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**Datasheet for the decision  
of 8 October 2019**

**Case Number:** T 2224/16 - 3.5.05  
**Application Number:** 11800238.5  
**Publication Number:** 2588945  
**IPC:** G06F3/048, G06F3/14, G06F1/16,  
H04M1/02  
**Language of the proceedings:** EN

**Title of invention:**

METHOD AND APPARATUS FOR IMPLEMENTING A MULTIPLE DISPLAY MODE

**Applicant:**

Nokia Technologies Oy

**Headword:**

IMPLEMENTING A MULTIPLE DISPLAY MODE / NOKIA

**Relevant legal provisions:**

EPC Art. 56, 123(2)

**Keyword:**

Inventive step - third auxiliary request (yes) - non-obvious  
combination of known features

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
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Case Number: T 2224/16 - 3.5.05

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.05**  
**of 8 October 2019**

**Appellant:** Nokia Technologies Oy  
(Applicant) Karakaari 7  
02610 Espoo (FI)

**Representative:** Swindell & Pearson Limited  
48 Friar Gate  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted on 18 April 2016  
refusing European patent application No.  
11800238.5 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chairman** P. Cretaine  
**Members:** N. H. Uhlmann  
D. Prietzel-Funk

## **Summary of Facts and Submissions**

The appeal is against the examining division's decision to refuse European patent application No. 11800238.5.

- I. The reasons for the decision refer to the following prior-art documents:  
  
D1 US 2006/211454;  
D4 US 2009/298546.
- II. The examining division held that the main request and the first to third auxiliary requests did not meet the requirements of Articles 123(2) and 56 EPC.
- III. In a statement setting out the grounds of appeal, the appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the claims of the main request or first or second auxiliary request on which the decision under appeal was based.
- IV. The board arranged for oral proceedings to be held.
- V. In the summons, the board set out its provisional view of the case. The board considered that none of the pending requests met the requirements of Article 56 EPC.
- VI. In response, by letter dated 6 September 2019, the appellant filed amended versions of the main request and first auxiliary request, renumbered the previous first and second auxiliary requests as second and third auxiliary requests respectively, and submitted further arguments.
- VII. Oral proceedings were held on 8 October 2019 and attended by the appellant's representative. In the course thereof, an amended third auxiliary request was

submitted which replaced the former third auxiliary request.

VIII. 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 the first or second auxiliary requests submitted with the letter dated 6 September 2019, or on the basis of the third auxiliary request filed during the oral proceedings before the board.

IX. Claim 1 of the main request reads as follows:

"A method comprising:

causing a home screen with home screen content to be displayed by a first display (106; 116; 120a; 120b; 120c) of an apparatus (10; 100; 110; 500);

receiving an indication of a transition to a multiple display mode;

in response to receiving the indication of the transition to the multiple display mode, continuing to cause the home screen with the home screen content to be displayed by the first display of the apparatus;

in response to receiving the indication of the transition to the multiple display mode, causing a task switcher to be displayed by a second display (108; 118; 122b; 122c) of the apparatus while the home screen with the home screen content is being displayed by the first display, wherein the task switcher enables a user to select an application; and

in response to user selection of the application, causing application content for the selected application to be displayed by the second display while

the home screen is being displayed by the first display."

- X. Claim 1 of the first auxiliary request specifies further that the home screen comprises a plurality of user selectable icons for initiating a plurality of applications.
- XI. Claim 1 of the second auxiliary request adds to the wording of claim 1 of the main request that the task switcher enables a user to select one of multiple applications "that are currently running in the background or have recently been implemented".
- XII. Claim 1 of the third auxiliary request reads as follows:  
  
"A method comprising:  
  
causing a home screen with home screen content to be displayed by a first display (106; 116; 120a; 120b; 120c) of an apparatus (10; 100; 110; 500), wherein the home screen includes a user selectable icon for a first application;  
  
receiving an indication of a transition to a multiple display mode;  
  
in response to receiving the indication of the transition to the multiple display mode, continuing to cause the home screen with the home screen content to be displayed by the first display of the apparatus;  
  
in response to receiving the indication of the transition to the multiple display mode, causing a task switcher to be displayed by a second display (108; 118; 122b; 122c) of the apparatus while the home screen with the home screen content is being displayed by the first display, wherein the task switcher enables a user to

select one of multiple applications that are currently running in the background or have recently been implemented;

in response to user selection of a second application from the multiple applications, causing application content for the second application to be displayed by the second display while the home screen content is being displayed by the first display; and

in response to user selection of the user selectable icon for the first application, replacing the application content for the second application with the application content for the first application on the second display."

Each request comprises a further independent claim directed to a corresponding apparatus.

## **Reasons for the Decision**

### **Main request**

1. Patentability
- 1.1 Document D4 forms a suitable starting point for assessing inventive step.

This prior-art document discloses an apparatus comprising two displays (abstract). The apparatus can either be in a closed state, in which only the main display is visible (paragraphs 296 and 326, Figure 72A: the main display 151 is visible, while the sub-display 154 is in non-active, transparent state) or in an opened state, with both displays being visible. In the closed state, main display 151 displays indicators 334 and software menus 336, which qualify as home screen with home screen content in view of the definition

given on page 4, lines 12 - 17 of the application in suit (see D4, paragraph 326, Figure 72A, left-hand side). Upon opening the apparatus, i.e. on transition to two-display mode, main display 151 continues to display the home screen content (Figure 72A, right-hand side). Simultaneously, a multitasking menu window 326 is displayed on sub-display 154. This multitasking menu window comprises icons which clearly represent different applications: telephony, contacts, notes, messaging, etc... (from left to right). Hence, this menu anticipates the task switcher as claimed.

- 1.2 Document D4 does not explicitly disclose:
  - (a) in response to user selection of an application, causing application content for the selected application to be displayed
  - (b) by the second display while the home screen is being displayed by the first display.
- 1.3 The board holds that feature (a) is clearly implicitly disclosed in document D4: the icons representing applications are clearly meant to be selected by a user, which would then result in displaying application content.
- 1.4 The objective technical problem solved by the feature (b) is "how to display the application content as to utilize the available display space efficiently".
- 1.5 Facing this problem and considering the opened state of the terminal as depicted in Figure 72A, the skilled person would readily decide that the application content is to be displayed on the same sub-display as the multitasking menu window 326, i.e. sub-display 154. The alternative possibilities involve clear disadvantages: displaying the content on the main



display 151 or on both displays 151, 154 would disrupt the group management information already depicted on the main display 151.

- 1.6 The appellant argued that in document D4, "in every example, the application is displayed by both of the displays 151, 154 when the terminal is open" (section 5.7 of the statement of grounds). The board is not convinced. For instance, Figure 72A does not depict an application which is displayed on both displays. Instead, the application "Group Management" is displayed on the main display 151 only. The arguments in section 5.13 are not convincing for the same reason.
- 1.7 The appellant submitted that the "main menu" is not concurrently displayed with the application content. The board does not agree. While the impugned decision refers to the "main menu" of document D4, Figure 68B as anticipating the "home screen" as claimed, the board's analysis in section 1.1 is based on Figure 72A and the indicator 334 and the software menus 336.
- 1.8 The appellant provided a "widely understood" definition of "home screen" (second paragraph on page 3 of the letter dated 6 September 2019):

"A home screen is the root navigation screen of an electronic apparatus. That is, it is widely understood by those skilled in the art to be the first screen which is displayed once an electronic apparatus has been unlocked. Considered from a different perspective, if one were to successively navigate backwards in an electronic apparatus until it were no longer possible, the home screen is the screen that would be displayed.",

which, in its view, should supplement the definition given in the description of the application.

The board is not convinced that this is a widely understood definition. In 2010, at the priority date of the application in suit, a number of operating systems for portable devices including different home screens were on the market. For example, iPhone devices did not provide any backward navigation function.

Moreover, the home screen content was not fixed, but could be adapted by the user of a portable device. This aspect was not disputed by the appellant.

Furthermore, the definition on page 4, lines 12 to 17 clearly indicates that a home screen may cover only a part of the display: "a home screen may be a virtual surface that spans one or more screen areas". In contrast, the definition submitted by the appellant suggests that the home screen extends over the entire display.

Finally, the analogy with a wheel for a car appears very remote.

For these reasons, the board holds that document D4 discloses a home screen within the meaning of claim 1 and the description.

1.9 The appellant referred to Figure 55A and paragraph 250, allegedly in order to give a better understanding of Figure 72A.

However, Figure 55A and paragraph 250 relate only to a closed state of the display and not to any transition from closed to open state, as claimed.

1.10 The board observes that claim 1 does not require the first display to display only the home screen, or the second display to display only the task switcher or the application content.

- 1.11 In view of these arguments, the skilled person would arrive at the subject-matter of claim 1 in an obvious way, which does not therefore involve an inventive step in view of document D4 and the general knowledge of the skilled person, Article 56 EPC.

**First auxiliary request**

2. Patentability

- 2.1 Claim 1 specifies further that the home screen comprises a plurality of user selectable icons for initiating a plurality of applications.

- 2.2 Document D4 does not explicitly disclose this feature. However, the software menus 336 in Figure 72A and paragraph 326 clearly enable the initiation of at least part of an application's functionality. Bearing in mind that the use of icons for initiating applications formed part of common general knowledge long before 2010, that the multitasking menu window 326 comprises icons for initiating applications and that Figure 68B clearly depicts icons for initiating applications (for instance the Camera application), the board judges that the skilled person aiming to provide a state-of-the art way of initiating applications would arrive effortlessly at the feature set out in section 2.1.

- 2.3 For these reasons, the subject-matter of claim 1 does not involve an inventive step in view of document D4 and the general knowledge of the skilled person, Article 56 EPC.

**Second auxiliary request**

3. Patentability

- 3.1 In addition to claim 1 of the main request, claim 1 of the second auxiliary request further specifies the

applications the task switcher offers a user:  
"applications that are currently running in the  
background or have recently been implemented".

- 3.2 The appellant argued that document D4 did not disclose anything about applications running in the background.
- 3.3 However, the board holds that the multitasking menu window 326 as displayed on the sub-display 154 (document D4, Figure 72A and paragraph 326) anticipates the task switcher as set out in claim 1. The term "multitasking" implies that a number of tasks can be executed simultaneously, of which, by necessity, some will be running in the background. Document D1, Figure 8C and paragraph 82 confirms this understanding.
- 3.4 Moreover, the wording of claim 1 does not require the task switcher to enable the user to select only applications that are currently running in the background.
- 3.5 Consequently, the subject-matter of claim 1 does not involve an inventive step in view of document D4 and the general knowledge of the skilled person (Article 56 EPC).

### **Third auxiliary request**

4. Basis for the amendments

The independent claims are based on the original independent claims and furthermore on page 4, lines 13 to 20 and page 8, line 29 to page 9, line 8 of the description as originally filed. Moreover, the board holds that since widget and device status information are described as possible components of the home screen, they do not need to be included in the independent claims.

For these reasons, the requirements of Article 123(2) EPC are complied with.

5. Patentability

5.1 Document D4 forms a suitable starting point for assessing the inventive step of the subject-matter of claim 1.

5.2 In view of the explanations in sections 1.1, 1.2, 2.1, 2.2 and 3.3 above, document D4, in the embodiment based on Figure 72A, does not explicitly disclose that:

(a) the home screen includes a user selectable icon for a first application, before and after transition to multiple display mode;

(b) the applications to which the task switcher refers are currently running in the background or have recently been implemented;

(c) in response to user selection of a second application, application content for the second application is caused to be displayed

(d) by the second display while the home screen is being displayed by the first display;

(e) in response to user selection of the user selectable icon for the first application, the application content for the second application is replaced with the application content for the first application on the second display.

5.3 As set out above in relation to the main request, document D4 implicitly discloses feature (c), and the skilled person would arrive at feature (d) in an obvious manner. With regard to the latter feature, the person skilled in the art would decide that the application content of the second application is to be

displayed on the sub-display 154, i.e. on the second display, which also displays the task switcher.

- 5.4 The technical effect of the distinguishing features (a) and (e) is the provision of a faster way for the user to select and launch a (first) application. Indeed, the embodiment of Figure 72A does not provide a way of selecting an application's icon from the home screen.
- 5.5 The skilled person faces the objective technical problem of "how to modify the teaching of this embodiment to provide a faster way for the user to select and launch an application".
- 5.6 In this regard, Figure 68B depicts a number of application icons on the lower display and the content of the Camera application on the upper display. However, paragraph 308, which explains this figure, teaches that the icon of the Camera application is selected before the mobile terminal is opened, and the Camera application is executed upon opening the terminal. The user does not perform any selection of an icon after the terminal has been opened. Hence, document D4 does not hint at the claimed solution.
- 5.7 Following the line of reasoning explained in section 5.3 above, the person skilled in the art would be prompted to display the content of the first application on the display that depicts the icon of this application, i.e. the first display. Consequently, they would not arrive at distinguishing feature (e). In other words, it would be inconsistent if the skilled person, having regard to their general knowledge and the teaching of document D4, displayed the application's content at one point on the display at which the selection took place (for the second

application) and at another point on the other display (for the first application).

- 5.8 For these reasons, the subject-matter of claim 1 involves an inventive step in view of document D4 and the general knowledge of the skilled person.
- 5.9 Document D1 relates to a portable device with two displays, but does not relate to a mode of operation which uses one display only. Hence, this document does not hint at distinguishing feature (a).
- 5.10 Consequently, the subject-matter of claim 1, and of the corresponding apparatus claim 8, meets the requirements of Article 56 EPC.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the examining division with the order to grant a patent based on claims 1 to 9 of the third auxiliary request filed during the oral proceedings before the board, and a description and drawings to be adapted.

The Registrar:

The Chairman:



K. Götz-Wein

P. Cretaine

Decision electronically authenticated