Datasheet for the decision
of 8 February 2012

Case Number: T 0852/10 - 3.5.05
Application Number: 08153041.2
Publication Number: 2104027
IPC: G06F 3/048
Language of the proceedings: EN

Title of invention:
Electronic device including touch sensitive input surface and method of determining user-selected input

Applicant:
RESEARCH IN MOTION LIMITED

Headword:
Determining user-selected input/RESEARCH IN MOTION

Relevant legal provisions:
EPC Art. 84, 123(2), 52(1), 54

Relevant legal provisions (EPC 1973):
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Keyword:
"Clarity and support by the description - yes (after amendment)"
"Extension of subject-matter - no"
"Novelty - yes (after amendment)"
"Remittal for further prosecution - (yes)"

Decisions cited:
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Catchword:
-
Case Number: T 0852/10 - 3.5.05

DECISION
of the Technical Board of Appeal 3.5.05
of 8 February 2012

Appellant: RESEARCH IN MOTION LIMITED
(Applicant)
295 Phillip Street
Waterloo, Ontario N2L 3W8 (CA)

Representative: Finnie, Peter John
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 7 December 2009 refusing European patent application No. 08153041.2 pursuant to Article 97(2) EPC.

Composition of the Board:
Chair: A. Ritzka
Members: P. Corcoran
D. Prietzel-Funk
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division to refuse the European patent application no. 08 153 041.2, publication no. EP 2 104 027. The decision was dispatched on 7 December 2009.

II. The decision under appeal was based on a main request and an auxiliary request, both of said requests having been filed with the letter dated 12 November 2009.

III. The examining division found that the independent claims of the main request lacked novelty over the following document:

   D1: WO 97/18547 A.

   The independent claims of the auxiliary request were found to lack an inventive step over D1.

IV. Notice of appeal was received at the EPO on 26 January 2010 with the appropriate fee being paid on the 27 January 2010. A written statement setting out the grounds of appeal was received at the EPO on 1 April 2010. With said written statement the appellant filed a new main request and two auxiliary requests. The appellant additionally submitted a request to the effect that the application be remitted to the department of first instance if the board considered that there were grounds for refusal under Article 56 EPC.

V. In a communication accompanying a summons to oral proceedings to be held on 8 February 2012, the board gave its preliminary opinion that the appellant's
requests did not comply with the requirements of the EPC.

VI. With respect to the main request, observations were made concerning a perceived lack of compliance with the requirements of Article 84 EPC. The board further expressed the preliminary opinion that the wording of claim 1 of the request did not effectively distinguish the matter for which protection was sought over the disclosure of D1 but noted that its reservations in this regard could, in principle, be overcome by appropriate amendment to the wording of said claim.

Subject to the aforementioned objections being overcome, the board noted that it would be inclined to remit the application to the department of first instance for further prosecution in order to preserve the appellant's right to have the question of inventive step decided at two instances, in particular taking account of the appellant's request concerning remittal noted under IV. above.

VII. With a letter of reply dated 9 January 2012, the appellant filed an amended main request and a further auxiliary request.

VIII. At the oral proceedings held as scheduled on 8 February 2012, the appellant filed a new main and sole request comprising a set of claims numbered 1 to 10. All previous requests were withdrawn.

IX. The appellant has requested that the decision under appeal be set aside and that a patent be granted on the
basis of the main and sole request submitted during the oral proceedings.

X. Claim 1 of the main request reads as follows:

"A method comprising:
determining a first selection of one of a plurality of selectable options displayed on a touch screen display (38) based on touch attributes, including touch location, of a touch of at least one touch on the touch screen display;
detecting changes in the touch attributes including size of the touch; and
when a change in size of the touch is detected,
determining a direction of change in the location of the touch; and
determining a second selection of another one of the plurality of selectable options based on the direction of change in the location of the touch."

The request includes further claims seeking protection for a corresponding electronic device (claim 8) and a corresponding computer readable medium (claim 10).

XI. During the oral proceedings, the appellant made submissions in support of the main request, in particular in relation to claim 1 thereof, which are summarised as follows:

(i) According to the appellant, the term "touch" as used in the claims was sufficiently clear to the person skilled in the art. Said term was to be interpreted as having substantially the same meaning as the term "single touch input" used in [0004] of the published application, i.e. a
contact between one or more fingers and the touch screen display such that only a single touch location could be resolved. The term thus included the contact of a single finger with a touch screen location as well as the combined contact of a plurality of fingers sufficiently adjacent to each other such that separate touch locations could not be resolved.

Notwithstanding the fact that the term "touch" is used on one occasion in col.13 l.6-9 of the description to denote the contact of an individual finger with the touch screen display ("the two touches are not resolved as separate touch locations"), the predominant usage of the term in the description is as indicated above. The skilled person would thus recognise the intended meaning of the term as used in claim 1, in particular from Fig. 3 and the associated passages of the description.

(ii) With respect to the expression "touch attributes of a touch of at least one touch", the appellant submitted that this expression was clear and supported by the description. In particular, the application discloses selections comprising two or more "touches", e.g. combining a shift key with a letter key to provide a capital letter (cf. published application: [0015] and [0059]).

The aforementioned expression was thus intended to denote that the touch attributes which are used to determine the first and second selections relate to a "touch" which can form part of a more
complex input constellation comprising further "touches".

(iii) The expression "determining a second selection of another one of the plurality of selectable options based on the direction of change in the location of the touch" was clear and supported by the description. Although the embodiment disclosed in [0058] specifies that the second selection corresponded to the closest option displayed in the direction of change in the location (cf. [0058], last sentence), it was not necessary to limit the claim to specify the closest option. A basis for the more general wording used in the claim could be found in the last sentence of [0050] and in step 126 of Fig. 3.

(iv) The present invention related to a method for disambiguation of touches on a touch screen device, i.e. for resolving touches where the intended location was ambiguous, and addressed the technical problem discussed in [0004] of the published application. The subject-matter of claim 1 was now clearly distinguished over D1 which, being primarily concerned with using touch inflections to modify the key input of a touch screen keypad, addressed significantly different issues.

XII. At the end of the oral proceedings the chair announced the board's decision.
Reasons for the Decision

1. The appeal is admissible.

2. Preliminary observations

2.1 Claim 1 of the main request is based on the embodiment of the invention disclosed in [0056] to [0058] of the published application.

2.2 According to the aforementioned embodiment, a first touch signal is generated when a user's finger makes contact with the touchscreen at a first touch location (corresponding to the letter "J" on a virtual keyboard as illustrated in Fig. 4). A first user-selected input ("J") is determined based on the first touch location (cf. published application: col.12 l.31-35).

2.3 A second touch signal is generated when the user places a second finger at a second touch location (corresponding to the letter "U" on the keyboard as illustrated in Fig. 4) while the first finger remains at its previous location (col.12 l.50-58).

2.4 The two touch locations are adjacent on the virtual keyboard such that they cannot be resolved as separate touch locations, i.e. the second touch signal generated following the placement of the second finger is determined as a single touch signal (cf. col.13 l.6-10). However, the touch attributes of the second touch signal differ with respect to the first touch signal.

2.5 Based on a comparison of the touch attributes of the first and second touch signals, a second user-selected
input is determined (col.13 l.9-33). More specifically, based on a comparison of said touch attributes a change in size of the touch signal is determined and if the location of the touch ("the center of the signal") has changed, the direction of change of location is determined (cf. col.13 l.19-22). A second user-selected input is then determined based on the direction of change, e.g. by selecting an adjacent option in the direction of change of the touch signal (cf. col.13 l.31-33).

3. Article 84 EPC

3.1 The board is satisfied that the subject-matter of the claims of the appellant's request is supported by the description. In particular, the subject matter of claim 1 finds support in [0056] to [0058] of the published application.

3.2 Having regard to the appellant's submissions concerning the term "touch" as used in claim 1 (cf. Facts and Submissions, item XI(i) above), the board is satisfied that the intended meaning of said term in the given context is clear and judges that said term is to be interpreted as having substantially the same meaning as the term "single touch input" used in [0004] of the published application, i.e. a contact between one or more fingers and the touch screen display such that only a single touch location can be resolved in respect of said contact.

3.3 With respect to the expression "touch attributes of a touch of at least one touch", the board is satisfied on the basis of the appellant's submissions in this regard
(cf. Facts and Submissions, item XI(ii) above) that said expression is clear and supported by the description, in particular [0015] and [0059] of the published application according to which input selections comprising two or more "touches" are disclosed, e.g. combining a shift key with a letter key to provide a capital letter.

3.4 Concerning the claim specification "determining a second selection of another one of the plurality of selectable options based on the direction of change in the location of the touch", the board is satisfied on the basis of the appellant's submissions in this regard (cf. Facts and Submissions, item XI(iii) above) that it is not necessary to limit the claim by specifying the closest option in the direction of change in the location of the touch. Support for the more general wording used in the claim can be found in the last sentence of [0050] of the published application.

3.5 In view of the foregoing, the board judges that following amendment claim 1 of the appellant's request defines the matter for which protection is sought in a manner which complies with the clarity and support requirements of Article 84 EPC.

4. Article 123(2) EPC

4.1 The passages of the description providing support for claim 1 form part of the application documents as originally filed. On this basis, the board judges that the amendments to said claim comply with the requirements of Article 123(2) EPC.
5. **Novelty**

5.1 D1 relates to a multi-touch input device which may be a touch screen (cf. D1: p.4 l.24-27; p.9 l.18-22). In a preferred embodiment, a keypad is provided as illustrated in Fig.3 and numbers are entered using a single finger touch when the centroid of the touch falls within a central area of the key (cf. D1: p.7 l.14-15; p.12 l.19-20). D1 further discloses the use of other touch patterns including two-touch chords formed using a finger and thumb (cf. D1: p.10 l.16-23).

5.2 According to D1 both single-touch and double-touch inputs can involve "inflections" which are slight touch variations that convey additional information (cf. p.7 l.16-20). Examples of such inflections are "pick", "roll" and "waggle" gestures involving a directional component (cf. D1: p.7 l.27-33, and p.8 l.1-11). These gestures can be used to modify the input, e.g. by introducing a space or punctuation upon release of a two-touch chord or indicating a digraph (common two letter combination such as "th") or indicating a function key corresponding to the selected number key.

5.3 D1 is essentially concerned with using the aforementioned inflection gestures to modify the operation of a selected key (or key combination). On this basis, D1 is found to disclose the determination of a change in the shape and direction of a touch signal and using such a determination to modify the operation of a selected key (or key combination).

5.4 In contrast to the present application, D1 is not concerned with the problem of disambiguating between a
plurality of selectable options displayed on a touch screen display when separate touch locations cannot be resolved as discussed in [0004] of the published application.

5.5 In view of the foregoing, the board finds that D1 does not disclose a method as defined by claim 1 according to which a first selection of one of a plurality of selectable options displayed on a touch screen display is determined based on touch attributes of a touch of at least one touch and a second selection of another one of the plurality of selectable options is subsequently determined based on detecting a change in size of the touch and determining a direction of change in the location of the touch.

5.6 The board therefore concludes that D1 is not prejudicial to the novelty of the subject-matter of claim 1 of the appellant's request.

6. Remittal

6.1 The definition of the matter for which protection is sought according to claim 1 of the appellant's request is effectively distinguished over the disclosure of D1 such that a novelty objection based on said document is no longer applicable.

6.2 In view of the amendments to claim 1, the question as to whether D1 still represents the closest prior art to the invention as defined by said claim needs to be given consideration before the issue of compliance with the requirements of Article 52(1) EPC, in particular the inventive step requirement thereof, is decided.
6.3 Under the given circumstances, the board judges that it would not be appropriate for the question of compliance with the requirements of Article 52(1) EPC, in particular the inventive step requirement thereof, to be decided in a definitive manner in the context of the present appeal proceedings.

6.4 Accordingly, the board decides to exercise its discretion under Article 111(1) EPC to remit the case to the department of first instance for further prosecution.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance for further prosecution on the basis of the claims filed during the oral proceedings before the board of appeal.

The Registrar: 

K. Götz

The Chair:

A. Ritzka