**Internal distribution code:**

(A) [ - ] Publication in OJ
(B) [ - ] To Chairmen and Members
(C) [ - ] To Chairmen
(D) [ X ] No distribution

# Datasheet for the decision of 18 November 2019

**Case Number:** T 2185/16 - 3.5.07

**Application Number:** 07100788.4

**Publication Number:** 1811408

**IPC:** G06F17/30

**Language of the proceedings:** EN

**Title of invention:**
Apparatus and method for displaying multimedia contents

**Applicant:**
Samsung Electronics Co., Ltd.

**Headword:**
Displaying multimedia contents/SAMSUNG ELECTRONICS

**Relevant legal provisions:**
EPC Art. 56

**Keyword:**
Inventive step - all requests (no)

Europäisches Patentamt
European Patent Office
Office européen des brevets

**Beschwerdekammern**

**Boards of Appeal**

**Chambres de recours**

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

**Case Number: T 2185/16 - 3.5.07**

# D E C I S I O N
# of Technical Board of Appeal 3.5.07
# of 18 November 2019

| | |
|---|---|
| **Appellant:** (Applicant) | Samsung Electronics Co., Ltd.<br>129, Samsung-ro<br>Yeongtong-gu<br>Suwon-si, Gyeonggi-do, 443-742 (KR) |
| **Representative:** | Grootscholten, Johannes A.M.<br>Arnold & Siedsma<br>Bezuidenhoutseweg 57<br>2594 AC The Hague (NL) |
| **Decision under appeal:** | **Decision of the Examining Division of the European Patent Office posted on 9 May 2016 refusing European patent application No. 07100788.4 pursuant to Article 97(2) EPC** |

**Composition of the Board:**

| | |
|---|---|
| **Chairman** | R. Moufang |
| **Members:** | M. Jaedicke |
| | C. Barel-Faucheux |

## Summary of Facts and Submissions

I. The applicant (appellant) appealed against the decision of the Examining Division refusing European patent application No. 07100788.4. The application claims a priority date of 20 January 2006.

II. The documents cited in the contested decision were the following:
D1: US 2003/033296 A1, published on 13 February 2003
D2: US 2005/166149 A1, published on 28 July 2005
D3: US 2002/167538 A1, published on 14 November 2002

III. The Examining Division decided that the subject-matter of the independent claims of the main request lacked inventive step in view of "the absence of a 'further technical effect' providing the solution to a technical problem" and "the disclosure of any of D1 to D3 and the general knowledge of any programmer working in the field of data retrieval" (see point 1.7 of the contested decision). It also objected to the clarity of independent claim 13. Moreover, it decided that the subject-matter of the independent claims of the first to fourth and sixth auxiliary requests then on file lacked inventive step and that claims 1 and 15 of the then fifth auxiliary request comprised added subject-matter. Finally, the contested decision contained objections under Article 84 EPC to various requests.

IV. In its statement of grounds of appeal, the appellant requested that the decision be set aside and that a patent be granted on the basis of a main request or one of the first to fifth auxiliary requests, all requests submitted with the grounds of appeal.

V. In a communication under Article 15(1) RPBA accompanying the summons to oral proceedings, the Board requested that the appellant indicate which version of the first auxiliary request, the clean or the annotated version, was to be considered by the Board, as these versions differed. In its communication, the Board assumed that the annotated version, which has a more limited scope, constituted the appellant's first auxiliary request. Moreover, if the appellant did not clarify the situation, the Board would continue the appeal proceedings on the basis of the annotated version of the first auxiliary request.

Furthermore, the Board expressed its provisional opinion that the subject-matter of claim 1 of the main request and the first auxiliary request lacked inventive step when starting from document D1 and common general knowledge. Moreover, the subject-matter of claim 1 of the second to fifth auxiliary requests lacked inventive step also in consideration of the following documents D4 to D6.

D4: US 2004/0054757 A1, published on 18 March 2004

D5: PC Remote Control, IP.COM Journal, IP.com Inc., West Henrietta, NY, US, published on 5 February 2003

D6: Myers, Brad, Using Handhelds and PCs Together, Communications of the ACM, vol. 44, no. 11, pp. 34-41, November 2001

VI. In its reply to the Board's summons, the appellant informed the Board that it would not be represented at the oral proceedings. Moreover, it requested that a decision be taken on the file as it stands.

VII. Oral proceedings were held as scheduled in the absence of the appellant. At the end of the oral proceedings, the chairman pronounced the Board's decision.

VIII. Independent claim 13 of the main request reads as follows:

"A method of displaying multimedia contents, the method comprising:

determining an alignment condition corresponding to a received first user command signal among a plurality of alignment conditions;

displaying the determined alignment condition in a first region of a screen;

characterized by

determining a detailed condition, among a plurality of detailed conditions, of the determined alignment condition, wherein the detailed condition is determined corresponding to a received second user command signal;

extracting first multimedia contents according to the determined detailed condition; and

displaying the determined detailed condition in a second region, and displaying a second multimedia contents among the extracted first multimedia contents in a third region of the screen;

wherein the first user command signal and the second user command signal are direction and/or numeral button signals from numeral and/or directional buttons of an input unit (410) and wherein the buttons which cause the first user command signal are different from buttons which cause the second user command signal."

IX. Claim 11 of the first auxiliary request (for the first auxiliary request the Board using the marked-up version - see point V. above) differs from claim 13 of the main request in that the text "and wherein the buttons which cause the first user command signal are different from

buttons which cause the second user command signal" at the end of the claim was replaced as follows:
", wherein the first user command [*sic*]
wherein the determining of the alignment condition comprises determining the alignment condition according to an up/down button signal among the direction button signals
wherein the determining of the detailed condition comprises determining the detailed condition according to a left/right button signal among the direction button signals or one of the numeral button signals".

X. Claim 13 of the second auxiliary request differs from claim 13 of the main request in that the text "and wherein the buttons which cause the first user command signal are different from buttons which cause the second user command signal" at the end of the claim was replaced as follows:
", wherein the first and second user command signals are generated by selecting by a user of direction and/or numeral buttons of a remote control device or portable terminal".

XI. Claim 13 according to the third auxiliary request is derived from claim 13 of the main request by adding the following text after "characterized by":
" generating by a remote control device or portable terminal of first and second user command signals by selecting by a user of respectively a first set of direction and/or numeral buttons of the remote control device or portable terminal and a second set of direction and/or numeral buttons of the remote control device or portable terminal, the remote control device or portable device only having direction and/or numeral buttons;"
Moreover, the following text at the end of the claim

was deleted: "and wherein the buttons which cause the first user command signal are different from buttons which cause the second user command signal".

XII. Claim 13 of the fourth auxiliary request is derived from claim 13 of the second auxiliary request by adding the following text at the end of the claim:
", displaying in the vicinity of the second multimedia contents (331) portions (332a, 332b) of contents included in multimedia contents (331) adjacent to the second multimedia contents (331) in sequence according to the alignment condition."

XIII. Claim 13 of the fifth auxiliary request differs from claim 13 of the main request in that the characterising part reads as follows:

**"characterized by**

determining a detailed condition, among a plurality of detailed conditions, of the determined alignment condition, wherein the detailed condition is determined corresponding to a received second user command signal;

extracting first multimedia contents according to the determined detailed condition; and

generating thumbnails for a part or all of the extracted first multimedia contents in a thumbnail region (320) of the screen;

displaying the determined detailed condition in a second region, and displaying a second multimedia contents among the extracted first multimedia contents in a third region of the screen;

displaying the thumbnails in a sequence according to the alignment condition (311) and a detailed condition (341);

wherein the first user command signal and the second user command signal are direction and/or numeral button signals from numeral and/or directional buttons of an

input unit (410), wherein the first and second user command signals are generated by selecting by a user of direction and/or numeral buttons of a remote control device or portable terminal,

further comprising changing the thumbnails (321) that are displayed in the thumbnail region (320) as the detailed condition (341) changes, wherein the thumbnails are changed corresponding to the detailed condition (341), and then changing the multimedia contents (331) to be displayed in the third region (330) corresponding to a newly selected thumbnail in the thumbnail region (320)."

XIV. The appellant's arguments where relevant to the decision are discussed in detail below.

## Reasons for the Decision

1. *Admissibility of appeal*

The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.

2. The duly summoned appellant having been absent from the oral proceedings is treated - in accordance with its request for a decision on the state of the file - as relying only on its written case (Article 15(3) RPBA).

**The invention**

3. The application relates to displaying multimedia contents, and in particular, to an apparatus and method for displaying stored multimedia contents to accommodate a user's preference using limited buttons of a remote control device or a cellular phone

(description as filed, page 1, lines 4 to 9).

3.1 According to the background art described in the application, multimedia information to be searched was stored in a one-dimensional structure (a sequence) according to predetermined conditions, such as file names, file sizes, file types, the generation date, or the correction date. Users could search information immediately before or after currently searched information with one click on an arrow button. In order to search information distant from the currently searched information using such a successive search method, a large number of clicks of the arrow button was required (description, page 3, lines 11 to 29). It was also known to display multimedia information to be searched as thumbnails (description, page 3, line 31, to page 4, line 5).

Therefore, a method was needed for displaying multimedia contents according to an "alignment condition" corresponding to a user's preference and for searching stored multimedia contents using a "limited" input unit (description, page 4, lines 7 to 14). In a graphical user interface for searching, the multimedia contents can be displayed in sequence according to the alignment condition, i.e. the alignment condition serves to identify the attribute of the multimedia contents to be used as sort criterion for the sequence of contents to be displayed (see also Figures 6 to 12 of the application). Alignment conditions include at least one of a sequence of generation time of the multimedia contents, a sequence of main colours included in the multimedia contents, a sequence of contents included in the multimedia contents, a sequence of user's preferences for multimedia contents, and a sequence of generation periods, in which the

multimedia contents are generated (description, page 16, lines 4 to 10). Apart from the "alignment condition", users can also select a "detailed condition", which determines a particular value of the attribute designated by the "alignment condition". For example, when the alignment condition is a colour, a detailed condition can include predetermined colours (description, page 11, lines 24 to 33).

3.2 An apparatus according to the invention is illustrated in Figure 4, a corresponding method is illustrated in Figure 13 and disclosed in the description, page 31, line 4, to page 34, line 15. According to the method, a first user signal is input to determine an "alignment condition" (see e.g. Figure 6: 610), then a second user input signal is input to determine a "detailed condition" (see e.g. Figure 6: detailed condition region 630 and pointer 650). The content extraction unit extracts the multimedia contents stored in a storage unit according to the determined detailed condition. The extracted multimedia contents are transmitted to a thumbnail generation unit, which generates thumbnails for the extracted multimedia contents. The generated thumbnails, multimedia contents, the "alignment condition" and the "detailed condition" are displayed in different regions of the display.

**Main request**

4. *The appellant's request*

Claim 13 of the main request relates to "a method of displaying multimedia contents" which comprises the following features, as itemised by the Board.

A determining an alignment condition corresponding to a received first user command signal among a plurality of alignment conditions

B displaying the determined alignment condition in a first region of a screen

C determining a detailed condition, among a plurality of detailed conditions, of the determined alignment condition, wherein the detailed condition is determined corresponding to a received second user command signal

D extracting first multimedia contents according to the determined detailed condition

E displaying the determined detailed condition in a second region, and displaying a second multimedia contents [*sic*] among the extracted first multimedia contents in a third region of the screen

F wherein the first user command signal and the second user command signal are direction and/or numeral button signals from numeral and/or directional buttons of an input unit

F1 wherein the buttons which cause the first user command signal are different from buttons which cause the second user command signal

*5. Inventive step*

5.1 In its statement of grounds of appeal, the appellant agreed with the Examining Division that document D1 was a suitable starting point for assessing inventive step.

5.2 D1 discloses methods for associating ("tagging") fields of text and numeric data ("metadata") with individual objects such as images or photos, storing the objects and associated metadata as records in a relational database, and selecting, sorting, organising and

finding the objects based on their tagged metadata content (paragraph [0004]). A tag is a form of metadata that can be associated with the photo (paragraph [0019]). This metadata can include when the photo was taken, where it was taken, the nature of the event at which it was taken and the subject of the photo. Once tagged, photos with specific tags or combinations of tags can be readily found in the database by searching the database for all records that contain the same metadata as the metadata associated with the one or more search tags (paragraph [0018]).

When search criteria are applied to the photos in the database, the order in which the photos are displayed in the graphical user interface of D1 is updated so that "best match" photos or photos that match all of the search criteria are displayed at the top of an image area, while "close match" photos that match one or more but not all of the search criteria are displayed after the "best match" photos (paragraph [0026]).

D1 also discloses that "the easiest search to conduct on tagged photos is a search for photos taken on a certain date, or within a certain period of time" (paragraph [0027]). Metadata that can be stored with a photo includes information indicating the date and time a photo was taken. If the photo is created on a digital camera, the camera will generally tag the photo with the date and time the photo was taken (paragraph [0027]).

As shown in Figures 1 and 3 of D1, the temporal metadata associated with the photos can be used to present a histogram of photos in the form of a timeline. The timeline includes adjustable time bands

(Figure 3: reference sign 251) that can be moved to specify the time period that is used to find matching photos (paragraph [0028]). Photos falling within this range are designated "best match" photos, and can be viewed as such in an image area in the graphical user interface (Figure 1: 100). For example, the timeline can be used to find all photos taken between 1 January 2000 and 28 February 2000 by moving the adjustable time bands to these dates (paragraph [0029], claims 1, 10, 11).

5.3 As D1 displays in Figure 1 a timeline in a first region of a screen, it discloses in essence feature B of claim 13, the "alignment condition" being the time. It also discloses feature C of claim 13, as it allows determining a detailed condition, by allowing the user to select by means of the graphical user interface a certain date or a certain period of time on the timeline. As D1 extracts the photos falling within the selected time period as best matches from the database and displays them in an image region and as it also displays the detailed condition, i.e. the selected time period, it discloses features D and E of claim 13. D1 mentions an input device in paragraph [0041] and Figure 1 discloses one example of a graphical user interface with directional buttons at the ends of the scroll bars for various regions, including the timeline region. It was notoriously known to operate such a graphical user interface with a keyboard having buttons or with a mouse or similar pointing device also comprising various buttons. Hence, D1 discloses "directional buttons" of an input unit for providing the second user command signal and thus also a part of feature F.

5.4 In view of the above, the difference between the claimed method and D1 consists of features A, F1, and the part of feature F which relates to the first user command signal.

These distinguishing features allow a user to select the alignment condition (the timeline) using different buttons than those used for selecting the detailed condition (the desired period of time).

However, as Figure 1 of D1 (see reference sign 210 "Search Criteria") already discloses a graphical user interface element (which is a "directional button") to select a search criterion, the skilled person would consider, without exercising inventive skill, providing the user with a directional or numeral button to choose between the different search possibilities offered by D1, such as a timeline, calendar and map (Figures 3, 4 and 5; paragraphs [0028], [0032] and [0035]). Selecting the search possibility then also determines a corresponding alignment condition (time, geographic position). Thus the Board considers the claimed method to be an obvious extension of the method disclosed in document D1.

The Board notes that even if the use of "different" buttons was interpreted as relating to different keys of a keyboard, such a use of different ("numeral" or "directional") buttons to operate different graphical user interface elements was well-known at the priority date and thus a matter of routine design (for example shortcut keys for operating a graphical user interface with less mouse interaction).

5.5 In its statement of grounds of appeal, page 3, the appellant argued that the technical effect of the

invention was to enable users to efficiently browse through a collection of multimedia contents despite being able to use only input from the numeral and/or directional buttons of an input unit.

However, the Board is not convinced that the invention achieves an advantage over D1 with respect to efficient browsing. As discussed in detail above, D1 already enables the efficient browsing of photos using directional input with respect to the timeline. Thus the Board does not share the appellant's view that it was not easy to browse through the photos in the method of D1 using directional input for the timeline.

5.6 The Board agrees with the appellant that D1 discloses neither the use of specific buttons as input devices from which directional input is received nor the use of different buttons for operating different elements of the graphical user interface. However, the Board considers these details to be conventional and obvious.

5.7 The appellant also argued that a skilled person attempting to replace a keyboard and mouse as the input device with a remote control would have solved the problem by simulating a keyboard and mouse with the remote control, i.e. using the directional buttons of the remote control to move a pointer on the screen.

However, claim 13 does not rule out that such a simulation is used for operating some graphical user interface elements. Moreover, by the priority date, it was notoriously known to associate the operation of graphical user interface elements with keys. Hence, the skilled person would have considered using different keys for operating graphical user interface elements as one obvious possibility. The user interface design

would also take into account the subjective, non-technical preferences of the users.

5.8 In summary, the method of claim 1 lacks inventive step in view of document D1 and common general knowledge (Article 56 EPC).

**First auxiliary request**

6. Independent method claim 11 of the first auxiliary request additionally cites the following features when it is compared with independent method claim 13 of the main request (the Board uses the marked-up version of the claims for the first auxiliary request - see point V. above):

G1 wherein the determining of the alignment condition comprises determining the alignment condition according to an up/down button signal among the direction button signals

G2 wherein the determining of the detailed condition comprises determining the detailed condition according to a left/right button signal among the direction button signals or one of the numeral button signals

The Board considers that the phrase ", wherein the first user command" in claim 1 of the first auxiliary request (see point IX. above) is an obvious error (that was apparently introduced by erroneous editing). Hence, the Board has ignored this phrase in the following assessment of inventive step.

7. *Inventive step*

The Board considers that features G1 and G2 of the independent method claim are straightforward choices for implementation. Feature G2 is directly suggested by D1, where the determination of the period of time is apparently achieved by left/right movements of adjustable time bands along the timeline. Feature G1 would also be an obvious choice for the skilled person as the graphical user interface element for selecting search criteria in Figure 1 of D1 (see reference sign 210) is a drop-down list which is operated by an up/down movement and a selection.

Hence, the Board considers that features G1 and G2 are obvious details which cannot be the basis for acknowledging an inventive step. When considering this finding in combination with the Board's assessment of the main request, independent method claim 11 of the first auxiliary request lacks inventive step (Article 56 EPC).

It is not necessary to decide on the clean version of the claims of the first auxiliary request (see point V. above). However, the Board remarks that the scope of claim 1 of the clean version is broader than the scope of claim 1 of the marked-up version. Thus, the above objection to inventive step would also apply to the subject-matter of claim 1 of the clean version.

**Second auxiliary request**

8. Independent method claim 13 of the second auxiliary request additionally cites the following feature when compared to claim 13 of the main request:

H wherein the first and second user command signals are generated by selecting by a user of direction and/or numeral buttons of a remote control device or portable terminal

9. *Inventive step*

Feature H specifies that users select direction and/or numeral buttons of a remote control device or portable terminal to provide input.

The Board considers that the use of directional and/or numeral buttons of a remote control device or portable terminal to provide input for a (stationary) device such as a PC was well-known. For the sake of completeness, the Board refers in this respect to documents D4 to D6 (see D4: abstract, paragraphs [0006], [0007], [0031] and [0032], Figures 1 to 3; D5: Figure 1; page 1: section "Short Summary and Purpose"; page 3, section "PC Remote Control"; D6: page 36, right-hand column, third paragraph; page 38, right-hand column, penultimate paragraph, to page 40, left-hand column, third paragraph; Figures 1, 2, 4 and 5; note in particular document D6, Figure 4, describing numeral and directional keys on a portable device used as remote control for a PC).

As the prior art documents D4 to D6 disclose the use of portable devices with application-specific interfaces for the remote control of a PC application, the Board is not convinced by the appellant's argument that the input units of a remote control or portable terminal were too limited to be able to perform the method of claim D1.

In view of the above, the Board regards feature H as

conventional. In consideration of this finding together with the Board's assessment of the main request, independent method claim 13 of the second auxiliary request lacks inventive step (Article 56 EPC).

**Third to fifth auxiliary request**

10. Independent method claim 13 of the third to fifth auxiliary request respectively additionally cites the following feature(s) when compared to claim 13 of the second auxiliary request:

I generating by a remote control device or portable terminal of first and second user command signals by selecting by a user of respectively a first set of direction and/or numeral buttons of the remote control device or portable terminal and a second set of direction and/or numeral buttons of the remote control device or portable terminal, the remote control device or portable device only having direction and/or numeral buttons (third auxiliary request)

K displaying in the vicinity of the second multimedia contents portions of contents included in multimedia contents adjacent to the second multimedia contents in sequence according to the alignment condition (fourth auxiliary request)

L1 generating thumbnails for a part or all of the extracted first multimedia contents in a thumbnail region of the screen (fifth auxiliary request)

L2 displaying the thumbnails in a sequence according to the alignment condition and a detailed condition (fifth auxiliary request)

L3 further comprising changing the thumbnails that are displayed in the thumbnail region as the

detailed condition changes, wherein the thumbnails are changed corresponding to the detailed condition, and then changing the multimedia contents to be displayed in the third region corresponding to a newly selected thumbnail in the thumbnail region (fifth auxiliary request)

11. *Inventive step*

11.1 *Third auxiliary request*

As to the third auxiliary request (feature I), the Board considers that the issue of using several sets of directional or numeral buttons of the remote control device or portable terminal is an obvious design of a user interface. As already stated above, it was well known to associate shortcut keys with graphical user interface elements to allow their operation with less navigation by pointing devices such as a mouse. Moreover, document D6 discloses such sophisticated interfaces in Figure 4 (see e.g. Figure 4b disclosing different buttons for scrolling up/down and left/right; Figure 4e which discloses different buttons for louder/ softer and next/previous track; Figure 4f, which discloses scrolling up/down within a page in the Internet Explorer and back/forward to navigate in the browsing history).

As it was known from the prior art to flexibly customise the input buttons of a remote control device, the Board is not convinced by the appellant's argument that a skilled person would have been biased against using an input unit with only directional and/or numeral buttons. Hence, the skilled person would have

arrived at feature I in an obvious manner.

11.2 *Fourth auxiliary request*

Feature K of the fourth auxiliary request relates to the presentation of partial multimedia items on the display, the partial items being positioned in the overall sequence of items corresponding to the alignment condition before and after a fully displayed item as in Figure 3 of the application (see pictures 331, 332a and 332b in region 330). In contrast, the method of D1 displays in full all images visible in the image area (see Figure 1, reference sign 100).

However, as the image area of D1 can be scrolled up/down using a scroll bar (see right-hand side of Figure 1), the skilled person would understand that when the user scrolls the image area, images at the upper/lower boundary of the image area may be displayed only partially. When the images in the image area of D1 are displayed according to the timeline, they are also displayed in sequence according to the alignment condition.

Hence, the Board considers that feature K is implicitly disclosed in document D1 or at least directly suggested by it. Thus the Board is not persuaded by the appellant's argument that this feature allowed for a relatively efficient selection of a particular multimedia content despite using an input unit with limited input possibilities. Rather, the Board is not convinced that feature K contributes to any effect of the claimed method over the method of document D1. Consequently, feature K provides no basis for acknowledging an inventive step.

11.3 *Fifth auxiliary request*

As to the fifth auxiliary request, the appellant acknowledged in its statement of grounds of appeal that the generation of thumbnails was known. However, the particular manner of displaying and changing the thumbnails was a feature which allowed for the relatively efficient selection of a particular multimedia content despite using an input unit with limited input possibilities.

The Board considers that features L1 to L3 enable the user to search for multimedia contents by using the thumbnails as a preview (which uses less screen space per multimedia item than the normal view). However, using thumbnails as a preview for more efficient navigation was already well-known, at the priority date (see e.g. D2, paragraphs [0007], [0064] and [0065] and Figures 2A to 2F). The fact that displayed contents are changed in reaction to changes in the detailed condition and the selected thumbnail, respectively, was a conventional and known possibility for supporting the non-technical requirements to be able to modify searches and navigate in the data (see e.g. D2, paragraphs [0037] and [0038]; D1, paragraph [0030], discloses that the timeline visualises the total number of "best" or "close" matches - consequently the display changes when users change the detailed condition).

Hence, the Board considers that features L1 to L3 cannot overcome a lack of inventive step.

11.4 In view of the above and considering the Board's assessment of the main request and the second auxiliary request, independent method claim 13 of the third to

fifth auxiliary request lacks inventive step (Article 56 EPC).

**Conclusion**

12. As none of the appellant's requests can form the basis for the grant of a patent, the appeal is to be dismissed.

## Order

## For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

I. Aperribay R. Moufang

Decision electronically authenticated