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**Datasheet for the decision  
of 23 March 2022**

**Case Number:** T 1601/19 - 3.5.07

**Application Number:** 06765447.5

**Publication Number:** 1891553

**IPC:** G06F17/30, G06F17/21, G06F3/048

**Language of the proceedings:** EN

**Title of invention:**

System and method for maintaining a view location during rendering of a page

**Applicant:**

Nokia Technologies Oy

**Headword:**

Maintaining view location during rendering/NOKIA

**Relevant legal provisions:**

EPC Art. 56, 123(2)

**Keyword:**

Inventive step - main request (no) - first, second, sixth, fourth and third auxiliary request (no)  
Amendments - added subject-matter - fifth auxiliary request (yes)

**Decisions cited:**

T 1143/06, T 1741/08, T 0336/14, T 0505/18



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Case Number: T 1601/19 - 3.5.07

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.07**  
**of 23 March 2022**

**Appellant:** Nokia Technologies Oy  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 3 January 2019  
refusing European patent application  
No. 06765447.5 pursuant to Article 97(2) EPC**

**Composition of the Board:**

**Chair** J. Geschwind  
**Members:** P. San-Bento Furtado  
M. Jaedicke

## **Summary of Facts and Submissions**

- I. The appeal lies from the decision of the examining division to refuse European patent application No. 06765447.5.

The following documents were cited in the decision under appeal:

- D1: US 5 845 084, published on 1 December 1998;  
D2: US 5 778 372, published on 7 July 1998;  
D3: EP 0 632 362 A2, published on 4 January 1995.

The examining division decided that the subject-matter of the independent claims of the main request and the first to sixth auxiliary requests was not inventive over document D1 and taking into account that the distinguishing features related to non-technical user requirements.

- II. With the statement of grounds of appeal, the appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the main request or one of the six auxiliary requests considered in the appealed decision and re-submitted with the grounds of appeal, with the order of the third and sixth auxiliary requests interchanged.
- III. In a communication accompanying a summons to oral proceedings, the Board expressed the view that the subject-matter of claim 1 of each of the requests was not inventive over document D1, and that claim 1 of the fifth auxiliary request added subject-matter beyond the content of the application as filed.

- IV. With a letter of reply the appellant provided further arguments.
- V. Oral proceedings were held as scheduled. At the end of the oral proceedings, the Chair announced the board's decision.
- VI. The appellant's final requests were that the decision under appeal be set aside and that a patent be granted on the basis of the main request or on the basis of one of the first, second, sixth, fourth, fifth and third auxiliary requests, in this order.
- VII. Claim 1 of the main request reads as follows (itemisation added by the board):

"A method for controlling the exhibition of material on a display of an electronic device, comprising:

- (f1) receiving a first portion of a document;
- (f2) exhibiting the first portion on the display;
- (f3) identifying a reference point, on the display, for the document, the reference point corresponding to a particular portion of the exhibited first portion exhibited in a particular region on the display;
- (f4) after exhibiting the first portion on the display, receiving a second portion of the document; and
- (f5) if the second portion of the document is to be positioned and exhibited before the reference point, positioning the second portion of the document before the reference point while maintaining the position of the reference point in the particular region of the display, thereby maintaining the position of the document as it

appears on the display following receipt of the second portion of the document."

- VIII. Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the text "if the second portion of the document is to be positioned and exhibited before the reference point" has been replaced with

"if the second portion of the document is to be positioned before the reference point and cause a change in page layout affecting the first portion of the document".

- IX. Claim 1 of the second auxiliary request differs from claim 1 of the main request in that the text "if the second portion of the document is to be positioned and exhibited before the reference point" has been replaced with

"if the second portion of the document is to be positioned before the reference point and changes the position of the first portion of the document in the overall content of the document".

- X. Claim 1 of the sixth auxiliary request differs from claim 1 of the main request in that the text "if the second portion of the document is to be positioned and exhibited before the reference point" has been replaced with

"if the second portion of the document is to be positioned before the reference point and changes the position of the first portion of the document in the overall content of the document such that the first portion of the document is forced off the display".

XI. Claim 1 of the fourth auxiliary request differs from claim 1 of the main request in that the text "and exhibited" in the text of features (f5) above has been deleted, and in that the following text has been inserted at the end of (f3) above:

", wherein the reference point is selected based on a language used in the document".

XII. Claim 1 of the fifth auxiliary request differs from claim 1 of the main request in that the text "and exhibited" in the text of features (f5) above has been deleted, and in that the text "in a particular region on the display" of (f3) has been replaced with the following text:

"in a region selected from a group consisting of an upper right hand corner of the display, a middle portion of an upper edge of the display, and a center of the display with the selection being based upon a language in which the web document is presented".

XIII. Claim 1 of the third auxiliary request reads as follows:

"A method for controlling the exhibition of material on a display of an electronic device, comprising:

receiving a first portion of a mark-up language document;

exhibiting the first portion on the display;

identifying a reference point, on the display, for the mark-up language document, the reference point corresponding to a particular portion of the exhibited first portion exhibited in a particular region on the display;

after exhibiting the first portion on the display, receiving a second portion of the mark-up language document; and

if the second portion of the mark-up language document is to be positioned before the reference point and changes the position of the first portion of the document in the overall content of the mark-up language document, positioning the second portion of the document before the reference point while maintaining the position of the reference point in the particular region of the display, thereby maintaining the position of the mark-up language document as it appears on the display following receipt of the second portion of the mark-up language document."

XIV. The appellant's arguments, where relevant to this decision, are addressed in detail below.

## **Reasons for the Decision**

### *Application*

1. The present application concerns displaying a document such as a web page on a display of an electronic device during the loading process. According to the description, when a user accesses a remote web page using a web browser, the web browser begins to display the web page before all of the page's content has been loaded to the user's device. If the user scrolls the view into the middle of the web page that is still being downloaded, the viewed location may "jump" during the loading process when additional material, e.g. a large image, is downloaded which is placed above or before the view location (paragraph [0003] of the international publication). In order to avoid this, the application suggests, when content is being rendered



and loaded, to maintain the "view location" of the page on a device's display based upon the content actually appearing on the display, instead of being based on the page origin itself (paragraph [0005]).

*Main request*

2. *Inventive step over D1 - claim 1*

2.1 Document D1 discloses a method for displaying data received by a computer networking application from a computer network (column 1, lines 6 to 8). When data is received from the network, for instance data of a HTML document with several embedded graphical images, text data, which is typically received before the image data, is displayed as it is being received. When an embedded graphical image with an unknown size is encountered in the HTML data received, a placeholder icon may be displayed. The use of a placeholder eliminates the delay that can arise in displaying a web page when the receive data transfer rate is slow (column 8, lines 24 to 38). As explained in column 9, lines 1 to 10, "When replacing placeholders with corresponding embedded graphical images, only those areas of the display affected by the replacement are reformatted. For example, the display area containing text data 94 in FIG. 6 is not reformatted because this area is not affected by replacement of a placeholder with an embedded graphical image. The same is true for the display area containing text data 106. However, the areas of the display containing placeholder icons (98,102,106 FIG. SC) are reformatted."

2.2 In the decision under appeal, the examining division concluded that the subject-matter of claim 1 differed

from the method of document D1 in that it included features (f3) and (f5).

The appellant did not contest this finding of the decision under appeal. It argued that the distinguishing features had, irrespective of the user preferences, the technical effect of supporting the continued display of information during the loading process. The invention avoided changes of the displayed text affecting the readability of the web page. The invention facilitated a continued human-machine interaction by solving conflicting technical requirements regarding rendering speed (displaying the available information when available) while avoiding obviating in-use content. This was not an issue of aesthetics or user preference, it related to the fundamental aspects of rendering information to the user. The use of a reference point provided functional data for controlling the operation of an electronic device processing and displaying the first and second portions of the web document.

2.3 According to the case law, the presentation of cognitive information may be considered technical if it credibly assists the user in performing a technical task by means of a continued and/or guided human-machine interaction process (see e.g. T 336/14, reasons 1.2.4, and T 505/18, reasons 9.3). On the other hand, presentation of information is not technical if it merely reduces the cognitive burden of the user (T 1741/08, reasons 2.1.6, T 1143/06, reasons 5.4).

2.4 Claim 1 does not specify which type of content is being displayed, what the reference point and the particular region are and how they are determined, nor how the user is viewing the content. It is not implicit from the claim that the whole document cannot be rendered

simultaneously on the display. Given this level of generalisation of the claimed subject-matter, the board considers that the use of a reference point, or the distinguishing features, cannot be considered to have a technical effect.

2.5 Assuming, at least for the sake of argument, that the distinguishing features make a technical contribution, the board notes the following.

2.5.1 The appellant argued that document D1 did not solve the problem of continuity of display. Following the teaching of D1, if a placeholder were positioned before a "reference point" of the display (such as the top left-hand corner of a display part of a web page), then that placeholder would be reformatted. As noted in D1, column 7, lines 59 and 60, the placeholder was a "small (e.g. 25x25 pixel) graphical image or icon". Thus, reformatting the small icon resulted in the "jump" problem identified in the present application.

According to the appellant, maintaining the reference point in the claimed invention provided for "continuity of display", which facilitated the user's task of viewing (e.g. reading) the document using the electronic device when the document was being loaded, e.g. by avoiding that the part of the document which the user was viewing at a particular moment moved when the document was updated with the second portion.

The board notes, however, that the reference point is a static point within the displayed region of the document (for example, the upper left- or right-hand corner, see paragraph [0022]). Moving the content is not completely avoided in the claimed invention. When the second portion is positioned within the displayed area in the method of claim 1, the displayed portion

changes and some jumps may occur (see also paragraph [0021] of the application). Continuity is only improved, if at all, at the reference point. Furthermore, document D1 discloses the need for avoiding making the display unreadable for the user (column 2, lines 39 to 41; column 4, lines 1 to 5) and already supports "continuity of display" to some degree by reformatting only those areas of the display (e.g. areas containing placeholders) affected by the replacement (column 3, lines 1 to 4; column 9, lines 1 to 3).

2.6 The distinguishing features can thus be seen as solving the problem of further improving the readability of the displayed web page during loading in the method of document D1.

2.7 In the board's opinion, the skilled person facing that problem would consider avoiding changes of the displayed document at the user's reading position of the document on the display. The skilled person would immediately recognise that this required fixing the reading position on the display each time placeholders are replaced with the received image data, even for placeholders positioned in the document before the reading position. This corresponds to features (f5).

Since the user's exact reading position at the point in time of the replacement is unknown, the skilled person would consider identifying at least an approximate reading position in some way (as in feature (f3)), for example as the user's approximate reading position at the point in time the placeholder is replaced with the received image during loading. For instance, for web pages in English, and knowing that a user usually starts reading such documents from the upper left-hand corner, the skilled person would identify an

approximate reading position as the upper left-hand corner of the displayed area.

2.8 Therefore, the subject-matter of claim 1 is not inventive (Article 56 EPC).

*First, second, sixth and fourth auxiliary requests*

3. Claim 1 of each of the first, second and sixth auxiliary requests differs from claim 1 of the main request in that the condition "if the second portion of the document is to be positioned and exhibited before the reference point" has been amended by deleting the text "and exhibited" and inserting the following text at the end of that passage:

- (a1) "and cause a change in page layout affecting the first portion of the document";
- (a2) "and changes the position of the first portion of the document in the overall content of the document"; and
- (a6) "and changes the position of the first portion of the document in the overall content of the document such that the first portion of the document is forced off the display".

4. Claim 1 of the fourth auxiliary request differs from claim 1 of the main request in that "and exhibited" has been deleted and the following text has been inserted at the end of (f3):

- (a4) "wherein the reference point is selected based on a language used in the document".

5. *Inventive step*

5.1 None of the amendments (a1), (a2), (a6) and (a4) confers inventive step to the subject-matter of claim 1 of the respective auxiliary request.

5.2 Features (a1), (a2) and (a6) describe specific situations in which the second portion of the document affects the (position of) the first portion. These features do not change the main idea of maintaining the position of the reference point, they merely refer to situations in which it is applied. The inventive step assessment for the main request also applies, since the board is of the opinion that the aforementioned main idea itself is not inventive. The skilled person would consider maintaining the position of the reading position on the display independently of whether positioning of the second portion caused a change in page layout affecting the first portion of the document, changed the position of the first portion in the overall content of the document, and/or forced it off the display.

5.3 The fact that specific languages with different reading directions are to be supported is a non-technical requirement. The board has therefore doubts that feature (a4) makes a technical contribution. In addition, as explained in point 2.7 above, it would be obvious for the skilled person to identify the reading position depending on the language due to the different reading directions of different languages.

5.4 Therefore, the subject-matter of claim 1 of the first, second, sixth and fourth auxiliary requests is not inventive (Article 56 EPC).

*Fifth auxiliary request*

6. Claim 1 of the fifth auxiliary request differs from claim 1 of the main request in that "and exhibited" has been deleted and the text "in a particular region on the display" of feature (f3) has been replaced with

(a5) "in a region selected from a group consisting of an upper right hand corner of the display, a middle portion of an upper edge of the display, and a center of the display with the selection being based upon a language in which the web document is presented".

7. *Added subject-matter*

7.1 Claim 1 of the fifth auxiliary request specifies that the region of a portion to which the reference point corresponds is selected based upon a language in which the web document is presented. It also specifies that such a region can be selected to be "a middle portion of an upper edge of the display" or "a center of the display". In simpler terms, this means that the reference point is selected based on the language and it may correspond to the "middle portion of an upper edge" of the display or a center of the display.

7.2 The only passage of the application as filed which discloses the selection of the reference point based on a language is paragraph [0022]. At the oral proceedings the appellant confirmed that paragraph [0022] was the basis for the features of the fifth auxiliary request.

Paragraph [0022] also refers to a "middle of the upper edge" and a "center point" being used as a reference point:

"where the user's language or the language used on the web page 60 is read from right to left, such as Hebrew and Arabic, it may instead be desirable to use the upper right corner 67 of the content appearing on the display 32 as the reference point. Additionally, any other point besides the upper right and left corners, such as a center point or

the middle of the upper edge, or in some cases even the lower left or right corners, or the middle of the lower edge, may be used as well."

- 7.3 However, this paragraph does not directly and unambiguously disclose the "middle of the upper edge" or a "center point" being used as reference point (or as a corresponding region or portion) in combination with the reference point (or a corresponding region or portion) being selected based on a language.

Using "Additionally," to begin the sentence indicates that the following features are not related to what has just been described in the preceding sentence (i.e. the language based selection). Besides, whereas the description refers to languages read from left to right and from right to left, there is no mention of a language read from the middle or the center. Therefore, the skilled reader does not derive from the description that the selection of the middle or center points is based on the language used in the document.

- 7.4 Paragraph [0022] is not unambiguously referring to a "middle of the upper edge" or center in relation to the display, as defined in features (a5), since it refers to a "middle of the upper edge" or center in relation to "the web page 60 portion appearing on the display" mentioned in the first sentence of the paragraph.
- 7.5 Therefore, claim 1 of the fifth auxiliary request does not fulfil the requirements of Article 123(2) EPC.

*Third auxiliary request*

8. Claim 1 of the third auxiliary request differs from claim 1 of the second auxiliary request in that



(a3) the occurrences of "document", except in "changes the position of the first portion of the document" and in "positioning the second portion of the document", have been replaced with "mark-up language document".

8.1 In the method of D1, the document may also be a "mark-up language document" (column 5, lines 31 to 40).

8.2 Therefore, features (a3) are known from D1 and, for the same reasons as given for the second auxiliary request, the third auxiliary request does not fulfil the requirements of Article 56 EPC.

*Concluding remark*

9. Since none of the requests on file is allowable, the appeal is to be dismissed.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chair:



S. Lichtenvort

J. Geschwind

Decision electronically authenticated