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Datasheet for the decision
of 23 January 2023

Case Number: T 1792/20 - 3.5.05
Application Number: 15893601.3
Publication Number: 3291062
Language of the proceedings: EN

Title of invention:
METHOD FOR ADJUSTING PHOTOGRAPHING FOCUS OF MOBILE TERMINAL THROUGH TOUCH CONTROL PANEL AND MOBILE TERMINAL

Applicant:
HUawei TECHNOLOGIES CO., LTD.

Headword:
Focal length of mobile terminal/HUawei

Relevant legal provisions:
EPC Art. 56
RPBA 2020 Art. 12(6)

Keyword:
Inventive step - (no)
Late-filed request - admitted (no)
Case Number: T 1792/20 - 3.5.05

DECISION
of Technical Board of Appeal 3.5.05
of 23 January 2023

Appellant: HUAWEI TECHNOLOGIES CO., LTD.
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 21 April 2020 refusing European patent application No. 15893601.3 pursuant to Article 97(2) EPC.

Composition of the Board:
Chair A. Ritzka
Members: P. Cretaine
E. Mille
Summary of Facts and Submissions

I. This appeal is against the examining division's decision posted on 21 April 2020 refusing European patent application No. 15893601.3. The application was refused on the grounds that a main request lacked novelty (Article 54 EPC) in view of the disclosure of:

D1: US 2015/029382,

that a first auxiliary request lacked inventive step (Article 56 EPC) in view of D1 in combination with:

D2: US 2015/126246 or

D4: US 2013/129162,

and that a second auxiliary request lacked inventive step in view of D1 and the common general knowledge as illustrated for instance by:


The following document was also cited during the examination proceedings:

D3: US 2012/050332

II. Notice of appeal was received on 15 June 2020, and the appeal fee was paid on the same date. The statement setting out the grounds of appeal was received on 17 August 2020. The appellant requested that the decision be set aside and that a patent be granted on the basis of a main request or first and second
auxiliary requests filed with the statement setting out the grounds of appeal. Oral proceedings were requested in the event that the main request was not allowed.

III. A summons to oral proceedings was issued on 9 May 2022. In a communication pursuant to Article 15(1) RPBA, sent on 21 December 2022, the board gave its preliminary opinion that the main request did not meet the requirements of Article 56 EPC in view of D1 in combination with D2 or D4 and that the first auxiliary request did not meet the requirements of Article 56 EPC in view of D1 in combination with D4 and taking into account the common general knowledge as illustrated by D5. The board also expressed the opinion that the second auxiliary request should not be admitted into the appeal proceedings under the provisions of Article 12(6) RPBA. The board added that even if the second auxiliary request were admitted into the appeal proceedings, it did not appear to meet the requirements of Article 56 EPC in view of D1 in combination with D3.

IV. Oral proceedings were held on 23 January 2023. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the set of claims of the main request or, alternatively, of either the first or second auxiliary request, all requests filed with the statement setting out the grounds of appeal. The board's decision was announced at the end of the oral proceedings.

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

"A method for adjusting a photographing focal length of a mobile terminal (100) by using a touchpad, wherein the method is applied to a mobile terminal, the mobile
terminal comprises a touchpad, and the method comprises:
when the mobile terminal (100) enters a camera application program and displays a shooting preview screen on a display of the mobile terminal, triggering (101, 201) generation of a focal length adjustment start instruction if a user touches the touchpad;
executing the focal length adjustment start instruction, and displaying a focal length indication bar on the display (140), wherein the focal length indication bar is used to prompt the user a degree of focal length adjustment;
when a finger of the user starts to move on the touchpad (131, 210), obtaining (103, 203) gesture touch information generated by the finger of the user performing an operation on the touchpad;
determining (104, 204) a focal length adjustment instruction corresponding to the gesture touch information; and
adjusting (105, 205) a focal length according to the focal length adjustment instruction, and displaying, on the shooting preview screen, an image that is captured after the focal length is adjusted,
wherein the touchpad is a rear-facing fingerprint touchpad or a front-facing fingerprint touchpad."

Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the wording "wherein the touchpad is a rear-facing fingerprint touchpad or a front-facing fingerprint touchpad" at the end of the claim is replaced with the wording:
"wherein the touchpad is a front-facing fingerprint touchpad,
wherein when the operation is a slide operation, the obtaining gesture touch information generated by the
finger of the user operating on the touchpad (131, 210) comprises:

obtaining a sliding track that has direction information and is generated by the finger of the user sliding on the touchpad (131, 210), wherein when the sliding track is the circular track: if the slide direction is the anti-clockwise direction, it is determined that the focal length adjustment direction is zooming out to decrease the focal length; or if the slide direction is the clockwise direction, it is determined that the focal length adjustment direction is zooming in to increase the focal length; or if the slide direction is the anti-clockwise direction, it is determined that the focal length adjustment direction is zooming in to increase the focal length; or if the slide direction is the clockwise direction, it is determined that the focal length adjustment direction is zooming out to decrease the focal length."

Claim 1 of the second auxiliary request differs from claim 1 of the main request in that the wording "wherein the touchpad is a rear-facing fingerprint touchpad or a front-facing fingerprint touchpad" at the end of the claim is replaced with the wording: "wherein if the operation is a tap operation, the obtaining gesture touch information generated by the finger of the user operating on the touchpad (131, 210) comprises:

obtaining a quantity of taps of the tap operation performed by the finger of the user on the touchpad (131, 210), wherein the quantity of taps comprises a tap and a double-tap, and the determining a focal length adjustment instruction corresponding to the gesture touch information comprises:
when the tap operation is the tap, generating a focal length adjustment instruction that is used to instruct to zoom in to increase the focal length according to a preset unit focal length adjustment amount; when the tap operation is the double-tap, generating a focal length adjustment instruction that is used to instruct to zoom out to decrease the focal length according to the unit focal length adjustment amount; or when the tap operation is the tap, generating a focal length adjustment instruction that is used to instruct to zoom out to decrease the focal length according to a unit focal length adjustment amount; when the tap operation is the double-tap, generating a focal length adjustment instruction that is used to instruct to zoom in to increase the focal length according to the unit focal length adjustment amount."

Each request contains a further independent claim (claim 6 of the main request, claim 5 of the first auxiliary request, claim 7 of the second auxiliary request) directed to a corresponding mobile terminal.

**Reasons for the Decision**

1. Main request

1.1 Closest prior art

It was common ground at the oral proceedings that D1 was the prior art closest to the subject-matter of claim 1.

D1 discloses a mobile terminal comprising a touchpad and a camera (see paragraphs [0105], [0150] and [0151]). Paragraph [0013] teaches a method for
adjusting the camera lens position for focusing the image. Changing the lens position to adjust focusing leads to a change in the focal length of the optical path of the camera, and hence a photographing focal length is adjusted. It is agreed that a difference between the application in hand and D1 is that D1 uses the focal length adjustment for a focusing operation whereas the application in hand uses the focal length adjustment for a zooming operation. However, claim 1 relates only to adjusting the focal length and does not specify any zooming operation.

1.2 Claim 1 is in substance identical to claim 1 of the first auxiliary request on which the decision is based. As also acknowledged by the appellant, the subject-matter of claim 1 differs from the disclosure of D1 in that the touch information commanding the focal length adjustment is provided by the user touching a rear-facing fingerprint touchpad or a front-facing fingerprint touchpad, instead of touching the touchscreen as in D1.

Since the authentication functionality of the fingerprint touchpad is not related to the image capturing and focal length adjustment functionalities of the device and is mentioned only in one passage of the application documents (see paragraph [0045] of the description), the board agrees with the decision that the problem solved by the distinguishing feature can be formulated as finding alternative input means for inputting a gesture on the mobile device of D1. At the oral proceedings the appellant argued that the formulation of the problem should include the fact that the alternative input means were intended to command focusing on the image capturing mobile device. However, the formulation of the problem is to be based on the
identified features that distinguish the subject-matter of claim 1 from the disclosure of D1. In the case in hand, the above-mentioned distinguishing features are directed to input means on a mobile device adapted for performing a specific function, namely focusing on a captured image, and not to the specific function itself, which is already implemented in the device of D1. For these reasons, the board holds that formulating the problem without this function is justified.

1.3 In looking for such an alternative, the skilled person would consider documents dealing with input arrangements for mobile devices, such as document D2. D2 discloses a mobile device equipped with a touch sensor implemented on the rear face of the device as a fingerprint reader. By applying this teaching of D2 to the mobile device of D1, the skilled person would arrive at the subject-matter of claim 1 without exercising inventive skill.

1.4 The appellant argued that the skilled person would not consider D2 since it did not relate to a mobile device comprising an input device suitable for focal length adjustment in an image capturing arrangement. Furthermore, according to the appellant, even if the skilled person did consider D2, they would not arrive at the subject-matter of claim 1 by combining D1 and D2 because the fingerprint sensor in D2 was used for quick access actions only and not for a continuous action like the focal length change in D1.

However, the board holds that the skilled person would not restrict themselves to only mobile devices with a camera function but would in fact look for mobile devices having an input arrangement suitable for adjusting a parameter of a function of the device, such
as D2. Moreover, the fingerprint touchpad of the device in D2 is suitable for commanding the volume of an integrated music player by detecting swipe-up or swipe-down gestures (see paragraph [0028]), which corresponds to the detection of the touch gesture defined in claim 1. The skilled person would thus implement the fingerprint sensor of D2 as an input device in D1 to command the focal length adjustment and arrive at the subject-matter of claim 1 in an obvious manner.

For these reasons, the subject-matter of claim 1 and of corresponding independent system claim 6 does not involve an inventive step (Article 56 EPC) having regard to the disclosure of D1 in combination with D2.

2. First auxiliary request

2.1 The subject-matter of claim 1 differs in substance from the disclosure of D1 in that:
   a) The input device for focal length adjustment is a front-facing fingerprint touchpad.
   b) When the sliding track on the fingerprint touchpad is a circular track, the focal length adjustment direction is determined by the slide direction and is zooming out to decrease the focal length or zooming in to increase the focal length.

2.2 Feature a) relates to the kind of touchpad used, namely a front-facing fingerprint touchpad.
   Feature b) relates to the user's gesture applied to the touchpad and the resulting action on the device, namely a circular track of the user's finger and a focal length adjustment resulting in zooming in or out on the captured image. Therefore, the two features are merely juxtaposed in the claim and do not achieve a
synergistic effect, so they can be examined separately for the assessment of inventive step.

2.3 As to feature a), D4 discloses, similarly to D2, a mobile device equipped with a touch sensor implemented as a fingerprint reader. The fingerprint reader of D4 is a front-facing fingerprint touchpad which can be used to move a cursor in a continuous manner (see Figure 5). For reasons similar to that detailed in points 1.3 and 1.4 above, the skilled person would implement the front-facing fingerprint sensor of D4 in the device of D1 as an alternative input device for commanding the focal length adjustment.

2.4 As to feature b), the board acknowledges that, as argued by the appellant, D1 discloses a focusing operation by focal length adjustment and not a zooming operation as defined in this feature. However, it is common general knowledge that a zooming in/out operation can be performed in a mobile device having a digital camera and that a focal length adjustment may provide a zooming function (see for instance D5, "Background of the invention", paragraphs [0002] and [0003]). Moreover, a sliding circular track as an input command on a touchpad is already known from D1 for adjusting the focal length (see paragraph [0155] and Figures 18 and 19). The skilled person would thus obviously use the sliding circular track on the touchpad of D1 to perform a focal length adjustment aimed at a zooming operation, as defined in feature b).

2.5 For these reasons, claim 1 and corresponding independent system claim 5 do not meet the requirements of Article 56 EPC having regard to D1 in combination with D4 and taking into account the common general knowledge as illustrated by D5.
3. Second auxiliary request

3.1 The second auxiliary request was filed for the first time with the statement setting out the grounds of appeal and thus represents amendments within the meaning of Article 12(2) and (4) RPBA.

The appellant argued that this request was filed in response to D5 being introduced for the first time in the decision, D5 being a document whose relevance is demonstrated by the fact that it is used, in combination with other previously cited documents, in an inventive step objection.

3.2 However, D5 was used in the decision to illustrate the common general knowledge and not as a document in a combination (see points 11 and 15.1.3 of the decision).

Moreover, the examining division noted in point 1.1 of the summons to oral proceedings (page 3) that the disclosure of a change of the lens position in D1 implied an adjustment of the focal length leading to a potential zooming effect. In response to the summons, the appellant filed new requests and argued, inter alia, that it was not common general knowledge to perform zooming on a mobile terminal (see point A.IV of the letter filed on 2 March 2020).

Therefore, the appellant was aware of the common general knowledge used by the examining division and could have expected the examining division to introduce a document, such as D5, to illustrate that common general knowledge during the oral proceedings. However, the appellant announced that it would not be attending
the scheduled oral proceedings, which, as a direct consequence, were cancelled.

The board holds that these circumstances of the appeal case do not justify the admittance of the second auxiliary request into the appeal proceedings under Article 12(6) RPBA.

4. Conclusion

The main request and the first auxiliary request are not allowable since they do not meet the requirements of Article 56 EPC. The second auxiliary request is not admitted into the appeal proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

K. Götz-Wein A. Ritzka

Decision electronically authenticated