

Veröffentlichung im Amtsblatt	Ja/Nein
Publication in the Official Journal	Yes/No
Publication au Journal Officiel	Oui/Non

Aktenzeichen / Case Number / N^o du recours : T 42/87 - 3.5.1

Anmeldenummer / Filing No / N^o de la demande : 81 106 482.3

Veröffentlichungs-Nr. / Publication No / N^o de la publication : 47 414

Bezeichnung der Erfindung: Method and apparatus for multilingual
Title of invention: communications of computer-specified
Titre de l'invention : control messages

Klassifikation / Classification / Classement : G 06 F 3/00, G 05 B 19/405

ENTSCHEIDUNG / DECISION

vom / of / du 5 October 1989

Anmelder / Applicant / Demandeur : Kearney & Trecker Corporation

Patentinhaber / Proprietor of the patent /
Titulaire du brevet :

Einsprechender / Opponent / Opposant :

Stichwort / Headword / Référence :

EPÜ / EPC / CBE Articles 52(2)(c) and (3), 56

Schlagwort / Keyword / Mot clé : "Patentable subject-matter (yes)"
"Inventive step (yes)"

Leitsatz / Headnote / Sommaire

Europäisches
Patentamt

Beschwerdekammern

European Patent
Office

Boards of Appeal

Office européen
des brevets

Chambres de recours



Case Number : T 42/87 - 3.5.1

D E C I S I O N
of the Technical Board of Appeal 3.5.1
of 5 October 1989

Appellant : KEARNEY & TRECKER CORPORATION
11000 Theodore Trecker Way,
West Allis
Wisconsin 53 214 (US)

Representative : Baillie, Iain Cameron
c/o Ladas & Parry
Isartorplatz 5
D-8000 München 2 (DE)

Decision under appeal : Decision of Examining Division 065 of
the European Patent Office dated
11 August 1986 refusing European
patent application No. 81 106 482.3
pursuant to Article 97(1) EPC

Composition of the Board :

Chairman : P.K.J. van den Berg
Members : W.J.L. Wheeler
E. Persson

Summary of facts and submissions

- I. The Appellant's European patent application No. 81 106 482.3, filed on 20 August 1981 claiming priority from a previous application US 185 240 of 8 September 1980, was refused by a decision of the Examining Division dated 11 August 1986. That decision was based on Claims 1 and 2 filed on 17 January 1986 and Claim 3 filed on 11 December 1984, amended to be dependent on Claim 1.
- II. The reason given for the refusal was that the subject-matter of the claims did not involve an inventive step within the meaning of Article 56 EPC having regard to the following prior art documents:
- D2: DE-A-2 740 873 and
D6: EP-A-14 312.
- III. On 8 October 1986 the Appellant filed a notice of appeal against that decision. The fee for appeal was paid on the same day. The statement of grounds was filed on 12 December 1986, accompanied by new pages of description and sheets 1/2 and 2/2 of drawings.
- IV. In reply to a communication from the Board dated 21 October 1988, the Appellant filed with a letter dated 2 May 1989 new Claims 1 and 2 (replacing all previous claims) and correspondingly amended pages of description. In response to a further communication from the Board dated 4 July 1989, in which it was indicated that grant of a patent was conceivable if certain amendments were made to the claims and description, the Appellant expressed agreement to the amendments in a letter dated 1 September 1989 and filed correspondingly amended pages of description.

V. The Appellant requests that the decision under appeal be set aside and a patent granted on the basis of the following documents:

Claims: Claims 1 and 2 filed on 2 May 1989, amended as indicated in the enclosure sent with the Board's communication of 4 July 1989;

Description: Pages 1, 1a and 4 to 8 filed on 12 December 1986, pages 1, 1a, 5 and 7 being amended as indicated in the enclosure sent with the Board's communication of 4 July 1989;
Pages 2, 2a (re-numbered 1b, 1c) filed on 1 September 1989;
Page 2, last line, and pages 3 and 9 as originally filed;

Drawings: Sheets 1/2 and 2/2 filed on 12 December 1986.

VI. Claims 1 and 2 are now worded as follows:

"1. A machine tool control that provides for the communication of messages relating to the operation of the machine tool to a human operator in any of a plurality of languages, comprising

a message memory (26,38) adapted to store a complete table of the messages required to be communicated to the operator during the operation of the machine,

means generating a message code upon the occurrence of a condition requiring communication to the operator,

selecting means actuated by the operator for selecting a desired one of the plurality of languages for the messages and

identifying means (24,36) connected to receive said message code and identify the required message in said message memory and transmit it in the selected language to a display or audio distribution system for communication to the operator

characterized in that

the said complete table of messages at any one time consists of messages in only one of the plurality of languages, with the same message being identified by the same message code, irrespective of the language,

the identifying means is responsive to the message codes in any order and in that

there is provided

a second memory (22,42) adapted to store a plurality of tables of messages with each table containing identical messages but in a language different from the languages of the other tables, and

a control (16,36) responsive to said selecting means for identifying the table of messages in said second memory appropriate to the selected language and transmitting that table of messages from said second memory to said message memory to form the complete table of messages required to be communicated to the operator.

2. A method of communicating messages to a human operator of a machine tool in any one of a plurality of different languages with each message relaying information to the operator relating to the operation of the machine tool, comprising

storing a complete table of predetermined messages in a message memory,

generating message codes that identify respective messages in said table that are appropriate for relaying to the operator information relating to the operation of the machine tool,

selecting a desired one of the plurality of languages for the messages to be communicated to the operator and

transmitting respective identified messages to a display or audio distribution system for communicating the message in the selected language to the operator,

characterized in that

the said complete table of messages consists at any one time of messages in only one of the plurality of different languages, with the same message being identified by the same message code, irrespective of the language, and

the message codes are generated in any order, and

in that there is provided the additional steps of

storing in a second memory, a plurality of tables of messages with each table containing identical messages but in a language different from the languages of the other tables, and wherein

the step of selecting the desired language is achieved by transmitting the table of messages in the selected language from said second memory to said message memory to form the complete table of messages required to be communicated to the operator."

Reasons for the decision

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is, therefore, admissible.

2. All the features specified in the current Claims 1 and 2 are disclosed in the originally filed description, from page 3, line 3 to page 8, line 25, it being implicit that the identifying means embodied in the CPU 24 or 36 can respond to the message codes in any order.

The only amendments made to the description and drawings are for the purposes of adapting the description to the current Claims, indicating the prior art, and removing inconsistencies.

Therefore the current version of the application, as specified in paragraph V above, does not contravene Article 123(2).

3. While, as indicated in the communication of 21 October 1988, the Board was of the opinion that the claims as they stood then were unacceptable because their subject-matter did not involve an inventive step, having regard to D2 and general knowledge, the Board is of the opinion that the present claims are not open to that objection.
 - 3.1 A machine tool control system according to the prior art portion of Claim 1 is known from D2. In that known system, which is intended for demonstration purposes, a series of messages is recorded in different languages on respective parallel soundtracks on a tape, each message being correlated with one of a predetermined sequence of machine operations to be demonstrated.

3.2 The subject-matter of Claim 1 differs from the prior art known from D2 in that the complete table of messages at any one time consists of messages in only one language (arranged so that, as in the prior art known from D2, the same message is identified by the same message code irrespective of the language), the identifying means is responsive to the message codes in any order, and in that there is a second memory adapted to store a plurality of tables of messages with each table containing identical messages but in a language different from the languages of the other tables, and, finally, in that there is a control responsive to the language selecting means for identifying the table of messages in said second memory appropriate to the selected language and transmitting that table to the message memory to form the complete table of messages.

3.3 Compared with the prior art system known from D2, the subject-matter of Claim 1 has the advantage of being able to communicate messages to the machine operator to inform him of various conditions requiring his intervention, which may occur in any order in the normal use of the machine.

3.4 In the opinion of the Board, it would be necessary to make the following changes to the prior art system known from D2 in order to arrive at something falling within the scope of the present Claim 1:

(a) replace the multi-language tape by a message memory storing only one table of messages in only one language;

(b) provide means which can respond to the message codes in any order to identify the appropriate message in the table, irrespective of the language;

(c) provide the second memory and means responsive to the language selecting means for identifying the table of messages in said second memory appropriate to the selected language and transmitting that table to the message memory.

3.5 D2 itself contains no hint which would lead a person skilled in the art to make any of the changes (a), (b) and (c). In the opinion of the Board, it is unlikely that a non-inventive person skilled in the art would think of making those changes on his own initiative, in the absence of any suggestion in the prior art.

3.6 Furthermore, it is the opinion of the Board that none of the other prior art documents cited by the Examining Division in the course of the proceedings before them would prompt a non-inventive person skilled in the art to make all those changes. In particular, it appears that in the multi-language option disclosed in D6 (pages 76 to 100 and Fig. 19 and 20), which relates to bank transaction terminals in which a customer can choose the language in which the transaction is carried out, the system selects an individual message in the chosen language from tables situated in the terminal and displays it. The operation of the system described in D6 does not appear to involve the transfer of a complete table of messages in the chosen language from one memory to another. Thus, even if the person skilled in the art could be expected to consult documents in such a relatively remote field (which is a question the Board does not need to decide here), following and adapting the teaching in D6 for use in a machine tool control according to the prior art portion of Claim 1 would not lead him to make the changes (a) and (c) mentioned in paragraph 3.4 above.

- 3.7 In view of the considerations explained in paragraphs 3.1 to 3.6 above, the Board takes the view that the subject-matter of Claim 1 (as now worded) involves an inventive step within the meaning of Article 56 EPC.
- 3.8 The subject-matter of Claim 2 also involves an inventive step for analogous reasons.
4. The Board observes in passing that the embodiments described with reference to Figs. 1, 2 and 3 of the present application involve the use of computer programs to convey messages relating to the operation of a machine tool to a human operator to warn him of a technical condition of the machine requiring his intervention. An example of such a condition might be a worn tool, as mentioned in the Appellant's statement of grounds of appeal. The Board therefore considers that the invention as now claimed solves a technical problem and that the present case is closely analogous to an earlier case T 115/85 (Headnote published in OJ EPO, 7/1989), where it was decided that giving visual indications automatically about conditions prevailing in an apparatus or system is basically a technical problem, and that even if the basic idea underlying an invention may be considered to reside in a computer program a claim directed to its use in the solution of a technical problem cannot be regarded as seeking protection for the program as such within the meaning of Article 52(2)(c) and (3) EPC. In such a situation, all the features (whether implemented in hardware or software) recited in the claim which contribute to the solution of the technical problem have to be taken into account when assessing the inventive step of the claimed subject-matter. This also applies to the present case. On the other hand, in the case T 38/86 (to be published) the situation was different: there the program was used to assist a human being in revising a

text by detecting linguistic expressions which are too difficult to understand, offering him alternative, easier, expressions for consideration, and, when he had chosen one of the offered alternatives using his own skill and judgment, replacing the detected expression by the chosen alternative. the program involved only conventional operations governing a method for performing a mental act, the overall effect being that signals representing one linguistic expression were replaced by signals representing another linguistic expression. Schemes, rules and methods for performing mental acts are excluded from patentability by Article 52(2)(c) EPC and, in the opinion of the Board, remain so when carried out by, or with the help of, a computer program. Consequently, and in accordance with Article 52(2)(c) and (3) EPC, to the extent that the features in the claims related only to the steps of a method for performing mental acts (rather than to the solution of a technical problem) and their implementation by computer program, they were left out of account when assessing the inventive step of the claimed subject-matter in that case. In the opinion of the Board, there is no inconsistency between the present decision and the two earlier ones referred to here.

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 on the basis of the Appellant's request (paragraph V above).

The Registrar

The Chairman

S. Fabiani

P.K.J. van den Berg