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Datasheet for the decision of 21 February 2018

Case Number: T 0063/12 - 3.5.05

Application Number: 08168419.3

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IPC: G06F3/033, G06F3/023

Language of the proceedings: EN

Title of invention:
Method for providing notifications of new events on a small screen device

Applicant:
BlackBerry Limited

Headword:
Visually modified application icons/BlackBerry

Relevant legal provisions:
EPC Art. 52(2)(d), 54, 56
RPBA Art. 13(1)

Keyword:
Novelty - main request (no)
Inventive step - first auxiliary request (no)
Admission of request filed during oral proceedings - (no)

Decisions cited:
T 0110/92, T 0336/14

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Case Number: T 0063/12 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 21 February 2018

Appellant: (Applicant)	BlackBerry Limited 2200 University Avenue East Waterloo, ON N2K 0A7 (CA)
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 22 August 2011 refusing European patent application No. 08168419.3 pursuant to Article 97(2) EPC**

Composition of the Board:

Chair	A. Ritzka
Members:	K. Bengi-Akyuerek
	D. Prietzel-Funk

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division to refuse the present European patent application for lack of inventive step (Article 56 EPC) with respect to the claims of a main request and three auxiliary requests, having regard to the disclosure of

D2: M. Miller: "10 Minute Guide to Pocket PC 2002", pp. 1, 4, 14, 18, 60, 134, 135 and 148, September 2002,

combined with

D1: US-A-5 617 526.

II. With the statement setting out the grounds of appeal, the appellant filed new sets of claims according to a main request and five auxiliary requests. It requested that the examining division's decision be set aside and that a patent be granted on the basis of one of those claim requests.

III. In an annex to the summons to oral proceedings pursuant to Article 15(1) RPBA, the board expressed its preliminary opinion on the appeal. In particular, it raised objections under Article 123(2) EPC, and indicated that it, in principle, confirmed the assessment of inventive step as conducted in the impugned decision, having regard to D2 and/or D1. The board further stated that claim 1 lacked novelty (Article 54 EPC), having regard to

D3: WO-A-98/48550,

which the board, in view of the various amendments made

to claim 1 refused by the examining division and of the new arguments put forward in the statement setting out the grounds of appeal, introduced into the appeal proceedings under Article 114(1) EPC.

IV. With a letter of reply dated 16 January 2018, the appellant submitted amended claims according to a main request and a first auxiliary request, replacing the former main and auxiliary requests on file.

V. Oral proceedings were held on 21 February 2018, during which the appellant filed a further set of amended claims as a second auxiliary request. All the pending claim requests were discussed.

The appellant's final request was that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request or the first auxiliary request, both submitted with the letter dated 16 January 2018, or the second auxiliary request submitted during the oral proceedings before the board.

At the end of the oral proceedings, the board's decision was announced.

VI. Claim 1 of the **main request** reads as follows:

"A method for providing notifications of new events on a display (112, 122[sic]) of a wireless handheld communication device (102, 202), the method comprising:

providing on the display (112, 222) a plurality of application icons (304, 306) each icon being invokable to launch a respective application, at least some of the applications being applications for managing communications capabilities associated with the wireless communication device, and at least some of the

applications being of the same application type;

monitoring for new communication events and, in response to a new communication event in respect of one of the applications, visually modifying the respective application icon to notify of the new communication event;

the application icons (304, 306, 308, 310, 312) being maintained on the display (112, 122[sic]) continuously."

Claim 1 of the **first auxiliary request** reads as follows (amendments to claim 1 of the main request indicated by the board):

"A method for providing notifications of new messages on a display (112, 122[sic]) of a wireless handheld communication device (102, 202), the method comprising:

providing on the display (112, 222) a plurality of application icons (304, 306) each icon being invokable to launch a respective application, at least some of the applications being applications for managing communications capabilities associated with the wireless communication device, and at least some of the applications being of the same application type;

monitoring for new communication messages, and in response to a new communication message in respect of one of the applications:

determining a visual modification for said respective application icon in response to the new communication message; and

visually modifying, using said visual modification, the respective application icon to notify of the new communication message, wherein said step of determining a visual modification comprises maintaining a count of new

communication messages for the application corresponding to the visually modified icon, and visually modifying the respective application icon comprises displaying said count;
the application icons (304, 306, 308, 310, 312) being maintained on the display (112, 122[sic]) continuously."

Claim 1 of the **second auxiliary request** comprises all the features of claim 1 of the first auxiliary request, and adds the following phrase at its end:

", wherein, subsequently, only once a user activates the respective application and reads the new communication message is the visual modification changed."

Reasons for the Decision

1. MAIN REQUEST

Claim 1 of the main request comprises the following features, as labelled by the board:

A method for providing notifications of new events on a display of a wireless handheld communication device, the method comprising:

A) providing on the display a plurality of application icons, wherein each icon is invokable to launch a respective application,
B) wherein at least some of the applications are applications for managing communications capabilities associated with the wireless communication device,

C) wherein at least some of the applications are of the same application type;
D) monitoring for new communication events;
E) visually modifying the respective application icon to notify of the new communication event in response to a new communication event in respect of one of the applications,
F) wherein the application icons are maintained on the display continuously.

1.1 *Novelty (Article 54 EPC)*

The board finds that the subject-matter of present claim 1 lacks novelty over document **D3**, for the reasons set out below.

1.1.1 It is apparent to the board that D3 also relates to the notification of communication events on a display of a wireless handheld communication device ("mobile telephone 1100"; see e.g. Fig. 2) and anticipates all the features of present claim 1:

1.1.2 In particular, as to feature A) of claim 1, Figure 7 of D3 shows that the main screen of mobile telephone 1100 comprises three different application icons such as "icon 7100" corresponding to an off-hook telephone application, "icon 7200" associated with an on-hook telephone application and "message center icon 7300" corresponding to a messaging application (see also D3, page 9, lines 16-19). According to D3, when the user presses any of those icons the corresponding application is started (see e.g. page 9, lines 8-15 and 21-23).

1.1.3 As to features B) and C), it is evident from D3 that the above phone and messaging applications are supposed

to manage the communications capabilities of the underlying mobile device and that some of them, such as the off-hook and on-hook telephone applications, relate to voice calls and thus are of the same type.

1.1.4 As regards feature D), D3 teaches that the present state of all the user applications available on the mobile device are detected and stored so that the user is able to monitor the status of the individual communications-related applications (see e.g. page 8, line 30 to page 9, line 2, in conjunction with page 2, lines 17-18). In that context, the status of an application may be related to new communication events such as a voice call (see e.g. Fig. 7 indicating a new voice call from "Brad Johnson") or an SMS note (see e.g. Fig. 8D indicating that a new SMS note has been sent).

1.1.5 As to feature E), the appellant argued repeatedly at the oral proceedings before the board that D3 did not disclose a modification of an application icon in response to detecting a new communication event but merely showed, referring in particular to Figures 7 and 8E of D3, an icon *supplemented* by a separate space in the form of a notification pop-up window.

However, in the absence of a more specific definition of the step of "visually modifying", the board holds that an icon supplemented by pop-up notifications, as illustratively demonstrated in D3 by means of balloon or bubble messages beneath off-hook telephone icon 7100 and message centre icon 7300 (see e.g. D3, Figs. 7 and 8E respectively), corresponds to an icon which has been *modified* as compared to its appearance without any indication of a communication event (e.g. as shown in Figs. 8B and 8C of D3). The board also notes that even

the present application as originally filed teaches that such visual modification may comprise bubbles or previews which clearly extend beyond the corresponding icon space (see e.g. page 12, lines 11-14 and page 14, lines 2-5, in conjunction with Figs. 4 to 8 of the present application). Accordingly, the icon appearances of at least Figures 2, 7, 8A and 8E of D3 fall well within the broad terms of "visually modified" icons.

1.1.6 Lastly, as to feature F), it is apparent to the board that D3 unequivocally demonstrates that application icons 7100, 7200 and 7300 are continuously present on the display (see e.g. Figs. 7 and 8A to 8E), in full accordance with that feature.

1.1.7 It follows from the above that all the features of present claim 1 are anticipated by document D3.

1.2 Hence, the main request is not allowable under Article 54 EPC.

2. FIRST AUXILIARY REQUEST

Claim 1 of this auxiliary request differs from claim 1 of the main request essentially in that it further specifies that (emphasis added by the board)

G) said new communication events are new communication messages;
H) said step of visually modifying the respective application icon comprises the steps of maintaining a count of new communication messages for the application corresponding to the visually modified icon and displaying said count.

2.1 *Novelty and inventive step (Articles 54 and 56 EPC)*

The board holds that the subject-matter of present claim 1 is novel but does not involve an inventive step, for the following reasons:

2.1.1 As to added feature G), D3 likewise relates to the notification of incoming "communication", which includes communication *messages* such as SMS messages (see e.g. page 10, lines 7-8: *"... Other activities include ... notification of incoming messages ..."* and page 4, lines 23-24: *"The user communicates ... by establishing either a voice call ... or by sending an SMS message ..."*).

2.1.2 As to added feature H), however, the board accepts that the determination and presentation of a count indicating the number of new communication messages is not disclosed in D3. Hence, the subject-matter of present claim 1 is found to be novel over D3 (Article 54 EPC).

2.1.3 As regards the assessment of inventive step, the appellant argued that **D2** was in fact the closest prior art for the subject-matter claimed. The board is not convinced. Given that D2 represents a quick-start manual ("10 Minute Guide") which is entirely silent as to features C) and F) of present claim 1, i.e. as to whether some applications are of the same type and whether the application icons are continuously maintained on the display, the board considers **D3** to be the closest prior art for the subject-matter of present claim 1.

2.1.4 As to distinguishing feature H), it is apparent to the board that this feature relates to presenting cognitive

content, namely a count of new messages, to the user of the handheld device. So, it has first to be established whether that kind of presentation constitutes "presentations of information as such" within the meaning of Article 52(2)(d) and (3) EPC which then could be disregarded in the assessment of inventive step of present claim 1.

Given that the count of new communication messages indicates - at least by implication - the actual number of digital messages stored in the corresponding application buffer and thus the handheld device's internal (buffer) state, the board accepts that this cognitive information corresponds to "technical information" in the sense of T 336/14 (Reasons 1.2.4).

2.1.5 The next issue to be addressed is whether that technical content presented credibly assists the user in performing a technical task. Concerning the technical effect of distinguishing feature H), the appellant argued that it enabled the user to view a snapshot of the history of new communication events via the underlying graphical user interface (GUI) rather than only the last event as in D3. The board is not persuaded that such an effect is indeed achieved, basically for two reasons. Firstly, the mere fact that the number of new communication messages relating to an application is presented to the user does not mean that the user is presented with the *history* of those events, i.e. the chronological order of incoming and outgoing messages. Secondly, D3 does not indicate at all that only the last event is shown. Nor does it teach in its entire disclosure that the previous communication events are automatically replaced or overwritten, as was asserted by the appellant at the oral proceedings

before the board.

2.1.6 The appellant also submitted at those oral proceedings that the objective technical problem solved by present claim 1 was "how to inform the user which application instance has received events in a launch window of a small-screen device". However, the board holds that such a problem is already solved by the teaching of D3 (see e.g. Figs. 7 and 8A where the user is informed about a new incoming voice call on the main screen of the mobile device). The board also adds that present claim 1 is not limited to "received" new communication messages. Thus, the objective problem as formulated by the appellant cannot be accepted.

2.1.7 Instead, the board takes the view that distinguishing feature H) has the technical effect of reducing the number of GUI-related interactions required by the user in order to obtain more specific information on newly stored communication messages which are to be read or sent. This is in particular done by presenting the user with the exact number of such messages. Accordingly, the board accepts that the cognitive information relating to the count of new communication messages does indeed assist the user in managing newly stored communication messages by implicitly prompting him to view the relevant messages, thereby enabling a more ergonomic human-machine interaction process. Thus, the board concludes that distinguishing feature H) does not relate to "presentations of information as such" and is therefore to be considered in full in the assessment of inventive step.

2.1.8 Overall, the board sees the objective technical problem to be solved by claim 1 as being "how to enhance the ergonomics and user-friendliness in providing an

overview of application states on the main screen of the mobile device of D3". The board believes that such a problem is directed to a skilled person in the field of GUI design and ergonomics. In that field, it is typically of utmost importance to minimise the number of GUI interactions required by a user to perform a certain task.

2.1.9 Setting out from D3 and being tasked with the above-identified objective technical problem, the skilled person would notice that D3 likewise addresses the problem of permitting the user to monitor the status of communication tasks with ease (see page 2, lines 16-18) and that the handheld device of D3 is able to store information regarding the status of user applications (see page 8, line 30 to page 9, line 2). The skilled person would also be aware from the teaching of D3 that the user, in order to obtain more specific information about the application statuses such as the number of voice calls or SMS messages being received or to be sent, would have to press one of application icons 7100, 7200 and 7300 of the main screen (see e.g. page 9, lines 21-30: *"By simply pressing one of the major communication task objects while the user maintains a voice call with a called party, as evidenced by off-hook telephone icon 7100, the user can ... view information regarding received voice mail, faxes, SMS messages, etc., by pressing message center icon 7300 ..."*. From this the skilled person in the field of GUI design and ergonomics would infer that the user is required to perform an extra action to be able to view the relevant information, contrary to user-friendliness.

When seeking a feasible solution to the problem of enhancing the ergonomics of the underlying small-screen

device, the board believes that the person skilled in the field of GUI design and ergonomics would in no way be deterred from also considering solutions arising from large-screen computer devices as set out e.g. by prior-art document **D1**. More specifically, this document shows a taskbar-based notification management system likewise relying on modified application icons signifying new communication events (see e.g. column 1, lines 8-10; Fig. 8, step 50) such as a "printer icon 30" modified by way of the appearance of a "tool tip 34" which indicates the count of pending print documents (see e.g. column 4, lines 3-5, in conjunction with Fig. 4) or a "mail icon 38", normally represented by a "single envelope", modified by way of the presentation of "multiple envelopes" (see in particular column 5, lines 38-60 together with Fig. 6).

Particularly from the fact that multiple incoming email messages are signified by a modified application icon in the form of "multiple envelopes" on taskbar 24, which indicates that the count of new incoming email messages is greater than 1 (see D1, column 5, lines 51-54: *"... the mail program wishes to change the icon to one that displays a mail slot with multiple envelopes to indicate that the user has now received multiple electronic mail messages ..."*), the skilled person would deduce that the exact number of incoming communication messages is already *detected* in D1 but not actually *presented*.

The skilled person would also recognise from D1 that numerical information, though only upon using a mouse cursor 32, may indeed be presented e.g. next to a printer icon (see Fig. 4). The appellant's argument in this regard that, due to the limited resolution of computer displays at the present application's priority

date, numerical information modifying an icon would only be presented when a mouse cursor is positioned on an application icon does not convince the board. Actually, D1 demonstrates that printer icon 30 is modified by adding numerical information. Thus, the display's resolution was apparently sufficient for this kind of modification at that time. Whether the modification is triggered by the positioning of the mouse cursor or by the receipt of a new message is typically independent of the resolution of the display.

As a result, in view of the teaching of D1, the board holds that the skilled person would ensure that the exact number of incoming messages is also presented in the system of D3 in order to avoid an additional GUI interaction step, i.e. the further step of pressing the particular application icon with the aim of obtaining the relevant information, thereby improving the ergonomics and user-friendliness of the system of D3 in accordance with the above-mentioned objective technical problem. Put differently, if it is generally preferred that, for whatever reasons (e.g. in order to prioritise application access based on more detailed event information; see appellant's letter of 16 January 2018, page 8, third paragraph), the user is to be presented with more specific information about the incoming communication messages, the skilled person would certainly implement that, without encountering any practical difficulties in simply presenting the information which the mobile device has already detected (as in D1) to the user via the underlying user interface. Hence, given that neither the objective problem nor its solution is found to be non-obvious, the board judges that the skilled person would combine the teachings of D3 and D1 and arrive at the solution

of present claim 1 in a straightforward way.

2.1.10 In support of inventive step, the appellant also argued at the oral proceedings before the board that, in view of the widespread use and commercial success of notifying the number of available new communication messages according to feature H), an inventive step had to be acknowledged.

In that regard, the board notes that it is established jurisprudence of the Boards of Appeal (see e.g. T 110/92, Reasons 5.6) that commercial success alone is not to be regarded as indicative of inventive step and that in the present case the alleged commercial success does not appear to derive from the features of the invention but from user preferences and/or market demand.

2.2 Hence, the first auxiliary request is not allowable under Article 56 EPC.

3. SECOND AUXILIARY REQUEST

Claim 1 of this auxiliary request differs from claim 1 of the first auxiliary request in that it further specifies that

I) the visual modification is subsequently changed only once a user activates the respective application and reads the new communication message.

3.1 *Admissibility under Article 13(1) RPBA*

3.1.1 The claims of the second auxiliary request were filed during the oral proceedings before the board, i.e. at a

very late stage in the overall proceedings. The appellant argued that they were submitted with the aim of overcoming all the outstanding objections and that they did not introduce added subject-matter (Article 123(2) EPC).

3.1.2 In appeal proceedings, the admissibility of claim requests filed after a party has submitted its statement setting out the grounds of appeal, which "shall contain a party's complete case" (Article 12(2) RPBA), is mainly governed by Article 13 RPBA. By virtue of Article 13(1) RPBA, a board's discretion in admitting any amendment to a party's case "shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy". In that regard, the board notes that the list of criteria set out in Article 13(1) RPBA is not exhaustive ("... in view of inter alia ..."). Thus, other well-established criteria relevant to the admissibility issue may also be taken into account, such as the question whether a request is likely to overcome the objections in response to which it has been filed or whether it is clearly allowable.

3.1.3 As regards the procedural aspects of the second auxiliary request, the board establishes from the file that the claims of the second auxiliary request, including a new feature I) taken from the application's description as filed (cf. page 12, line 32 to page 13, line 2), were submitted for the very first time at the oral proceedings before the board after a total of seven different claim requests had been filed during these appeal proceedings. They were thus submitted at a very late stage in those proceedings, during which the appellant had had ample opportunity to file a

potentially allowable set of claims.

3.1.4 As regards the substantive aspects of the present auxiliary request, i.e. its *prima facie* allowability, it is apparent to the board that added feature I) is not clearly allowable under (i) Article 123(2) EPC, (ii) Article 84 EPC and (iii) Article 56 EPC.

As to objection (i), added feature I) gives rise to an intermediate generalisation of the application's original content which, for the specific embodiment relating to presenting a count of new communication messages, clearly indicates that the new communication messages are "unread messages" (see page 12, lines 11-14: *"... the new IM message is indicated with a visual modification 400 comprising a ... count of new events, which in this case are unread messages ..."*) and that said visual modification in that specific case corresponds to decreasing the count and, if applicable, removing the modification if the count is zero (see page 12, line 32 to page 13, line 2).

As to objection (ii), added feature I) is not *prima facie* clear because present claim 1 does not previously define that said new communication messages, which according to its general meaning could refer to outgoing *and* incoming communication messages, are in fact incoming and readable messages, such that the user "reads the new communication message".

As to objection (iii), the technical effect induced by added feature I) in combination with distinguishing feature H) is not immediately derivable. Nor could the appellant provide a synergistic technical effect at the oral proceedings before the board. In that context, the appellant only pointed out that feature I) was

introduced in order to further distinguish the subject-matter claimed from prior-art document D3.

3.2 In view of the above, the board decided not to admit the second auxiliary request into the appeal proceedings under Article 13(1) RPBA.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

K. Götz-Wein A. Ritzka

Decision electronically authenticated