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Datasheet for the decision of 16 December 2014

Case Number: T 1111/11 - 3.5.03

Application Number: 07022221.1

Publication Number: 1895751

IPC: H04M1/725

Language of the proceedings: EN

Title of invention:
DMB terminal for enabling simultaneous DMB viewing and phone call and method therefor

Applicant:
Samsung Electronics Co., Ltd.

Headword:
DMB terminal/SAMSUNG

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step (no) - all requests

Decisions cited:

Catchword:

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Case Number: T 1111/11 - 3.5.03

D E C I S I O N
of Technical Board of Appeal 3.5.03
of 16 December 2014

Appellant: (Applicant)	Samsung Electronics Co., Ltd. 129, Samsung-ro Yeongtong-gu Suwon-si, Gyeonggi-do, 443-742 (KR)
Representative:	Grünecker, Kinkeldey, Stockmair & Schwanhäusser Leopoldstrasse 4 80802 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 22 December 2010 refusing European patent application No. 07022221.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	F. van der Voort
Members:	T. Snell
	M.-B. Tardo-Dino

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 07022221.1 (publication No. EP 1 895 751 A1). The application is a divisional application of European patent application No. 06008800.2.

The refusal was based on the ground of lack of inventive step pursuant to Article 52(1) EPC in combination with Article 56 EPC.

II. The applicant filed a notice of appeal against the above decision. New sets of claims of a main request and an auxiliary request were subsequently filed with the statement of grounds of appeal.

Oral proceedings were conditionally requested.

III. In a communication accompanying a summons to oral proceedings, the board raised matters concerned with Article 76(1) EPC. In addition, the board gave a preliminary opinion that the subject-matter of claim 1 of both requests did not involve an inventive step (Articles 52(1) and 56 EPC), *inter alia* in the light of the disclosure of the document:

D4: US 2005/070327 A1.

D4 had been cited in the European Search Report.

IV. In response to the board's communication, the appellant filed new claims of a main request and of auxiliary requests 1 and 2, apparently aimed at overcoming the objections raised under Article 76(1) EPC. The

appellant did not comment on the issue of inventive step.

V. Oral proceedings took place on 16 December 2014.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request, or on the basis of the claims of either auxiliary request 1 or auxiliary request 2, all requests as filed with the letter dated 14 November 2014.

After due deliberation, the chairman announced the board's decision.

VI. Claim 1 of the **main request** reads as follows:

"A method in a digital-multimedia-broadcasting-capable, wireless communication terminal, said digital-multimedia-broadcasting-capable, wireless communication terminal comprising a controller provided with a digital-multimedia-broadcasting, *[sic]* digital-multimedia-broadcasting module for receiving, processing, and outputting digital-multimedia-broadcasting data and at least one other module for performing an application related to communication service, wherein applications
drive said corresponding modules and each of said applications is assigned a different memory working area so that the applications can run concurrently or so that two or more modules can operate simultaneously, said method comprising:

determining whether an execution of the application related to communication service is selected during

displaying received digital-multimedia-broadcasting data on a screen;

if the execution of the application is selected by a user, switching to a display (206) only associated with the execution of the application from the display of the digital-multimedia-broadcasting data, while continuing to receive the digital-multimedia-broadcasting data; and

if a digital-multimedia-broadcasting reception mode is selected by an user during executing the application, switching from the display only associated with the execution of the application to the display of only the digital-multimedia-broadcasting data received on the screen, while continuing to executing the application."

Claim 1 of **auxiliary request 1** is the same as claim 1 of the main request except that the last two clauses of the claim read as follows (Board's underlining):

"if the execution of the application is selected by a user, switching an entire screen to a display (206) associated with the execution of the application from the display of the digital-multimedia-broadcasting data, while continuing to receive the digital-multimedia-broadcasting data; and

if a digital-multimedia-broadcasting reception mode is selected by an user during executing the application, switching the entire screen from the display associated with the execution of the application to the display of the digital-multimedia-broadcasting data received on the screen, while continuing to executing the application.".

Claim 1 of **auxiliary request 2** reads as follows (Board's underlining):

"A method in a digital-multimedia-broadcasting-capable, wireless communication terminal, said digital-multimedia-broadcasting-capable, wireless communication terminal comprising a controller provided with a digital-multimedia-broadcasting, *[sic]* digital-multimedia-broadcasting module for receiving, processing, and outputting digital-multimedia-broadcasting data and at least one other module for performing an application related to communication service, wherein applications drive said corresponding modules and each of said applications is assigned a different memory working area so that the applications can run concurrently or so that two or more modules can operate simultaneously, the controller comprising a digital-multimedia- broadcasting-modem switch unit (216), said digital-multimedia-broadcasting-modem switch unit comprising an image output switch (318) for switching an image output path for outputting image information to a display (206), said image output path connecting either a digital-multimedia-broadcasting module (220) or a modem module (218) with the display, said digital-multimedia-broadcasting module comprising a digital-multimedia-broadcasting data processor (312) for receiving, decoding and outputting digital-multimedia-broadcasting data to said image output switch, said method comprising:

determining whether an execution of the application related to communication service is selected during displaying received digital-multimedia-broadcasting data on a screen;

if the execution of the application is selected by a user, switching, by said image output switch (318), the image output path from the digital-multimedia-broadcasting module for displaying the digital-multimedia-broadcasting data to the modem module for displaying image information associated with the execution of the application, while continuing to receive and process the digital-multimedia-broadcasting data by said digital-multimedia-broadcasting data processor; and

if a digital-multimedia-broadcasting reception mode is selected during executing the application, switching, by said image output switch (318), the image output path from the modem module for displaying the image information associated with the execution of the application to the digital-multimedia-broadcasting module for displaying the digital-multimedia-broadcasting data, while continuing to executing the application.".

Reasons for the Decision

1. *Procedural matter*

This decision is based on the issue of inventive step with regard to the disclosure of document D4. D4 was cited in the European Search Report but not referred to during the first instance procedure. The board referred to this document in the communication accompanying the summons to oral proceedings by virtue of its power under Article 114(1) EPC and gave its provisional opinion with respect to the relevance of this document with regard to inventive step. The matter was further discussed at the oral proceedings. Consequently, the

appellant's right to be heard has been respected (Article 113(1) EPC).

2. Main request - claim 1 - inventive step

2.1 The present application relates to a terminal for receiving Digital Multimedia Broadcasting (DMB) signals, by means of which for example a TV program can be received. In addition to receiving a DMB signal, the terminal is able to simultaneously process another communications application, for example receiving an incoming telephone call. Claim 1 is directed to aspects regarding what can be displayed when simultaneously a DMB signal is received and another communications application is carried out.

2.2 In the view of the board, document D4 represents the closest prior art. D4 (see the abstract) discloses a cellular phone which is able to receive a television signal and can be simultaneously used for telephony. The television signal is not explicitly a "DMB" signal, but that is not relevant to inventive step, and nor did the appellant argue otherwise.

2.3 The appellant also did not argue that any feature of the first clause of claim 1 was relevant to inventive step. In this respect, D4 discloses a controller 22 for controlling the whole operation of the cellular phone (cf. paragraph [0047] and Fig. 2). The controller controls the radio signal sending/receiving section (ie the telephone call processing section) and the TV signal receiving section (cf. paragraph [0061]). It is implicit that the controller 22 includes (software) modules and that applications are provided which drive the modules (cf. paragraph [0052]). D4 further

discloses that there are different memory areas allocated for each application (cf. paragraph [0052]).

2.4 D4 also discloses the feature of claim 1 of "determining whether an execution of the application related to communication service [in this case, receiving a telephone call] is selected during displaying received digital-multimedia-broadcasting data on a screen" (cf. paragraphs [0111] to [0113]). In this respect, a user may choose to answer a call (ie go off-hook) whilst the TV picture is displayed on display unit 13. This was also not disputed by the appellant.

2.5 The remaining steps of claim 1 read as follows:

(a) if the execution of the application is selected by a user, switching to a display (206) only associated with the execution of the application from the display of the digital-multimedia-broadcasting data, while continuing to receive the digital-multimedia-broadcasting data; and

(b) if a digital-multimedia-broadcasting reception mode is selected by an user during executing the application, switching from the display only associated with the execution of the application to the display of only the digital-multimedia-broadcasting data received on the screen, while continuing to executing the application.

2.6 The board understood that the appellant interpreted these features to mean that the user was able to freely change the display mode between TV-only and application-only whilst the application continues to be executed and the TV signal received. The board adopts this interpretation.

2.7 These features provide the technical effect that a user is provided with options in respect of the image to be displayed during the execution of the application, ie during a call. The problem to be solved starting out from D4 can be seen as to enhance the display options provided to the user during a call.

2.8 D4 discloses three embodiments in conjunction with the the simultaneous reception of a TV signal and processing of an incoming call:

(i) In accordance with a first embodiment (cf. paragraphs [0072] to [0074]), when there is an incoming call while the telephone is receiving a TV signal, the cellular phone enters phone-call mode. The display shows an incoming-call screen. The TV signal is no longer displayed but may be stored for subsequent play-back (cf. paragraph [0097]).

(ii) In accordance with a second embodiment (cf. paragraphs [0098] to [0101]), the display 13 shows only the TV signal during the processing of an incoming call.

(iii) In accordance with a third embodiment (cf. paragraphs [0106] to [0116] and Fig. 12), the display is divided such that the top part displays the TV image and the bottom part caller's data.

2.9 The appellant argued that D4 did not render obvious the possibility to switch the display mode while continuing to execute the application which was previously displayed, eg to change from a TV display to a call-related display and back during call processing, while

continuing to receive the TV signal. The board takes a different view for the reasons set out below.

2.10 Firstly, D4 discloses that a modification may be made such that the user can prioritise by a previous selection which of the processes executed in the first, second or third embodiment the cellular phone should enter when a call is received (cf. paragraph [0117]). Therefore, it follows that the three different embodiments (i), (ii) and (iii) may constitute different modes which are selectable by the user, at least in advance. In the board's view, in practice, obvious situations would arise which would prompt the skilled person to make it possible to subsequently switch the display mode during a call.

2.11 As a first example, consider that the user has prioritised the split-display mode (iii). In the board's view, it is obvious that once a user has seen who is calling, he/she may want to view the TV image on the entire display 13 again, i.e. without losing about one-third of the display to the caller's data, since there is no need for the caller's data to be displayed throughout the duration of the call. In this respect, it is well-known to display text temporarily over part of a TV image, e.g. program information, and to resume display of the TV image on the entire screen once the text has been read. The skilled person starting out from D4 would thus have considered providing the user with the option of releasing the division of the display during a call, ie to switch from mode (iii) to mode (ii).

2.12 As a second example, consider that a user has prioritised mode (ii) or mode (iii), ie the TV picture is still being displayed whilst the call is answered.

Subsequently, it may happen that the call demands such attention that the user no longer wishes to watch TV and would rather record the TV program. Since this facility is only provided by mode (i), it would be obvious to provide the user with the facility to switch to this mode during the call. Similarly, it would be obvious that a user, having starting in mode (i), may wish to resume watching TV later in the call, i.e. to switch back to mode (ii) or (iii). It follows that the skilled person would not require inventive skill to enable the user to freely select the display mode during the call.

2.13 Since feature (a) (see point 2.5 above) is the same as switching from mode (ii) to mode (i), and feature (b) is the same as switching from mode (i) to mode (ii) and since the claim does not further define any technical details of the switching, the person skilled in the art starting out from D4 would arrive at the subject-matter of claim 1 without exercising inventive skill.

2.14 The board concludes that the subject-matter of claim 1 of the main request does not involve an inventive step (Articles 52(1) and 56 EPC). Consequently, the main request is not allowable.

3. Auxiliary request 1 - claim 1 - inventive step

3.1 Claim 1 of auxiliary request 1 differs from claim 1 of the main request only in that it is specified that the entire screen switches to the application or the TV signal. This was however already the interpretation the board has given to claim 1 of the main request.

3.2 Consequently, the subject-matter of claim 1 of auxiliary request 1 does not involve an inventive step

either (Articles 52(1) and 56 EPC). Auxiliary request 1 is therefore not allowable.

4. Auxiliary request 2 - claim 1 - inventive step

4.1 Claim 1 of auxiliary request 2 differs from claim 1 of the main request essentially in that the controller includes a DMB-modem switch unit comprising an image output switch for switching the required image to the display. In the view of the board, this feature is obvious in order to solve the problem of providing the correct image to the display in accordance with modes (i) and (ii) of D4 mentioned above. The board notes in this connection that Fig. 2 of D4 suggests that the controller 22 switches image signals to the display driver 25 of display unit 13 via an internal bus.

The appellant did not provide any counter-arguments.

4.2 Consequently, the board concludes that the subject-matter of claim 1 of auxiliary request 2 does not involve an inventive step (Articles 52(1) and 56 EPC). Auxiliary request 2 is therefore not allowable.

5. Conclusion

As there is no allowable request, it follows that the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Rauh F. van der Voort

Decision electronically authenticated