Datasheet for the decision
of 24 February 2010

Case Number: T 0779/07 - 3.5.04
Application Number: 04007724.0
Publication Number: 1471719
IPC: H04N 1/00
Language of the proceedings: EN

Title of invention:
Portable terminal having a camera and method for taking a photograph with the same

Patentee:
SAMSUNG ELECTRONICS CO., LTD.

Opponent:
-

Headword:
-

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 54, 56

Keyword:
"Novelty (yes) after amendment"
"Inventive step (yes) after amendment"

Decisions cited:
-

Catchword:
-
Case Number: T 0779/07 - 3.5.04

DECISION
of the Technical Board of Appeal 3.5.04
of 24 February 2010

Appellant: SAMSUNG ELECTRONICS CO., LTD.
416, Maetan-dong,
Yeongtong-gu
Suwon-si
Gyeonggi-do (KR)

Representative: Grünecker, Kinkeldey,
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Composition of the Board:
Chairman: F. Edlinger
Members: C. Kunzelmann
B. Müller
Summary of Facts and Submissions

I. The appeal is against the decision of the examining division to refuse European patent application No. 04 007 724.0.

II. The application was refused on the ground of lack of novelty (Article 54(1), (2) EPC 1973) of the subject-matter of claims 1 and 11 of the main request then on file, and on the ground of lack of inventive step (Article 56 EPC 1973) of the subject-matter of claims 1 and 11 of both the first and second auxiliary requests then on file.

III. The applicant appealed and filed the claims of a new auxiliary request with the statement of grounds of appeal. The appellant also requested oral proceedings as an auxiliary measure.

IV. The board issued a communication pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal (RPBA) annexed to a summons to oral proceedings. In this communication the board raised objections under Article 84 EPC 1973 and Article 123(2) EPC with respect to the claims of the main and auxiliary requests. The board also expressed doubts as to whether the subject-matter of claim 1 of the auxiliary request involved an inventive step.

V. With a letter dated 22 January 2010 the appellant filed claims of new main and first and second auxiliary requests.
VI. Oral proceedings were held on 24 February 2010. In the oral proceedings the appellant submitted claims 1 to 5 and description pages 1, 2, 2a and 3 to 15 of a new sole request (the claims being labelled "main request") and withdrew the previous requests submitted in writing. At the end of the oral proceedings the chairman announced the board's decision.

VII. Claim 1 reads as follows.

"An entity comprising a portable terminal with a camera module (130) and an external device (300, 600), said portable terminal further comprising a user interface (200) connected to said external device (300, 600), a camera key (420) provided on a housing of said terminal, a control module (100) and a storing section (140) for storing an image photographed under the control of the control module, said external device (300, 600) adapted to output a photographing command for photographing an image scanned through said camera module (130), wherein said control module (100) is adapted to change an operation mode from a common mode to a camera mode according to a photographing command input from the external device when a present operation mode is the common mode and to cause an image scanned through the camera module to be photographed when the photographing command is input from the external device during an operation in the camera mode, wherein the camera mode is a mode for photographing the image scanned through the camera module and wherein the common mode is an operation stand-by mode which excludes the camera mode, said external device (300) is an earset which comprises a handset module (300) including only two keys, from which a call key (320) is adapted to generate a signal
corresponding to a call command inputted in the stand-by mode and from which a shutter key (324) is adapted to generate a signal corresponding to said photographing command and a microphone for transmitting sounds to a counterpart, and an earspeaker outputting voice signals outputted from the user interface (200)."

Claims 2 to 5 are dependent on claim 1.

VIII. The decision under appeal cited documents

D1: US 6 233 002 B1 and

Furthermore the examining division had cited document

D2: WO 00/65803 A1

in a communication.

IX. The reasons for the decision can be summarised as follows, as far as they apply to the present claims.

D1 disclosed a portable terminal having a camera and an external device capable of inputting multiple commands into an interface module of the camera. D1 disclosed the possibilities of switching between a calling mode and a camera mode and of starting a camera mode directly by pushing a key of a remote control module connected to the external device. In particular, the recording of a video could be started by pressing a video key on the remote control module. A video could be considered as a sequence of still images. Hence D1 rendered the features of remotely controlling
photography in the camera mode obvious for a person skilled in the art. The feature of using the same key, namely the camera key, for both switching between modes and for taking a photograph was not disclosed in D1. This feature solved the problem of reducing the burden of the user using a remote device. However providing the same key with different functionalities could not be considered inventive because a person skilled in the art would easily have applied this option when faced with the problem of reducing the burden of the user because the advantage of combining multiple functions into the same key was known in the art of generic user control devices.

X. The appellant's arguments can be summarised as follows.

The invention was directed to an entity comprising a portable terminal and an earset in combination. The portable terminal had a camera module. The invention prevented the shaking of the camera module resulting from pressing the camera key arranged on the body of the portable terminal and allowed remote control of the portable terminal in a simple way and with a simple construction of the earset. In particular, it was sufficient to press a camera key on the earset a first time to switch the portable terminal from a stand-by mode to a camera mode, and to press the same key a second time to take a photograph. The earset had only two keys and was thus simple to use and of a simple construction. The earset allowed the user to perform an exterior command dependent on the particular operation mode of the portable terminal. When the exterior command was input, first the present operation mode was determined and then the operation was performed
corresponding to the exterior command and the present operation mode.

D1 did not disclose an entity consisting of a portable terminal and an earset. Instead D1 disclosed an entity consisting of three parts, namely a portable terminal, an earset and a remote control. The earset did not comprise keys for controlling the portable terminal. Instead the keys were provided on the remote control. According to D1, function keys on the remote control were used for switching the portable terminal to the different modes. The operation buttons to be pressed once the mode was selected were provided on the portable terminal. The remote control was not as simple as that of the present invention.

D2 disclosed a device for controlling a portable telephone. Using the controlling device, the telephone could be utilised without using the keys of the telephone's keyboard. The portable telephone did not comprise a camera. Instead a camera was provided in the controlling device. The telephone did not have different operation modes, and there was no disclosure of an operation mode dependent interpretation of a command input by the user using the controlling device.

D3 disclosed a portable telephone in combination with an earset. The telephone did not have a camera mode. The earset included a remote control unit which could be used to control the portable telephone. But it could only be used for call taking or call making operations. No other mode was possible. In one embodiment the earset could be combined with a portable audio device in addition to the portable telephone. But also in this
embodiment only call taking or call making operations were possible with the earset.

All the documents D1 to D3 disclosed a remote control which avoided the use of the keys on the portable terminal. These remote controls provided alternative keys to the keys provided on the portable terminal. The remote control of the invention however had only two keys, namely a call key and a camera/shutter key.

XI. The appellant requested that the decision under appeal be set aside and that a patent be granted with the description and claims submitted in the oral proceedings, and the drawings as originally filed.

Reasons for the Decision

1. The appeal is admissible.

2. Amendments (Article 123(2) EPC)

2.1 The entity of claim 1 is disclosed in the block diagram of figure 2 and the corresponding description as originally filed, in combination with features of the original second and third embodiments disclosed in figures 5 and 6 and the corresponding description, and claims 1 to 7 as originally filed.

2.2 The subject-matter of the dependent claims is disclosed in original claims 5, 6 and 8 and the description of the second and third embodiments.
2.3 The amendments to the description have brought the description into line with the claims and acknowledge the prior art.

2.4 Thus the board sees no reason for an objection under Article 123(2) EPC.

3. Clarity (Article 84 EPC 1973)

3.1 The claims now make it clear that protection is sought for an entity comprising a portable terminal with a camera module and an external device. Claim 1 specifies the essential features of both the portable terminal and the external device. In particular, the external device is an earset comprising a handset module and an earspeaker. Hence the board considers that claim 1 clearly defines the matter for which protection is sought.

3.2 The board sees no other reasons for an objection under Article 84 EPC 1973.

4. Novelty (Article 54(1), (2) EPC 1973)

4.1 It is undisputed that D1 is the closest prior art. The entity of claim 1 differs from the entity disclosed in D1 (see, in particular, figures 6B and 6C), and also from the entities disclosed in D2 and D3, at least in that the handset module of the earset includes only two keys, namely a call key and a shutter key. The call key is adapted to generate a call command signal in a stand-by mode of the portable terminal, and the shutter key is adapted to generate a photographing command signal. When the shutter key generates the
photographing command signal in a common mode which is
the operation stand-by mode of the portable terminal,
the stand-by mode changes to a camera mode. When the
shutter key generates the photographing command signal
in the camera mode, an image scanned through the camera
module is (caused to be) photographed. Hence the entity
of claim 1 is new (Article 54(1), (2) EPC 1973).

5. Inventive step (Article 56 EPC 1973)

5.1 D1 discloses that a remote control unit has various
function keys, such as a communication key, a music key
and a telephone address key, as well as dial keys (D1,
column 5, lines 55 to 65). These keys allow a user to,
for instance, make phone calls, including entering the
telephone number, even if the portable terminal is
carried in a bag (D1, figure 5A and column 9, line 19,
to column 10, line 9). This functionality could not be
achieved without major modifications if only two keys
were provided in a handset module of an earset.

5.2 In this respect the argument in the decision under
appeal, that providing one and the same key with
different functionalities could not be considered
inventive, did not convince the board in the context of
the present amended claim 1. Claim 1 specifies a
handset module including only two keys with different
functionalities of the shutter key in the stand-by mode
and in the camera mode. The specific functionalities of
the two keys in the handset of the earset and the
dependency on the specific modes distinguish the
claimed entity from an obvious adaptation of keys of
the known remote control unit.
5.3 D2 discloses a "hands-free" mobile telephone and a device for controlling it. The mobile telephone does not have a camera, but the control device may have a camera (D2, page 9, lines 18 to 24, and figure 3). The control device has an activating key (14) and a selection key (15). D2 describes the functionalities of these keys in the context of accepting or making telephone calls (D2, page 7, line 31, to page 8, line 20). But D2 does not disclose mode dependent functionalities of these keys in the context of the use of a camera module of the portable terminal.

5.4 D3 relates to a portable telephone and an earphone set including a remote control unit for controlling the portable telephone. The remote control unit comprises a single switch for switching the portable telephone, for instance, from a waiting mode to a speech recognition mode when the user is making a call by means of voice input instead of by means of the keys of the portable telephone (D3, column 5, lines 51 to 59). The single switch may also be used to switch the portable telephone to the telephone communication mode when an incoming call occurs (D3, column 5, lines 23 to 28). Neither the portable telephone nor the remote control unit has a camera.

5.5 In the board's judgment, the other documents on file are not more relevant than D1, D2 and D3.

5.6 In view of the above, the board judges that the entity of claim 1 was not obvious to a person skilled in the art having regard to the state of the art on file. Consequently the entity of claim 1 shall be considered as involving an inventive step (Article 56 EPC 1973).
5.7 The subject-matter of claims 2 to 5 involves an inventive step because these claims comprise all the features of claim 1.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to grant a patent in the following version:
   Description:
   pages 1, 2, 2a, 3 to 15 submitted in the oral proceedings
   Claims:
   No. 1 to 5 submitted in the oral proceedings
   Drawings:
   sheets 1/9 to 9/9 as originally filed.

The Registrar: The Chairman:

L. Fernández Gómez F. Edlinger