

European & Chartered Patent Attorneys  
Trade Mark Attorneys

European Patent Office  
D-80298  
München  
Germany

Our Ref: P338984EP-PCTDIV2/MH

Your Ref:

17 November 2017

**SIGNED AND SENT  
ELECTRONICALLY**

Writer's Telephone: +44 117 925 3030

Dear Sirs

**European Patent Application No. 10194359.5  
Unlocking A Device By Performing Gestures On An Unlock Image  
Apple Inc.**

Further to the Notice of Appeal filed on 19 September 2017, we now file Grounds of Appeal in relation to the above-mentioned application.

Interlocutory revision of the Decision of the Examining Division dated 19 July 2017 to refuse this application is requested in accordance with Article 109 EPC.

These Grounds of Appeal contain a Main Request and First and Second Auxiliary Requests, for consideration in the order in which they are presented here.

We request that the Decision of the Examining Division dated 19 July 2017 to refuse the application be set aside, and grant of a European patent on the basis of the Main Request, or in the alternative on the basis of the First or Second Request.

Additionally we request the opportunity to file further amendments and observations as may be required by the proceedings.

In the event that the Examining Division or the Board of Appeal is unwilling to grant a European patent on the basis of the amended claims, we request Oral Proceedings before the Board of Appeal.

Yours faithfully

**Matthew Howell  
Professional Representative  
WITHERS & ROGERS LLP**

**Withers & Rogers LLP is a limited liability partnership registered in England and Wales (registered number OC310992) with its principal place of business and registered office at 4 More London Riverside, London, SE1 2AU. Regulated by IPReg.**

Also at 1 Redcliff Street, Bristol, BS1 6NP Tel: +44 (0)117 925 3030 Fax: +44 (0)117 925 3530

Nicholas Wilson House, Dormer Place, Leamington Spa, Warwickshire, CV32 5AE Tel: +44 (0)1926 310 700 Fax: +44 (0)1926 335 519

Derwent House, 150 Arundel Gate, Sheffield, S1 2FN Tel: +44 (0)114 273 3400 Fax: +44 (0)114 275 5788 and

Steinerstr. 15, building A, D-81369 Munich, Germany Tel: +49 (0)89 50222 4020

European & Chartered Patent Attorneys  
Trade Mark Attorneys

## **1. Main Request**

This Main Request comprises a set of 12 claims based on the set of claims filed with the Main Request of 27 April 2017. A clean version of the claim set is enclosed, together with a marked-up version showing the amendments with respect to the claims filed with the Main Request of 27 April 2017.

### Claim Amendments and Basis

Independent claims 1, 5 and 9 differ from the corresponding claims of the Main Request of 27 April 2017 only in that they each recite that:

"transitioning the optical intensity includes the at least one of the one or more user interface objects (708) appearing and increasing in optical intensity".

This amendment is for consistency with the recitation of "at least one of the one or more user interface objects" in each of independent claims 1, 5 and 9, and finds basis, for example, in paragraph [0092] of the specification as originally filed, which discloses:

*"As the user drags the unlock image, a set of virtual buttons appears and increases in optical intensity... The increases in optical intensity indicate to the user progress towards completion of the unlock action".*

Thus the amendments to claims 1, 5 and 9 are directly and unambiguously derivable from the application as originally filed and therefore meet the requirements of Article 123(2) EPC regarding added subject matter.

### Inventive Step

In its Decision of 19 July 2017 the Examining Division held that the subject matter of the claims of the Main Request of 27 April 2017 lacked an inventive step over combined disclosure of D8 ("N1 Quick Start Guide") and D6 ("Touchscreen Toggle Design" by Plaisant *et al*).

It is respectfully submitted that the Examining Division erred in its assessment of inventive step, and that the subject matter of the claims as currently amended involves an inventive step over the combination of D8 and D6, as will now be explained.

D8 is regarded as representing the closest available prior art document, inasmuch as that document describes a mechanism for an electronic device with a touch screen display which prevents unintentional unlocking of the device.

D8 discloses a device having a first user interface state, namely the keylock state in which the screen turns dark, as disclosed on page 8. D8 also discloses a second user interface state, namely the unlocked state that the device enters after completion of a sweep gesture to unlock it.

**Withers & Rogers LLP is a limited liability partnership registered in England and Wales (registered number OC310992) with its principal place of business and registered office at 4 More London Riverside, London, SE1 2AU. Regulated by IPReg.**

Also at 1 Redcliff Street, Bristol, BS1 6NP Tel: +44 (0)117 925 3030 Fax: +44 (0)117 925 3530  
Nicholas Wilson House, Dormer Place, Leamington Spa, Warwickshire, CV32 5AE Tel: +44 (0)1926 310 700 Fax: +44 (0)1926 335 519  
Derwent House, 150 Arundel Gate, Sheffield, S1 2FN Tel: +44 (0)114 273 3400 Fax: +44 (0)114 275 5788 and  
Steinerstr. 15, building A, D-81369 Munich, Germany Tel: +49 (0)89 50222 4020

In order to transition from the first user interface state to the second user interface state, the user must first press the power button once, and then perform a sweep gesture (see page 9 of D8). When the power button has been pressed, the text "Right sweep to unlock" appears on the screen of the device and the menu bar appears on the bottom of the screen, as shown in the drawing on page 9. The menu bar is a user interface object, and in order for it to appear in response to the press of the power button, the optical intensity of the menu bar may be said to transition, in the sense that the menu bar transitions from being invisible (zero optical intensity) to being visible (optical intensity greater than zero).

Claim 1 as currently amended requires:

"while the device (700) is in the first user-interface state,  
indicating (604) progress of the gesture input by transitioning an optical intensity of one or more user interface objects (708),  
wherein at least one of the one or more user interface objects (708) 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".

In D8, the transition of the optical intensity of the menu bar is not linked to the progress of the sweep gesture required to unlock the device. Instead, the menu bar appears instantaneously (and thus its optical intensity transitions from zero to greater than zero) in response to the press of the power button. Accordingly, the transition of the optical intensity of the menu bar in D8 does not indicate progress of a gesture input needed to transition to a second user-interface state.

Thus (as conceded by the Examining Division in its Decision), D8 fails to disclose the characterising features of claim 1 as currently amended of:

"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".

These characterising features give rise to a technical effect of providing visual feedback to a user as to the progress of the transition between the first and second user interface states.

Accordingly, the objective technical problem may be regarded as being "how to provide visual feedback to a user as to the progress of a transition between first and second user interface states in a portable electronic device".

In seeking to address this problem the skilled person would not (indeed could not) combine the teaching of D8 with that of D6 to arrive at the claimed subject matter.

In its Decision the Examining Division indicated (see section 16.7) that D6 teaches a slider toggle control, which is a user control for touch screen devices, having a pointer which can be moved using a touch gesture from one side of the slider toggle to the other side of the toggle. The Examining Division further indicated that D6 teaches to highlight the pointer once it is touched in order to signify to the user that the user has control over the slider toggle.

The Examining Division conceded in its Decision that "D6 does not further describe how the highlight of the pointer is created", but argued that "it is implicit that when highlighting an element on a screen, that some part of the screen has to change, e.g. by changing the colour of part of the element which is highlighted. Such a 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".

On this basis the Examining Division asserted that "when solving the problem, the person skilled in the art would take the slider toggle 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".

It is respectfully submitted that the Examining Division's interpretation of the disclosure of D6 is flawed.

The only disclosure in D6 of highlighting of the slider toggle is in page 668, column 2, lines 7-9:

*"the slider pointer should be larger, and the lever or pointer should highlight when touched to signify the user now has control over it".*

Thus, the proposed highlighting of the lever or pointer in D6 does not serve to indicate progress of a gesture input, as required by claim 1 of the present application, but instead signifies that the user has control over it. Progress of the gesture in D6 is indicated by the *"simple three step animation"* disclosed in page 668, column 1 lines 22-27.

Moreover, the Examining Division's assertion that highlighting the lever or pointer implies that something appears on the screen has no basis in the disclosure of D6, and does not make sense from a technical point of view, given what is actually disclosed in D6.

As the Examining Division itself concedes, D6 does not describe how the highlight of the pointer is created. However, D6 does disclose that *"the lever or pointer should highlight when touched to signify the user now has control over it"*. This implies that the highlight should remain for as long as the user has control over the slider or pointer.

If, as the Examining Division appears to be suggesting, a highlight is a separate user interface object that is distinct from the slider or pointer user interface object, then this arrangement would require that two different user interface objects (namely the slider or pointer object and the highlight object) track the user's finger and are refreshed as the user's finger is moved across the screen to move the pointer or lever from its "off" position to its "on" position and vice versa.

Those skilled in the art would appreciate that such an approach is highly inefficient, both from a programming point of view and from an implementation point of view, as two different user interface objects need to be created and updated, which is a time consuming process during program execution, and which needlessly consumes computing resources during execution. Such an approach would be therefore be avoided by those skilled in the art, particularly for portable electronic devices which have limited processing power and battery capacity.

A far more likely approach would be to have a single user interface object in the form of a lever or pointer with a "highlight" property that can be set to "on" or "off", or a "colour" property that can be changed when the lever or pointer is to be highlighted (as suggested by the Examining Division itself: "e.g. by changing the color of part of the element which is highlighted"). Such an approach would reduce the programming complexity and use of computational resources at run-time, in comparison to the "two user interface object" approach proposed by the Examining Division, and would ensure that the lever or pointer remains highlighted for the entire time that the user has control over it.

It will be recalled that in order to transition from the first user interface state to the second user interface state in D8, the user must first press the power button once, and then perform a sweep gesture.

Adapting the mechanism of D8 using the disclosure of D6 would lead to an arrangement in which a user interface object in the form of a slider or lever appears after a user has pressed the power button once. When the user touches the slider or lever object, a property (e.g. a "highlight" property or a "colour" property) of the slider or lever object changes, highlighting the object to signify that the user has control of the object. The slider or lever object remains highlighted as the user performs the sweep gesture, and a simple three step animation indicates the progress of the slider or lever object itself as it moves between its two positions.

Whilst such an arrangement does provide feedback to a user as to the progress of a transition between first and second user interface states in a portable electronic device, in the form of the three step animation of the slider or lever object, this feedback is not achieved in the manner claimed, namely by:

"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".

Accordingly it is submitted that, contrary to the Examining Division's view, the combination of D8 with D6 would not lead to the solution of claim 1, and therefore the subject matter of claim 1 involves an inventive step over the combination of D8 and D6.

The subject matter of independent claims 5 and 9 also involves an inventive step, for similar reasons.

### Concluding Remarks

It is submitted that the amendments and arguments in this Main Request place this application in condition for allowance, and we therefore request cancellation of the Decision in its entirety and grant of a European patent on the basis of this Main Request.

## **2. First Auxiliary Request**

This First Auxiliary Request comprises a set of 12 claims based on the set of claims filed with the Main Request of 27 April 2017. A clean version of the claim set is enclosed, together with a marked-up version showing the amendments with respect to the claims filed with the Main Request of 27 April 2017.

### Claim Amendments and Basis

Independent claims 1, 5 and 9 differ from the corresponding claims of the Main Request of 27 April 2017 in that they each recite that:

- i) "transitioning the optical intensity includes the at least one of the one or more user interface objects (708) appearing and increasing in optical intensity"; and
- ii) "wherein at least one of the one or more user interface objects (708) is an interactive object with which the user may interact when the device is in the second user-interface state ".

Amendment i) is for consistency with the recitation of "at least one of the one or more user interface objects" in each of independent claims 1, 5 and 9, and finds basis, for example, in paragraph [0092] of the specification as originally filed, which discloses:

"As the user drags the unlock image, a set of virtual buttons appears and increases in optical intensity... The increases in optical intensity indicate to the user progress towards completion of the unlock action".

Amendment ii) finds basis in paragraph [0060] of the specification as originally filed, which discloses (emphasis added):

*"The displayed user-interface objects may include non-interactive objects that convey information or contribute to the look and feel of the user interface, interactive objects with which the user may interact, or any combination thereof. The user may interact with the user-interface objects by making contact with the touch screen at one or more touch screen locations corresponding to the interactive objects with which she wishes to interact. The device detects the contact and responds to the detected contact by performing the operation(s) corresponding to the interaction with the interactive object(s)".*

Further basis for amendment ii) may be found, for example, in paragraph [0092] of the specification as originally filed, which discloses (emphasis added):

*"In Figure 7B , the user is in the process of dragging the unlock image 702 along the channel 704 in the direction of movement 712. As the user drags the unlock image, a set of virtual buttons 708 appears and increases in optical intensity. The virtual buttons 708 are shown with dotted outlines to indicate that they are not yet at their final optical intensity levels. The virtual buttons 708 are associated with the prompt 706; the virtual buttons shown in Figure 7B - 7D allow the user to decline or accept the incoming call. However, the user cannot interact with the virtual buttons 708 until the device is unlocked and the virtual buttons have reached their final optical intensity. In Figure 7C , the user drags the unlock image 702 further along the channel 704 in the direction of movement 712. The virtual buttons 708 have increased further in optical intensity relative to their optical intensity in Figure 7B , as illustrated by their different style of dotted outlines. The increases in optical intensity indicate to the user progress towards completion of the unlock action".*

Thus the amendments to claims 1, 5 and 9 are directly and unambiguously derivable from the application as originally filed and therefore meet the requirements of Article 123(2) EPC regarding added subject matter.

### Inventive Step

In its Decision of 19 July 2017 the Examining Division held that the subject matter of the claims of the Main Request of 27 April 2017 lacked an inventive step over combined disclosure of D8 ("N1 Quick Start Guide") and D6 ("Touchscreen Toggle Design" by Plaisant *et al*).

It is respectfully submitted that the Examining Division erred in its assessment of inventive step, and that the subject matter of the claims as currently amended involves an inventive step over the combination of D8 and D6, as will now be explained.

D8 is regarded as representing the closest available prior art document, inasmuch as that document describes a mechanism for an electronic device with a touch screen display which prevents unintentional unlocking of the device.

The disclosure of D8 is discussed in detail in the Main Request above.

D8 fails to disclose the characterising features of claim 1 as currently amended of:

"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 an interactive object with which a user may interact when the device is in the second user-interface state, wherein the 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".

These characterising features give rise to a technical effect of providing visual feedback to a user as to the progress of a transition between a first user interface state in which a user interface object is not displayed and cannot be interacted with and a second user interface state in which the user interface object is displayed and can be interacted with.

Accordingly, the objective technical problem may be regarded as being "how to provide visual feedback to a user as to the progress of a transition between a first user interface state in which a user interface object is not displayed and cannot be interacted with and a second user interface state in which the user interface object is displayed and can be interacted with".

In seeking to address this problem the skilled person would not (indeed could not) combine the teaching of D8 with that of D6 to arrive at the claimed subject matter.

In its Decision the Examining Division indicated (see section 16.7) that D6 teaches a slider toggle control, which is a user control for touch screen devices, having a pointer which can be moved using a touch gesture from one side of the slider toggle to the other side of the toggle. The Examining Division further indicated that D6 teaches to highlight the pointer once it is touched in order to signify to the user that the user has control over the slider toggle.

The Examining Division conceded in its Decision that "D6 does not further describe how the highlight of the pointer is created", but argued that "it is implicit that when highlighting an element on a screen, that some part of the screen has to change, e.g. by changing the colour of part of the element which is highlighted. Such a 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".

On this basis the Examining Division asserted that "when solving the problem, the person skilled in the art would take the slider toggle 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".

It is respectfully submitted that the Examining Division's interpretation of the disclosure of D6 is flawed, for the reasons discussed in the Main Request above.

Nevertheless, the Examining Division's reasoning is not applicable to the independent claims as currently amended, which require that "the at least one of the one or more user interface objects is an interactive object with which a user may interact when the device is in the second user-interface state".

The Examining Division's interpretation of D6 appears to be that the highlight that is applied to the slider toggle in D6 is a separate user interface object which appears and thus increases in optical intensity.

We respectfully disagree with this interpretation of D6, for the reasons set out in the Main Request above.

However, even if the Examining Division's interpretation were correct, the feature of the independent claims as currently amended that "the at least one of the one or more user interface objects is an interactive object with which a user may interact when the device is in the second

user-interface state" is not disclosed in D6, since the user cannot interact with a highlight element that appears when the slider toggle is selected to signify that the user has control over it.

Applying the Examining Division's interpretation of "highlight" feature of D6, adapting the mechanism of D8 using the disclosure of D6 would lead to an arrangement in which a user interface object in the form of a slider or lever appears after a user has pressed the power button once. When the user touches the slider or lever object, a further, non-interactive, user interface object, namely the notional "highlight" object appears, highlighting the slider or lever to signify that the user has control of it. The highlight object remains visible as the user performs the sweep gesture, and a simple three step animation indicates the progress of the slider or lever object itself as it moves between its two positions.

Whilst such an arrangement does provide feedback to a user as to the progress of a transition between first and second user interface states in a portable electronic device, in the form of the three step animation of the slider or lever object, this feedback is not achieved in the manner claimed, namely by:

"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 an interactive object with which the user may interact when the device is in the second user-interface state,  
wherein the at least one user interface object 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".

It could be argued that the appearance of the slider or lever user interface object amounts to "transitioning an optical intensity of one or more user interface objects", on the basis that in order to appear the optical intensity of the slider or lever must transition from zero to some non-zero value. However, it will be recalled that the claim requires "indicating progress of the gesture input by transitioning an optical intensity of one or more user interface objects", and the gesture input is "a gesture input on the touch-sensitive display needed to transition to a second user-interface state".

The appearance (and therefore the notional increase in optical intensity) of the slider or lever user interface object in the system that would result from the combination of the D8 and D6 is not linked to the progress of the sweep gesture required to unlock the device — the slider or lever object would appear before the sweep gesture begins — and so could not indicate progress of a gesture input on the touch-sensitive display needed to transition to a second user-interface state.

Accordingly it is submitted that the combination of D8 with D6 would not lead to the solution of claim 1, and therefore the subject matter of claim 1 involves an inventive step over the combination of D8 and D6.

The subject matter of independent claims 5 and 9 also involves an inventive step, for similar reasons.

#### Concluding Remarks

It is submitted that the amendments and arguments in this First Auxiliary Request place this application in condition for allowance, and we therefore request cancellation of the Decision in its entirety and grant of a European patent on the basis of this First Auxiliary Request.

### **3. Second Auxiliary Request**



This Second Auxiliary Request comprises a set of 12 claims that are identical to the claims filed for the Second Auxiliary Request during the oral proceedings of 13 June 2017. A clean copy of that claim set is enclosed.

### Inventive Step

In its Decision the Examining Division held that the subject matter of the Second Auxiliary Request filed during the oral proceedings of 13 June 2017 lacks an inventive step over the combination of the prior art documents D8 and D6.

We respectfully submit that the Examining Division erred in its assessment of inventive step, and that the subject matter of this Second Auxiliary Request involves an inventive step over the combination of D8 and D6.

D8 is regarded as representing the closest available prior art document, inasmuch as that document describes a mechanism for an electronic device with a touch screen display which prevents unintentional unlocking of the device.

D8 discloses a device having a first user interface state, namely the keylock state in which the screen turns dark, as disclosed on page 8. D8 also discloses a second user interface state, namely the unlocked state that the device enters after completion of a sweep gesture to unlock it.

In order to transition from the first user interface state to the second user interface state, the user must first press the power button once, and then perform a sweep gesture (see page 9 of D8). When the power button has been pressed, the text "Right sweep to unlock" appears on the screen of the device and the menu bar appears on the bottom of the screen, as shown in the drawing on page 9. The menu bar is a user interface object, and in order for it to appear in response to the press of the power button, the optical intensity of the menu bar might be said to transition, in the sense that the menu bar must transition from being invisible (zero optical intensity) to being visible (optical intensity greater than zero).

Claim 1 of this Second Auxiliary Request recites:

"while the device (700) is in the first user-interface state,  
indicating (604) progress of the gesture input by transitioning an optical intensity of one or more user interface objects (708),  
wherein at least one of the one or more user interface objects (708) 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 (708) 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".

In D8, the transition of the optical intensity of the menu bar is not linked to the progress of the sweep gesture required to unlock the device. Instead, the menu bar appears (and thus its optical intensity transitions instantaneously from zero to greater than zero) in response to the press of the power button. This instantaneous transition of the optical intensity of the menu button does not occur 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.

Thus, as acknowledged by the Examining Division (see section 18.3 of the Decision), D8 fails to disclose the characterising features of claim 1 of:

"while the device (700) is in the first user-interface state,

indicating (604) progress of the gesture input by transitioning an optical intensity of one or more user interface objects (708),  
wherein at least one of the one or more user interface objects (708) 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 (708) 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".

These characterising features give rise to a technical effect of providing continuous visual feedback to a user as to the progress of the transition between the first and second user interface states.

Accordingly, the objective technical problem may be regarded as being "how to provide continuous visual feedback to a user as to the progress of a transition between first and second user interface states in a portable electronic device".

In seeking to address this problem the skilled person would not (indeed could not) combine the teaching of D8 with that of D6 to arrive at the claimed subject matter.

D6 discloses a slider toggle which is able to provide visual feedback as to the progress of a transition between states using "*a simple three step animation*". Whilst D6 does disclose that the lever or pointer of the slider toggle "*should highlight when touched to signify that the user now has control over it*", there is no suggestion that the optical intensity of the highlight should increase in any way to indicate progress of a transition between states. Indeed, since the "*simple three step animation*" provides feedback as to the progress of the transition between states, a further visual feedback mechanism is not required and, therefore, would not be contemplated.

Thus, adapting the mechanism of D8 using the disclosure of D6 would lead to an arrangement in which a user interface object in the form of a slider or lever appears after a user has pressed the power button once. When the user touches the slider or lever object, the slider or lever is highlighted to signify that the user has control of it. The highlight object remains visible as the user performs the sweep gesture, and a simple three step animation indicates the progress of the slider or lever object itself as it moves between its two positions.

Whilst such an arrangement does provide feedback to a user as to the progress of a transition between first and second user interface states in a portable electronic device, in the form of the three step animation of the slider or lever object, this feedback is not continuous, and is not achieved in the manner claimed, by:

"while the device (700) is in the first user-interface state,  
indicating (604) progress of the gesture input by transitioning an optical intensity of one or more user interface objects (708),  
wherein at least one of the one or more user interface objects (708) 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 (708) 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".

As previously discussed, D6 teaches (emphasis added) that "*a simple three step animation shows the movement of the pointer along the slide*" between ON and OFF positions. Thus, the pointer of D6 can adopt one of three discrete positions, so the progress of the gesture is indicated in a step-wise fashion, rather than in a continuous way.

Thus, the combination of D6 with D8 would not solve the problem of "how to provide continuous visual feedback to a user as to the progress of a transition between first and second user interface states in a portable electronic device", since only step-wise feedback can be provided by a three step animation.

Accordingly the subject matter of the claims of this Second Auxiliary Request involves an inventive step over the combination of D8 and D6.

In its Decision the Examining Division held that the features that distinguish claim 1 from the D8 prior art document provide no technical effect and thus cannot support the presence of an inventive step, citing T119/98 in support of its position.

The Examining Division indicates (see section 18.4.6 of the Decision) that "The decisive question is thus as to whether there is any effect of the claimed specific manner 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".

In T1119/88, Reasons, 4.1, the Technical Board of Appeal indicated that "... the technical or non-technical character of this feature [having a pigment of a colour other than black within a specific range of light intensity] may be decided by the effect it brings about after it has been added to an object that did not comprise this feature before... It seems to the Board, therefore, that it has to be investigated whether the effects implied by the sole feature of possessing a specific colour, could render that feature into a feature not excluding from patentability the known object or device provided with that colour".

It is submitted that the effects of the claimed feature of:

"while the device (700) is in the first user-interface state,  
indicating (604) progress of the gesture input by transitioning an optical intensity of one or more user interface objects (708),  
wherein at least one of the one or more user interface objects (708) 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 (708) 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"

would render that feature into a feature "not excluding from patentability" a known electronic device not comprising this feature.

As discussed in paragraph [0082] of the specification as originally filed, *"The change in optical intensity of the user-interface objects provides a user with sensory feedback of the progress in transitioning between user interface states"*.

Such sensory feedback may be more easily perceptible for particular users (e.g. those with visual impairments) than other visual feedback mechanisms such as the animated slider pointer or lever mechanism of D6. Thus, incorporating a visual feedback mechanism of the kind claimed into a known electronic device that does not have such a mechanism would render that feature into a feature "not excluding from patentability" such a modified device.

In other words, the claimed feature of:

"while the device (700) is in the first user-interface state,  
indicating (604) progress of the gesture input by transitioning an optical intensity of one or more user interface objects (708),  
wherein at least one of the one or more user interface objects (708) 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 (708) 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"

does provide a technical effect, namely providing a continuous visual feedback mechanism that is more easily perceptible to visually impaired users for indicating the progress of a transition between first and second user interface states in a portable electronic device.

In its Decision, the Examining Division cites (see section 18.4.2) T336/14, indicating that "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".

It is submitted that a visual feedback mechanism of the kind defined by the distinguishing features of claim 1 does indeed credibly assist the user in performing a technical task by means of a continued and guided human-machine interaction process. The (visually impaired) user is assisted in performing the technical task of switching between user interface states. The transition of the optical intensity provides continuous guidance to the user as to the progress of the transition between states and how much more user input the user must provide before the second user interface state will be reached. Thus, the claimed subject matter does produce a technical effect.

Accordingly it is submitted that, contrary to the Examining Division's view, the distinguishing features of claim 1 are technical in nature, and the combination of D8 with D6 would not lead to the solution of claim 1. The subject matter of claim 1 therefore involves an inventive step over the combination of D8 and D6.

The subject matter of independent claims 5 and 9 also involves an inventive step, for similar reasons.

#### Concluding Remarks

It is submitted that the amendments and arguments in this Second Auxiliary Request place this application in condition for allowance, and we therefore request cancellation of the Decision in its entirety and grant of a European patent on the basis of this Second Auxiliary Request.