BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPÉEN DES BREVETS

Internal distribution code:

- (A) [] Publication in OJ
- (B) [] To Chairmen and Members
- (C) [] To Chairmen
- (D) [X] No distribution

Datasheet for the decision of 26 January 2022

Case Number: T 1645/19 - 3.5.05

Application Number: 13795392.3

Publication Number: 2912542

IPC: G06F3/01, G06F3/041, G06F3/0488

Language of the proceedings: EN

Title of invention:

DEVICE AND METHOD FOR FORGOING GENERATION OF TACTILE OUTPUT FOR A MULTI-CONTACT GESTURE

Applicant:

Apple Inc.

Headword:

Selective haptic feedback/APPLE

Relevant legal provisions:

EPC Art. 56

Keyword:

Inventive step - main request (yes)



Beschwerdekammern Boards of Appeal Chambres de recours

Boards of Appeal of the European Patent Office Richard-Reitzner-Allee 8 85540 Haar GERMANY Tel. +49 (0)89 2399-0 Fax +49 (0)89 2399-4465

Case Number: T 1645/19 - 3.5.05

DECISION
of Technical Board of Appeal 3.5.05
of 26 January 2022

Appellant: Apple Inc.

(Applicant) One Apple Park Way Cupertino CA 95014 (US)

Representative: Barton, Russell Glen

Withers & Rogers LLP 2 London Bridge London SE1 9RA (GB)

Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 20 December 2018 refusing European patent application No. 13795392.3 pursuant to Article 97(2) EPC.

Composition of the Board:

Chair A. Ritzka
Members: P. Cretaine
E. Mille

- 1 - T 1645/19

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division posted on 20 December 2018, refusing European patent application No. 13795392.3. The application was refused for lack of clarity (Article 84 EPC) of the main request and lack of inventive step (Article 56 EPC) of the main request and auxiliary requests 1 and 2 over the disclosure of:

D1: EP 2 375 314

and the common general knowledge, as illustrated by

D2: US 2010/0156818.

- II. Notice of appeal was received on 15 February 2019, and the appeal fee was paid on the same day. The statement setting out the grounds of appeal was received on 26 April 2019. The appellant requested that the decision be set aside and that a patent be granted on the basis of the main request or one of the first to third auxiliary requests filed with the statement setting out the grounds of appeal. Oral proceedings were requested in the event that none of the requests was allowed.
- III. A summons to oral proceedings was issued on 2 July 2021. In a communication pursuant to Article 15(1) RPBA, sent on 10 December 2021, the board gave its preliminary opinion, which was that the main request and the first to third auxiliary requests did not meet the requirements of Article 56 EPC in the light of the disclosure of D1.

- 2 - T 1645/19

- IV. By letter dated 12 January 2022, the appellant provided further arguments with respect to inventive step.
- V. Oral proceedings were held on 26 January 2022. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request or, in the alternative, one of the first to third auxiliary requests, all of which had been submitted with the statement setting out the grounds of appeal. The decision of the board was announced at the end of the oral proceedings.
- VI. Claim 1 of the main request reads as follows:

"A method (10000), comprising:
at an electronic device (300) with a display (450) and
a touch-sensitive surface (451),
wherein the device includes one or more sensors (357)
to detect intensity of contacts with the touchsensitive surface:
detecting, on the touch-sensitive surface, a gesture
that includes an increase of intensity of a contact

that includes an increase of intensity of a contact above a respective intensity threshold (10002); and in response to detecting the gesture (10008), triggering an event in accordance with the gesture: in accordance with a determination that the gesture includes a first number of contacts, generating a tactile output on the touch-sensitive surface (10010); and

in accordance with a determination that the gesture includes a second number of contacts different from the first number, forgoing generating the tactile output on the touch-sensitive surface (10018) and performing an operation of reducing a size of an object displayed on the display in accordance with the gesture including the second number of contacts,

- 3 - T 1645/19

wherein the first number of contacts is one contact (10012), and the second number of contacts is two contacts (10020)."

The main request includes further independent claims directed to a corresponding computer program (claim 9) and device (claim 11).

Given the outcome of the appeal, there is no need to set out the claims of the first to third auxiliary requests.

Reasons for the Decision

1. Main request - admission

Claim 1 was amended with respect to the claim 1 on which the decision was based, by adding: the feature of performing an operation of reducing a size of an object displayed on the display in accordance with the gesture including the second number of contacts; and the feature that the first number of contacts is one contact and the second number of contacts is two contacts.

The first additional feature can be seen as an attempt to further distinguish the subject-matter of claim 1 from the disclosure of D1, thereby aiming at overcoming the inventive-step objection on which the decision under appeal was based.

The second additional feature can be seen as a response to the clarity objection raised in the decision to refuse the application. - 4 - T 1645/19

For these reasons, the board has decided to admit the main request into the appeal proceedings $(Article\ 12(4)\ RPBA)$.

2. Main request - inventive step

2.1 Prior art

D1 discloses a touch-sensitive device able to provide tactile feedback when a user applies a touch having a characteristic above a touch threshold on a touch key of the device (see paragraphs [0024], [0030] and [0038]). The touch threshold may be a force threshold, i.e. a user who presses a touch key of the device with a force above the threshold will receive tactile feedback (see paragraph [0032], lines 24 to 38). Multiple thresholds may be used for a touch key, each corresponding to a particular function of the touch key (see paragraph [0032], lines 41 to 49, and paragraph [0034], lines 33 to 34 and 43 to 47). In particular, tactile feedback may be generated only when the touch exceeds a certain threshold (see paragraph [0032], lines 55 to 58 and paragraph [0057], lines 24 to 30).

D1 also discloses that, once a number of simultaneous touches on the device has exceeded a certain threshold, the touches may be disregarded (see paragraph [0033], lines 13 to 17, and paragraph [0043], lines 36 to 39), since the detection of a number of contacts above a certain figure is indicative of a user making inadvertent touches.

Paragraph [0042] mentions in lines 21 to 25 that modifying the touch threshold may comprise modifying a threshold of other characteristics related to a touch. As examples of such characteristics, the duration of a

- 5 - T 1645/19

touch, the number of touches, the touch rate, and the size of the contact area are listed. However, D1 is vague about the meaning of the wording "number of touches" in this paragraph, so it is not clearly disclosed whether the number of touches means the number of simultaneous touches at different positions of the touch surface, or the number of repeated touches at the same position.

- 2.2 D1 does not disclose the following features of claim 1:
 - the device performs an operation in response to detecting a gesture including two contacts and including an increase of intensity of a contact above the threshold for triggering an event,
 - this operation consists in reducing the size of an object displayed in accordance with the gesture, and
 for this two-contact gesture, generation of tactile output is forgone.

The technical effect of these distinguishing features is that an operation of zoom-out is enabled by a two-contact gesture, without any tactile feedback.

The objective technical problem can thus be formulated as how to improve the operations and feedback provided during interaction with the device.

2.3 At the priority date of the present application in 2012, the skilled person was aware that touch-screen devices able to detect multi-touch gestures, i.e. multi-finger contacts, such as the device of D1, could be adapted to detect the so-called "pinch-to-zoom" gesture. It was thus common ground in the oral proceedings that applying to the device of D1 recognition of the pinch-to-zoom gesture and its

- 6 - T 1645/19

associated functionality did not contribute to an inventive step.

However, only in one passage does D1 disclose forgoing tactile feedback when an operation is performed after a touch (see paragraph [0057]. In that case, a lower touch threshold and an upper touch threshold are defined for a location, and a touch having an intensity between the lower and the upper touch thresholds results in the operation of highlighting a selection option, but without tactile feedback. The teaching of paragraph [0057] therefore implies that for a onecontact gesture, the performing of an operation may occur with tactile feedback. However, claim 1 specifies that for all the locations on the touch screen the same intensity threshold, i.e. force threshold, triggers an event both in the case of a one-contact and in the case of a two-contact gesture, whereas tactile feedback is always generated in the case of a one-contact gesture. Thus, nothing in the teaching of D1 in paragraph [0057] provides any hint to the skilled person of implementing the forgoing of tactile feedback only in the case of a two-contact gesture as defined in claim 1.

Furthermore, D1 discloses in paragraphs [0033] and [0043] the forgoing of tactile feedback in case of a multi-contact gesture, but only on the assumption that this gesture was made inadvertently and is therefore not to trigger any operation. Thus, the teaching of D1 in paragraphs [0033] and [0043] does not provide any hint to the skilled person of implementing the forgoing of tactile feedback in the case of a two-contact gesture triggering an operation, as defined in claim 1.

Moreover, even if paragraph [0042] of D1 were interpreted as meaning that a touch force threshold may

- 7 - T 1645/19

depend on the number of simultaneous touches, i.e. that a force threshold for a two-contact gesture could be made different from a force threshold for a one-contact gesture, this passage of D1 would not provide the skilled person with any hint with respect to forgoing tactile feedback depending on the number of touches.

Furthermore, the board agrees with the appellant that cherry-picking different aspects of D1 for a combination that is not disclosed and for which there is no pointer in D1 - namely implementing a touch threshold for generating tactile feedback - and then choosing a number of contacts as the basis for the threshold even when a gesture is positively identified and a subsequent action taken would be based on hindsight knowledge of the invention.

The appellant also plausibly argued that forgoing tactile feedback when making a zoom gesture, as defined in claim 1, is advantageous, since the user might exceed the contact intensity threshold at any point during the zoom operation. In that case, tactile feedback would potentially interfere with the user's ability to make an ongoing zoom input gesture and be disturbing. Moreover, forgoing tactile feedback in such circumstances will also help to save battery charge for portable electronic devices.

For these reasons, the board holds that the subjectmatter of claim 1 involves an inventive step, having regard to the prior art on file.

Independent claims 9 and 11 contain the same features as claim 1, but relate to a computer program and a device respectively. Therefore, these claims also meet the requirements of Article 56 EPC. Claims 2 to 8 and

- 8 - T 1645/19

12 are dependent claims and, as such, meet the requirements of Article 56 EPC.

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the examining division with the order to grant a patent based on claims 1 to 12 of the main request submitted with the statement setting out the grounds of appeal, description pages 1 to 97 submitted with the letter of 7 September 2017 and drawings sheets 1/58 to 58/58 as originally filed.

The Registrar:

The Chair:



K. Götz-Wein

A. Ritzka

Decision electronically authenticated