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Datasheet for the decision of 29 April 2025

Case Number: T 1817/23 - 3.5.06

Application Number: 19859269.3

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Language of the proceedings: EN

Title of invention:
METHOD FOR QUICKLY ADJUSTING OUT SMALL WINDOW IN FULLSCREEN DISPLAY DURING VIDEO, GRAPHIC USER INTERFACE AND TERMINAL

Applicant:
Huawei Technologies Co., Ltd.

Headword:
Hovering window/HUAWEI

Relevant legal provisions:
EPC Art. 52(1), 56, 84, 123(2)
RPBA Art. 12(4)

Keyword:
Amendments - added subject-matter (yes)
Claims - clarity (no)
Inventive step - (no)

Catchword:
A claim specifying computer instructions that, when executed by a device, cause that device to perform a method, may not be clear, Article 84 EPC, if that method depends on a particular use of the device which is not implied by the automatic execution of the computer instructions (see point 7 of the reasons).

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Case Number: T 1817/23 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 29 April 2025

Appellant: (Applicant)	Huawei Technologies Co., Ltd. Intellectual Property Department F1-5F, Bantian Longgang District Shenzhen, Guangdong 518129 (CN)
Representative:	Gill Jennings & Every LLP The Broadgate Tower 20 Primrose Street London EC2A 2ES (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 1 June 2023 refusing European patent application No. 19859269.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	M. Müller
Members:	M. Domingo Vecchioni
	K. Kerber-Zubrzycka

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division to refuse European patent application No. 19859269.3 on the basis that the independent claims of the then main request and auxiliary requests 1 and 2 did not involve an inventive step, Articles 52(1) and 56 EPC.

The decision cited *inter alia* the following documents:

D1: WO 2015/016628 A1,
D3: EP 2 587 369 A1,

but only D1 was relied upon in the reasoning of the examining division.

II. With the statement of grounds of appeal, the appellant requested that the decision of the examining division be set aside and that a patent be granted on the basis of the main request or, alternatively, any of auxiliary requests 1 or 2 filed with that statement. Oral proceedings were requested on an auxiliary basis.

III. The board summoned the appellant to oral proceedings. In a communication pursuant to Article 15(1) RPBA, the board presented its preliminary opinion and introduced the following document in accordance with Article 114(1) EPC:

D5: D. Pogue, iPhone - The Missing Manual, O'Reilly, 2007, pages 29-30.

The main request and auxiliary requests 1 and 2 were admitted, Article 12(4) RPBA. Objections under Articles

84 and 123(2) EPC were raised. The independent claims of all requests appeared not to involve an inventive step, Articles 52(1) and 56 EPC, in view of D1 combined with common general knowledge (for which D3 and D5 were cited as evidence).

IV. On 11 April 2025, the appellant indicated that it would not be represented at the oral proceedings. The oral proceedings were thereupon cancelled.

V. Independent claim1 of the main request reads as follows (with labels a), b), ... added by the board):

a method for invoking a hovering window when a video is displayed in full screen in a terminal with a touch screen, the method is performed by the terminal, and the method comprises:

a) displaying (101) a video playing interface in full screen of the touch screen;

b) receiving a prompt information indicating that an instant messaging information receives a new message or a reminder item established by the user, and

c) displaying the prompt information in a top area of the touch screen;

d) detecting (102) a first user operation performed on the prompt information and responsive thereto, displaying a first hovering window stacked over the video playing interface such that content in the video playing interface in the area of the first hovering window is blocked, wherein the first hovering window

displays a first interface comprising an interface of the instant messaging application;

e) detecting a fifth user operation, and responsive thereto, changing, by the terminal, a position of the first hovering window based on the fifth user operation;

f) detecting (104) a third user operation and responsive thereto, hiding the first hovering window; and

g) displaying a graphic identifier of the first hovering window, wherein the graphic identifier indicates that the first hovering window is hidden;

h) detecting (105) a fourth user operation performed on the graphic identifier and responsive thereto, displaying the first hovering window, wherein a position of the first hovering window when displayed in response to the fourth user operation is the same as a position of the first hovering window when the first hovering window is hidden responsive to the third user operation;

when the terminal continuously displays the video playing interface, and the video is continuously displayed in the video playing interface.

VI. Independent claim 8 of the main request reads as follows:

a terminal, comprising one or more processors and one or more memories, wherein

the one or more memories are coupled to the one or more processors, the one or more memories are configured to store computer program code, the computer program code comprises a computer instruction, and when the one or more processors execute the computer instruction, the terminal performs the method according to any one of claims 1 to 7.

VII. Independent claim 1 of auxiliary request 1 differs from claim 1 of the main request in the following additional feature at the end of the claim:

wherein the method further comprises:
if the prompt information is displayed for a preset time and the first user operation is not detected during the preset time, causing the prompt information to automatically disappear.

VIII. Independent claim 1 of auxiliary request 2 differs from claim 1 of the main request in the following additional feature at the end of the claim:

wherein the method further comprises:
changing a display status of the graphic identifier of the first hovering window when the first interface displayed in the first hovering is updated.

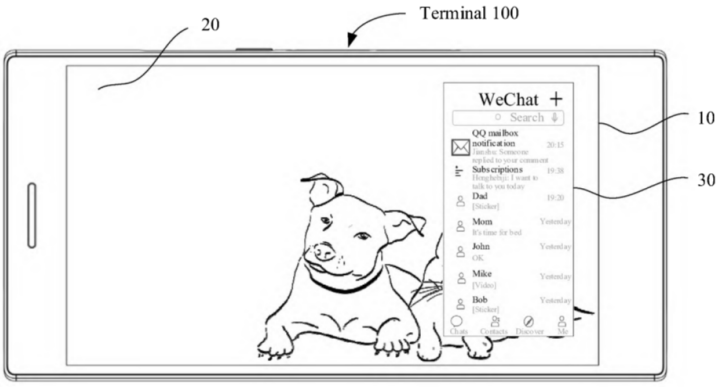
Reasons for the Decision

The application

1. The application relates to the graphical user interface of a terminal device with a touch screen. It addresses in particular the specific situation in which a user, who is watching a video in full screen, wants to view instant messaging information at the same time without

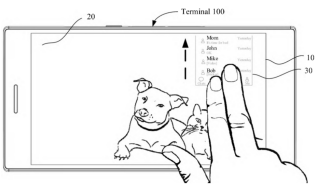
the video being interrupted (paragraphs [0001], [0003] and [0052] of the description as filed).

2. The application proposes invoking a small "hovering" window 30 to display the instant messaging application, as illustrated in figure 4:

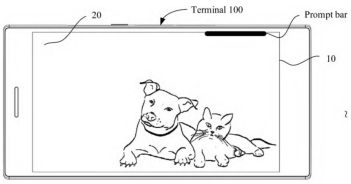


(figure 4 of the application)

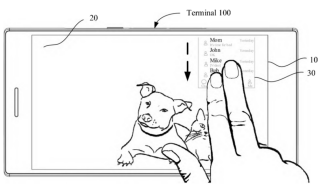
3. The window can then be manipulated by the user by a number of "user operations", e.g. specific gestures, for instance to change the window's position on the screen (figure 13a), to hide the window and "re-invoke" it afterwards (figures 5, 6a, 6b and 7), or to swap what is being displayed in full screen and in the window (figures 17a and 17b, "switch" operation). See e.g. figures 5, 6a and 7 illustrating how the window may be hidden and re-invoked with corresponding user operations:



(figure 5)



(figure 6a)



(figure 7)

Main request - Admittance, Articles 84 and 123(2) EPC

4. The claims of the main request filed with the statement of grounds of appeal differ from those of the main request underlying the contested decision only in a clarification in dependent claim 5 ("first interface" instead of "second interface"). This avoids a potential objection under Article 84 EPC without changing the substantive issues to be addressed in the appeal. The board therefore admits the main request, Article 12(4) RPBA.

5. While passages of the description and figures corresponding to each of the individual steps of claim 1 (see point V above) can be found in the application as filed, the board fails to see a direct and unambiguous basis in the application as filed for the *specific sequence of steps* recited in claim 1, Article 123(2) EPC.

Original claim 1 was directed to a method corresponding to the flowchart of figure 24 and comprising step a), a broader version of step d), a step of "switching" the interface displayed in the window, followed by broader versions of steps f) and h).

Original claim 1 did thus not comprise steps b), c), e) and g), and the "switching" step of original claim 1 has been deleted in present claim 1. A direct and unambiguous basis in the application as filed for the inclusion of step e) between steps d) and f) in present claim 1 is especially not apparent to the board.

6. As a general remark, the board notes that the actual contribution of the present application appears to be a terminal with a particular graphical user interface

(configured to react in particular ways to specific user operations in specific situations), rather than a particular sequence of steps being performed by the terminal in reaction to a specific sequence of user operations being input by a user (the latter amounting to a particular *use* of the graphical user interface that does not appear to be in itself serving a clear overall *technical* purpose).

7. Because the method of claim 1 is not a method automatically carried out by the terminal but is dependent on a particular use of that terminal by a user (inputting a particular sequence of user operations), it is not clear how a "computer instruction" could, by itself, cause a terminal to *perform the method* of claim 1, as required in independent claim 8 (see point VI above). Independent claim 8 is therefore not clear, Article 84 EPC.

8. These objections under Articles 84 and 123(2) EPC (together with further objections under Article 123(2) EPC) were raised in the board's communication under Article 15(1) RPBA (see points 9 to 12). The appellant did not react to them and the board sees no reason not to maintain them.

Main request - Inventive step

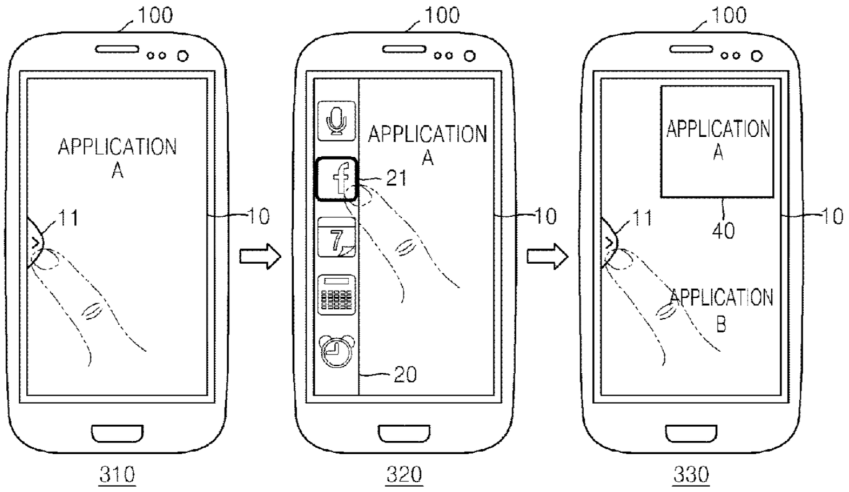
9. The examining division found that claim 1 lacked an inventive step over D1 (contested decision, point 3).

10. Document D1

10.1 D1 is concerned with the simultaneous execution of two (or more) applications in two (or more) windows,

including a "full-sized window" and a "sub-window", in a terminal device with a touch screen.

10.2 The basic operation of the graphical user interface disclosed in D1 is shown in figure 3:



(part of figure 3 of D1)

In 310, the terminal is in a state in which an application A is displayed in a full-sized window 10 covering the entire area of the display screen (figure 3, 310; paragraph [95]; see also paragraph [67]). The user may invoke the execution of a new application (application B) by a particular user operation (figure 3, 310 and 320; paragraphs [0095] and [0096]). Thereupon, a sub-window 40 is displayed over the full-sized window 10. Application A is now displayed in the sub-window and the new application B in the full-sized window (figure 3, 330; paragraph [98]).

10.3 The application displayed in the full-sized window can be controlled by the user on that window. Whether that is also the case for the application displayed in the

(smaller) sub-window depends on "settings" (D1, paragraph [114], in particular last sentence).

10.4 D1 discloses how the user can manipulate the sub-window by respective gesture operations, in particular to:

- swap the applications displayed in the full-sized window and the sub-window, i.e. to have application A displayed in the full-sized window and application B in the sub-window (figure 5; paragraphs [118]-[120]);

- hide the sub-window by dragging it to an edge of the display (figure 7A, 710), leaving only a portion of the sub-window visible on the edge as a "bookmark" (figure 7A, 720: 111b), and re-invoke the sub-window by a gesture on the bookmark (figure 7A, 730 and 740) (paragraphs [131]-[133] and [136]-[141]);

- change the position and/or the size of the sub-window (figures 8, 9A and 9B; paragraphs [148]-[162]).

10.5 In an example, application A involves the display of a video and application B a "new application". In that case, "the user may continue to watch the video displayed on the sub-window 111 while controlling the new application displayed on the full-sized window 112" and "the video may be continuously reproduced even though the video is displayed onto the sub-window 111 instead of the full-sized window 112" (paragraph [85]).

10.6 In another example, application A is a calculator application and application B a web browser application (paragraph [85]). In yet another example, application B is an alarm clock application (paragraph [104]).

10.7 D1 notes that while figure 3 discloses how application B can be executed by first pressing a button 11 to request the display of an application list (figure 3, 310 and 320), the disclosure of D1 is not limited thereto and "the applications may be executed through various methods" (paragraph [103]). An example of alternative method is the automatic execution of an alarm clock application at a preset time (paragraph [104]).

11. Comparison of claim 1 with D1

11.1 The display of a sub-window as a result of invoking of a new application while a video is being displayed in a full-sized window in D1 amounts, in the terms of claim 1, to

a method for invoking a hovering window (sub-window of D1) **when a video is displayed in full screen** (in the full-screen window) **in a terminal with a touch screen, the method is** [sic] **performed by the terminal, the method comprising:**

a) displaying a video playing interface (the application rendering the video) **in full screen on the touch screen;**

b), c) -

d') detecting a first user operation ~~performed on the prompt information~~ (the user operation invoking the new application, e.g. tapping on an icon corresponding to the application in an application list as in figure 3, 320) **and responsive thereto, displaying a first hovering window stacked over the ~~video playing interface~~ *full-sized window* such that content in the**

~~**video playing interface**~~ ***full-sized window*** **in the area of the hovering window is blocked** (the sub-window, when invoked, is not transparent, as can be inferred from paragraph [124]), **wherein the first hovering window displays a first interface comprising an interface of** ~~**the instant messaging application**~~ ***the application rendering the video*** (paragraph [86]).

11.2 D1 further discloses that *the graphical user interface is configured* to perform the following operations *in reaction to certain user operations:*

e') *upon* detecting a fifth user operation (gesture in area 117 of the sub-window in figure 9B; paragraph [159]), **and responsive thereto, changing, by the terminal, a position of the first hovering window based on the fifth user operation** (figure 9B, paragraph [159]);

f') *upon* detecting a third user operation (dragging and dropping gesture in which the sub-window is dragged in a right direction and dropped, as shown in figure 7A, 710; paragraph [138]) **and responsive thereto, hiding the first hovering window** (the sub-window is in "hide mode", only a portion thereof is displayed as a "bookmark" 111b in figure 7A, 720; paragraphs [132] and [138]); **and g') displaying a** ~~**graphic identifier**~~ ***portion*** **of the first hovering window** (portion of the sub-window displayed as a bookmark 111b in figure 7A, 720), **wherein the** ~~**graphic identifier**~~ ***portion*** **indicates that the first hovering window is hidden** (the sub-window is in "hide mode");

h') *upon* detecting a fourth user operation performed on ~~**graphic identifier**~~ ***portion*** (dragging and dropping gesture in which the displayed portion of the sub-

window (and thus the hidden sub-window) is dragged and dropped to a left side, as shown in figure 7A, 730; paragraph [140]) **and responsive thereto, displaying the first hovering window** (figure 7A, 740; paragraph [141]), **wherein a position of the first hovering window when displayed in response to the fourth user operation is the same as a position of the first hovering window when the first hovering window is hidden responsive to the third user operation** (figure 7A, 710 and 740: sub-window before being hidden and after the "hide mode" is released).

Regarding g'), the board notes that the displayed portion 111b of the sub-window in figure 7A, 720, could be considered to be a "graphic identifier" (as argued by the examining division in the contested decision, points 3.2 and 3.6.4), as it is a graphic element and its function is to serve as a "bookmark" (paragraph [133]). In the following, it is however assumed that this is not the case, to the benefit of the appellant.

11.3 D1 also discloses that **the terminal continuously displays the video playing interface, and the video is continuously played in the video playing interface** (paragraph [85]).

11.4 Hence, following this feature mapping, claim 1 differs from the disclosure of D1 essentially in that:

F1 **the application that is invoked** (while a video is being displayed in full screen) **is an "instant messaging application";**

F2 **the invocation of the instant messaging application involves a prior display, "in a top area of the touch screen", of a "prompt**

information indicating that an instant messaging application receives a new message or a reminder item established by the user", and a "first user operation performed on the prompt information" (steps b and c);

F3 **the application that is invoked by the user is displayed in the hovering window, the video continuing to be displayed in full screen** (whereas the reverse happens in D1);

F4 **following the first user operation** (to invoke the application)**, the terminal detects (and reacts to) a fifth user operation** (to change a position of the window)**, a third user operation** (to hide the window) **and a fourth user operation** (to re-invoke the window) (this particular sequence of user operations is not disclosed in D1);

F5 **a "graphic identifier" is displayed to indicate that the first hovering window is hidden and the fourth user operation is performed on it** (instead of displaying a portion of the sub-window and having the operation performed on it as in D1).

Differentiating features F1 to F5 are essentially the same as those identified by the appellant in the statement of grounds of appeal, point A.1.

12. Assessment of inventive step

12.1 The examining division and the appellant formulated the objective technical problem solved by the method of claim 1 over D1 as "how to facilitate continued

interaction between a user and multiple display interfaces in a terminal" (contested decision, point 3.5; statement of grounds of appeal, page 3).

12.2 The board considers this formulation too generic and not sufficiently based on the effects actually achieved by the differentiating features.

12.3 Features F1 and F2

Features F1 and F2 may be considered to have the technical effect of *facilitating a user's access to an instant messaging application while the user is watching a video on full screen on the terminal* and thus to solve the technical problem over D1 of achieving that effect.

12.3.1 Despite the reference to an "instant messaging application" as new application (hence feature F1) in the formulation of the technical problem, the board views this problem as one that the skilled person starting from D1 would have considered without inventive activity.

D1 already considers the situation in which a user opens a "new application" when watching a video on full screen (paragraph [86]).

While D1 does not explicitly mention that the new application may be an instant messaging application, this is a commonly used application on terminal devices and thus one to be considered when designing the graphical user interface of a terminal device. Moreover, the skilled person would have recognised the application icon 21 represented in figure 3 as a Facebook icon 320, which provides further motivation

for considering the case in which the new application would be an instant messaging application.

Furthermore, D1 teaches with paragraphs [103] and [104] that the manner in which a user may invoke an application may be adapted to the particular application, which would motivate the skilled person to find an appropriate manner of facilitating the user's access to an instant messaging application.

12.3.2 The board considers that the skilled person knows from common general knowledge the GUI design pattern of automatically providing a notification on the screen to inform the user that there is a new event (e.g. a new message, an incoming call) and to enable the user to open the relevant application by clicking or tapping on the notification. This GUI design pattern is for instance disclosed in D3: see figure 3A and paragraphs [0031], [0040] and [0041].

It would consequently have been obvious to a skilled person to solve the aforementioned technical problem by providing that a notification of the instant messaging application ("prompt information" in the terminology of claim 1) is displayed on the screen to inform the user that a new message has been received or another relevant event has occurred and to enable the user to invoke the instant message application by a user operation performed on the notification.

Where on the screen the notification is displayed - e.g. in "top area" as in feature F2 - is technically arbitrary. See also D3, paragraph [0031], suggesting displaying the notification in an area of the screen where it would not overlap with a video caption, which makes a display of a notification in a top area of the

screen particularly obvious when a video is being displayed.

12.3.3 Hence, features F1 and F2 are obvious starting from D1.

12.4 For the reasons given below, the board considers that none of the remaining differentiating features F3 to F5, by itself or in combination with other differentiating features, solves a *technical* problem over D1, with the consequence that they cannot establish the presence of an inventive step within the meaning of Article 56 EPC. Furthermore, these differentiating features are also considered to be obvious.

12.5 Feature F3

12.5.1 That the video application and the new application (instant messaging application) are respectively displayed, upon invocation of the new application, in the full-screen window and in the small window (as in claim 1) instead of vice versa (as it would be the case in a straightforward application of the teachings of D1) does not appear to improve or "facilitate continued interaction between a user and multiple display interfaces" (as argued by the appellant) in any *objective* way. It is only a different manner of presenting the same information to the user, which may be preferred by some users but not by others, i.e. a matter of *subjective* user preferences, which does not solve any *technical* problem.

12.5.2 This remark notwithstanding, the board considers that feature F3 is anyway obvious, as has been argued by the examining division (contested decision, point 3.6.3). D1 provides that the user may switch the applications

being displayed in the full-sized window and sub-window (paragraph [118]) and it would be an obvious design option to give the user the possibility to select in the settings of the graphical user interface whether a new application is to be displayed in the full-sized window or in the sub-window (the "old" application being then displayed in the other window).

The board also notes that having a new application being opened in a pop-up window and the application previously displayed in a full-sized window continuing to be displayed in that window is what the skilled person knows from the well-known Microsoft Windows environment, and thus feature F3 represents an obvious alternative choice of which application should be displayed in which window upon invocation of a new application, for instance an instant messaging application.

12.6 Feature F4

The appellant stressed that D1 does not disclose the claimed combination of user operations specified in claim 1, i.e. feature F4 (statement of grounds of appeal, paragraph bridging pages 3-4).

The board notes that the graphical user interface of D1 provides the user with user operations to change the position of a sub-window, to hide and re-invoke it (see point 11.1 above). Feature F4 only limits the claim to a situation in which a user would perform these three operations in this order, hence a particular circumstance of use. It is not apparent which *technical* problem is thereby solved. Furthermore, the claimed

sequence of user operations appears to be one which would routinely occur in use.

12.7 Feature F5

The appellant emphasised that the portion of the sub-window that is displayed in D1 when the sub-window is in "hide mode" (figure 7A, 720: 111b) does not amount to a "graphic identifier" (statement of grounds of appeal, page 3, fifth complete paragraph).

The board fails however to see which *technical* problem is solved by this difference. It is rather merely a matter of presentation of information and/or of aesthetics.

And, in any case, it would be an obvious alternative to represent the "bookmark" 111b as a tab specific to the application being executed in the sub-window, hence a "graphic identifier", instead of the portion of sub-window. A similar idea can also be found in the alternative "hide mode" disclosed in D1, paragraph [124], in which the sub-window is replaced by a smaller "alternative image", as noted by the examining division (contested decision, point 3.6.4).

12.8 Conclusion

Hence, claim 1 does not involve an inventive step, Articles 52(1) and 56 EPC.

Auxiliary request 1

13. Auxiliary request 1 differs from auxiliary request 1 underlying the contested decision only in a clarification in dependent claim 5 ("first interface"

instead of "second interface"). The board therefore admits auxiliary request 1, Article 12(4) RPBA.

14. Claim 1 of auxiliary request 1 differs from claim 1 of the main request in the following additional feature at the end of the claim:

F2a "wherein the method further comprises: if the prompt information is displayed for a preset time and the first user operation is not detected during the preset time, causing the prompt information to automatically disappear".

15. The appellant argued that this additional differentiating feature further contributed to the same objective technical problem as that formulated for the main request (see point 12.1 above) (statement of grounds of appeal, point B.2).

16. The board considers that F2a is a further differentiating feature of claim 1 over D1 that may be considered jointly with features F1 and F2 to solve the technical problem identified in point 12.3 above.

Following the argument set out in point 12.3.2 above, it would be obvious for the skilled person to provide that a notification ("prompt information") ceases to be displayed after a preset time if the user does not interact with it to open the corresponding application, as is common for such notifications. For instance, see D3, paragraph [0032] ("when user input has not been received for a specified time [...] the portable terminal removes the displayed information while continuing the [video] app execution operation").

Hence, claim 1 of auxiliary request 1 does not involve an inventive step, Articles 52(1) and 56 EPC.

Auxiliary request 2

17. Auxiliary request 2 differs from auxiliary request 2 underlying the contested decision only in a clarification in claim 1 ("first interface" instead of "second interface"). The board therefore admits auxiliary request 2, Article 12(4) RPBA.

18. Claim 1 of auxiliary request 2 differs from claim 1 of the main request in the following additional feature at the end of the claim:

F6 "wherein the method further comprises:
changing a display status of the graphic identifier of the first hovering window when the first interface displayed in the first hovering is updated".

19. The examining division found this feature to be obvious in view of common general knowledge, "the skilled person [being] well aware of markers which reflect e.g. the number of incoming and/or unread messages" (contested decision, point 9.3).

20. The appellant argued that this additional differentiating feature further contributed to the same objective technical problem as that formulated for the main request (see point 12.1 above). It argued that, in D1, when a portion of the sub-window is displayed, it cannot be taken as a certainty that that portion will reflect updates to the application executed in that sub-window, as the display portion could merely show a static portion of the application interface. The

appellant also contested the common general knowledge relied upon by the examining division, for which no supporting evidence had been cited (statement of grounds of appeal, point C.2).

21. The board first notes that it is not apparent that feature F6 solves a *technical* problem as it is not clear which is the technical relevance of the "update" in the first hovering window.

Notwithstanding this remark, the board agrees with the examining division that the skilled person would know from common general knowledge the GUI design pattern of informing the user about a number of unread messages in a messaging application by a corresponding marker on an icon representing the messaging application. This is for instance the case in the well-known graphical user interface of the iPhone since the first version in 2007, as evidenced by D5, page 30 (see "Tip" box and image).

The board also agrees with the examining division that it would have been obvious to the skilled person to add such a marker to the portion of the sub-window or any alternative representation of the bookmark, hence any tab or "graphic identifier", in particular in the case of an instant messaging application being executed in the sub-window, e.g. to inform the user about a number of unread messages.

Hence, claim 1 of auxiliary request 2 does not involve an inventive step, Articles 52(1) and 56 EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

L. Stridde Martin Müller

Decision electronically authenticated