The examination is being carried out on the **following application documents**

Description, Pages

1-54 as originally filed

Claims, Numbers

1-9 filed in electronic form on 27-01-2020

Drawings, Sheets

1/15-15/15 as originally filed

1 Reference is made to the following documents; the numbering will be adhered to in the rest of the procedure.

D1 "N1 Quick Start Guide",
, 29 July 2004 (2004-07-29), XP055249230,
Retrieved from the Internet:
URL:http://www.instructionsmanuals.com/download/telefonos_movil/Neonode-N1-en.pdf
[retrieved on 2016-02-11]

D2 EP 1 462 920 A2 (MICROSOFT CORP [US]) 29 September 2004 (2004-09-29)

D3 David A Carr ET AL: "Using Interaction Object Graphs to Specify Graphical Widgets",
CR-TR-3344, 30 September 1994 (1994-09-30), XP055527045,
Retrieved from the Internet:
URL:http://www.cs.umd.edu/hcil/trs/94-09/94-09.pdf
[retrieved on 2018-11-26]

D4 PLAISANT C ET AL: "TOUCHSCREEN TOGGLE DESIGN", STRIKING A BALANCE. MONTEREY, MAY 3 - 7, 1992; [PROCEEDINGS OF THE CONFERENCE ON HUMAN FACTORS IN COMPUTING SYSTEMS], READING, ADDISON WESLEY, US, vol. -, 3 May 1992 (1992-05-03), page 667/668, XP000426849,

2 Oral proceedings according to Article 116(1) EPC are convened at the applicant's request, since the arguments submitted on 27-01-2020 do not put the application in a state for grant. Based on the present state of the file, a refusal of the application is to be expected. The Examining Division intends to arrive at a decision at the end of the oral proceedings (Rule 111(1) EPC) without granting further extension of time to file additional arguments or evidence.

3 Considering that the EPO aims in the interest of the public to bring the proceedings to a conclusion as rapidly as possible and to avoid unnecessary costs, the Applicant is invited to declare within the given time limit whether, in view of the provisional conclusion set forth herein above, the request for Oral Proceedings is maintained. His attention is drawn to the fact that a decision according to the state of the file can be requested, which can be appealed before a higher instance (see Articles 106-109 EPC and Guidelines C-V, 15). However, such a request can only be honoured if the applicant at the same time withdraws his request for Oral Proceedings and refrains from filing further amendments and arguments.

4 At least the following points will need to be discussed during the oral proceedings:

5 **Divisional Application (Art. 76 EPC)**

5.1 The present application has been filed as a divisional application of the earlier application EP10194359.5. Under the provisions of Article 76(1) EPC, a divisional application may be filed only in respect of subject-matter which does not extend beyond the content of the earlier application as filed.

5.2 Present independent **claim 1** defines: "detecting a predefined gesture on the touch-sensitive display at a location remote from an unlock image (402) and remote from a visual cue (404) distinct from the unlock image". According to the applicant, the aspect of "remote from" is disclosed in para. 56-62 and par. 78. As mentioned in the previous communications, para. 56-61 do not discuss the relationship between the gesture and the unlock image at all. Par. 62 discusses the unlock image, but teaches the opposite of "detecting .... at a location remote", namely that the unlock image is dragged across the screen.

The relevant part of par. 78 states: "the user may unlock the device 400 by making contact anywhere on the touch screen 408 and moving the point of contact horizontally as if he or she were following the channel 404". Par. 78 has

to be read in conjunction with para. 71ff, which discuss the use of the channel 404, and linked to it the unlock image. This embodiment differs from the claimed method in the following aspects:

a.) Instead of unlocking, the claim defines a transition between user interface states. According to the applicant, a basis for the generalisation may be found in para. 48 and 81 (e.g. par. 48: "the plurality of user interface states includes a user-interface lock state and a user-interface unlock state").
b.) Instead of "moving the point of contact horizontally", the claim generalizes the movement to a "predefined gesture", which according to the applicant is based on par. 55 ("the predefined gesture may include a contact of the touch screen on the left edge (to initialize the gesture), a horizontal movement of the point of contact to the opposite edge while maintaining continuous contact with the touch screen").
c.) Instead of "channel 404", the claim generalizes to a modification of an unlock image accordance with a "visual cue", the applicant providing inter alia par. 71 as a basis ("visual cues shown include a channel 404 indicating the path of the gesture/movement along which the unlock image").
d.) Instead of (implicitly) detecting contact anywhere on the touch screen, contact on a location remote from an unlock image is detected.

5.3 The examining division acknowledges that the passages cited by the applicant indeed show generalized variants of each of the features a.)-c.). However, this is not sufficient to show that the subject-matter of **claim 1** as a whole is directly and unambiguously derivable from the earlier application.

Firstly, concerning feature a.), there appears to be no clear indication in the description that an unlock image is used in a transition between states that is not an unlocking operation.

Secondly, it is apparent to the person skilled in the art that allowing the touch anywhere on the screen only makes sense for certain types of gestures and associated visual cues. For instance, if the gesture is a circular movement, starting the gesture anywhere on the screen would not allow to detect the end of the gesture at a predetermined location, as required by the claim. Depending on where the gesture is started, the circular movement may be ended at an arbitrary point on the screen. In contrast, in the example of the description with a channel, the detection may be done at a predetermined location, namely on the right part of the screen.

Based on these considerations, the skilled reader would see a functional link between "anywhere", "horizontal movement" and "channel". Hence, the teaching of par. 78, read in combination with the passages cited by the applicant, is not that a gesture detection remote from an unlock image and a visual cue. Instead, the teaching is a more specific one, namely that in an embodiment with a channel, the input is accepted even when not provided on the channel, as long as the horizontal movement is following the channel.

5.4 With regard to feature d.), it also questionable as to whether allowing a first point of contact anywhere on the screen is the same as to detect a gesture at a location remote from an unlock image. The claimed feature suggests that a specific detection is performed, namely that the gesture is remote from the unlock image. In contrast, allowing the first point of contact anywhere on the screen is agnostic about the location of the unlock image.

5.5 Furthermore, **claim 1** defines "continuously modifying the unlock image on the touch-sensitive display in accordance with the predefined gesture and the visual cue". In their letter, the applicant indicates para. 54, 62, 71 and 73 as a basis.

Par. 54 does not discuss the modification of the unlock image. Par. 62 does not disclose the relationship between the unlock image and the visual cue. Par. 71 discloses that the unlock image is dragged along a channel, which is one variant of a visual cue. Par. 73 mentions that the unlock image is moved from the beginning of the channel to the end. Par. 73 also notes that different cues may be used, based on the particulars of the unlock action.

The description fails to disclose that the unlock image is continuously modified in accordance with the predefined gesture and visual cue. The description only teaches that the visual cue informs the user about the gesture that is expected and that the unlock image is dragged along the channel. It appears that modifications different from moving the unlock image are not disclosed in conjunction with visual cues. For example, within the scope of the claim, a modification of the unlock image could be changing its colour or shape.

Additionally, a modification of the unlock image in accordance with the visual cue is not disclosed. It is disclosed that the content of the visual cue depends

on the unlock action. However, the modification of the unlock image (i.e. the position) depends on the input of the gesture, not the visual cue.

5.6 Dependent **claim 7** defines the use of a channel, indicating par. 71 as a basis. However, for the same reasons as above, also **claim 7** does not comply with Article 76 EPC. The combination of touching anywhere without requiring a horizontal movement is an unallowable generalization.

5.7 It is noted that the description of the present application as filed is identical to the description of the earlier application as filed. The amendments discussed above are based on the description. Therefore, the objections under Article 76 EPC also give rise to corresponding objections under Article 123(2) EPC.

5.8 **Discussion of the arguments of the applicant**

5.9 Concerning Article 76 EPC, the applicant argues in their letter that "figures 4A-4B and 5A-5D (and associated paragraphs [0071]-[0079]) are all part of the same embodiment" which is "an embodiment in which it is explicitly disclosed that the channel 404 can be replaced with any other visual cue". Paragraphs [0074]-[0079] are said *to merely describe ways in which the gesture can be performed and visual feedback provided*.

These arguments cannot convince: The statement of par. 73, that the visual cues (channels) of Figures 4A-4B are merely exemplary and that alternative visual cues may be used, does not mean that the subsequent examples specific to a channel can be all generalized to any type of cue. Certain examples related to the channels may simply not generalized to any type of visual cue. For example, a channel has a start point and an end point, while a circle does not have start and end points.

5.10 Furthermore, the applicant also argues that *the use specifically of a channel, as opposed to any other visual cue, is entirely unrelated to the gesture being detected at a remote location*, because the *fact that the gesture doesn't touch the visual cue has nothing to do with the form of that visual cue*. The applicant also opposes the idea that allowing contact anywhere is *solving a problem specific to a channel*.

As has been discussed above, due to the requirement of detecting the end of the gesture at a predetermined location, not any gesture and cue is possible.

The example of the description hence does not provide a solution for general types of gestures and cues.

5.11 It appears that dependent **claim 7** at least partially resolves the issue identified above. The limitation "includes a channel" instead of "is a channel" appears not to be derivable from the earlier application. However, contrary to the teaching of the earlier application, **claim 7** fails to mention that a horizontal movement is to be performed.

6 Novelty and Inventive Step (Art. 52(1), 54 and 56 EPC)

6.1 The present application does not meet the requirements of Article 52(1) EPC because the subject-matter of **claim 1** does not involve an inventive step within the meaning of Article 56 EPC.

6.2 **D1** may be considered to be the prior art closest to the subject-matter of **claim 1**, and discloses:

A method of controlling an electronic device with a touch-sensitive display (**the Neonode N1**), comprising:
while the electronic device is in a first user-interface state, detecting a predefined gesture on the touch-sensitive display at a location remote from an unlock image ~~and remote from a visual cue (404) distinct from the unlock image~~ (**page 9: "Right sweep to unlock"; page 14 shows a right sweep**);
~~continuously modifying the unlock image on the touch-sensitive display in accordance with the predefined gesture and the visual cue;~~
in response to detecting that the predefined gesture ends after moving to at least a predetermined location (**page 14 notes that the right sweep is "over the screen" and shows a movement from the left side of the screen to the right side; this implies that the phone has some location on the screen designated as a location at which it can be said that the right sweep is finished**):
ceasing to display the unlock image; and
transitioning the electronic device from the first user-interface state to a second user-interface state (**page 9 discloses that the text "Right sweep to unlock" appears on the screen; the text is an "unlock image"; pages 10 and 11 show the phone in an unlocked state, in which no text is shown; this implies that after unlocking the image is not shown anymore**); and
in response to detecting that the predefined gesture ends before moving to the predetermined location:

maintaining the electronic device in the first user-interface state (**it is implicit that an unsuccessful execution of the right sweep gesture lets the phone to be maintained in the locked state**).

6.3 The subject-matter of **claim 1** therefore differs from this known method in
- detecting the predefined gesture at a location remote from a visual cue distinct from the unlock image
- continuously modifying the unlock image on the touch-sensitive display in accordance with the predefined gesture and the visual cue

6.4 As the image merely reflects past inputs, it does not guide the user towards the successful input of the gesture. Therefore, the modification of the image does not produce a technical effect. Consequently, no technical problem is solved. Therefore, the subject-matter of **claim 1** lacks an inventive step.

6.5 The above objection also applies to **claims 8 and 9**.

6.6 **Discussion of the arguments of the applicant**

6.7 The applicant argues that the text "Right sweep to unlock" in **D1** is not an unlock image within the meaning of the present invention - the simple text instruction is not something that can be modified in accordance with the gesture and with a visual cue.

It is noted that the examining division did not claim that **D1** discloses modifying the unlock image. Providing on-screen instructions about unlocking a device is an unlock image. Therefore, the text of **D1** falls within the scope of the claim. Accordingly, **D1** also discloses to cease to display the unlock image.

6.8 The applicant argues that the modification of the unlock image illustrates the progress of the gesture - the examining division agrees.

6.9 The applicant argues that the visual cue guides the user in how to continue the gesture.

The claim defines "continuously modifying the unlock image on the touch-sensitive display in accordance with ... the visual cue". In other words, the manner in which the unlock image is displayed depends on the visual cue. This

does not mean that the user is guided in how to continue the gesture. The following example, falling within the scope of the claim, illustrates why: the visual cue could be a text that sates "The unlock image changes colors in accordance with the input". In the progress of inputting the gesture, the unlock image is now modified to turn from red to green. When the user provides some input and sees that the unlock image is now slightly less red, this does not instruct the user in how to continue the input. It only shows that some correct input has been provided.

6.10 The applicant also argues that the unlock image and visual cue of amended claim 1 provide an indication to the user as to whether further input (and how much) is needed to achieve the transition to the second UI state.

In the broad way claimed, the visual cue and the unlock image do not provide an indication to the user as to whether further input (and how much) is needed to achieve the transition to the second UI state - see the example above.

6.11 In a further argument, the visual cue and location of the unlock image along the channel is said to be used to further guide the user to perform the gesture required to transition the UI state of the device.

This argument is not pertinent, because **claim 1** is not limited to the channel. However, **claim 7** is limited to moving the unlock image along the channel and the argument will be discussed with reference to claim 7: It needs to be asked whether the combination of the visual cue and location of the unlock image along the channel is a continued and guided human-machine interaction process which assists the user in performing a technical task.

In the present case, there is no continuous guidance, because the location of the unlock image along the channel only informs the user about how much of the gesture has been completed so far, but does not instruct the user how to continue the gesture depending on the present state of the input. For example, within the scope of the claim, the gesture may be a zig-zag movement across the screen, and the position of the unlock image inside the channel only shows how much of the movement has been completed. The channel does not guide the user to change directions according to the zig-zag movement depending on the already completed movement.

To decide whether a graphical output is a continued and guided human-

machine interaction process which assists the user in performing a technical task, it may be asked whether the input can be performed by ignoring the graphical feedback altogether without any loss in input precision or speed. For the channel embodiment of **claim 7** and the more specific teaching of the description, this question can be answered with yes. A user can just make a swipe movement from left to right, completely ignoring the displayed information.

6.12 The applicant also argues that when implementing the unlock image/visual cue in **D1**, the obvious implementation would be to require the user to contact the unlock image.

Since the inventive step is not to be assessed in view of a modified prior art, but the prior art as given, this argument cannot convince. **D1** allows a touch remote from an unlock image. **D1** does not disclose the continuous modification. This continuous modification creates no technical effect. Consequently, no problem is solved. Hence, it does not need to be asked further how an obvious solution would look like, because without a technical problem there cannot be a solution.

7 Procedure

7.1 It is not at present apparent which part of the application could serve as a basis for a new, allowable claim. Should the applicant nevertheless regard some particular matter as patentable, an independent claim should be filed taking account of Rule 43(1) EPC. The applicant should also indicate how the subject-matter of the new claim differs from the state of the art and the significance thereof.

To aid the examination procedure, the applicant may:
- Indicate which cited document should be considered as the closest prior art
- Indicate the difference of the claimed subject-matter over the closest prior art
- Demonstrate the technical effect(s) achieved by determined difference
- Provide a formulation of the objective technical problem based on the technical effect(s) in view of the closest prior art
- Comment why the claimed solution of the objective technical problem is non-obvious.

7.2 In order to comply with the requirements of Rule 137(4) EPC, the applicant should clearly identify the amendments made, irrespective of whether they concern amendments by addition, replacement or deletion, and indicate the passages of the application as filed on which these amendments are based (see Guidelines H III, 2.1).

7.3 If the applicant should decide to renounce the oral proceedings, he is asked to inform the office at the earliest possible.

7.4 The applicant's attention is drawn to the fact that if a party duly summoned does not appear as summoned, the proceedings may continue in absentiam (Rule 115(2) EPC).

7.5 During the oral proceedings, in addition to the above topics, compliance with the EPC will be subject to discussion in view of any amendment filed before or during the oral proceedings.