Datasheet for the decision of 28 April 2011

Case Number: T 0084/08 - 3.5.05

Application Number: 04251088.3

Publication Number: 1569076

IPC: G06F 3/033

Language of the proceedings: EN

Title of invention:
Mobile device with integrated camera operations

Patentee:
RESEARCH IN MOTION LIMITED

Headword:
In-line image insertion in mobile device/RESEARCH IN MOTION

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 56, 106, 107, 108

Keyword:
"Inventive step - yes"

Decisions cited:
-

Catchword:
-
Case Number: T 0084/08 - 3.5.05

DECISION
of the Technical Board of Appeal 3.5.05
of 28 April 2011

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

Representative: Skone James, Robert Edmund
Gill Jennings & Every LLP
The Broadgate Tower
20 Primrose Street
London EC2A 2ES (GB)


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

I. This appeal is against the decision of the examining division announced in oral proceedings held on 5 July 2007, with reasons dispatched 30 August 2007, refusing European patent application No. 04251088.3 on the grounds that none of the subject-matter of the independent claims of any of the requests involved an inventive step according to Article 56 EPC 1973 having regard to the disclosure of D1: US 6 249 275.

II. The notice of appeal was submitted on 30 October 2007 and the appeal fee was paid on the same day. The statement setting out the grounds of appeal was submitted on 19 December 2007. It was requested that the decision under appeal be set aside and that a patent be granted on basis of one of the sets of claims referred to in the impugned decision under appeal as follows:

Main request:
Claims 1 to 15 as filed with letter of 1 June 2007;

First auxiliary request:
Claims 1 to 15 as filed with letter of 1 June 2007;

Second auxiliary request:
Claims 1 to 15 as filed with letter of 1 June 2007;

Third auxiliary request:
Claims 1 to 14 as filed with letter of 27 June 2007;
Fourth auxiliary request:
Claims 1 to 15 as filed with letter of 27 June 2007.

A precautionary request for oral proceedings was also made.

III. In a communication accompanying a summons to oral proceedings to be held on 28 April 2011, the board expressed its preliminary opinion that the appellant's requests were not allowable because the independent claims of none of the requests met the requirements of Article 56 EPC. In particular, the board expressed the opinion that independent claims 1 and 9 of the main request lacked an inventive step having regard either to the prior-art standard device acknowledged in the description, paragraphs 2 to 4 of the published application, or to the disclosure of D1.

The board further gave its reasons why the appellant's arguments in respect of inventive step were not convincing.

IV. With a letter of reply dated 28 March 2011, the appellant filed a fifth auxiliary request, together with arguments in support of inventive step of the claims according to the main request and to the first to fifth auxiliary requests.

V. Oral proceedings were held on 28 April 2011, in the course of which the appellant presented arguments in favour of inventive step, in particular in the light of the prior-art standard device and of D1.
VI. The appellant has requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1-15 of the main request as submitted during the oral proceedings before the board. All other requests have been withdrawn.

The further documents on which the appeal is based, i.e. the text of the description and the drawings, are the following:

description pages 1, 2, 2a as submitted during the oral proceedings;
  pages 3-14 as originally filed;

drawing sheets 1/3-3/3 as originally filed.

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

"1. A method of capturing image data and inserting said image data into an active document on a mobile device (10), the mobile device including a camera (44) and a camera activator (46), the mobile device having an active application (58) in which the active document is open and a camera application (56), the method comprising the steps of:
detecting a first signal from the camera activator (46);
determining that the active document is open in an editable mode;
switching from operation of the active application to the camera application (56) in response to detection of the first signal from the camera activator (46) if the
active document is determined to be open in an editable mode;
detecting a second signal from the camera activator (46); and
in response to detection of said second signal, capturing image data via the camera (44) using the camera application (56), and automatically resuming operation of the active application and inserting said image data into said active document open in the active application."

Independent claim 9 of the appellant's main request reads as follows:

"9. A mobile device, comprising:
a processor (38) and associated memory (24 and 26), the processor (38) being configured to run an active application (58) and a camera application (56), the active application being configured to open an active document;
a camera (44) for capturing images and providing image data for said images to said processor (38) via said camera application (56); and
a camera activator (46) responsive to user activation; wherein the mobile device further comprises a camera listener interface (60) comprising a test module adapted to test whether said active document is open in an editable mode in response to a first signal from said camera activator (46), and wherein said camera listener interface (60) is further adapted to:
cause the processor to switch from said active application to said camera application (56) if said active document is in the editable mode,
cause the camera (44) to capture the image data and the processor to resume said active application and to pass to said active application said image data for insertion into said active document in response to a second signal from said camera activator (46)."

VIII. After deliberation, the board announced its decision.

Reasons for the decision

1. Admissibility

The appeal complies with Articles 106 to 108 EPC 1973, and is therefore admissible (see Facts and Submissions, point II).

2. Inventive step

2.1 Prior art

2.1.1 D1 discloses a pen computer which enables a user to store, in a memory, voice data, image data and text data entered by, respectively, a microphone, a camera and a pen tablet. The apparatus automatically recognises the type of entered data without the user having to select a mode of the device (column 7, line 66 to column 8, line 4). A page corresponds to one screen of the pen computer and displays at least two types of the above information data (column 2, lines 49 to 58), the voice data being represented as an icon on the screen (column 3, lines 38 to 41). For capturing image data, the user first depresses the camera button halfway for displaying an image and adjusting the
camera parameters; when he further fully depresses the camera button, the image is automatically captured, displayed on the current page and stored at a memory address corresponding to said current page (see column 6, line 56 to column 7, line 6). The user may further add text data to the current page by using the pen (see column 7, lines 10 to 13 and figure 3A). The different types of data may however be captured in any order (see column 8, lines 7 to 9) before being stored in relation to the same page (see column 8, lines 59 to 63, and figure 4).

2.1.2 The description (see paragraphs [0002] to [0004] of the published application) acknowledges a prior art consisting in a messaging-enabled mobile phone that comprises a display screen and a built-in camera with a camera activator. This device is referred to as "standard device" in the decision under appeal and the board does the same. In order to incorporate a picture in a text document which is being currently edited on the display, the user of the standard device has to perform manually, i.e. by activating appropriate command buttons on the device, the following sequence of steps:
- exit the active application containing the edited document,
- take a picture with the camera,
- store the picture in a memory,
- re-enter the application editing the document,
- retrieve the stored picture from the memory,
- attach or insert the picture into the edited document.

2.1.3 The board agrees with the appellant that the above-mentioned standard device represents a prior art which
is closer to the subject-matter of the present application than the device described in D1, for the following reasons. The method defined in claim 1 and the device defined in claim 9 involve respectively a determining step and means (test module of camera listener interface) for assessing if an active document is open in an editable mode, before switching from the document application to the camera application. Such a determination has also to be done by the user of the standard device before starting the whole procedure for inserting a picture into the document. In contrast, the device of D1, when powered on, is constantly in an input-ready mode for pictures captured by the built-in camera. D1 therefore does not consider the possibility of having documents not accepting image data and the method of capturing data disclosed in D1 does not require the determination step. The board also notes that the decision under appeal likewise acknowledged the standard device as closest prior art (see Reasons, 3.1).

2.2 The mobile device according to claim 9 differs from the standard device by the provision of a camera listener interface which:
- comprises a test module adapted to test whether an active document, open in an active application running on the device's processor, is open in an editable mode, in response to a first signal from the device's camera activator, and
- is adapted:
  - to cause the processor to switch from the active application to the device's camera application if said active document is in the editable mode, and
to cause the camera to capture the image data and the processor to resume the active application and to pass the image data to the active application for insertion into the active document in response to a second signal from the camera activator.

The technical effects of the combination of these distinguishing features are that a user wishing to insert an image into a document has just to press the camera activator button; the device then automatically checks if the document is open in an editable mode, and automatically captures the picture only if the document is open in an editable mode, thereby avoiding capturing a picture for a document which cannot accept it.

The objective technical problem may thus be formulated as how to automatically insert the output of the mobile device camera smoothly, i.e. in a simpler and more user-friendly manner, into an active document open in an active application.

2.3 The appellant has plausibly argued that the solution to this technical problem is not provided by a mere automation of the steps performed by the user of the standard device, as described in paragraph 2.1.2 above. The skilled person implementing a mere automation would design the device to automatically perform the steps sequentially in response to the actuation of a camera activator or button. He would in no way consider designing a camera activator adapted to issue a first and a second signal, the first signal triggering a test of the active document and the second signal triggering, depending on the result of the test, the capture of the
image and its insertion into the document. On this basis the board concurs with the appellant's submissions that the subject-matter of claims 9 and 1 represents more than mere automation of the standard device and method.

2.4 The skilled person, faced with the above-mentioned objective technical problem, would search for prior-art documents dealing with mobile devices equipped with a built-in camera and able to insert captured images into documents edited by the device. He would thus come across document D1 which relates to a mobile device (see column 5, line 23: "pen computer") equipped with a camera (see column 5, line 33: "CCD camera"). In D1, a camera button, or camera activator, causes, when first depressed halfway by the user, the image from the camera to be viewed on the device's screen, and, when further depressed, the image to be locked and captured (see column 6, lines 23 to 33). The captured image is both displayed on the device and stored in memory.

2.4.1 However, the device of D1, when powered on, always displays a page which is readily able to accept text or image entry. Pressing the camera button automatically leads to the insertion of the image on the page without the device having to check if the page is able to accept the image. That is to say, the skilled person would recognise that, in D1, a page or document which is active is always open in an editable mode. For this reason only, the skilled person would consider that the teaching of D1 in respect of automatic image capture and insertion is not suitable to be applied to a device wherein documents may not be always open in an editable mode.
mode. He would thus be prevented from combining the teaching of D1 with the prior-art standard device.

2.4.2 Even if, for argument's sake, it were supposed that the skilled person were to apply, to the standard device, the teaching of D1 in respect of automatic image insertion, he would not arrive at the subject-matter of claims 1 and 9, at least for the reason that D1 does not disclose or even suggest providing a test module for determining if the active document is open in an editable mode. By implementing the technique of D1 in the standard device, it may be assumed that the skilled person would provide a camera activator within the standard device which, when half-way depressed, caused the image of the camera to be displayed on the mobile device, in place of the previously displayed active document, and, when further fully depressed, caused the displayed image to be captured and stored in the device memory, independently of whether the previously displayed document could accept images or not. The board does not share the view expressed in the decision under appeal (see Reasons, 3.3) that the skilled person would necessarily have to decide what would happen if the user actuated the camera activator while the active document was not in an editable state and would choose among several straightforward possibilities. In the board's view, this step goes beyond the implementation of the features of D1 in the standard device that the skilled person could perform without the use of inventive skill.

2.4.3 Moreover, the appellant has plausibly argued that the claimed invention provides technical advantages over the standard device, including the fact that passing
the image data directly from the camera application to the document eliminates the need for storage in a separate image file and a corresponding image-retrieval process.

2.5 It is thus judged that the subject-matter of claims 1 and 9 involves an inventive step having regard to the disclosure of the prior-art documents on file.

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 with the order to grant a patent on the basis of claims 1-15 of the main request as submitted during the oral proceedings before the board, description pages 1, 2, 2a as submitted during the oral proceedings before the board, description pages 3-14 as originally filed and drawings sheet 1/3 to 3/3 as originally filed.

The Registrar: The Chair:

K.Götz A. Ritzka