

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

**Description, Pages**

|      |                             |            |                           |
|------|-----------------------------|------------|---------------------------|
| 2-33 | as originally filed         |            |                           |
| 1    | received on                 | 05-10-2010 | with letter of 05-10-2010 |
| 1a   | filed in electronic form on |            | 04-08-2016                |

**Claims, Numbers**

|      |                             |            |
|------|-----------------------------|------------|
| 1-10 | filed in electronic form on | 04-08-2016 |
|------|-----------------------------|------------|

**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 | WO 2004/001560 A1 (NOKIA CORP [FI]; RYTIVAARA MARKKU [FI]; MUSTONEN MIKA [FI]; TOKKONEN T) 31 December 2003 (2003-12-31)  |
| D2 | US 5 821 933 A (KELLER NEAL MARTIN [US]; PICKOVER CLIFFORD ALAN [US]) 13 October 1998 (1998-10-13)  |
| D3 | "ACCESS/CONTROL ICONS (ICON KEYS)",<br>IBM TECHNICAL DISCLOSURE BULLETIN, IBM CORP. NEW YORK, US,<br>vol. 38, no. 4, 1 April 1995 (1995-04-01), pages 407-409,<br>XP000516196,<br>ISSN: 0018-8689 |
| D4 | US 5 907 327 A (OGURA TSUYOSHI [JP]; ITOH AKIHISA [JP])<br>25 May 1999 (1999-05-25)   |

The following documents are cited by the Examiner; the numbering will be adhered to in the rest of the procedure.

D5        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,

D6        Anton Kotov: "Mobile-review.com Review GSM phone Neonode  
             N1m",  
             , 30 July 2005 (2005-07-30), XP055267274,  
             Retrieved from the Internet:  
             URL:[http://web.archive.org/web/20050730004341/http://](http://web.archive.org/web/20050730004341/http://www.mobile-review.com/review/neonode-n1m-en.shtml)  
             [www.mobile-review.com/review/neonode-n1m-en.shtml](http://www.mobile-review.com/review/neonode-n1m-en.shtml)  
             [retrieved on 2016-04-20]

D7        "N1 Quick Start Guide",  
             , 29 July 2004 (2004-07-29), XP055249230,  
             Retrieved from the Internet:  
             URL:[http://www.instructionsmanuals.com/download/](http://www.instructionsmanuals.com/download/telefonos_movil/Neonode-N1-en.pdf)  
             [telefonos\\_movil/Neonode-N1-en.pdf](http://www.instructionsmanuals.com/download/telefonos_movil/Neonode-N1-en.pdf)  
             [retrieved on 2016-02-11]

2        Oral proceedings according to Article 116 (1) EPC are convened at the Applicants request, since the amendments and arguments submitted with the letter of 04-08-2016 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 **Amendments (Art. 123(2) EPC)**

- 5.1 The amendments filed with the letter dated 04-08-2016 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 123(2) EPC. The amendments concerned are the following:
- 5.2 **Claim 1** has been amended by addition of the following feature: "... maintaining the portable electronic device in the locked state and maintaining display of the single unlock image if the moving of the single unlock image ...".

The applicant has indicated par. 77 and 93 of the application as originally filed as a basis for the amendment. Said par. 77 discloses: "In some embodiments, the unlock image 402 may also be used to indicate failure of performance of the unlock action. For example, if the user breaks the contact with the touch screen before the unlock image reaches the right end of the channel 404, the unlock action has failed. The device 400 may display the unlock image 402 returning to its initial position on the left end of the channel 404, allowing the user to attempt the unlock action again, if she so chooses. In some embodiments, the device goes back to sleep if no gesture is applied in a predetermined period of time."

The feature defined in the claim is not directly and unambiguously derivable from the application as originally filed, because the term "maintain" also encompasses the case of leaving the image at the position to which it was dragged by the user. In contrast, the description only discloses that the image is returned to the initial position and displayed there (implicitly disclosed by "allowing ...").

In order to overcome the objection it is suggested to amend the claim in accordance with the wording used in the description.

5.3 The above objection applies, mutatis mutandis, also to **claims 7 and 10**.

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 **D7** is considered to be the prior art closest to the subject-matter of **claim 1** and discloses:

A computer-implemented method for preventing unintentional unlocking of a portable electronic device, the device including a touch-sensitive display (**page 11, the phone is controlled by touching the screen with the finger**), characterised in that the method comprises:

detecting a contact with the touch-sensitive display at a first predefined location (**page 9: "sweep right to unlock your unit"; in order to implement a sweep from right to left, a contact location on the left side of the display has to be defined**) ~~corresponding to a single unlock image~~ while the portable device is in a locked state, ~~wherein the single unlock image is a graphical, interactive user interface object with which a user interacts in order to unlock the device;~~

~~moving the single unlock image on the touch-sensitive display in accordance with the movement of the contact~~ while continuous contact with the touch-sensitive display is maintained (**sweeping implies a continuous contact**); unlocking the portable electronic device ~~and ceasing to display the single unlock image~~ if the moving of the single unlock image on the touch-sensitive display results in movement of the single unlock image from the first predefined location to a predefined unlock region on the touch-sensitive display (**sweeping from left to right implies that the unlock region is pre-defined to be right of the initial contact location**); and

~~maintaining the portable electronic device in the locked state and maintaining display of the single unlock image~~ if the moving of the single unlock image does not result in movement of the single unlock image from the first predefined location to the predefined unlock region on the touch-sensitive display (**implicitly if the movement is not left-to-right, the unlock does not occur**).

### 6.3 **Distinguishing features:**

The subject-matter of **claim 1** therefore differs from this known method in that:

- a.) detecting a contact at a first predefined location *corresponding to a single unlock image* while the portable device is in a locked state, *wherein the single unlock image is a graphical, interactive user-interface object with which a user interacts in order to unlock the device*
- b.) moving *the single unlock image* on the touch-sensitive display *in accordance with the movement of the contact*
- c.) *ceasing to display the single unlock image* if the moving of the single unlock image on the touch-sensitive display results in movement *of the single unlock image* from the first predefined location to a predefined unlock region on the touch-sensitive display
- d.) maintaining the portable electronic device in the locked state *and maintaining display of the single unlock image* if the moving *of the single unlock image* does not result in movement *of the single unlock image* from the first predefined location to the predefined unlock region on the touch-sensitive display

### 6.4 **Technical contribution:**

Features a.) and b.) hence relate to detecting a contact at a region corresponding to a single unlock image and moving the single unlock image on the touch-sensitive display in accordance with the movement of the contact. Features c.) and d.) relate to the continuation of displaying the single unlock image or the disappearance of the single unlock image, depending on the success of the unlock operation.

- 6.5 The feature of "moving the single unlock image on the touch-sensitive display" is considered to make a technical contribution, since the contact of the user on the touch-sensitive display not only causes the unlocking of the device, but also the moving display of the single unlock image. Moving the single unlock image "in accordance with the movement of the contact" however cannot be considered to contribute to technical effect. How the movement of the contact is represented on the display, is purely based on aesthetic considerations, not technical considerations (see also T 1958/13 of 11 June 2015).

The maintaining and ceasing to display the single unlock image (features c.) and d.)) relates to showing the internal state of a device and hence has a technical character.

**6.6 Technical effect:**

The technical contribution of **claim 1** over **D7** are therefore features c.) and d.), and features a.) and b.), limited to the aspect that a movement is caused by the contact, and not how this movement is graphically shown. The technical effect achieved is that, depending on the current device state, a feedback indicator about the unlocking operation is shown to the user.

**6.7 Objective technical problem:**

The problem to be solved by the present invention may therefore be regarded as *how to provide guidance to a user about available operations and their execution on a touch-screen device*.

**6.8 Combination of D7 and D5:**

The problem solved lies within the technical domain of user interface design. Thus, when faced with the problem solved by the invention, the person skilled in the art would be aware of prior art documents in the field of user interface design (Guidelines G-VII.6.). In particular, both **D5** and **D7** are directed to the design of user interfaces for touch-sensitive displays. **D5** hints that there is "the confusion between state indication and possible action label" and that "the difficulty of deciding what to do to change the state of the device" needs to be addressed. Thus, solving the problem, the person skilled in the art would consider combining the teachings of **D5** and **D7**.

**6.9 Obviousness:**

From **D5**, the person skilled in the art would learn about the slider toggle, which comprises a "yellow pointer" that is dragged by the user. The person skilled in the art would learn to cause the moving of an image on a screen in reaction to a contact on the touch-sensitive display in order to provide guidance to a user about available operations and their execution on a touch-screen device (see point 6.7). Hence, when solving the problem in view of **D5** and **D7**, the person skilled in the art would arrive at features a.) and b.).

Regarding features c.) and d.), the person skilled in the art would have the following considerations: When implementing a slider toggle, as known from **D5**, there are two options. Option 1.) is to show the slider toggle irrespective of the current state of the device (locked or unlocked). Option 2.) is to only show the slider toggle when the device is in locked state and to hide the slider toggle once the device transits into unlocked state. Page 9 of **D7** discloses that the locking operation is caused automatically and that it can also be performed manually by activating a respective entry in a menu. In other words, the locking operation is not performed using a swiping gesture, but by a simple menu selection. Thus, when using the toggle slider, the person skilled in the art would be lead to use the toggle slider only for the unlocking operation. Since after the unlocking operation the slider toggle is of no more use, it would be a normal design procedure to hide the slider toggle. Thereby, the person skilled in the art would arrive at features c.) and d.).

6.10 **Response to the arguments of the applicant:**

- 6.11 On pages 4 and 5 of his letter the applicant argues that the **D7** fails to disclose any unlock image and that the distinguishing features give rise to a technical effect of providing an improved mechanism for unlocking a portable electronic device which, once the device has been unlocked, does not occupy screen area that could be used for displaying content. The applicant further argues that the objective technical may therefore be expressed as "how to provide an improved mechanism for unlocking a portable electronic device which does not compromise the screen area available to display content".

The arguments are not convincing for the following reasons: The mechanism for unlocking the portable electronic device of **D7** shows an instruction message in locked state and is understood to not occupy any screen area in unlocked state. Hence, the mechanism of **D7** already achieves the effect of "does not compromise the screen area available to display content". Therefore, the technical effect used for formulating the objective technical problem identified by the applicant is not derivable from the application as filed when considered in the light of the closest prior art.

- 6.12 The applicant further argues that the person skilled in the art would not consider combining **D7** with **D5**, because **D5** does not relate even remotely to the technical problem.

This argument is not convincing because the problem solved by claim 1 is *how to provide guidance to a user about an available operations and their execution on a touch-screen device*. The person skilled in the art would seek advice in **D5** for solving this problem (see point 6.7 and point 6.8 above).

- 6.13 The applicant also argues that in the combination of **D7** and **D5** the person skilled in the art would not arrive in the subject-matter of claim 1, because in **D5** the control must be permanently visible.

As discussed above ("Obviousness"), the person skilled in the art would learn from **D7** that the swiping gesture is only used for unlocking. Hence, there would be no motivation to keep the slider toggle of **D5** visible when the device is in unlocked state.

- 6.14 The above objections apply, mutatis mutandis, also to **claims 7 and 10**. The subject-matter of **claims 7 and 10** therefore does not involve an inventive step within the meaning of Article 56 EPC.

- 6.15 Dependent **claims 2-6 and 8-9** do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the EPC with respect to inventive step.

Said claims merely define details of the movement action (e.g. claim 2), which are implicit from the use of **D7/D5** or define graphical details (e.g. claim 5), which do not contribute to any technical effect.

## 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.

The applicant is in particular pointed to Guidelines G-VII.5.4. In general, the graphic design of user interfaces does not have a technical effect. Thus, in



overcoming the above objection under Article 56 EPC, it is required to solve a technical problem in a non-obvious way. The mere specification of design details generally does not contribute to an inventive step.

- 7.2 In case the applicant will amend the claims, 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 Handwritten amendments are no longer accepted at oral proceedings. The European Patent Academy has prepared a brief tutorial that assists the applicant in fulfilling the requirements, indicating how to obtain the electronically editable versions and how to print documents when at the EPO facilities. At the time of issuing those summons, it is available via the following URL: <https://e-courses.epo.org/course/view.php?id=274>.
- 7.4 If the applicant should decide to renounce the oral proceedings, he is asked to inform the office at the earliest possible.
- 7.5 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).