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**Datasheet for the decision
of 13 January 2021**

Case Number: T 2145/19 - 3.5.05

Application Number: 11184223.3

Publication Number: 2405344

IPC: G06F3/048, G06F17/30

Language of the proceedings: EN

Title of invention:

Touch event model programming interface

Applicant:

Apple Inc.

Headword:

Touch-screen device providing touch control of web pages

Relevant legal provisions:

EPC Art. 56

RPBA Art. 12(4)

Keyword:

Enabling disclosure - (yes)

Inventive step - (no)



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Case Number: T 2145/19 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 13 January 2021

Appellant: Apple Inc.
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Representative: Gillard, Matthew Paul
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 26 February
2019 refusing European patent application No.
11184223.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair A. Ritzka
Members: P. Tabery
D. Prietzel-Funk

Summary of Facts and Submissions

- I. This is a second appeal. It is against the second decision of the examining division, dated 26 February 2019, to refuse European patent application No. EP11184223.3. The case had been remitted to the examining division for further prosecution, by the decision of the board dated 29 June 2017 in appeal case T 1738/15. The request underlying the decision under appeal is based on the main request, which in the earlier decision of the board was considered to fulfil the requirements of Article 123(2) and Article 84 EPC.
- II. The examining division made reference, *inter alia*, to the following documents:
- D1** US 2008/028327 A1, 31 January 2008
- D4** Michael Thörnlund: "Gesture Analyzing for Multi-Touch Screen Interfaces", Bachelor's Thesis, Luleå University of Technology, 17 September 2007, XP055318914, retrieved from the Internet: <http://epubl.ltu.se/1404-5494/2007/30/LTU-HIP-EX-0730-SE.pdf> [retrieved on 2016-11-11]
- III. The examining division decided that the claims of the sole request did not fulfil the requirements of Article 56 EPC.
- IV. In its statement setting out the grounds of appeal, the appellant (applicant) requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of a main request (identical to the

sole request considered in the impugned decision) or an auxiliary request.

- V. The board issued a summons to oral proceedings. In an annex to the summons, the board set out its provisional view of the case (Article 15(1) RPBA 2020).

In the summons, the board made reference to the following documents which it introduced into the procedure:

D10 Wikipedia: "Web 2.0", 3 March 2008, XP055721276, retrieved from the Internet: URL: https://en.wikipedia.org/w/index.php?title=Web_2.0&oldid=195641121 [retrieved on 2020-08-10]

D11 Wikipedia: "Web application", 29 February 2008, XP055721274, retrieved from the Internet: URL: https://en.wikipedia.org/w/index.php?title=Web_application&oldid=194888078 [retrieved on 2020-08-10]

The board considered that the **main request** did not meet the requirements of Article 56 EPC in view of what is known from document **D4** in combination with the teaching of document **D1**. This was in line with the decision of the examining division.

With respect to the **auxiliary request**, the board considered that the amendments did not appear to overcome the objection pursuant to Article 56 EPC that had been raised with respect to the main request. This would be taken into account when discussing the admissibility and/or allowability of this request.

- VI. In a reply dated 11 December 2020, the appellant provided further arguments regarding the pending requests.
- VII. Oral proceedings were held on 13 January 2021. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request or the auxiliary request (both submitted with the statement setting out the grounds of appeal).
- VIII. **Claim 1** of the **main request** comprises the following features (as labelled by the board):

A method performed by an electronic device with one or more processors and memory storing one or more programs for execution by the one or more processors, the method comprising:

- (i) providing, to a web page for processing by the web page, a touch list including touch data identifying all touches on the web page,
- (ii) wherein the touch data includes a touch identifier and at least one set of touch location coordinates for a respective touch of the said all touches on the web page; and
- (iii) generating a display of the web page.

Independent **claims 4 and 7** are directed to a corresponding electronic device and a corresponding computer readable storage medium respectively.

IX. **Claim 1** of the **auxiliary request** comprises the following features (as labelled by the board; amendments to the wording of claim 1 of the main request are marked by underlining, as provided by the appellant):

A method performed by an electronic device with one or more processors and memory storing one or more programs for execution by the one or more processors, the method comprising:

(a) displaying a web page on a touch sensitive device;

(b) detecting multiple simultaneous touches on the web page;

(c) providing, to the web page for processing by the web page, a touch list including touch data identifying all touches on the web page, the said all touches including two or more simultaneous touches on the web page,

(d) wherein the touch data includes a touch identifier and at least one set of touch location coordinates for a respective touch of the said all touches on the web page; and

(e) generating a display of the web page.

Reasons for the Decision

1. The present application concerns a touch-screen device providing touch control of web pages.
2. Main request

2.1 Novelty (Article 54(1) EPC)

Although targeted at an academic audience, document **D4** describes the development of proof-of-concept software for a touch-screen interface. It describes a software library for sorting the multiple finger inputs on the screen and interpreting the gestures made out of them (see preface of document **D4**). The code excerpts and the accompanying explanations are considered to be sufficiently complete to allow the skilled person to transform these into working code as part of their routine activities. Consequently, the board asserts that document **D4** constitutes an enabling disclosure. Furthermore, it is noted that the present application discloses the invention at a level of detail which is similar to that of document **D4**.

Document **D4** discloses the following features of **claim 1** (strike-through is used to mark undisclosed features; the references in parentheses referring to this document):

A method performed by an electronic device with one or more processors and memory storing one or more programs for execution by the one or more processors (*implied by "computer", see abstract*), the method comprising:

(i) providing, to a ~~web page application~~ application for processing by the ~~web page application~~, a touch list including touch data identifying all touches on the ~~web page application~~ ("*Gesture pointer sent to the listener*", see page 11, line 10),

(ii) wherein the touch data includes a touch identifier and at least one set of touch location

coordinates for a respective touch of the said all touches on the ~~web page~~ application ("*TouchData [...]* consisting of *PositionX, PositionY [...]* and a unique *ID*", see page 6, lines 9-10); and

(iii) generating a display of the ~~web page~~ application (see figure 7).

The board notes that the term "*all touches*" allows for broad interpretation and may vary between touches at "*a specific moment*", within "*shorter periods of time*" and for "*a longer period of time*" (see the board's previous decision T1738/15, item 2.2.2).

Hence, the difference between the subject-matter of **claim 1** and that of document **D4** resides in the fact that *the application is a web page*.

The subject-matter of **claim 1** is therefore novel.

The board notes that web pages allowing for an advanced level of interaction are commonly known as "*web applications*".

2.2 Inventive step (Article 56 EPC)

The distinguishing feature achieves the technical effect that the user is allowed to use touch input to also control web pages displayed in a browser. It is noted that a browser is a notoriously known application and commonly known to have been available on any typical computer well before the claimed priority date.

The objective technical problem may thus be formulated as how to modify what is known from document **D4** to allow for controlling web pages displayed in a browser.

Document **D4** teaches the implementation of gesture recognition in a manner separate from applications, and mentions some types of applications to be controlled by gesture recognition, e.g. a drawing application (see **D4**, figure 7). Since a browser is among the notoriously known applications of a typical computer, document **D4** would have led the skilled person to using gesture recognition also in the context of a browser and the web pages displayed in it. At the claimed priority date (4 March 2008), using web applications as part of web pages displayed in a browser was a general trend. The concept of "*Web 2.0*" was commonly known, as demonstrated for example by documents **D10** and **D11**. Reference is made in particular to the section entitled "*Web-based applications and desktops*" in document **D10** and the section entitled "*Interface*" in document **D11**. Since the latter even mentions "*drawing on the screen*" as an example of a web application, the skilled person would regard it as a normal design option to also support the drawing application mentioned in document **D4** being implemented as a web application.

Thus, when attempting to solve the objective technical problem, the skilled person would have been looking for a document disclosing enhanced user interfaces for web pages. They would have considered document **D1**, which deals with implementing user interfaces by executing a description language on a browser (see [0004]).

When combining the teachings of documents **D4** and **D1**, the skilled person would have recognised that the event listeners known from document **D1** (see [0085], [0086], and figures 15A-C) are similar to the touch listeners of document **D4**. Hence, they would have considered providing the data relating to the user's touch events,

i.e. the touch list, to the web page's script in the same way as the mouse events.

Thus, the skilled person would have arrived at the distinguishing features without employing inventive skills.

- 2.3 The appellant argues that document **D4** only discloses sending gesture data to applications, thereby teaching away from sending touch event data to applications as well. The statement provided by Professor Klemmer says the same.

The board considers that document **D4** discloses sending both touch data and gesture data to applications; see the analysis provided in point 2.1 above. Therefore, the appellant's argument is not convincing.

- 2.4 Furthermore, the appellant contests that the "point gesture" disclosed in document **D4** comprises a "touch list of all touches". Notably, the term "all" would only make sense if it was interpreted as relating to all finger touches at a particular sampling instant.

As argued above, the board considers that the term "all touches" allows for broad interpretation. Document **D4** discloses that the "point" gesture "holds ... **all** the data from TouchLib forwarded in one big package [emphasis added]" and that it "contains **all** the information of the light blobs' position and size [emphasis added]". Hence, it discloses providing "a touch list of all touches", wherein the scope of "all" is confined to "the data from TouchLib". Therefore, the board considers that the contested feature is indeed disclosed by document **D4**.

- 2.5 Furthermore, the appellant argues that the distinguishing feature allows the web page to take action on the touches provided to it without having to wait until a gesture is provided, and enables more types of gestures to be recognised.

The board notes that this applies to what is known from document **D4** as well. Hence, this effect is not caused by the distinguishing feature. Therefore, this argument fails to convince the board.

- 2.6 Finally, the appellant submits that, according to **D4**, the processing of the touch events is performed by an intermediate layer, rather than the web page.

The board notes that this is not contradicted by the wording of claim 1, which merely specifies that the touch list is provided "*for processing by the web page*". Notwithstanding the issue that the processing as such is not a step of the claimed method, this does not exclude the possibility that the web page is relying on an intermediate layer for further processing.

- 2.7 In view of the above, the **main request** is not allowable.

3. Auxiliary request

The board notes that the present auxiliary request has been submitted for the first time with the statement setting out the grounds of appeal. It thus constitutes an amended request which has not been presented in the procedure before.

3.1 Admissibility (Article 12(4) RPBA 2007)

The new RPBA entered into force on 1 January 2020 (Article 24(1) RPBA 2020). Article 12(4) to (6) RPBA 2020 does not apply in the present case, since the statement setting out the grounds of appeal was filed on 8 July 2019, before 1 January 2020. Instead, Article 12(4) RPBA 2007 applies (Article 25(2) RPBA 2020).

The subject-matter of claim 1 according to the auxiliary request effectively differs from that of claim 1 according to the main request in that it relates to *"multiple simultaneous touches"*.

The board notes that both this application and the parent application disclose, in paragraphs [0023]-[0025], *"gesture events [containing] scale and/or rotation information"*. As this implies *"simultaneous touches"*, the board considers that the requirements of Article 76(1) and Article 123(2) EPC are fulfilled. Since the amendments are straightforward, and address the issue of inventive step without giving rise to new objections, the board decides to admit the amended request into the proceedings.

3.2 Inventive step (Article 56 EPC)

On the one hand, the board asserts that the additional feature (a) does not add further limitations. Therefore, it has already been considered in connection with the formulation of the technical effect and resulting objective technical problem that was given in relation to claim 1 of the main request.

On the other hand, newly introduced feature (b) and the additional aspect in feature (c) of having *"multiple (two or more) simultaneous touches"* is known from document **D4**. Document **D4** discloses that the *"point"*

gesture *"is all the data from TouchLib forwarded in one big package"*, see page 11, line 13. Figure 8 shows that *"TouchLib"* references the *"GestureAnalyzer"*, which comprises the method *"#Analyze(data1: TouchData, data2: TouchData)"*, see line 14 of *"GestureAnalyzer"*. It is disclosed on page 10, line 7, that *"Analyze (TouchData, TouchData) [is] for the analysis of multiple fingers"*. Hence, newly introduced feature (b) and the additional aspect in feature (c) do not constitute an additional difference, as argued by the appellant.

Therefore, the subject-matter of **claim 1 of the auxiliary request** differs from what is known from document **D4** in respect of the same features as **claim 1 of the main request**.

Hence, the board finds that the subject-matter of **claim 1 of the auxiliary request** is not inventive over documents **D4** and **D1**, for the same reasons as for **claim 1 of the main request**.

- 3.3 The appellant asserts that the *"point"* gesture cited in the board's analysis of document **D4** relates to touches by a single finger only. *"Every finger pressed onto the screen will initially compose a gesture of this type"* (see page 11, lines 15-16) implies, according to the appellant, that a separate *"point"* gesture is composed for every finger. Since only a single *"point"* gesture is provided (see page 11, lines 10-12), document **D4** only discloses providing the touch data for a single finger, even in the case of simultaneous touches. Consequently, according to the appellant the amended feature is an additional distinguishing feature.

The board considers that the sentence quoted by the appellant (*"Every finger pressed onto the screen etc."*)

relates to the *"selection of an object"* mentioned in the preceding sentence, which may not require multiple simultaneous touches. On the other hand, with respect to the point gesture, document **D4** explains that *"it contains all the information of the light blobs' position and size"*. The plural *"light blobs' [sic]"* used therein is consistent with the board's interpretation of the disclosure of document **D4** given above.

3.4 In view of the above, the **auxiliary request** is not allowable.

4. Consequently, the appeal is not allowable.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chair:



A. Chavinier-Tomsic

A. Ritzka

Decision electronically authenticated