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Datasheet for the decision
of 28 November 2019

Case Number: T 2741/16 - 3.5.05
Application Number: 11191507.0
Publication Number: 2461228
IPC: G06F3/01, G06F3/048, G06F17/24
Language of the proceedings: EN

Title of invention:
Haptic feedback assisted text manipulation

Applicant:
Immersion Corporation

Headword:
Haptic feedback assisted text manipulation / Immersion

Relevant legal provisions:
EPC Art. 56, 84
RPBA Art. 13(1), 13(3)

Keyword:
Inventive step - obvious modification
Late-filed auxiliary requests - admitted (no) - amendments after arrangement of oral proceedings - diverging versions of claims - request clearly allowable (no)
Decisions cited:

Catchword:
Case Number: T 2741/16 - 3.5.05

DECISION
of Technical Board of Appeal 3.5.05
of 28 November 2019

Appellant: Immersion Corporation
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Representative: Hofstetter, Schurack & Partner
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 11 July 2016
refusing European patent application No.
11191507.0 pursuant to Article 97(2) EPC.

Composition of the Board:
Chair A. Ritzka
Members: N. H. Uhlmann
D. Frietzel-Funk
Summary of Facts and Submissions

I. The appeal lies from the decision of the examining division to refuse European patent application No. 11191507.0 because the main request and the first auxiliary request do not meet the requirements of Articles 123(2) and 84 EPC.

II. The reasons for the decision refer to the following prior-art documents:

D1 EP 2 105 844;
D2 US 2009/167508.

III. In its notice of appeal, the appellant submitted an amended main request and auxiliary requests 1 and 2.

IV. In its statement setting out the grounds of appeal, the appellant submitted amended versions of the main request and auxiliary request 1, with arguments. Auxiliary request 2 was maintained.

V. The board arranged for oral proceedings to be held.

VI. In the summons, the board set out its provisional view of the case. Among other things, it considered that the main request did not meet the requirements of Article 56 EPC and that auxiliary request 1 did not comply with the requirements of Articles 56 and 84 EPC. Moreover, the admissibility of auxiliary request 1 under Article 12(4) RPBA was addressed.

VII. By letter dated 28 October 2019, the appellant filed an amended main request and auxiliary requests 1 and 2, to replace all requests previously on file.

VIII. In a letter dated and received on 27 November 2019, the appellant's representative informed the board that he would not be attending the hearing on 28 November 2019.
IX. Oral proceedings were held on 28 November 2019. As announced, no one attended on behalf of the appellant.

X. The appellant requested in writing that the decision under appeal be set aside and that a patent be granted based on the claims of the main request or of auxiliary request 1 or 2, all submitted with the letter dated 28 October 2019.

XI. Claim 1 of the main request reads as follows:

"A computer readable medium having instructions stored thereon that, when executed by a processor (22), cause the processor (22) to provide haptic feedback on a device (50) comprising a touchscreen (55), the instructions comprising:

displaying dynamically generated text (58) comprising a plurality of characters; and

sensing a touch by a user's finger (56) within the dynamically generated text (58);

characterized by

determining if the touch is a manipulation of the dynamically generated text (58) and a type of the manipulation, wherein the manipulation comprises a selection of the dynamically generated text (58) by sliding the finger (56) across the dynamically generated text (58); and

while the finger (56) is being slid across the dynamically generated text (58) right or left from a handle (78) which is displayed when the user initially touches the dynamically generated text (58) and which indicates the initial position of the cursor,

highlighting (74) that portion of the text, indicating that the user is selecting that portion of the text, and
generating a type of haptic event based at least in part on the type of the manipulation, wherein the haptic event generates the haptic feedback with an actuator (26), wherein as the finger slides across the text (58), different haptic events are generated."

XII. Claim 1 of auxiliary request 1 corresponds to claim 1 of the main request with following features added at the end:

"wherein the selection of the text (58) comprises one of selecting a character, a word, a sentence, or a paragraph, and a first haptic event is generated for each of the characters, the word, the sentence, or the paragraph or

wherein the selection of text (58) comprises selecting an item comprising a word, sentence or paragraph, and haptic event is generated when the touch reaches an end of the item."

XIII. Claim 1 of auxiliary request 2 corresponds to claim 1 of the main request with following features added at the end:

"wherein if a user is slowly moving a finger across text, the type of haptic event varies when encountering the space between characters, and if the user is more quickly moving a finger across text, the type of haptic event varies when encountering the space between words."

Moreover, the "sensing" feature was moved to the characterising portion.
Reasons for the Decision

1. The invention as described relates to a device comprising a touch screen that provides tactile feedback upon sensing a touch by a user's finger. The addressed problem is to support the user as he or she manipulates text. The solution as claimed provides for adapting the type of tactile feedback to the type of manipulation and to specific touch gestures.

2. Prior Art

Document D2 discloses a device with a touch screen. The device is adapted to provide tactile feedback in different situations.

Main request

3. Amendments

The board considers that the feature "as the finger slides across the text (58), different haptic events are generated" added to the present independent claims meets the requirements of Article 123(2) EPC. In particular, the last sentence of paragraph 21:

"As finger 56 slides across text 58, different haptic events are generating indicating, for example, whether finger 56 is covering a text character, or at a space between characters or between words",

and the first sentence of paragraph 23:

"As finger 56 touches or slides across text 58, different haptic events can be generated depending on
the position of finger 56, the context of the text, etc"

form a proper basis for deriving this feature.

4. Patentability

4.1 The board agrees with the appellant that document D2 forms a suitable starting point for analysing patentability.

4.2 The appellant argued (first paragraph on page 4 of the statement setting out the grounds of appeal; and letter dated 28 October 2019, first paragraph on page 3) that two distinguishing feature were present:

(a) "sensing a touch by a user's finger within the dynamically generated text"; and

(b) "as the finger slides across the dynamically generated text, different haptic events are generated".

The appellant did not argue that there were other differences.

4.3 While the board accepts that the subject-matter of claim 1 is new, it does not agree that those are the distinguishing features.

4.4 The claimed concept of "dynamically generated text" is explained as follows in paragraph 27 of the description:

"In general, the text is dynamically generated, and is different from more static input controls or other types of user interfaces that are used to control or modify text or data. In most embodiments, the text is displayed in a region of the display that is separate from UI controls and other non-textual areas."
In view of this explanation, the board holds that the text in preview window 970 (D2, Figure 9B) and in text box 1020 (D2, Figure 10) qualifies as dynamically generated text in the sense of claim 1.

Furthermore, paragraph 83 of D2 teaches that tactile feedback is provided to a user in response to detecting the user's finger over preview window 970 and that the tactile feedback is provided to indicate the placement of a cursor or marker in preview window 970.

Considering that placing a cursor in a part of the preview window where no text is displayed would not make sense, the board holds that document D2 discloses feature (a). Additionally, paragraph 87, first two sentences, comprises a similar teaching.

The fact that a separate touch keyboard is provided in document D2 is not at odds with this finding.

4.5 With regard to feature (b), claims 8 and 9 of document D2 disclose that different tactile feedback is provided when a portion of a user's hand is positioned on different, first and second, locations, and that tactile feedback is provided as the portion is moved from the first to the second location. In view of the board, D2's "portion of a user's hand" anticipates the user's finger recited in claim 1. Hence, document D2 discloses that as the finger slides across the display, different haptic events are generated, but does not disclose that the finger slides across the dynamically generated text.

4.6 Consequently, the subject-matter of claim 1 differs from the disclosure of document D2 in that

(m1) the user's finger is being slid across the dynamically generated text and the corresponding portion of the text is highlighted.
4.7 The technical effect of distinguishing feature (m1) is that the user is enabled to efficiently select a text portion.

4.8 The objective technical problem is considered to be how to enable the user to efficiently select a text portion.

4.9 Faced with this problem, the person skilled in the art would consider, based on his or her common general knowledge, that by dragging a selection cursor on a touch screen text can be selected and highlighted.

Similarly, document D1, which falls within the same technical field and discloses techniques for selecting information on a touch screen, discloses selecting and highlighting a region of text by a proximity-drag touch operation (Figures 45 and 46, paragraph 201). In this regard, the appellant confirmed (page 4, last paragraph of the statement of grounds) that document D1 discloses that "text may also (be) directly selected by sliding the finger over the text".

Consequently, to solve the problem posed, the person skilled in the art would modify the teaching of document D2 by providing a possibility for the user to slide his or her finger across the text and thereby highlight the corresponding text's portion. Moreover, the different haptic events of document D2 would clearly result as the finger slide across the text. In this way, the skilled person would arrive at the subject-matter of claim 1 in an obvious manner.

4.10 The appellant argued that the prior art did not disclose evaluation of a relative position (or distance) of the finger with respect to dynamically generated content, but only of absolute position on the screen.
4.11 In the board's view, this aspect is not decisive, because the claims do not require evaluation of a relative position, either explicitly or implicitly. Claim 1 states that "as the finger slides across the text, different haptic events are generated" but does not require the different haptic events to depend on position relative to characters or words in the text.

Hence, D2's evaluation of an absolute position is not excluded by the wording of the claim.

4.12 For these reasons, the subject-matter of claim 1 does not involve an inventive step under Article 56 EPC.

**Auxiliary request 1**

5. The board considers that claim 1 is not clear.

According to lines 23 and 24 of claim 1, "different haptic events are generated", but according to lines 26 and 27, "a first haptic event is generated for each of the characters, the word, the sentence, or the paragraph".

It is not clear how to reconcile "different haptic events", which implies events of different kinds, and "first haptic event", which implies the same kind of event for each of the characters, the word, the sentence, or the paragraph.

6. Patentability

In the board's view, the features added to claim 1 (lines 25 to 30) do not contribute towards inventive step.

With regard to the first "wherein" clause (lines 25 to 27), "selecting a character" is disclosed in document D1, and widely known. The fact that a haptic event is generated for each of the characters appears to be a
trivial modification which the skilled person would carry out to provide a further indication to the user regarding the progress of selecting text.

The appellant argued that the relevant feature was "the relative position or distance of the user's finger with regard to the single words / sentences of the dynamically generated text". However, claim 1 does not refer to any relative position or distance and does not specify any point of origin for evaluating any relative position or distance. Moreover, generating a haptic effect for each of the characters suggests that the relative distance from the beginning of the text is not relevant.

**Auxiliary request 2**

7. The appellant filed this request by letter dated 28 October 2019, after the board had issued summons to oral proceedings. Thus, the admissibility of this request is at the discretion of the board (Article 13(1) and (3) RPBA).

8. Contrary to the submission of the appellant in its letter dated 28 October 2019, the claims of auxiliary request 2 do not go even further than those of auxiliary request 1. In fact, the two last "wherein" clauses of claim 1 of auxiliary request 1 (lines 25 to 30) have been replaced by different features (lines 25 to 28). Consequently, there is no convergence of the claims of auxiliary requests 1 and 2.

9. According to lines 21 and 22 of claim 1, one type of haptic event is generated, based on the "selection" manipulation. However, the claim requires that the type of haptic event varies (lines 25 and 27). Hence, claim 1 comprises contradictory teaching and is thus prima facie not clear.
10. Consequently, the board did not admit auxiliary request 2, pursuant to Article 13(1) and (3) RPBA.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

K. Götz-Wein A. Ritzka

Decision electronically authenticated