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**Datasheet for the decision
of 20 March 2014**

Case Number: T 1562/10 - 3.5.05

Application Number: 06110226.5

Publication Number: 1830245

IPC: G06F3/023

Language of the proceedings: EN

Title of invention:

System and method for associating characters to keys in a keypad in an electronic device

Applicant:

BlackBerry Limited

Headword:

System and method for associating characters to keys/
BLACKBERRY

Relevant legal provisions:

EPC 1973 Art. 56

Keyword:

Inventive step - (no)
Juxtaposition of features solving partial problems - (yes)

Decisions cited:

Catchword:



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

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Case Number: T 1562/10 - 3.5.05

**D E C I S I O N
of Technical Board of Appeal 3.5.05
of 20 March 2014**

Appellant: BlackBerry Limited
(Applicant) 2200 University Avenue East
Waterloo, ON N2K 0A7 (CA)

Representative: Moore, Barry
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 18 December
2009 refusing European patent application
No. 06110226.5 pursuant to Article 97(2) EPC.

Composition of the Board:

Chair: A. Ritzka
Members: M. Höhn
G. Weiss

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division, posted on 18 December 2009, refusing European patent application No. 06110226.5 on the ground of lack of inventive step (Article 56 EPC 1973) with regard to prior art publications:

D1: US 4 333 097 A1,
D2: US 6 307 549 B1 and
D3: US 2002/0097227 A1.

II. The notice of appeal was received on 25 February 2010. The appeal fee was paid on the same day. The statement setting out the grounds of appeal was received on 16 April 2010. The appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the sets of claims filed as main request and auxiliary request with the statement setting out the grounds of appeal. Oral proceedings were requested on an auxiliary basis.

III. With a communication dated 4 December 2013 the board summoned the appellant to oral proceedings on 20 March 2014. In an annex to the summons the board gave its preliminary opinion that the subject-matter of independent claims 1 and 12 according to the main request appeared to lack novelty over D4 (US 2001/0048378 A1) and to be obvious with regard to D3 and the skilled person's common general knowledge. The subject-matter of independent claims 1 and 12 according to the auxiliary request appeared to lack inventive step with regard to the disclosure of D4 combined with D3 in view of the skilled person's common general knowledge. Publication D4 was introduced under

Article 114(1) EPC on the board's own motion, in reaction to the appellant's amendments made to the independent claims in the appeal proceedings.

- IV. By letter dated 12 February 2014 the appellant submitted an amended set of claims 1 to 20 replacing all previous requests and presented arguments supporting the amendment.
- V. With letter dated 7 March 2014 the appellant informed the board that it would not be represented at the oral proceedings.
- VI. Independent claim 1 according to the sole main request reads as follows:

"1. A method of mapping a layout (400) of a keyboard onto a keypad (24) of a mobile telephonic device (10), comprising the steps of:
dividing a layout of alphabetic characters of an alphanumeric keyboard into a plurality of segments (402) arranged as two columns of segments (402), each segment (402) comprising a plurality of adjacent alphabetic characters from said layout of alphabetic characters;
associating a set of characters in one segment of said segments (402) to one set of programmable keys (24A) in said keypad (24); and
moving from one segment to another segment and
assigning the characters of a newly selected segment to said one set of programmable keys (24A) based on a signal received from a navigation system (24B-E, 32) when a directional input key of said navigation system is actuated, and
characterised in that at least one programmable key (24A) is concurrently associated with two individual

characters and a set of icons (34) is generated on a display (14) of said device (10) identifying the characters associated with the one set of programmable keys, the set of icons (34) displayed changing on moving from one segment to another segment."

Independent claims 11 and 20 are directed to a corresponding mobile telephonic device and a computer program product.

VII. The appellant requested in writing that the decision under appeal be set aside and that a patent be granted on the basis of the claims 1 to 20 (sole main request) filed with letter dated 12 February 2014 and replacing all previous requests

VIII. Oral proceedings were held on 20 March 2014 in the absence of the appellant. After due consideration of the appellant's arguments, in particular those presented in writing with letter dated 12 February 2014, the chair announced the decision.

Reasons for the Decision

1. Admissibility

The appeal complies with Articles 106 to 108 EPC (see Facts and Submissions, point II above). It is therefore admissible.

2. Non-attendance at oral proceedings

By letter dated 7 March 2014 the board was informed that the appellant would not be represented at the oral

proceedings. The board considered it expedient to maintain the date set for oral proceedings. No-one attended on behalf of the appellant.

Article 15(3) RPBA stipulates that the board is not obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of any party duly summoned who may then be treated as relying only on its written case.

Hence, the board was in a position to announce a decision at the end of the oral proceedings.

3. Amendments - Article 123(2) EPC

3.1 The amendments to independent claims 1 and 11 are supported by paragraphs [0031] and [0062]-[0069] of the description and by figure 5B of the application as originally filed.

3.2 The amendment to dependent claims 5 and 15 is supported by paragraph [0073] of the description and by figure 6.

The set of claims therefore fulfils the requirements of Article 123(2) EPC.

4. Claims 1 and 11 are based on claims 1 and 12 submitted with letter of 24 July 2008 and are further limited to a mobile telephonic device. In comparison to independent claims 1 and 12 on which the decision under appeal is based, the appellant directed the claimed subject-matter to a mobile telephonic device.

Thereby the focus of the claimed subject-matter was shifted from electronic devices in general to telephonic devices. At the same time the appellant

argued that a conventional mobile telephone with a numeric keypad would have to be considered the closest prior art (see e.g. point 16 of the statement setting out the grounds of appeal). The board reacted to this shift by referring to publication D4 disclosing such a conventional mobile telephone.

5. Novelty and inventive step - Articles 54(2) and 56 EPC 1973

5.1 For the reasons mentioned above, D4 is considered to be the closest prior art. It discloses a virtual QWERTY-arrangement on a mobile phone with a method for mapping a layout of adjacent alphabetic characters of an alphanumeric keyboard (see figure 1 and figures 3f to 3h with a QWERTY arrangement) arranged in segments of (at least) two columns onto a keypad (see figure 3f to 3h with three columns in a right, central and left section). One segment of those characters is associated (see abstract and paragraph [0025]) with a set of programmable keys of a keypad (see 10-key board in figure 2 and figures 3A to 3C). D4 further discloses different navigation systems for switching between the right, central and left section, i.e. for generating a directional input for moving between the segments, for example by the use of shift keys (see keys 3a and 3b in figures 3A to 3C).

5.2 The subject-matter of claim 1 differs from the teaching of D4 in the features of the characterising portion, i.e. in that

- a) at least one programmable key is concurrently associated with two individual characters and
- b) a set of icons is generated on a display of said device identifying the characters associated with the

one set of programmable keys, the set of icons displayed changing on moving from one segment to another segment.

- 5.3 Distinguishing features a) and b) do not provide for a common overall technical effect, but solve different partial problems. In the absence of a synergetic effect, the inventive step of both problems has to be assessed separately.
- 5.4 Feature a) solves the objective technical problem of reducing the number of required programmable keys for the input of characters (in accordance with the appellant's argumentation on the fourth page, first paragraph of the letter dated 12 February 2014).
- 5.4.1 This problem was well known in the art of input for mobile devices and many standard solutions to this problem were known before the priority date of the present application. Even D4 already discloses such a commonly known input measure for inputting many characters with a reduced number of programmable keys as described in paragraph [0005] of D4 ("For example, when the numeral key "9" is depressed four times, an expressed character changes from "W", "X", "Y" to "Z" by each depression to select the character "Z"..."). Also prior art publication D2 discloses that it was known by the skilled person for a programmable key to be concurrently associated with two individual characters (see e.g. column 1, lines 50 and 51; figure 1b). The claimed solution according to feature a) therefore does not involve an inventive step over the disclosure of D4 combined with the skilled person's common general knowledge as, for example, referred to in D4 and D2.

5.5 Feature b) solves the objective technical problem of assisting a user in identifying which is the active set of characters associated with the set of programmable keys (in accordance with the appellant's arguments on the third page, sixth paragraph of the letter dated 12 February 2014).

5.5.1 The board agrees with the analysis of D3 in the decision under appeal regarding the features of claim 1 (see point 2.1 of the decision). D3 also discloses mapping a layout of adjacent alphabetic characters of an alphanumeric keyboard on the keypad of mobile phones, since the teaching of D3 is not limited to the embodiments dealing concretely with mobile phones (see e.g. figures 4 and 5); its whole disclosure deals with portable electronic computing devices (see e.g. [0012]) of which the concept would be regarded by the skilled person as applicable also for mobile phones. D3 is therefore regarded as pertinent prior art which would be consulted by the skilled person looking for a solution to the afore-mentioned problem (see point 5.5).

5.5.2 Furthermore, the board considers the feature of associating a set of characters to a set of programmable keys to be disclosed in D3 (see e.g. figure 2a, 214 and figure 2b, 212a). The wording of claim 1 is not limited to only a single set of characters associated with the programmable keys. Figure 2a of D3 discloses that for a set of programmable keys 206a a set of icons 214 is generated on the display 204 identifying the characters associated with the set of programmable keys (see also [0031] "...row selection feedback area 214 on screen 204 comprises indications of all of the input key characters in the selected row..."). Since D3 also

suggests changing the displayed characters if control keys 210a and 210b are actuated to select the current row (see [0012] and [0031] of D3), the set of icons displayed changes on moving from one segment to another segment according to feature b). The skilled person would therefore arrive at the claimed solution without the need of inventive skills by a combination of the teachings of D4 and D3.

5.6 Features a) and b) according to the characterising portion of claim 1 are considered to be merely a juxtaposition not linked by any technical interaction going beyond the respective technical effects (see points 5.4 and 5.5 above). The appellant has not presented convincing arguments that features a) and b) provide for any kind of synergetic effect, nor does the board see an interaction or synergy caused by distinguishing features a) and b) which could be the basis for an inventive technical contribution. Features a) and b) of claim 1 are therefore considered to be merely aggregated features which are each obvious for the reasons presented above.

5.7 The same reasoning applies *mutatis mutandis* to corresponding claim 11.

The subject-matter of claims 1 and 11 is therefore obvious with regard to D4 combined with D3 and the skilled person's common general knowledge (Article 56 EPC 1973).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chair:



K. Götz

A. Ritzka

Decision electronically authenticated