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Datasheet for the decision
of 12 March 2014

Case Number:	T 1186/11 - 3.5.01
Application Number:	01917472.1
Publication Number:	1346291
IPC:	G06F17/28
Language of the proceedings:	EN

Title of invention:
AUTOMATIC OR SEMIAUTOMATIC TRANSLATION SYSTEM AND METHOD WITH
POST-EDITING FOR THE CORRECTION OF ERRORS

Applicant:
D'Agostini Organizzazione S.r.l.

Headword:
Translation system/D'AGOSTINI

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step - (no)

Decisions cited:
T 0006/83, T 1177/97

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It can be changed at any time and without notice.

Case Number: **T 1186/11 - 3.5.01**

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 12 March 2014

Appellant: D'Agostini Organizzazione S.r.l.
(Applicant)   Via G. Giusti, 17
                           33100 Udine (IT)

Representative: D'Agostini, Giovanni
                           D'Agostini Organizzazione
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Decision under appeal: Decision of the Examining Division of the
                           European Patent Office posted on 25 January 2011
                           refusing European patent application No.
                           01917472.1 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: S. Wibergh
Members: P. Scriven
                 D. Prietzel-Funk

Summary of Facts and Submissions

I.   This appeal is against the Examining Division's
        decision to refuse European Patent application
        01917472.1 for reasons of lack of inventive step.

II.   In the statement setting out its grounds of appeal, the
        appellant requested that the decision under appeal be
        set aside, and that a patent be granted. The appellant
        also requested oral proceedings, if the Board
        contemplated deciding against that request.

III.   The Board arranged to hold oral proceedings. In a
        communication accompanying the summons, the Board set
        out its provisional view that the invention seemed to
        amount to the automation of how a translator might
        organise his work. The Board also stated its assumption
        that the appellant sought the grant of a patent on the
        basis of the sole request underlying the Examining
        Division's decision.

IV.   In a letter of response, dated 6 November 2013, the
        appellant submitted a new set of claims and stated that
        it sought the grant of a patent on that basis.
        Alternatively, the appellant requested that inventive
        step be evaluated on the basis of claim 1 of the
        corresponding US patent 7 580 828, a copy of which was
        also submitted.

V.   Oral proceedings were held as scheduled. The appellant
        stated his final requests as: that the Examining
        Division's decision be set aside and that a patent be
        granted on the basis of the claims of the main or of
        the auxiliary request, both submitted with the letter
        dated 6 November 2013.

VI.   Claim 1 according to the main request reads as follows:

Automatic/semiautomatic translation system for translating text from one language to another, of the type utilizing a system which comprises means of automatic or semiautomatic translation and means to allow the correction of the translation operated by the computer and means to implement sentence/word dictionary/ies into the computer system, and word process means in post-editing for check and correction of the mistakes of what has been translated, said automatic/semiautomatic translation system providing viewing means on monitor of a translation-interface involving a couple of text-columns, wherein each text-column includes parallel scrolling field means, characterized in that said couple of text-columns is horizontally divided, realizing at least two superimposed couples of parallel scrolling fields, forming a "+" structure in which, one couple of scrolling fields is below for translation and correction after translation, forming a couple of main translation and correction fields (F1, B-U) and the second couple is above these for accumulation of what has been translated, checked and corrected, forming a couple of accumulating fields (A1, U/Z) and wherein, said automatic/ semiautomatic translation system provides the following steps:
a) making an automatic translation of the entire text;
b) after said automatic translation, using:

– transfer means (Memline) to progressively
transfer the couples of top paragraphs of
said main translation and correction fields
(F1, Z/V) to said accumulating fields (A1,
Z/V), said automatic/semiautomatic
translation system being further
characterized by having correction-
autolearning means and
– retranslation means to retranslate at
least the first paragraph to check in said
couple of main translation and correction
fields (F1, B-U), said automatic/
semiautomatic translation system providing
means for automatically [sic] retranslation
of the remaining paragraphs.

VII.   Claim 1 according to the auxiliary request reads as
        follows:

A computer translation system having
viewing means on a monitor of a
translation-interface involving a couple of
text-columns, characterized in that said
couple of text-columns are divided
horizontally to form at least two pairs of
parallel scrolling fields, wherein each
text-column includes vertical parallel
scrolling field means, said at least two
pairs comprising a main pair of scrolling
fields including a main translation field
having text to be translated, wherein the
system translates the text in the main
translation field to provide translated
text, and a correction field, having the
translated text, for checking and
correcting the translated text, and a

second pair of scrolling fields, located
above the main pair, including first and
second accumulating fields for accumulating
text from the main translation field and
the correction field, respectively, and
wherein, said translation system has
transfer means to progressively transfer a
portion of the texts in said main
translation field and said correction field
to said accumulating fields.

VIII.   The appellant's arguments can be summarised as follows.

According to T 1177/97, *Translating natural languages/*
SYSTRAN, not published in the OJ EPO, it was found
(catchword 2) that, "Information and methods related to
linguistics may thus in principle assume technical
character if they are used in a computer system and
form part of a technical problem solution." The same
decision also stated that, "Implementing a function on
a computer system always involves, at least implicitly,
technical considerations and means in substance that
the functionality of a technical system is increased.
The implementation of the information and methods
related to linguistics as a computerized translation
process similarly requires technical considerations and
thus provides a technical aspect to *per se* non-
technical things such as dictionaries, word matching or
to translating compound expression into a corresponding
meaning."

According to T 0006/83, *Data processor network*/IBM, OJ
EPO 2005, 5, the co-ordination and control of the
internal communication between programs and data files
held at different processors in a data processing
system was to be regarded as solving a problem which

was essentially technical.

The Examining Division erred by separately treating
those features involving the different text fields and
the transfer of text between them and those involving
the additional complete translation. The invention
relied on a strict interaction between the operator and
the computer, because an accurate and speedy
translation could not be obtained by either of them
alone. However, in prior art computer-operator systems,
the "working condition was really boring and wearing,
causing possible mistakes due to the continuous need to
jump from one field to the other identifying the
corresponding paragraphs," and, "the solution proposed
by the applicant is new and inventive because getting
this kind of unusual division of the working fields
together with the feature of providing the complete
automatically translated text considerably improves the
translation jobs, both for quality and speed."

According to the Guideline for Examination in the
European Patent Office, when features of a user
interface "are combined with interaction steps or means
or when they concern technical information (e.g.
internal machine states), the examiner must check
whether they are necessary for achieving a particular
technical effect, for example by enhancing the
precision of an input device. The technical effect
achieved might be a more efficient man-machine
interface." The present invention provided just such an
enhanced man-machine interface.

Document D1 (WO-A1-99/45476) disclosed a system using
two columns, which scroll together. In the system
according to D1, there were automatic and interactive
modes. In the former, the whole text was automatically

translated, but in the latter, translation proceeded paragraph by paragraph: when the user had checked, and possibly corrected, the computer's translation of one paragraph, the next paragraph would be translated. The auto-learning in D1 applied to each subsequent paragraph, so that if a user, while checking paragraph 1, taught the system some new translation rule, that rule would be applied when paragraph 2 was translated.

The invention according to the present application differed in several ways. Firstly, unlike the interactive mode of D1, there was first a complete automatic translation, rather than a translation of only one paragraph. Secondly, each of the columns was horizontally divided, so that the screen presented four fields. As the user checked the translation, paragraphs that had been checked were moved from the lower right field to the upper right, and the corresponding paragraphs in the original text were moved from the lower left to the upper left. Thirdly, when the system learnt some new translation rule, it was applied so as to re-translate the entire text. In D1, it would be applied to the next paragraph to be translated, but that would not be a re-translation, because the paragraph had not previously been translated.

The use of the horizontal division of columns provided a technical effect. In D1, while the two columns scrolled together, there was no real alignment between the two, simply because the original and translated texts would not be equally long. That meant that the user would have difficulty locating the correct position in the original text, when checking a particular passage in the translation. The horizontal division, however, provided an easy means of alignment, because the first paragraphs in the lower pair of

fields would always correspond.

The re-translation went beyond a simple find-replace tool such as word processors provided, because it took account of grammatical rules. For example, the change of one noun (e.g. "modelo" in Italian) to another ("modela") would be accompanied by concomitant changes to articles and adjectives. Such re-translation greatly reduced the time needed to produce a correct translation.

Reasons for the Decision

Introduction

1.   The invention concerns translation between natural languages. A computer first translates a text, and a human operator checks and corrects the translation. The way in which the computer makes its translation is not important to the invention, but it is important to understand that, as the operator checks the translation and makes corrections, the computer can "learn", so that future translations will be better. How the learning takes place is also not part of the invention.

2.   The invention builds on the appellant's earlier invention, which was the subject of document D1, WO-A1-99/45476, and which includes automatic translation and the "learning" of new translation rules. In the system according to D1, the original text is presented in one column, the translation in a second. The two columns scroll together, but that does not mean the two texts are precisely aligned: if the translated text is

longer than the original, and is scrolled down ten
lines, the original will also scroll down ten lines,
which is too far for proper alignment.

3.   In the system of D1, the operator may choose between a
        completely automatic translation and interactive
        translation. It is not clearly stated what happens in
        the former, but the appellant's explanation was that
        the computer translates the whole text by itself, and
        that is it. The alternative, interactive, translation
        proceeds one sentence, or paragraph, at a time. The
        operator is presented with a suggested translation in a
        pop-up window, and can make corrections. Approved
        translations are then accumulated in the right-hand
        column.

4.   When, in D1, a new translation rule is learnt, it will
        be applied to subsequent translations. The first
        opportunity for that is when the computer translates
        the next sentence or paragraph.

5.   The present invention organises the work differently.
        Instead of using two columns with a pop-up window for
        checking, the screen is divided into four fields,
        arranged in a square. The lower two fields contain, on
        the right, the translated text that remains to be
        checked, and, on the left, the corresponding original
        text. The upper pair of fields contains, on the right,
        the checked paragraphs of the translation, and, on the
        left, the corresponding original text.

6.   As the appellant explained it, and demonstrated during
        oral proceedings before the Board, the operator
        perceives two text columns with a common horizontal
        dividing line. Above the division is the text in the
        original version (left) and in the automatically

translated, but manually checked version (right); below
it is also the original text (left) as well as the
automatically translated, but as yet unchecked text
(right). The first paragraphs (on the left and right)
below the division correspond to one another and are
thus presented synoptically. It is, therefore,
straightforward for the operator to find matching
places in the original and translated texts.

7.   The invention also uses newly learnt translation rules
        differently from D1. Since there is now a translation
        of the entire text from the start, the new rule is
        incorporated by making a new translation.

The main request

8.   In the present case, there are two differences over the
        system of D1. Firstly, there is the layout using four
        fields; secondly, there is the re-translation when a
        new rule is "learnt".

9.   As the appellant explained it, the operator, a
        translator, using the system disclosed in D1, has to
        compare original and automatically translated text
        passages, so as to refine the machine translation and
        must often spend a lot of time searching for
        corresponding portions of text. That is one problem the
        horizontal division solves since it aligns those
        paragraphs. However, it results directly from the way
        the translator wants to organise his work. Indeed, a
        translator working by hand, and checking a translation,
        will place original and translated texts side by side
        for ease of reference. The translator wants to do that
        independently of the technical substrate, whether

pencil and paper or a computer screen and keyboard.

10.   The horizontal division also serves a second purpose.
        It helps the translator keep track of what has been
        checked, and what remains to be checked. But that too
        is a question of how the translator wants to organise
        his work, and is independent of the technology used.

11.   Since translation is not a technical activity, the
        Board does not consider the layout, in particular the
        four fields with a horizontal division, as solving a
        technical problem. It is a technically implemented
        solution to a non-technical problem. As a result, it
        cannot contribute to inventive step.

12.   A translator who notes, when checking the translation,
        that some word has been wrongly translated, will often
        want to apply the correction throughout the text. To
        take an example from the application, if the translator
        notes that the translation of "mezzi di raffronto" has
        been wrongly translated as "confront means" and
        considers that "comparing means" is better, he will
        want to apply corresponding changes throughout the
        document. Working with pencil and paper, that would no
        doubt be laborious and he might ask an assistant to do
        it. Having the computer do it is no more than
        automating what the translator wants to do or have
        done. The first impetus for "retranslation" comes from
        the translator. The programming of a computer to learn
        new rules of translation and to apply them to a text is
        no doubt difficult, but it is an acknowledged part of
        the prior art. What the present invention does is use
        that capability differently, because the translator
        wants to organise his work differently. Again, the
        Board sees a technically implemented solution to a non-
        technical problem, which does not contribute to

inventive step.

13.   The appellant has argued that one should not split the features relating to alignment of text from those relating to re-translation, because they both address the problem of speeding up the translation process. The Board acknowledges that they both do seem to contribute to that, but since the problem is not a technical one, it makes no difference.

14.   The appellant correctly argued that the implementation on a computer involved technical considerations. However, the Board does not see that the technical contribution goes beyond specifying that the computer should do what the translator wants of it. As such, the technical implementation cannot be other than obvious. That is no reflection on the usefulness of the invention, but rather a consequence of how non-technical features of an invention are treated according to the Boards' jurisprudence.

15.   The appellant's arguments regarding T 1177/97 and T 0006/83 relate to the overall requirement of technicality. That has not been an issue in this case. The issue, rather, has been how non-technical features, defined as part of an overall technical system or method, are treated when assessing inventive step.

16.   In summary, the Board sees the subject matter of claim 1 as a system that uses a computer for organising work the way a translator wants it to be organised. It is common ground that the computer could do that, that it was able to make and re-make translations, and that it was able to display different parts of the text on different parts of a screen. Once the translator has decided how that should be organised, the computer

implementation would, in the Board's view, have been obvious.

17.   The Board, therefore, cannot allow the main request.

The auxiliary request

18.   It is common ground that claim 1 according to this request does not define any feature that is not also defined in claim 1 according to the main request. It follows that its subject matter cannot have been less obvious to the technically skilled person, and the Board must conclude that it does not involve an inventive step.

19.   The Board, therefore, cannot allow the auxiliary request.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek   S. Wibergh

Decision electronically authenticated