step - no"
"Admissibility of a new request filed in oral proceedings - no"

Decisions cited:
-

Catchword:
-



Case Number: T 1996/07 - 3.5.01

D E C I S I O N
of the Technical Board of Appeal 3.5.01
of 7 November 2012

Appellant:
(Applicant)

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Decision under appeal:

**Decision of the Examining Division of the
European Patent Office posted 26 June 2007
refusing European patent application
No. 03252154.4 pursuant to Article 97(1) EPC
1973.**

Composition of the Board:

Chairman: S. Wibergh
Members: R. R. K. Zimmermann
G. Weiss

Summary of Facts and Submissions

- I. European patent application number 03252154, publication number EP 1 359 516, claims priorities from two Japanese patent applications filed in 2002 for a predictive information processing device and method. According to the present application the invention, if applied to a mobile phone for example, retrieves one or more Kana-Kanji character strings from a dictionary depending on a Hiragana-character keyed in by the user on the mobile phone and conversion time information representative of a time of conversion in a 24 hour day.
- II. The examining division refused the application for lack of inventive step. According to the decision posted on 26 June 2007, none of the features distinguishing the claimed invention from the relevant prior art provided an inventive contribution over the prior art. Predictive methods for disambiguating text entries to a portable device were well-known and common at the priority date of the invention. Using time information representative of a time band within a 24 hour day was not a technical feature and could thus not contribute to inventive step. Finally, setting the current time as a reference time for a mobile device was obvious since computers commonly provide time signals.
- III. The appellant (applicant) lodged an appeal on 30 July 2007 and paid the appeal fee on 22 August 2007. On 15 October 2007 the appellant filed a statement setting out the grounds of appeal and new sets of claims according to a main request and a first auxiliary request. Claim 1 of the main request reads as follows.

Main request

"1. ¹<An> information processing device for processing a conversion object input to said ²<> information processing device ³<>, said conversion object being a letter, a symbol, an element of a letter or a symbol, or a combination of not less than two of these, the information processing device ⁴<> comprising:

i) a conversion part (3) that converts one said conversion object into one or more conversion candidates, each conversion candidate comprising a ⁵<> character string corresponding to said conversion object⁶<>;

ii) a dictionary (7; 34) in which said one or more conversion candidates ⁷<are related to time information representative of a predetermined timeband and> are stored;

characterised in that ⁸<said predetermined timeband comprises> a predetermined timeband in a 24 hour day, and further characterised by:

(iii) a time recording part (1, 7) operable to record and output conversion time information representative of a time of conversion, in a 24 hour day, of the conversion object into said one or more conversion candidates,

wherein said conversion part is operable to refer to said dictionary (7; 34), and to said conversion time information is output by said time recording part, and to use said conversion time information when converting said conversion object into said one or more conversion candidates⁹<>."

Numbered angle brackets ¹<>, ²<> etc. are added for convenience to indicate passages where the wording of the respective claim 1 of the first auxiliary request

and second auxiliary request (see below) differs from claim 1 of the main request. The differences in the first auxiliary request are as follows:

¹<...> reads "An predictive",

²<> reads "predictive"

³<> reads "in order to convert said conversion object into a predictive character string that a user expects"

⁴<> reads "being for a portable device and", and

⁵<> reads "predicted";

⁷<...> is deleted;

⁸<...> reads "said conversion candidates are stored in said dictionary in relation to time information representative of".

IV. In a communication issued under Rule 100(2) EPC on 4 November 2011, the Board indicated its provisional opinion that the invention as claimed according to the main and first auxiliary requests was not inventive in the light of document D3 (EP-publication 1 035 712 A2 published in 2000). Essential features of the invention did not involve any technical aspects and did thus not provide a technical contribution over the prior art.

V. In a letter of reply dated 30 April 2012, the appellant filed an alternative set of claims as second auxiliary request. Claim 1 of this request differs from claim 1 of the main request in the passages marked above with angled brackets as follows:

⁶<> reads "and having the conversion object at a head thereof", and

⁹<> reads "such as a conversion candidate stored in said dictionary in relation to a time band corresponding to

time information representative of the time of conversion is displayed as a supreme conversion candidate".

- VI. In a communication dated 19 June 2012 annexed to a summons to oral proceedings, the Board outlined the agenda of the oral proceedings as follows:

"The matter to be discussed will include the admission of the new second auxiliary request (cf Article 12 (4) and 13 RPBA), admissibility of the amendments under Article 84 EPC 1973 and Article 123(2) EPC, and the objections concerning lack of inventive step in the light of the prior art, in particular documents D1, D2 and D3 (see the decision under appeal and the communication of the Board dated 4 November 2011)."

- VII. Oral proceedings before the Board took place on 7 November 2012. The appellant filed an alternative set of claims as third auxiliary request that combined claim 1 of the second auxiliary request with dependent claim 3. The new feature, added to the end of claim 1 of the second auxiliary request, reads as follows:

"wherein said conversion part (3) further includes a time modification part for qualifying a relation between said time information representative of a predetermined time band and said conversion time information".

- VIII. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 14 filed as main request or first auxiliary request with the statement setting out the

grounds of appeal or in the alternative on the basis of claims 1 to 14 filed as second auxiliary request with letter dated 30 April 2012 or on the basis of claims 1 to 12 filed as third auxiliary request at the oral proceedings.

- IX. According to the appellant, the invention was clearly patentable over the closest prior art, i.e. document D3. The invention solved the technical problem of improving the efficiency and accuracy of conversion of the predictive editor of document D3.

The technical solution of this problem was based on the idea of using time information related to the current period of day for providing the most appropriate conversion candidate. This idea was put to practice by providing an electronic dictionary storing conversion candidates in relation to time information representing a predetermined time band in a 24 hour day and a time recording part that recorded and outputted conversion time information representative of a time of conversion of a conversion object into one or more conversion candidates. The invention used the time information stored in the dictionary as well as the conversion time information determined by the time recording part during the conversion processing.

In addition, by selecting conversion candidates that had the conversion object "at a head thereof" the inventive conversion process provided strings as conversion candidates that could be longer than the input string. The input of the character "G", for example, could produce the full greeting formulas shown in table 7 (at page 22 of the published application),

namely "Good morning", "Good afternoon", etc. According to document D3, however, the full number of keystrokes was required, as shown in figure 6 for typing the word "Case".

There were no indications in the prior art which could point to these features of the invention.

The purpose of the first and second auxiliary requests was to define the inventive contribution over the prior art more distinctly.

Referring to the third auxiliary request filed during the oral proceedings before the Board, the appellant invoked the following circumstances in support of the admissibility of the request: The subject matter to which the new claims related was already present in the second auxiliary request before the Board and had been dealt with by the examining division in the decision under appeal. The addition was short and based on a dependent claim, not on the description. Furthermore, the request was a bona fide attempt to overcome the Board's reservations that had been fully understood by the appellant only in the course of the oral proceedings.

Reasons for the Decision

1. The appeal, although admissible, is not allowable since the requests before the Board are unsuccessful either on the merits or on grounds of inadmissibility.

2. The main request and the first and second auxiliary requests do not comply with Article 52 (1) EPC for lack of inventive step (Article 56 EPC 1973) of the invention as claimed in the respective claim 1. Since claim 1 of the second auxiliary request contains all the features of the main claim of the higher-ranking requests the following considerations concerning inventive step are confined to claim 1 of the second auxiliary request.

2.1 Document D3, the agreed closest prior art, discloses a predictive information processing device (predictive editor, see for example figure 3) for a portable device (hand portable phone, see figure 1), which receives a conversion object (key stroke string, see figure 11) and converts it into one or more conversion candidates (preferred and alternative matches, see figure 11, steps 103 ff.). The device comprises a dictionary (user dictionary, see figure 3, 41b).

2.2 Claim 1 includes, in its pre-characterising portion, the feature that the predicted character string has "the conversion object at a head thereof". This feature has been taken from the description (eg section 0069). There is no indication in the original application that the feature would not be known as such, and indeed its position in the claim indicates that the appellant itself believed it to be known. Nevertheless the appellant argued at the oral proceedings that it was in fact not known, at least not from D3. The Board notes that although there might be no explicit teaching in D3 to this effect, this circumstance could be accidental. D3 refers to a "predictive" editor. This very word indicates that the editor (D3 refers to the program T9®)

aims at completing inputs by the user. Whether or not the editor actually works in this way can be left undecided since, even if it did not, this kind of autofilling was obviously desirable. In the following this claim feature will therefore be ignored.

2.3 It follows that the invention differs from document D3 essentially by the following features:

- (1) the conversion candidates are stored in relation to time information representative of a predetermined period (timeband) in a 24 hour day;
- (2) a time recording part records and outputs conversion time information representative of a time of conversion, in the 24-hour day, of the conversion object into said one or more conversion candidates; and
- (3) the time information and the conversion time information are used for converting the conversion object into the one or more conversion candidates such that a conversion candidate, the predetermined timeband of which corresponds to the time of conversion, is displayed as a supreme conversion candidate.

2.4 The invention is based on the insight that the usage of some words and expressions is dependent on the time of day, as exemplified by the greeting formulas shown in table 7 (at page 22) of the published application. Such time-related usage is common in specific speech communities. The Board is of the opinion that this insight within a specific speech community and the resulting desire to automate writing in accordance with the usage belong to a phase preceding a patentable invention. In order to apply this insight to a mobile phone no relevant technical considerations were

required. In particular, confining the time dependency to 24 hour day periods - like morning, lunch, evening etc - does not involve any technical considerations or aspects.

- 2.5 The Board concludes that the technical problem objectively solved by the invention in the light of document D3 should be formulated as the task of providing a predictive information processing device which uses not only the frequency of words (as in the prior art, document D3, page 6, section 0040; cf. the present application, page 3, section 0017) but also the day-time dependency of use of words for predicting the most likely conversion candidates.

The alleged improvement of efficiency and accuracy of the conversion process presupposes a specific language habit of the user of the device. Clearly a device claim would normally not include features specifying a prospective user's cultural background, nor indeed is present claim 1 so limited. The technical problem must instead be derived from objective technical effects or objective technical properties of the invention as claimed.

- 2.6 In order to solve the above problem the skilled person would try to design a device that, in analogy to the displaying of the most common words according to the prior art (see section 0040 at page 6 of document D3), selects and displays as best candidates those words from the dictionary which meet the criterion that the current (conversion) time matches the word's associated 24 hour day period. In order to implement such a match it would be straightforward to use the system clock

present in all mobile phones, for example in processor 18 (see document D3, figure 2 and section 0066 at page 8), which provides the current time and thus "the time information representative of the time of conversion" necessary for applying the said time criterion. Clearly the dictionary would have to contain the required time information associated with each conversion candidate, something which in technical respect is merely a matter of storing the appropriate data. Equally clearly the most likely conversion candidate should be displayed "as a supreme conversion candidate", whatever the word "supreme" might mean, since the user's attention should be drawn to it.

2.7 For the above reasons, and since claim 1 of the second auxiliary request is within the scope of claim 1 of the higher-ranking requests, none of these requests complies with the requirement of inventive step.

3. Regarding the third auxiliary request, the Board decided in the oral proceedings not to admit it for the following reasons.

According to Article 13(3) RPBA, "amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the Board (...) cannot reasonably be expected to deal with without adjournment of the oral proceedings".

By filing the third auxiliary request including new independent claims that had not been brought before the Board in the written phase of the appeal proceedings, the appellant went clearly beyond the scope of the oral proceedings as outlined by the Board in the

communication of 19 June 2012 (see above). The appellant, therefore, could not reasonably expect the Board to be in a position to deal with such new subject matter within the framework set by the oral proceedings.

Furthermore, the objections to which the new request was said to be a response had already been brought to the attention of the appellant by the Board in its first communication, dated 4 November 2011. It was in reaction to that communication that the appellant filed the second auxiliary request, which the Board has admitted. The indication in the accompanying letter (dated 30 April 2012) that claims 3 and 10 might form the basis for a new allowable claim shows that the appellant at this point deliberately refrained from filing a corresponding request. Therefore, the Board does not accept the appellant's assertion that the third auxiliary requests was occasioned by the debate in the oral proceedings, and there is no acceptable excuse for the late filing of the new request.

Finally, the new request would require a resumption of the substantive examination and probably the re-entry into a second written phase of the appeal proceedings. It is true that the examining division dealt with claim 3 in the decision under appeal but their argumentation is based on different prior art.

Under these circumstances, admitting the new request would be clearly contrary to the spirit of Article 13(3) RPBA. The third auxiliary request, therefore, was not admitted to the proceedings.

4. For the above reasons, none of the requests before the Board can be granted.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

T. Buschek

S. Wibergh