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**Datasheet for the decision
of 16 March 2016**

Case Number: T 1357/10 - 3.5.07

Application Number: 03003931.7

Publication Number: 1416394

IPC: G06F17/21

Language of the proceedings: EN

Title of invention:

Method for selecting a font

Applicant:

Microsoft Technology Licensing, LLC

Headword:

Selecting a font/MICROSOFT LICENSING

Relevant legal provisions:

EPC Art. 56, 84, 123(2)

Keyword:

Inventive step - after amendment - (yes)

Decisions cited:

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

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Case Number: T 1357/10 - 3.5.07

D E C I S I O N
of Technical Board of Appeal 3.5.07
of 16 March 2016

Appellant: Microsoft Technology Licensing, LLC
(Applicant) One Microsoft Way
Redmond, WA 98052 (US)

Representative: Grünecker Patent- und Rechtsanwälte
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 14 December
2009 refusing European patent application No.
03003931.7 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman R. Moufang
Members: P. San-Bento Furtado
M. Rognoni

Summary of Facts and Submissions

- I. The former applicant, Microsoft Corporation, appealed against the decision of the Examining Division to refuse European patent application No. 03003931.7 by a "decision according to the state of the file", using EPO Form 2061, referring to the first communication and to the communication accompanying the summons to oral proceedings, dated 24 March 2006 and 5 August 2009 respectively. With effect from 2 February 2015, a transfer of the application to Microsoft Technology Licensing, LLC, which thereby obtained the status of appellant, was registered by the European Patent Office.
- II. In the communication accompanying the summons to oral proceedings referred to in the decision, the Examining Division found that the subject-matter of claims 1 to 7 then on file lacked inventive step over the following document
- D1: Bos, B., et al.: "Cascading Style Sheets, level 2, CSS2 Specification", W3C Recommendation, 12 May 1998.
- In the search report three further documents had been cited:
- D2: EP-A-1 033 697, published on 6 September 2000;
D3: WO-A-94/23379, published on 13 October 1994;
D4: US-B-6 313 735, published on 6 November 2001.
- III. In the statement of grounds of appeal, the appellant requested that the decision be set aside and that a patent be granted on the basis of the claims, description pages and figures on file.

- IV. The appellant was invited to oral proceedings. In a subsequent communication, the Board expressed doubts that claim 1 fulfilled the requirements of the EPC with respect to Articles 84 and 123(2) EPC. The Board provided a discussion of inventive step on the basis of document D1 and interpreting claim 1 in the light of the description.
- V. By a letter of reply, the appellant filed a new main request and an auxiliary request.
- VI. Oral proceedings were held on 16 March 2016. During the oral proceedings the appellant submitted a new main request to replace the previous requests. At the end of the oral proceedings, the chairman pronounced the Board's decision.
- VII. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request filed during the oral proceedings.
- VIII. Claim 1 of the sole request reads as follows:
"A method to be performed by a glyph generation module executing as a part of an operating system, the method comprising:
 receiving, from the operating system, a code indicating what character is required by a computer program;
 receiving, from the operating system, language information corresponding to a keyboard locality setting;
 referencing a mark-up language document, wherein the mark-up language document is linked to a plurality of font files; and
 determining, based on the received language information and the received code and the contents of

the mark-up language document, which of a plurality of fonts is needed by the computer program to display the character required by the computer program, wherein if the needed font is not available, a default font specified by the mark-up language document is used."

Claim 2 reads as follows:

"A computer-readable medium having stored thereon computer-executable instructions for performing the method of claim 1."

Each one of claims 3 to 5 reads

"The method of claim 1, further comprising" respectively followed by the features:

- "retrieving a glyph from the font that is determined to be needed, wherein the glyph is displayable to represent the character."
- "retrieving a glyph from the font that is determined to be needed; and
 providing the glyph to the computer program."
- "sending information regarding the determined font to a printer."

Claim 6 reads as follows:

"The method of claim 3, further comprising:
 resizing the glyph based on scaling information contained in the extensible mark-up language document."

IX. The appellant's arguments relevant to the decision are discussed in detail below.

Reasons for the Decision

1. The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.

2. *The invention*

2.1 The application relates to font selection techniques that use mark-up language documents to define one or more selection criteria (see paragraph [0001] of the description as filed).

A glyph generation module, which executes as part of the operating system, generates the glyphs that are to be shown on the display, obtaining the glyphs from one or more font files (paragraphs [0019] and [0020]). The determination of which font to be used is based on further information forwarded by the operating system such as user language, which may be obtained from the locality setting of the keyboard, or locality information associated with a document (paragraphs [0007] and [0019]). Using the forwarded information, the glyph generation module selects the appropriate font file from a virtual font file (paragraph [0020]), which is named "the mark-up language document" in the claims.

The virtual font file contains instructions in a markup language to select a particular font on the basis of the forwarded information (paragraph [0022]). The application shows in paragraph [0023] a virtual font file in XML and gives in paragraphs [0027] to [0030] some examples of the way the invention would use the virtual font file. In those examples, the glyph generation module receives from the operating system a Unicode value and further information such as the user's language and then determines from the virtual font file how to handle the Unicode value. The proper font to use may depend on whether the code is within a particular range (paragraph [0025]). The virtual font file also defines default fonts (paragraph [0026]).

3. *Articles 84 and 123(2) EPC*

3.1 In its communication, the Board raised some objections with regard to Articles 84 and 123(2) EPC. Those deficiencies were overcome by the amendments leading to the present claims.

3.2 In its communication, the Board found that claim 1 on which the appealed decision and the Board's preliminary opinion were based, lacked support by the description because it did not specify which component or system performed the steps of the claimed method. This deficiency has been overcome, due to the fact that independent claim 1 now clearly specifies that the method is to be performed by a glyph generation module executing as part of an operating system, as described in paragraph [0019], and depicted in Figure 3 (reference signs 22 and 28) of the application.

3.3 The expressions that were used in previous claims, which the Board objected to in its preliminary opinion, and at the oral proceedings, have been corrected in light of the description. Claim 1 is therefore clear and supported by the description.

3.4 Claim 1 is based on original claim 1, further reciting features taken from the description, mainly from paragraphs [0019] and [0022] to [0027].

Figure 3 and paragraph [0019] disclose that the method is performed by a glyph generation module executing as part of an operating system (see reference signs 22 and 28). Paragraph [0019] also explains that the module receives language information from the operating system and that the operating system receives a code

indicating the character from the keyboard. It is clear from paragraphs [0022] to [0026] that that code is passed by the operating system to the glyph generation module. That feature is also explicitly mentioned in the following text of paragraph [0027], third and fourth lines: "the operating system 22 detects that the keyboard 25 has generated a Unicode value of 0068, and passes this value to the glyph generation module 28".

That the mark-up language document is linked to a plurality of font files is derived from paragraphs [0013] and [0019].

Paragraph [0020] describes how the method of the invention determines which of the plurality of fonts is needed on the basis of the received language information, further examples of the functionality of the method being disclosed in paragraphs [0022] to [0025]. Those paragraphs give examples in which the font is determined on the basis of the language information and the code indicating the character. For instance, in the example of paragraph [0025], last five lines of page 12, "if the user's language is English-US and the Unicode value generated by a keystroke is between 4E00 and 9FAF [...], then the font to be used by the glyph generation module 28 is the Chinese (traditional) #2 font". It is therefore clearly and unambiguously derivable from those paragraphs, that the glyph generation module receives the language information and the code, and determines the needed font on the basis of those two parameters and the contents of the mark-up language document. Default fonts are described in paragraph [0026].

3.5 Claims 2 to 6 correspond, respectively, to original claims 2 to 4 and 6, and to a slightly amended version

of original claim 14. The Board is convinced, with regard to claims 2 to 6, that the claimed subject-matter is clearly defined and finds support by the description.

3.6 The Board is therefore satisfied that the claims meet the requirements of Articles 84 and 123(2) EPC.

4. *Inventive step*

4.1 In its assessment of inventive step, the Examining Division found that document D1 disclosed a method for selecting a font comprising most of the claimed steps and started its assessment of inventive step from that document.

Document D1 concerns the style sheet language Cascading Style Sheets, level 2 (CSS2), which allows users and authors to attach style, e.g. fonts, to structured documents, e.g. HTML documents and XML applications (see abstract). Section 15, starting on page 196, describes in detail features of CSS2 for determining fonts and glyphs to be used when a document's text is displayed.

Document D1 discloses a "visual user agent" or "user agent" responsible for rendering a character and explains that CSS2 offers more flexibility to style sheet authors to describe the fonts to be used, and to user agents in "selecting a font when an author's requested font is not immediately available" (see page 196).

On page 65, section 5.11.4, document D1 explains how the language of a document or elements can be determined, and gives an example of defining rules

setting the quotation marks depending on the language of a document. On page 200, it explains how to define language-sensitive typography, for instance to use the font appropriate for either Chinese or Japanese characters having the same Unicode. Furthermore, document D1 discloses on pages 209 to 212 generic font families, offering a default mechanism for finding a font when none of the specified fonts can be selected.

The Board therefore agrees with the Examining Division that document D1 discloses features of the claimed method.

- 4.2 The user agent of document D1 has similar functions to those of the glyph generation module. According to pages 196 and 197, in order to render a character, the user agent checks whether there is a font directly or indirectly specified for the character. If the font is available, the user agent maps the character using the font; otherwise, it substitutes the font by a different one or retrieves the font from the Web. Authors specify font characteristics via a series of font properties. Document D1 therefore discloses that the user agent receives a code indicating a character as essentially recited in claim 1.

Each user agent has a "font database" at its disposition and when it receives a character with a particular font it identifies the font in the database that "best fits" the specified font according to a font matching algorithm. It then retrieves the required glyph from the font database locally or from the Web (page 197, first paragraph). The selection mechanism is described in section 15.3, starting from page 212. As described on page 213, the font database contains font descriptions which may indicate the location of the

font data in the Web, or information to match the style sheet font properties to particular font data. On page 214, an example is given of a font descriptor including a link to a font file. As explained on that page, the user agent may add used font descriptors to the database for future access. The font database also includes full font descriptions for all fonts which the user agent will use for default presentation and for the five special generic font families (page 231). The font database hence corresponds to the virtual font file, or mark-up language document of the claim, which is linked to a plurality of font files and specifies default fonts. Therefore, the user agent also performs steps as specified in claim 1 of referencing a mark-up language document and determining which of a plurality of fonts is needed.

4.3 The Board notes that document D1 is a long document specifying generic features supported by CSS2 and that the passages of document D1 cited above were taken from different parts of the document. The features are therefore not explicitly disclosed in combination. The Board nevertheless finds that the skilled person would combine the teachings of those passages, and presupposes, in the following discussion, that document D1 teaches the combination of the features mentioned above.

4.4 The Examining Division was of the opinion that the claimed method differed from the disclosure of D1 in the step of forwarding information associated with a keyboard locality setting from an operating system to a glyph generation module for selecting a font for display.

However, the Examining Division did not explain what it considered to be "the computer program", as specified in the last paragraph of claim 1. Furthermore, it seems to have regarded an unspecified mark-up document as the "mark-up language document" of the claim, independently of its relationship to the other features of the invention.

As the Board explained in its communication, it could be argued that the reasoning of the Examining Division was nevertheless adequate in view of the vague and broad definition of the invention by claim 1 of the request on which the decision was based. However, current claim 1 specifies additional features and clearly recites that the method is performed by the glyph generation module executing as part of the operating system. The reasoning of the Examining Division is hence not valid for the present claims.

In the Board's view, the browser in the context of the disclosure of document D1 corresponds to the computer program mentioned in the claim. On the other hand, document D1 explains on page 23 that the user agent is often referred to as a "browser". Consequently, the skilled person would understand from document D1 that the glyph generation in D1 is performed by a module of the user agent or browser.

- 4.5 The invention of the present application therefore differs from the disclosure of document D1 in that:
- (a) the glyph generation module executes as part of the operating system (and is not part of the computer program as in document D1),
 - (b) the operating system forwards the code indicating what character is required and language information

associated with a keyboard locality setting to the glyph generation module, and

(c) the forwarded language information as well as the received code are taken into account to determine the font to be used.

4.6 The distinguishing features reflect the central concept of the invention of providing the glyph generation functionality in a module as part of the operating system to be used by different programs in the system. In this way the computer programs do not have to deal with the problems of glyph generation.

The Board finds that since document D1 does not describe determining fonts by a generic utility at the operating system level, it does not address the main problem of the present invention. Furthermore, the teaching of document D1 is directed to simplifying Web authoring and site maintenance by separating the presentation style from the content of documents (see abstract), which is different from the general problem addressed by the present invention. Under those circumstances, it is questionable whether document D1 is an appropriate starting point for the assessment of inventive step of the present claims.

If, in spite of that, document D1 were considered to be the closest prior art, the distinguishing features would be considered to solve the technical problem of providing improved font selection to programs in a computer system.

As explained above, the approach of document D1 is very different from that of the claimed invention. Furthermore, at the date of priority of the present application, the typical areas of application of the

technology of document D1, such as Web authoring (see abstract of document D1), were very different from that of the present invention, where the font selection is used at the operating system level to provide a generic utility for applications running in the computer (features (a) and (b)).

The Board is therefore not convinced that without a further hint it would be obvious for the skilled person facing the above mentioned problem to add features (a) to (c) to the font selection features described in a different context, in separate passages of document D1.

The other three prior-art documents D2, D3 and D4 cited in the search report do not disclose using mark-up files or any equivalent techniques for font selection. In fact, those documents describe inventions which are very different from that of the present application. Hence, none of the cited prior-art documents discloses features (a) to (c) or similar features or gives a hint that would lead the skilled person to combine the distinguishing features with the techniques known from document D1. From the above, it follows that none of those documents would be an adequate starting point for assessing inventive step of the claimed invention either.

From the above, it follows that the Board cannot deny inventive step of the subject-matter of claim 1 in light of the available prior art. The same applies to claims 2 to 6, each including all the features of claim 1 or corresponding features.

- 4.7 The Board is therefore satisfied that the claims meet the requirements of Articles 52(1) and 56 EPC with respect to the prior art on file.

5. *Concluding remarks*

5.1 In view of the concise description of the invention in the present application, and taking into account that the distinguishing features, especially feature (a), constitute the gist of the invention, the Board assumes that the search covered those features, independently of whether they were originally claimed or not. In the Board's view it would therefore be inappropriate to remit the case to the first instance for further search.

5.2 Since, additionally, the claims comply with the provisions of the EPC, a patent has to be granted on their basis. However, the description and drawings may still need to be adapted.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with the order to grant a patent on the basis of the main request filed during the oral proceedings and description and drawings yet to be adapted.

The Registrar:

The Chairman:



I. Aperribay

R. Moufang

Decision electronically authenticated