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Datasheet for the decision of 10 March 2023

Case Number: T 1682/20 - 3.5.06

Application Number: 16178506.8

Publication Number: 3139304

IPC: G06K9/00, G06F17/30

Language of the proceedings: EN

Title of invention:
MOBILE TERMINAL AND METHOD FOR OPERATING THE SAME

Applicant:
LG ELECTRONICS INC.

Headword:
Image reminder system/LG

Relevant legal provisions:
EPC Art. 56
RPBA 2020 Art. 12(4)

Keyword:
Inventive step - mixture of technical and non-technical features - main request and auxiliary requests 1 to 3 (no)
Amendment to case - auxiliary request 4 - unsearched - admitted (no)

Decisions cited:
T 0641/00

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

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Case Number: T 1682/20 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 10 March 2023

Appellant: (Applicant)	LG ELECTRONICS INC. 128, Yeoui-daero Yeongdeungpo-gu Seoul 07336 (KR)
Representative:	Plasseraud IP 66, rue de la Chaussée d'Antin 75440 Paris Cedex 09 (FR)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 16 March 2020 refusing European patent application No. 16178506.8 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	M. Müller
Members:	T. Alecu
	A. Jimenez

Summary of Facts and Submissions

I. The appeal is against the decision of the Examining Division, which refused all requests underlying the decision for a lack of inventive step (Article 56 EPC). The decision made reference to the prior art document

D1: US 2013/0265450 A1.

II. The appellant requested that the decision of the Examining Division be set aside and that a patent be granted on the basis of the main request or of one of four auxiliary requests, all filed with the statement of grounds of appeal. The main request and the first three auxiliary requests correspond to the requests refused by the Examining Division.

III. The decision was announced in oral proceedings on 10 March 2023.

IV. Claim 1 of the main request defines:

A mobile terminal (100) comprising:
a storage unit (170);
an input unit (120);
a display unit (151); and
a control unit (180) is configured to:
receive a voice input to input event information relating to an image through the input unit (120), while the image is displayed;
store, in the storage unit (170), the event information relating to the image;
detect an event;
determine that the detected event corresponds to the event information;

display, on the display (151), the image related to the event information, if the detected event corresponds to the event information,
wherein the control unit (180) is configured to:
receive the voice input to input event information relating to the image, wherein the event information relating to the image includes information on a time point at which the image is to be displayed again,
obtain information on the time point using the voice input and information pre-stored in the mobile terminal (100) and
store the obtained information on a time point;
wherein the control unit (180) is configured to display the image if an event arriving at the stored time point is detected.

V. Claim 1 of auxiliary request 1 differs from claim 1 of the main request by replacing the "wherein" clauses with the following text, which in particular defines the control unit as follows (emphasis by the Board):

wherein the control unit (180) is configured to:
receive the voice input to input event information relating to the image, wherein the event information relating to the image includes information on a time point at which the image is to be displayed again,
wherein the voice input includes a phrase indicating the image and the control unit (180) is configured to match the image to the event information;
wherein the control unit (180) is configured to display the image if an event arriving at the stored time point is detected.

VI. Claim 1 of auxiliary request 2 differs from claim 1 of the main request by replacing the "wherein"-clauses

with the following text, which defines the control unit as follows:

wherein the control unit (180) is configured to:
receive the voice input to input event information relating to the image, wherein the event information relating to the image includes information on a specific application to be displayed together with the image,
wherein the control unit (180) is configured to display the image if an event according to the received event information is detected.

VII. Claim 1 of auxiliary request 3 differs from claim 1 of the main request in that the following text has been added at the end:

wherein the control unit (180) is further configured to automatically delete the image after a specific time point after acquisition of the image.

VIII. Claim 1 of auxiliary request 4 differs from claim 1 of the main request by replacing the "wherein"-clauses by the following text:

wherein the control unit (180) is configured to:
receive the voice input to input event information relating to the image, wherein the event information relating to the image includes information on a place at which the image is to be displayed again,
match information on the place using the voice input and wireless signal information commonly transmitted from a plurality of places corresponding to each other as location information; and
store the matched location information;

wherein the control unit (180) is configured to display the image if an event is detected such that the terminal is at one of the plurality of places matched as location information.

Reasons for the Decision

The application

1. The application relates to a mobile terminal configured to classify, manage, and display images. In particular, the mobile is configured to associate images to events, and to display the images upon detection of the associated event (paragraph 3). The event may be location, time, or application related (paragraph 5). The user can configure the event by voice input (paragraphs 61, 164, 189). For instance, the user can take an image of a specific parking spot, and this image can be displayed upon the user returning to the parking area (paragraph 49); or the user may desire that an image is displayed on a certain date (e.g. a birthday; see paragraphs 49, 167); or when an application is opened (e.g. a banking app; see paragraphs 190 - 191). The annotated images may be automatically deleted after a certain amount of time (paragraph 146).

The prior art

2. D1 describes inter alia a method for supplying voice annotations for captured images (paragraph 32). The system extracts from spoken input (phrase or sentence) information relating to location (e.g. home) or time (e.g. a specific date or an "alias" for the date such as birthday) of the image capture and stores it as

metadata with the image. The user may then search the images using the metadata.

Main request

3. The Examining Division started its analysis from D1 and acknowledged a set of differences (see the decision, point 13.4) related to the event configuration and processing, essentially about the user specifying that an image is to be displayed at a certain time and the system monitoring the time and displaying the image at the specified time.

3.1 It argued in essence (decision 13.5 to 13.11), with reference to the description at paragraphs 49-52, 199 and 275, that the effect of these differences over D1, namely the users' "satisfaction" or their "being reminded of past events" occurred only in the head of the user and hence was not a technical effect. Moreover, scheduling as such was an administrative consideration. The relevant steps could thus be used as a constraint in the formulation of the objective technical problem according to the problem-solution approach.

3.2 The objective technical problem given to the skilled person was therefore how to implement, on the mobile terminal of D1, the requirements specification that encompasses the distinguishing procedural steps. The technical implementation of these steps was a matter of routine computer programming and did not involve an inventive step.

4. In its grounds of appeal (pages 2-4), the Appellant did not contest the identification of the differences but disagreed with the problem formulation.

4.1 The cited passages in the description did not mention "satisfaction", nor did they use words to that effect (grounds of appeal, page 3, middle paragraph). The Examining Division had arbitrarily selected an effect which it considered to be non-technical. Technical effects were present because the invention provided efficient means for configuring inputs to a form of reminder system on a mobile terminal. The objective technical problem, based on the differences identified, should therefore be formulated as follows: "how to provide an efficient means for configuring inputs to a form of reminder system on a mobile terminal".

4.2 The prior art at hand did not render the claimed features obvious as a solution to this problem (grounds of appeal, page 5). In particular: "*whilst D1 teaches receipt of voice information related to an image in paragraph [0032], this information is not linked to a time for future display of the image, and so this teaching is, in itself, not relevant to the technical problem*".

5. The Appellant is right to point out that D1 does not teach a reminder system. For that reason, the Board does not find D1 to be a particularly suitable starting point, or at least not more suitable than a standard mobile device with photo capabilities and voice input.

6. The claimed subject matter can be summarized, as also stated by the Appellant, as providing a form of reminder system on a mobile device. This system displays images upon activation of the reminder; the user configures the reminder by using voice input.

6.1 The paragraphs of the description referred to by the Examining Division in its assessment of the technical

contribution indeed do not speak of user "satisfaction", but they do address what the user "desires" or "wants", i.e. which image the user wants to be displayed and when.

6.2 Reminders, in general, are meant to bring a piece of information to the users' attention when they want it. The type of information that users want to be reminded of and the (type of) conditions triggering the reminder are therefore user requirements. In the case to hand, the Board considers it to be part of the problem rather than the solution that the user wants reminders on a particular, here mobile, device.

6.3 Accordingly, the skilled person may be considered to be tasked with the technical problem of enabling the creation, configuration, and triggering of reminders according to these user requirements (see T 641/00, point 7 of the reasons and headnote II) on a mobile device. The Board notes that the problem formulated by the Appellant (see point 4.1 above) is a sub-problem of this.

6.4 Any solution to this problem requires at least a step of acquiring user input to configure the reminder, a step of storing the configured reminder, a step of detecting a triggering event, and a step of displaying the reminder information.

6.5 The user requirements determine a system that displays images selected by the user at a certain time. So in the configuration step, the user needs to select an image and indicate the time of display, and both must be associated with each other.

6.6 The only difference features that do not follow immediately from the user requirements are those related to the (sub-)problem identified by the appellant, i.e. how to enable user input for configuring the reminder.

6.7 In the Board's view, the skilled person would consider user input in any conventional modality available on a mobile device. This includes voice, as exemplified by D1 in paragraph 32.

6.8 Thus the Board finds the technical contribution to be obvious in the light of common general knowledge, given the user requirements for the reminder system.

7. The Board notes that the same result would be arrived at if the standard mobile device with photo capabilities and voice input mentioned above was taken to be the starting point for the analysis of inventive step ("closest prior art") and the technical problem to be solved was limited to the non-technical user requirements.

8. During the oral proceedings the Appellant challenged the Board's analysis because it assumed too detailed user requirements.

8.1 Claim 1 of the main request defined technical features which could not be considered as part of the user requirements and did not constitute an obvious implementation of the user requirements. These features provided an easy way of configuring a reminder.

8.2 The Appellant quoted in particular the features

(a) *"receive a voice input to input event information relating to an image through the input unit (120), while the image is displayed", and*
(b) *"obtain information on the time point using the voice input and information pre-stored in the mobile terminal".*

8.3 As regards feature (a), it argued that even if voice input was an obvious option for configuring a reminder, there was no reason to provide for voice input while displaying the image.

8.4 As regards feature (b), it argued that the usage of pre-stored information was not obvious. In a normal reminder system, the user would provide an exact time. The claimed feature simplified the configuration by associating the user input (e.g. show this picture on someone's birthday) with knowledge stored on the terminal (e.g. the date of that birthday). There was no prior art on file showing devices with this feature.

9. The Board is not convinced by these arguments.

9.1 Regarding feature (a), it is quite cumbersome for a user to select an image for the reminder if it is not displayed. Moreover, it is customary to display the images while a user wishes to select one for any purpose. This observation does not depend on the input modality used for the selection. So this feature is an obviously convenient (but also commonly known) solution for the problem of selecting an image for the reminder.

9.2 Regarding feature (b), the Board considers it to be an obvious desirable characteristic, and as such a user requirement, that the device accept free speech voice input. Any solution to this problem requires the device

to translate the voice input into machine-usable information which cannot be done without using some sort of information stored on the device. The Board also remarks that claim 1 is not limited to the "birthday" example. However, the Board also considers that the idea of allowing indirect references such as "show me this on my birthday again" would be a user requirement, and its implementation would obviously require an automated mapping from "my birthday" to the speaking user's birthday. Using "pre-stored information" to this effect, e.g. from the user's profile, would be obvious.

10. The subject matter of claim 1 lacks therefore an inventive step in the sense of Article 56 EPC.

First, second and third auxiliary requests

11. The argumentation above applies also to claim 1 of the first auxiliary request: as noted, the user needs to specify the image to be displayed and it is obvious to use voice input for that purpose.

12. Claim 1 of the second auxiliary requests specifies a different event definition, namely to display an image upon opening a specific application rather than at a specific time point.

12.1 The Appellant argued that this facilitated the use of applications and reduced the interaction time. For instance the image might contain information related to a banking application and enabled faster use (see paragraph 191).

12.2 The Board does not accept this argument in general: whether a technical effect exists in the mentioned scenario will depend on the application and the infor-

mation contained in the picture, neither of which are defined by the claim. As claimed, the feature can only be understood broadly as implementing a given user requirement and thus cannot establish an inventive step.

13. Claim 1 of the third auxiliary request differs from that of the main request in specifying that the control unit is further configured to automatically delete the image after a specific time point after acquisition of the image.

13.1 The Appellant argued that this saved storage by deleting images which users took merely for use in a reminder (say, an image of the parking spot) and did not mean to keep beyond that.

13.2 The Board remarks that whether an image is, in principle, only to be used as a reminder, or kept indefinitely, depends on the circumstances of capture and desired use. The claim does not specify the capture conditions, and does not link the time of deletion with the time set for the reminder. It therefore specifies an arbitrary deletion of pictures, which, per se, is an obvious solution if storage space is a problem.

14. The Board concludes that these requests lack inventive step as well.

Fourth auxiliary request

15. This request was filed with the statement of grounds of appeal.

15.1 The amendments carried out in this request relate to the use of a "*wireless signal information commonly*

transmitted from a plurality of places corresponding to each other as location information".

15.2 In its provisional opinion the Board indicated that this may be identified as a technical contribution; however, it was the first time that the Appellant based a request on such subject matter. In particular, it was not part of the original set of claims searched by the Search Division, and the Board could not safely assume that the search had covered it.

15.3 During the oral proceedings, the Appellant explained that original claim 6 already covered such subject matter, by defining the use of "*location information indicating a location where the image was captured*". The Appellant referred to a scenario described in paragraphs 175 to 177 of the description, according to which location information was to be read as a plurality of corresponding places, e.g. convenience stores belonging to the same chain. The wireless network ID served to identify the chain and thus the location. The new request thus was only a further definition of matter which was already present in the claims so that the search must be assumed to have covered it.

15.4 The Board disagrees. Location information in the normal meaning of the word is understood to define one place, not a plurality of places. There was no mention of wireless information in the claims and no hint that claim 6 used "*location information*" with this special meaning. Moreover, large parts of the description use "*location*" with its normal meaning (see paragraphs 165 to 170).

15.5 Admittance of this request would therefore have required remittal to the Examining Division for an

additional search to be carried out, and for further prosecution of entirely new matter, both of which is obviously detrimental to procedural economy. Accordingly, the Board uses its discretion under Article 12(4) RPBA 2020 to not admit this request.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

L. Stridde M. Müller

Decision electronically authenticated