I. Summary of Facts and Submissions

1   European patent application No. 10 194 359.5 having the title "Unlocking a device by performing gestures on an unlock image" was filed on 30-11-2006. It claims priority of US 322549 filed on 23-12-2005. It is a divisional application in the sense of Article 76 EPC of the earlier European patent application No. 09 170 574.9. The applicant is
Apple Inc.
1 Infinite Loop
Cupertino, CA 95014
US.

2   The European search opinion cited the documents

D1	WO 2004/001560 A (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] ET AL) 13 October 1998 (1998-10-13)
D3	"ACCESS/CONTROL ICONS (ICON KEYS)", IBM TECHNICAL DISCLOSURE BULLETIN, IBM CORP. NEW YORK, US, vol. 38, no. 4, 1 April 1995 (1995-04-01), pages 407-409, XP000516196, ISSN: 0018-8689
D4	US 5 907 327 A (OGURA TSUYOSHI [JP] ET AL) 25 May 1999 (1999-05-25)
D5	WO 01/77792 A2 (RSA SECURITY INC [US]) 18 October 2001 (2001-10-18)
D6	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,

D7   US 2002/191029 A1 (GILLESPIE DAVID W [US] ET AL) 19 December 2002 (2002-12-19)

and raised objections under Article 76(1) EPC against claims 2, 9, 13, 15, 17 and 19 and under Articles 52(1) and 56 against independent claims 1, 6 and 11 as well as against dependent claims 2-5, 7-10 and 12-15.

3   In the response dated 23-09-2011 and received on 26-09-2011 the applicant requested further examination on an amended set of claims 1-15 and provided arguments in support of the patentability of these claims. As an auxiliary measure, he requested oral proceedings.

4   In a communication under Article 94(3) EPC issued by the examining division on 18-08-2015, objections under Articles 52(1) and 56 EPC were raised against independent claims 1, 6 and 11 as well as against dependent claims 2-5, 7-10 and 12-15.

5   In minutes to a phone conversation issued by the examining division on 08-10-2015, no in-depth discussion of the open objections was made.

6   In the response received on 22-01-2016 the applicant requested further examination based on an amended set of claims 1-15 and provided arguments in support of the patentability of the claims. As an auxiliary measure, he requested oral proceedings.

7   On 02-02-2017 the examining division issued a summons to attend oral proceedings on 13-06-2017. In the annex to the summons, objections under Article 84 EPC were raised against claims 1, 6 and 11 and under Article 54 EPC against claims 1, 6 and 11 and under Article 56 EPC against claims 2-5, 7-10 and 12-15. With the consent of the applicant, document D8 was introduced into the procedure in the summons.

D8   "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]

8   In a response to the summons received on 25-04-2017 the applicant submitted a main request and three auxiliary requests, and provided arguments in support of the patentability of the claims.

9   On 13-06-2017, oral proceedings were held. During the oral proceedings, the applicant introduced a new second auxiliary request, and maintained the second and third auxiliary request as filed on 25-04-2017, now named third and fourth auxiliary request.

10   The decision announced at the end of the oral proceedings is based on the following requests:

Main Request

Description, Pages

3-40, 42, 48-50	as originally filed				
41, 43-47	received on	26-09-2011	with letter of		23-09-2011
1, 2, 2a	filed in electronic form on				22-01-2016
2b	filed in electronic form on				25-04-2017

Claims, Numbers

1-12	filed in electronic form on	25-04-2017

Drawings, Sheets

1/15-15/15	as originally filed

Auxiliary Request 1

Description, Pages

3-40, 42, 48-50	as originally filed				
41, 43-47	received on	26-09-2011	with letter of		23-09-2011
1, 2, 2a	filed in electronic form on				22-01-2016
2b	filed in electronic form on				25-04-2017

Claims, Numbers

    1-15   filed in electronic form on   25-04-2017

Drawings, Sheets

    1/15-15/15   as originally filed

Auxiliary Request 2

Description, Pages

    3-40, 42, 48-50   as originally filed

    41, 43-47   received on   26-09-2011   with letter of   23-09-2011

    1, 2, 2a   filed in electronic form on   22-01-2016

    2b   filed in electronic form on   25-04-2017

Claims, Numbers

    1-12   filed during oral proceedings   13-06-2017

Drawings, Sheets

    1/15-15/15   as originally filed

Auxiliary Request 3

Description, Pages

    3-40, 42, 48-50   as originally filed

    41, 43-47   received on   26-09-2011   with letter of   23-09-2011

    1, 2, 2a   filed in electronic form on   22-01-2016

    2b   filed in electronic form on   25-04-2017

Claims, Numbers

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| 1-9 | filed in electronic form on | 25-04-2017 |

Drawings, Sheets

| 1/15-15/15 | as originally filed |

Auxiliary Request 4

Description, Pages

| 3-40, 42, 48-50 | as originally filed |

| 41, 43-47 | received on | 26-09-2011 | with letter of | 23-09-2011 |

| 1, 2, 2a | filed in electronic form on | 22-01-2016 |

| 2b | filed in electronic form on | 25-04-2017 |

Claims, Numbers

| 1-9 | filed in electronic form on | 25-04-2017 |

Drawings, Sheets

| 1/15-15/15 | as originally filed |

11   **Main Request:**

11.1   Independent **claim 1** reads as follows:
A computer-implemented method, comprising:
while an electronic device having a touch-sensitive display is in a first user-interface state, detecting progress towards completion of a gesture input on the touch-sensitive display needed to transition to a second user-interface state;
characterised in that the method further comprises:
while the device is in the first user-interface state,
indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects,
wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and,

wherein transitioning the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and transitioning the device to the second user-interface state if the gesture input is completed.

11.2 Independent **claim 5** reads as follows:
A portable electronic device, comprising:
a touch-sensitive display;
memory;
one or more processors; and
one or more modules stored in memory and configured for execution by the one or more processors, the one or more modules including instructions for:
while the device is in a first user-interface state, detecting progress towards completion of a gesture input needed to transition to a second user-interface state;
characterised in that the one or more modules further include instructions for:
while the device is in the first user-interface state, indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects, wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and,
wherein transitioning of the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and transitioning the device to the second user-interface state if the gesture input is completed.

11.3 Independent **claim 9** reads as follows:
A computer readable storage medium having stored therein executable instructions, which when executed by an electronic device having a touch-sensitive display, cause the device to:
while the device is in a first user-interface state, detect progress towards completion of a gesture input on the touch-sensitive display needed to transition to a second user-interface state;
characterised in that said executable instructions, when executed by the electronic device, further cause the device to:
while the device is in the first user-interface state, indicate progress of the gesture input by transitioning an optical intensity of one or more user interface objects, wherein at least one of the one or more user interface objects is not

displayed prior to detecting progress towards completion of the gesture input and, wherein transitioning the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and
transition the device to the second user-interface state if the gesture input is completed.

12 Auxiliary Request 1:

12.1 Independent **claim 1** reads as follows:
A computer-implemented method, comprising:
while an electronic device is in a first user-interface state, detecting progress towards satisfaction of a user input condition needed to transition to a second user-interface state;
while the device is in the first user-interface state,
indicating progress towards satisfaction of the condition by transitioning an optical intensity of one or more user interface objects, wherein at least one of the one or more user interface objects is not displayed prior to detecting progress toward satisfaction of the user input condition and, wherein transitioning the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and
transitioning the device to the second user-interface state if the condition is satisfied, characterised in that the one or more user interface objects increase in optical intensity in accordance with completion of progress towards satisfaction of the condition, from an initial optical intensity value when there is no progress towards satisfaction of the condition to a final optical intensity value when the condition is satisfied.

12.2 Independent **claim 6** reads as follows:
A portable electronic device, comprising:
a touch-sensitive display;
memory;
one or more processors; and
one or more modules stored in memory and configured for execution by the one or more processors, the one or more modules including instructions for:
while the device is in a first user-interface state, detecting progress towards satisfaction of a user input condition needed to transition to a second user-interface state;
while the device is in the first user-interface state, indicating progress towards

satisfaction of the condition by transitioning an optical intensity of one or more user interface objects, wherein at least one of the one or more user interface objects is not displayed prior to detecting progress toward satisfaction of the user input condition and, wherein transitioning of the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and

transitioning the device to the second user-interface state if the condition is satisfied, characterised in that the one or more modules further include instructions for increasing the optical intensity of the one or more user interface objects accordance with completion of progress towards satisfaction of the condition, from an initial optical intensity value when there is no progress towards satisfaction of the condition to a final optical intensity value when the condition is satisfied.

12.3   Independent **claim 11** reads as follows:

A computer readable storage medium having stored therein executable instructions, which when executed by an electronic device, cause the device to:

while the device is in a first user-interface state, detect progress towards satisfaction of a user input condition needed to transition to a second user-interface state;

while the device is in the first user-interface state, indicate progress towards satisfaction of the condition by transitioning an optical intensity of one or more user interface objects, wherein at least one of the one or more user interface objects is not displayed prior to detecting progress toward satisfaction of the user input condition and, wherein transitioning the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and

transition the device to the second user-interface state if the condition is satisfied, characterised in that said executable instructions, when executed by the electronic device, further cause the device to increase the optical intensity of the one or more user interface objects in accordance with completion of progress towards satisfaction of the condition, from an initial optical intensity value when there is no progress towards satisfaction of the condition to a final optical intensity value when the condition is satisfied.

13   **Auxiliary Request 2:**

13.1   Independent **claim 1** reads as follows:

A computer-implemented method, comprising:

while an electronic device having a touch-sensitive display is in a first user-interface state, detecting progress towards completion of a gesture input on the touch-sensitive display needed to transition to a second user-interface state;

characterised in that the method further comprises:

while the device is in the first user-interface state,

indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects,

wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and,

wherein transitioning the optical intensity includes the at least one of the one or more user interface objects appearing and increasing in optical intensity smoothly at a predefined rate in accordance with completion of the gesture, from an initial optical intensity value when there is no progress towards completion of the gesture to a final optical intensity value when the gesture is completed; and

transitioning the device to the second user-interface state if the gesture input is completed.

13.2   Independent **claim 5** reads as follows:

A portable electronic device, comprising:

a touch-sensitive display;

memory;

one or more processors; and

one or more modules stored in memory and configured for execution by the one or more processors, the one or more modules including instructions for:

while the device is in a first user-interface state, detecting progress towards completion of a gesture input needed to transition to a second user-interface state;

characterised in that the one or more modules further include instructions for:

while the device is in the first user-interface state,

indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects,

wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and,

wherein transitioning the optical intensity includes the at least one of the one

or more user interface objects appearing and increasing in optical intensity smoothly at a predefined rate in accordance with completion of the gesture, from an initial optical intensity value when there is no progress towards completion of the gesture to a final optical intensity value when the gesture is completed; and

transitioning the device to the second user-interface state if the gesture input is completed.

13.3   Independent **claim 9** reads as follows:

A computer readable storage medium having stored therein executable instructions, which when executed by an electronic device having a touch-sensitive display, cause the device to:

while the device is in a first user-interface state, detect progress towards completion of a gesture input on the touch-sensitive display needed to transition to a second user-interface state;

characterised in that said executable instructions, when executed by the electronic device, further cause the device to:

while the device is in the first user-interface state,

indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects,

wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and,

wherein transitioning the optical intensity includes the at least one of the one or more user interface objects appearing and increasing in optical intensity smoothly at a predefined rate in accordance with completion of the gesture, from an initial optical intensity value when there is no progress towards completion of the gesture to a final optical intensity value when the gesture is completed; and

transitioning the device to the second user-interface state if the gesture input is completed.

14   **Auxiliary Request 3:**

14.1   Independent **claim 1** reads as follows:

A computer-implemented method, comprising:

while an electronic device having a touch-sensitive display is in a first user-interface state, detecting progress towards completion of a gesture input on the touch-sensitive display needed to transition to a second user-interface state;

characterised in that:

the gesture input includes dragging an image to a predefined location on the touch-sensitive display, and in that the method further comprises:

while the device is in the first user-interface state,

indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects,

wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and,

wherein transitioning the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and

transitioning the device to the second user-interface state if the gesture input is completed.

14.2   Independent **claim 4** reads as follows:

A portable electronic device, comprising:

a touch-sensitive display;

memory;

one or more processors; and

one or more modules stored in memory and configured for execution by the one or more processors, the one or more modules including instructions for:

while the device is in a first user-interface state, detecting progress towards completion of a gesture input needed to transition to a second user-interface state;

characterised in that

the gesture input includes dragging an image to a predefined location on the touch-sensitive display, and in that the one or more modules further include instructions for:

while the device is in the first user-interface state, indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects, wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and,

wherein transitioning of the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and

transitioning the device to the second user-interface state if the gesture input is completed.

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14.3   Independent **claim 7** reads as follows:

A computer readable storage medium having stored therein executable instructions, which when executed by an electronic device having a touch-sensitive display, cause the device to:

while the device is in a first user-interface state, detect progress towards completion of a gesture input on the touch-sensitive display needed to transition to a second user-interface state;

characterised in that

the gesture input includes dragging an image to a predefined location on the touch-sensitive display, and in that said executable instructions, when executed by the electronic device, further cause the device to:

while the device is in the first user-interface state, indicate progress of the gesture input by transitioning an optical intensity of one or more user interface objects, wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and, wherein transitioning the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and

transition the device to the second user-interface state if the gesture input is completed.

15   Auxiliary Request 4:

15.1   Independent **claim 1** reads as follows:

A computer-implemented method, comprising:

while an electronic device having a touch-sensitive display is in a locked state, detecting progress towards completion of a gesture input on the touch-sensitive display needed to transition to an unlocked state;

characterised in that:

the gesture input includes dragging an unlock image to a predefined location on the touch-sensitive display, wherein the unlock image is a is a graphical, interactive user-interface object with which the user interacts in order to unlock the device, and in that the method further comprises:

while the device is in the locked state,

indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects,

wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and,

wherein transitioning the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and transitioning the device to the unlocked state if the gesture input is completed.

15.2 Independent **claim 4** reads as follows:

A portable electronic device, comprising:

a touch-sensitive display;

memory;

one or more processors; and

one or more modules stored in memory and configured for execution by the one or more processors, the one or more modules including instructions for:

while the device is in a locked state, detecting progress towards completion of a gesture input needed to transition to an unlocked state;

characterised in that

the gesture includes dragging an unlock image to a predefined location on the touch-sensitive display, wherein the unlock image is a is a graphical, interactive user-interface object with which the user interacts in order to unlock the device, and in that the one or more modules further include instructions for:

while the device is in the locked state, indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects, wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and, wherein transitioning of the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and transitioning the device to the unlocked state if the gesture input is completed.

15.3 Independent **claim 7** reads as follows:

A computer readable storage medium having stored therein executable instructions, which when executed by an electronic device having a touch-sensitive display, cause the device to:

while the device is in a locked state, detect progress towards completion of a gesture input on the touch-sensitive display needed to transition to an unlocked state;

characterised in that

the gesture includes dragging an unlock image to a predefined location on the touch-sensitive display, wherein the unlock image is a is a graphical, interactive user-interface object with which the user interacts in order to

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unlock the device, and in that said executable instructions, when executed by the electronic device, further cause the device to:

while the device is in the locked state, indicate progress of the gesture input by transitioning an optical intensity of one or more user interface objects, wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and, wherein transitioning the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity; and transition the device to the unlocked state if the gesture input is completed.

II. Decision

It is decided to refuse the application based on Article 97(2) EPC, since it does not fulfil the requirements of Articles 52(1) EPC, 54(1), 54(2) and 56 EPC.

III. Reasons for the decision

16 **MAIN REQUEST**

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

16.2 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.

16.3 **D8** is considered to be the prior art closest to the subject-matter of **claim 1** and discloses:

A computer-implemented method, comprising:
while an electronic device (**page 9, the mobile phone**) having a touch-sensitive display is in a first user-interface state (**the locked state**), detecting progress towards completion of a gesture input on the touch-sensitive display needed to transition to a second user-interface state (**page 9: "Right sweep to unlock"**);
characterised in that the method further comprises:
while the device is in the first user-interface state,
indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects,
wherein at least one of the one or more user interface objects is not displayed
prior to detecting progress towards completion of the gesture input and,

~~wherein transitioning the optical intensity includes the one or more user~~
~~interface objects appearing and increasing in optical intensity~~; and
transitioning the device to the second user-interface state if the gesture input
is completed (**the unlocked state**).

16.4   The subject-matter of **claim 1** therefore differs from this known method in that
while the device is in the first user interface state, the method comprises the
additional steps of

indicating progress of the gesture input by transitioning an optical intensity of
one or more user interface objects,
wherein at least one of the one or more user interface objects is not displayed
prior to detecting progress towards completion of the gesture input and,
wherein transitioning the optical intensity includes the one or more user
interface objects appearing and increasing in optical intensity

16.5   **Technical effect and problem**
The technical effect achieved by the difference is that the user is provided
with visual feedback about an ongoing transition from a first user-interface
state to a second user-interface state.

The problem to be solved by the present invention may therefore be regarded
as how to provide visual feedback to a user about the transition from a first
user-interface state to a second user-interface state of an electronic device.

16.6   **Combination of prior art documents**
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 **D6** and **D8** are directed to the
design of user interfaces for touch-sensitive displays. **D6** 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 **D6** and **D8**.

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16.7 Obviousness

In solving the problem, the person skilled in the art would learn from **D6** about the slider toggle (see fig. 2). The slider toggle is a user control for touch screen devices, having a pointer (the small rounded rectangle next to the "ON" label of the slider toggle in fig. 2) which can be moved using a touch gesture from one side of the slider toggle to the other side of the slider toggle. **D6** further teaches to highlight the pointer once it is touched, in order to signify to the user that the user now has control over the slider toggle. **D6** does not further describe how the highlight of the pointer is created. However, it is implicit that when highlighting an element on a screen, that some part of the screen related to the element has to change, e.g. by changing the color of part of the element which is highlighted. Such change of the screen implies that something appears on the screen (namely the element used for highlight). Having something appear on a screen also implies an increase in optical intensity.

Thus, when solving the problem, the person skilled in the art would take the slider toggle known from **D6** and add it to the unlock screen of **D8**. When the user unlocks the device using the slider toggle, a highlight of the pointer appears upon touching the pointer. Hence, the person skilled in the art would arrive in the subject-matter of **claim 1** without exercising any inventive skills.

Similar arguments and objections apply to claims 5 and 9, which express the subject-matter of claim 1 in terms of a device and a storage medium. The subject-matter of **claims 5 and 9** therefore also does not involve an inventive step within the meaning of Article 56 EPC.

16.8 Response to the arguments of the applicant

During the oral proceedings, the applicant pointed out, that
a.) the gesture input is not started yet by touching the pointer and
b.) that a highlight is not a user interface object, as the user does not directly interact with the element and
c.) the change in intensity of the highlight is instantaneous, not gradual.

Consequently, the combination of **D8** and **D6** would not anticipate the subject-matter of claim 1.

The examining division does not find those arguments convincing, because touching a screen also constitutes part of a touch gesture. Thus, the highlight

of **D6** provides indication about the progress of the gesture input. Furthermore, the term "user interface object" is commonly not understood to be limited to elements with which a user can interact (as opposed to "controls"). Also decorative elements, which provide no interaction possibilities to a user fall under the scope of the term. Therefore, also the highlight is considered a user interface object. In addition, the claim does not prescribe a gradual change in intensity.

During the oral proceedings the applicant also pointed out he considers all the features of the characterizing portion to be of technical nature. The discussion appears not relevant for the main request, since all distinguishing features are disclosed by **D6**. A discussion about the technicality will be provided for the second auxiliary request.

17   **FIRST AUXILIARY REQUEST**

17.1   **Novelty (Art. 52(1) and 54 EPC)**

17.2   The present application does not meet the requirements of Article 52(1) EPC because the subject-matter of **claim 1** is not new within the meaning of Article 54(1) and (2) EPC.

17.3   **Claim 1** of the First Auxiliary Request differs from claim 1 of the Main Request in two aspects:
1.) The claim requires a "satisfaction of a user input condition" instead of "completion of a gesture input"
2.) the one or more user interface objects (708) increase in optical intensity in accordance with completion of progress towards satisfaction of the condition, from an initial optical intensity value when there is no progress towards satisfaction of the condition to a final optical intensity value when the condition is satisfied

The first aspect broadens the scope of the claim, since now any kind of user input falls within the scope of the claim. The second aspect closer defines the transitioning of the optical intensity.

17.4   **D8** discloses:

A computer-implemented method, comprising:
while an electronic device is in a first user-interface state (**a state where no**

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start menu as in picture 3 of page 11 is shown; start menu refers to the icons on the screen used for launching an application), detecting progress towards satisfaction of a user input condition (**pressing the ON button, right sweeping and sweeping up, lifting the finger**) needed to transition to a second user-interface state (**an unlocked state in which the start menu as in picture 4 of page 11 is shown and icons can be touched to start a desired application**);

while the device is in the first user-interface state (**no start menu is shown**),

indicating progress towards satisfaction of the condition by transitioning an optical intensity of one or more user interface objects (**the start menu**), wherein at least one of the one or more user interface objects is not displayed prior to detecting progress toward satisfaction of the user input condition (**for example when the device is locked, the screen is black**) and, wherein transitioning the optical intensity includes the one or more user interface objects appearing and increasing in optical intensity (**the icons of the start menu appear when doing sweep for showing the start menu, see page 11**) ; and

transitioning the device to the second user-interface state if the condition is satisfied (**page 11: "lifting the finger, the start menu should have appeared"**), characterised in that the one or more user interface objects increase in optical intensity in accordance with completion of progress towards satisfaction of the condition (**when there is no press of the start button, nothing is shown; after sweeping up, the menu is shown; showing the menu therefore indicated the progress; showing the menu means to change the optical intensity of the menu**) , from an initial optical intensity value (**no start menu is shown, the intensity is 0**) when there is no progress towards satisfaction of the condition to a final optical intensity value when the condition is satisfied (**the start menu is shown, the intensity is at its maximum**).

17.5   Similar arguments and objections apply to **claims 6 and 11**, which express the subject-matter of claim 1 in terms of a device and a storage medium. The subject-matter of **claims 6 and 11** therefore also does not involve an inventive step within the meaning of Article 54 EPC.

17.6 Response to the arguments of the applicant

During the oral proceedings, the applicant pointed out, that the claimed subject-matter allows a gradual change in optical intensity and that therefore **D8** does not disclose to increase in optical intensity in <u>accordance with completion</u> of progress towards satisfaction of the condition.

The examining division does not share this restricted construction of the claimed subject-matter. The claim requires that there is an increase in optical intensity, and that the increase needs to reflect the completion of progress towards satisfaction of the condition. Such an increase can be instantaneous and only occur once during finishing the required user input condition. Such an instantaneous increase is known from **D8**.

18 SECOND AUXILIARY REQUEST

18.1 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.

18.2 **D8** is considered to be the prior art closest to the subject-matter of **claim 1** and discloses:

A computer-implemented method, comprising:
while an electronic device having a touch-sensitive display is in a first user-interface state, detecting progress towards completion of a gesture input on the touch-sensitive display needed to transition to a second user-interface state;
characterised in that the method further comprises:
~~while the device is in the first user-interface state,~~
~~indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects,~~
~~wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and,~~
~~wherein transitioning the optical intensity includes the at least one of the one or more user interface objects appearing and increasing in optical intensity smoothly at a predefined rate in accordance with completion of the gesture, from an initial optical intensity value when there is no progress towards completion of the gesture to a final optical intensity value when the gesture is completed~~; and

transitioning the device to the second user-interface state if the gesture input is completed.

18.3 The subject-matter of **claim 1** therefore differs from this known method in that while the device is in the first user interface state, the method comprises the additional steps of

indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects,
wherein at least one of the one or more user interface objects is not displayed prior to detecting progress towards completion of the gesture input and, wherein transitioning the optical intensity includes the at least one of the one or more user interface objects appearing and increasing in optical intensity smoothly at a predefined rate in accordance with completion of the gesture, from an initial optical intensity value when there is no progress towards completion of the gesture to a final optical intensity value when the gesture is completed

18.4 **Discussion of the arguments of the applicant concerning the technicality of the distinguishing features**

18.4.1 During the oral proceedings, the applicant pointed to the Boards of Appeal decision T 336/14, which in his view discusses an analogous situation of inventive step assessment and sets out several principles relevant to the assessment of the inventive step for subject-matter containing features directed to the presentation of information.

According to the applicant, following the principles set out in T 336/14 (in particular point 1.2.2.), the assessment of the inventive step requires to start from the closest prior art (**D8**), establish the difference over the prior art (the distinguishing features identified above) and assess as to whether the distinguishing features are obvious in view of the prior art. The applicant considers all distinguishing features to be of a technical nature, because they serve a technical purpose and provide guidance to a user in controlling the device. For the present case the applicant denies the obviousness of the distinguishing features, because **D8** in combination with **D6** would only lead the person skilled in the art to a method, in which the progress of the gesture input is shown by the position of the pointer, but not the appearing and

smoothly increasing optical intensity of a user interface element, as defined in claim 1.

18.4.2 In the understanding of the examination division, T 336/14 applies the well-established principles in the assessment of mixed-type inventions and does not deviate from the general principles of T 0641/00: A distinguishing feature relating to the presentation of information may not be excluded in the analysis of the obviousness per se - without any further considerations. Where a feature cannot be considered as contributing to the solution of any technical problem by providing a technical effect <u>it has no significance for the purpose of assessing inventive step</u> (T 0641/00). A feature defining a presentation of information produces a technical effect if it credibly assists the user in performing a technical task by means of a continued and guided human-machine interaction process (T 336/14 and T 1802/13). Therefore, it has to be established whether the distinguishing features identified above produce a technical effect.

18.4.3 A feature relating to presentation of information may commonly be considered to specify:
- the cognitive content of the presented information, i.e. defining "**what**" is presented; and/or
- the manner in which the information is presented, i.e. defining "**how**" the information is presented.

18.4.4 In the present case, information "indicating progress of the gesture input" is displayed in a continuous way (i.e. the "what"). This aspect is considered to be of technical nature, because indicating the progress assists the user in performing the technical task of switching user interface states by means of a continued and guided human-machine interaction process. This part of the distinguishing features thus has to be considered further in the analysis of the inventive step.

18.4.5 The above information is displayed in a manner of "transitioning the optical intensity includes the at least one of the one or more user interface objects appearing and increasing in optical intensity smoothly at a predefined rate in accordance with completion of the gesture, from an initial optical intensity value when there is no progress towards completion of the gesture to a final optical intensity value when the gesture is completed" (i.e. the "how"). In order to determine whether a feature brings along any technical contribution, the feature shall not be taken by itself, but its technical character shall be decided

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by the effect it brings about after being added to an object which did not comprise that feature before (see T 119/88).

The decisive question is thus as to whether there is any effect of the claimed <u>specific manner</u> of displaying the information "indicating progress of the gesture input". When comparing an electronic device which already indicates the progress in a continuous (but unspecified manner), with an electronic device that represents said information with optical intensity values, no technical effect can be observed. Whether to use optical intensity, colour, size etc. is guided by considerations in the domain of graphical design taken by a graphic designer, for example based on aesthetic consideration.

18.4.6   Therefore, in the present case the distinguishing features only have to be considered as far as they concern the "what", not the "how" the information is displayed. In other words, the distinguishing features which need to be considered in the further analysis are:
- indicating progress of the gesture input by transitioning in a continuous way

18.5   Technical effect and problem

The technical effect achieved by the difference is that the user is provided with visual feedback about an ongoing transition from a first user-interface state to a second user-interface state.

The problem to be solved by the present invention may therefore be regarded as how to provide visual feedback to a user about the transition from a first user-interface state to a second user-interface state of an electronic device.

18.6   Combination of prior art documents

See the discussion of the main request.

18.7   Obviousness

18.7.1   In combining **D8** and **D6**, the person skilled in the art would arrive in a method for switching between user interface states by using a slider-toggle. The slider toggle indicates the progress of the gesture input by transitioning in a continuous way.

Hence, the person skilled in the art would arrive in the subject-matter of **claim 1** without exercising any inventive skills.

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Similar arguments and objections apply to claims 5 and 9, which express the subject-matter of claim 1 in terms of a device and a storage medium. The subject-matter of **claims 5 and 9** therefore also does not involve an inventive step within the meaning of Article 56 EPC.

19   THIRD AUXILIARY REQUEST

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

19.2   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.

19.3   Claim 1 of the third auxiliary request differs from claim 1 of the main request only that is comprises the additional feature of "the gesture input includes dragging an image to a predefined location on the touch-sensitive display". This feature is also obvious in view of **D6** - see the pointer of the slider toggle. Therefore, and because of the reasons provided already in respect to the main request, the subject-matter of **claims 1, 4 and 7** does not involve an inventive step.

20   FOURTH AUXILIARY REQUEST

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

20.2   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.

20.3   Claim 1 of the fourth auxiliary request differs from claim 1 of the main request only that is comprises the additional feature of "the gesture input includes dragging an unlock image to a predefined location on the touch-sensitive display, wherein the unlock image is a is a graphical, interactive user-interface object with which the user interacts in order to unlock the device". This feature is also obvious in view of **D6** - see the pointer of the slider toggle. Therefore, and because of the reasons provided already in respect to the main request, the subject-matter of **claims 1, 4 and 7** does not involve an inventive step.