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Datasheet for the decision of 13 February 2015

Case Number: T 2049/10 - 3.5.06

Application Number: 05788888.5

Publication Number: 1782159

IPC: G06F1/16, H05K7/14

Language of the proceedings: EN

Title of invention:
WIDE TOUCHPAD ON A PORTABLE COMPUTER

Applicant:
APPLE INC.

Headword:
Wide touchpad/APPLE

Relevant legal provisions:
EPC 1973 Art. 84

Keyword:
Claims - support in the description (yes)

Decisions cited:
T 0133/85

Catchword:

Beschwerdekammern
Boards of Appeal
Chambres de recours

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Case Number: T 2049/10 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 13 February 2015

Appellant: (Applicant)	APPLE INC. 1 Infinite Loop Cupertino, CA 95014 (US)
Representative:	Lang, Johannes Bardehle Pagenberg Partnerschaft mbB Patentanwälte, Rechtsanwälte Prinzregentenplatz 7 81675 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 28 April 2010 refusing European patent application No. 05788888.5 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	W. Sekretaruk
Members:	S. Krischer
	A. Teale

Summary of Facts and Submissions

I. The appeal is directed against the decision of the examining division, posted on 28 April 2010, to refuse the application 05 788 888 for lack of clarity of the main request.

II. A notice of appeal was received on 8 July 2010. The appeal fee was received the same day. A statement of the grounds of appeal was received on 7 September 2010. Claim sets according to a main and four auxiliary requests were filed, and oral proceedings were requested.

III. In its summons to oral proceedings, the board gave reasons for its preliminary opinion (4.1, 5.) that claim 1 of the then main request and of the second and third auxiliary requests was neither clear (Article 84 EPC 1973) nor was the invention as claimed sufficiently disclosed (Article 83 EPC 1973). Further (4.2, 6.) that claim 1 of the main request and of the first and second auxiliary requests were not supported by the description, since the essential features "keyboard" and "hand location sensor" were missing (Article 84 EPC 1973).

IV. In a letter dated 23 December 2014, the appellant filed claim sets according to a new main and four new auxiliary requests. Therein the objections raised in the summons (4.1, 5.) concerning clarity and sufficient disclosure were overcome by clarifying that it is the *portable computer*, and not the *touchpad* which *filters* each contact sensed by the touchpad to either accept it as intentional, or reject it as unintentional.

V. Oral proceedings were held on 13 February 2015 during which the appellant withdrew the then main request and auxiliary requests 1 and 2, and made former auxiliary request 3 its main request and auxiliary request 4 its (sole) auxiliary request. At the end of the oral proceedings, the board announced its decision.

VI. The appellant requests that the decision be set aside and a patent be granted on the basis of claims 1-21 of a main request and of an auxiliary request filed on 23 December 2014 as auxiliary requests 3 and 4, respectively.

The further text on file is: description pages 1, 3-22 as originally filed/as published, page 2 filed during oral proceedings on 4 November 2009, page 23 filed on 8 January 2009; drawing sheets 1-10 as originally filed/as published.

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

"1. A portable computer (200, 500), comprising:
a display assembly (210, 510) coupled to a base assembly (220, 520), the base assembly (220, 520) having palm rest areas (252, 254) positioned to support a user's palms;
a keyboard (222, 522) disposed on the base assembly;
a touchpad (224, 524) disposed on the base assembly (220, 520), wherein the palm rest areas (252, 254) are formed by the touchpad (224, 524); and a hand location sensor (240, 545) being able to detect a hand location when a user's hand is positioned on the keyboard (222, 522),
wherein the portable computer (200, 500) filters each contact sensed by the touchpad (224, 524) to either accept the contact as an intentional input command, or

reject the contact as unintentional, based on the hand location detected by the hand location sensor (240, 545)."

VIII. In view of the board's decision, the claim text of the auxiliary request is immaterial.

Reasons for the Decision

1. *Overview of the invention*

The application relates to a portable computer (e.g. a laptop, notebook or notepad with a display coupled to a base assembly with a keyboard; see original description, [5], second sentence; figures 2-7, 12), where the *touchpad* is *enlarged* ([5], first sentence; [23], first sentence; 224 in figures 2-7). In view of this enlargement, the touchpad not only serves as an input device for cursor commands, but also as a palm rest area during typing (figure 4; [23], fourth sentence) or at least extends into the palm rest areas ([23], fifth sentence). In order to allow the user to type without disturbing the computer with unintentional touchpad contacts, a sensor detects the hand location of the user (240 in figures 2-7) in order to determine whether the touchpad contact is intentional or accidental ([24], second sentence). In scenarios where at least one hand is detected by the hand location sensor (240) as extending over the keyboard (figures 4, 5), the contacts on the corresponding part of the touchpad are ignored ([29], sentences 4-7 ; [30], sentences 3, 5, 7).

The auxiliary request also treats the scenario where

no hand is detected by the hand location sensor as extending over the keyboard (figure 6; [31], sixth sentence). In that case, contact data from the touchpad itself (which also constitutes a sensor) is used to compute ("estimate") a probability ([31], sentences 7-10) to decide which of the contacts are unintentional (and thus to be ignored or filtered) and which are valid. For this computation, data of the location, the trajectory (i.e. path) and the size of the contact patch sensed by the touchpad are used, in addition to the hand location sensor data (figure 11; [51], sentences 1, 4, 5).

2. *Support by the description (essential features missing)*

2.1 The board preliminarily remarks that it considers the topic "essential feature missing" to not primarily be a question of *clarity*, as the appealed decision did, but of *support by the description* (both subsumed under Article 84 EPC). This is in line with T133/85: the headnote of this decision (I.) says that if a feature which is described in the application as essential is missing in the claim, then this claim is not supported by the description.

2.2 According to the appealed decision (reasons, 1.2), the features of a *keyboard* and a *hand location sensor* of claim 1 of the then main request are missing from the claim. They are considered essential for the definition of the invention: in all embodiments in the description and in all corresponding figures, a keyboard and a hand location sensor are (at least implicitly) present. The only passage in the description ([6], first sentence) which would perhaps allow the interpretation that a hand location sensor is not required should be read in

the context of the rest of the description, in particular with [31] where it is stated that some contacts may be designated as unintentional even if no hand is detected over the keyboard by the hand location sensor.

2.3 According to the grounds of appeal (page 4-7, 1.2), the description discloses three embodiments. The third embodiment is disclosed on figure 6 and in [31]: only contact patches by the user's hands on the touchpad are used to judge whether a contact was intentional, although a hand location sensor is present in this embodiment. However, "the keyboard and the hand location sensor are not necessary here" (page 7, second paragraph, last sentence).

2.4 However, as the board argued in its summons and during oral proceedings, the so-called "third embodiment" is not an embodiment, but a "scenario", i.e. a description of how the invention (having a keyboard and a hand location sensor) works in the situation where no hand is over the keyboard, see [29], first sentence:

> "FIGS. 4-6 illustrate three of many possible scenarios (i.e., hand positions) of user activity with portable computer 200 ..."

The "portable computer 200" of figure 2 includes a keyboard 222 and a hand location sensor 240.

Furthermore, paragraph [31], first and second sentence, reads:

> "FIG. 6 illustrates a third scenario in which both left hand 280 and right hand 282 do not extend

> over keyboard 222. This hand position may occur when the user engages only in touchpad activity."

Further the sixth sentence:

> "Although no detection is made by sensor 240, touchpad 224 recognizes various characteristics of the contact patches made by the user's hands."

Thus a hand location sensor is used in the invention in order to detect this "third scenario" where no hand is over the keyboard. It follows that the hand location sensor is necessary for the invention.

2.5 According to the grounds of appeal (page 11, second paragraph), the invention opens up a whole new field and is entitled to more generality in the claims.

2.6 The board accepts that the invention opens a new field (namely the field of portable computers where the palm rest areas are formed by the touchpad), since none of the prior art documents in the search report discloses such a "wide touchpad". But, as the appealed decision argued (reasons 1.2, second paragraph, last two lines), the word "palm rest area" only makes sense when the palms can rest in front of a keyboard. This is confirmed by the following definition of a palm rest area in the description ([2], sentences 6, 7) which the board cited during oral proceedings (emphasis added):

> "Palm rest areas are areas positioned on the upper surface of the base assembly *below the keyboard*. They allow a user to rest the base or palm of his or her hands comfortably *during typing activity*."

Even original claims 1-4 and 7-10 (which do not explicitly contain a keyboard) contain a palm rest area. This means that these claims implicitly contain a keyboard.

2.7 At the end of the oral proceedings, the appellant overcame the objection of missing essential features by restricting its requests to the present main and auxiliary request which both contain a keyboard and a hand location sensor.

2.8 Therefore, no essential feature is missing anymore and claim 1 of the current main request and of the auxiliary request is supported by the description (Article 84 EPC 1973).

3. *Remittal*

3.1 Article 111(1) EPC, second sentence, gives the board a discretion either to exercise any power within the competence of the department which was responsible for the decision appealed or to remit the case to that department for further prosecution.

3.2 On the one hand, objections concerning inventive step (raised for the first time in the summons of the examining division) have never been reasoned by the examining division. On the other hand, the examining division found claim 1 of the then auxiliary request (filed during oral proceedings) allowable, see the minutes, 5. and the communication under Rule 71(3) EPC ("intention to grant"), dated 30 November 2009.

3.3 Claim 1 of the current auxiliary request is similar to claim 1 of the then auxiliary request. In addition to

claim 1 of the current main request, claim 1 of the then auxiliary request contained three parameters of the contacts sensed *by the touchpad* (location, path and size of the contact patch). As explained above, these parameter are only used in the third scenario ([31]) in which the hand location sensor detects no hands over the keyboard. They are not used in the first and second scenario in which the hand location sensor detects one or two hands over the keyboard ([29], [30]). In these scenarios, the hand location sensor alone allows the computer to qualify the touchpad contacts under the detected hands as unintentional.

3.4 However, the board has no document at hand containing the reasons why the examining division found claim 1 of the then auxiliary request (containing a hand location sensor *and* the three parameters) inventive and can only speculate about the reasons.

3.5 Therefore, the board remits the case for further prosecution in order to give the appellant two instances to decide on inventive step.

3.6 This also allows the examining division to decide about the presence of an inventive step of claim 1 of the main request (without the three parameters), given the fact that none of the prior art documents in the search report discloses either a wide touchpad or a hand location sensor.

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.

The Registrar: The Chairman:

B. Atienza Vivancos W. Sekretaruk

Decision electronically authenticated