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Datasheet for the decision
of 26 January 2023

Case Number:	T 2760/18 - 3.5.01
Application Number:	12175430.3
Publication Number:	2682906
IPC:	G06Q10/10
Language of the proceedings:	EN

Title of invention:
Displaying content items in a graphical user interface

Applicant:
BlackBerry Limited

Headword:
Enhanced scrollbar/BLACKBERRY

Relevant legal provisions:
EPC Art. 56, 123(2)
RPBA 2020 Art. 13(2)

Keyword:
Inventive step - modifying the width of a scrollbar's
navigation element according to the relative time span of
displayed items (no - presentation of information)

Decisions cited:
T 0336/14, T 1802/13, T 0407/11

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: **T 2760/18 - 3.5.01**

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 26 January 2023

Appellant:	BlackBerry Limited
(Applicant)	2200 University Avenue East
	Waterloo, ON N2K 0A7 (CA)

Representative:	MERH-IP Matias Erny Reichl Hoffmann
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Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 27 June 2018 refusing European patent application No. 12175430.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	W. Chandler
Members:	I. Kürten
	C. Schmidt

Summary of Facts and Submissions

I.   The appeal is against the examining division's decision
         to refuse the European patent application No.
         12175430.3 for added subject-matter (Article 123(2)
         EPC), lack of clarity (Article 84 EPC), and lack of
         inventive step (Article 56 EPC).

II.   The appealed decision cited *inter alia* the following
         documents:

              D1: CHIMERA, R.: "Value Bars: An Information
              Visualization and Navigation Tool for Multi-
              attribute Listings", Proceedings of the SIGCHI
              Conference on Human Factors in Computing Systems,
              1992, pages 293 - 294;

              D2: MASUI, T.: "LensBar - Visualization for
              Browsing and Filtering Large Lists of Data",
              Proceedings IEEE Symposium on Information
              Visualization, 1998, pages 113-120.

         As regards inventive step, the examining division held
         that the differences over D1 were either obvious
         alternatives or non-technical features related to the
         GUI's visual/graphical design.

III.   In the statement setting out the grounds of appeal, the
         appellant requested that the decision to refuse the
         application be set aside and a patent be granted on the
         basis of a main or one of seven auxiliary requests, all
         filed with the statement setting out the grounds of
         appeal. The main and the first to third auxiliary
         requests were identical to the refused requests, the

fourth to seventh auxiliary requests were new. Oral
proceedings were requested on an auxiliary basis.

IV.   In the communication accompanying the summons to oral
        proceedings, the Board tended to agree with some of the
        examining division's clarity and added matter
        objections and identified further clarity issues in
        claim 1 of all requests. The Board agreed with the
        appellant that D1 did not disclose an element that
        could be moved and preferred to start the inventive
        step assessment from D2, which related to an enhanced
        scrollbar. It set out its preliminary opinion that none
        of the appellant's requests involved an inventive step
        over D2.

V.   In a reply, the appellant filed new fourth to sixth
        auxiliary requests replacing the previous fourth to
        seventh auxiliary requests. It also filed arguments in
        favour of the admissibility and allowability of these
        requests.

VI.   In a brief communication, the Board informed the
        appellant that it maintained its preliminary view for
        the main and first to third auxiliary requests. The
        Board tended to admit the new auxiliary requests, but
        did not consider them to involve an inventive step
        (Article 56 EPC).

VII.   At the oral proceedings, held by videoconference on
        26 January 2023, the appellant confirmed the requests
        submitted in writing.

VIII.   Claim 1 of the main request reads (with the Board's
        numbering of the features):

A method on a portable electronic device (100), the portable electronic device (100) including a touch-sensitive display (1218) for presenting a graphical user interface (1248), the method comprising:

[1] displaying (902, 1102) content items (116, 117, 118) each having an associated common property (116a, 117a, 118a) in the graphical user interface (1248) on the display (1218), the content items being displayed in a graphical representation of the content items, icon or representative graphic, or by providing the content item itself;

[2] displaying (904, 1104) the associated common properties (116a, 117a, 118a) by presentation of a navigation list with a navigation element (170) in association with the displayed content items (116, 117, 118), the navigation element for identifying a position of the displayed content items (116, 117, 118) relative to the associated common property by which the content items (116, 117, 118) are ordered for display within the graphical user interface (1248), wherein movement of the navigation element through the navigation list is tied to the movement of the content items visible within the display;

[3] determining (1106) a measure of the common property associated with the displayed content items (116,117,118); and

[4] modifying (1108) a display element of the navigation element (170) corresponding at least in part to a distribution of the measure of the common property (116a, 117a, 118a) associated with the displayed content items (116, 117, 118) the display element of the navigation element (170) changing as the measure of

the common property changes based upon positions of each of the content items displayed within the graphical user interface (1110).

IX.   Claim 1 of the first auxiliary request adds to the end of feature [2] "*whereby the content item list may be navigated by (i) a swipe gesture of the content items, the graphical representation of the content items, icons or representative graphics, or (ii) by movement of the navigation element along the navigation list*".

X.   Claim 1 of the second auxiliary request adds before "the display element of the navigation element (170) changing" in feature [4] of the first auxiliary request "*the measure being defined by a distance there between*" and adds to the end of feature [4] "*wherein the display element comprises the length of the navigation element (170) and the modifying comprises proportionally increasing or decreasing the length of the navigation element relative to the axis of the navigation list*".

XI.   Claim 1 of the third auxiliary request replaces "displaying content items" in feature [1] of the second auxiliary request with "*displaying a first subset of a plurality of content items*" and adds at the end of the claim the following additional features:

[5] wherein when the subset of displayed content items changes to a second subset, a second common properties [sic] associated with the displayed content items within the navigation list is determined relative to the displayed second subset of content items (1010);

[6] wherein the navigation element (170) is then modified relative to a determined second measure between the second common properties of the second

subset of content items so as to have a colour
corresponding at least in part to a distribution of the
second measure.

XII.   Claim 1 of the fourth auxiliary request adds to the end
of feature [1] of the third auxiliary request "*image or*
text" and replaces in feature [2] "relative to the
associated common property" with "*relative to the*
displayed associated common property". It also modifies
features [3] to [6] as follows (additions over the
third auxiliary request underlined, deletions struck-
through):

[3] *determining (1106) a measure of the common property*
associated with the displayed content items
(116,117,118), <u>*the measure being defined by a distance*</u>
<u>*between the associated common properties of the first*</u>
<u>*and last content items of the displayed first subset of*</u>
<u>*content items*</u>*;*

[4] *modifying (1108) a display element of the*
navigation element (~~170~~<u>590</u>) corresponding at least in
part to a distribution of the measure of the common
property (116a, 117a, 118a) associated with the
displayed content items (116, 117,118), ~~*the measure*~~
~~*being defined by a distance there between,*~~ *the display*
element of the navigation element (~~170~~<u>590</u>) changing as
the measure of the common property changes based upon
positions of each of the content items displayed within
the graphical user interface (1110), wherein the
display element comprises the ~~length~~ <u>width</u> of the
navigation element (~~170~~<u>590</u>) and the modifying comprises
proportionally increasing or decreasing the ~~length~~
<u>*width*</u> *of the navigation element relative to the axis of*
the navigation list <u>based on the distribution of the</u>
<u>*measure of the common property*</u>*; ~~and~~*

[5] ~~wherein~~ when the subset of displayed content items changes to a second subset, <u>determining</u> a second common ~~properties~~ <u>property</u> ~~associated with~~ <u>for each of</u> the displayed content items <u>of the second subset</u> within the navigation list ~~is determined~~ relative to the displayed second subset of content items (1010); <u>and in response to the determination of the second subset,</u>

[6] ~~wherein~~ <u>modifying the width of</u> the navigation element (~~170~~<u>590</u>) ~~is then modified~~ relative to a determined second measure between the second common properties of the second subset of content items ~~so as to have a colour corresponding at least in part to~~ <u>based on</u> a distribution of the <u>determined</u> second measure.

XIII.   Claim 1 of the fifth auxiliary request adds to the end of feature [3] of the fourth auxiliary request "*wherein the first and last content items of the displayed first subset are defined by the graphical representation of the content items*".

XIV.   Claim 1 of the sixth auxiliary request adds the following feature at the end of claim 1 of the fifth auxiliary request:

[7] wherein the first and second common properties are defined as a time associated with each content item, and wherein the navigation element (590) identifying a position of the displayed content items along a timeline of all the content items.

Reasons for the Decision

1.   The invention

1.1   The invention relates to a graphical user interface
         (GUI) for navigating through a sorted, e.g. by time,
         list of content items, such as images or calendar
         entries (paragraphs [0001], [0002] of the published
         application).

1.2   The claimed invention specifies the elements of the GUI
         with a number of general terms. Essentially, however,
         taking time as the sorting (common) property and
         looking at Figure 1 it boils down to displaying a
         subset of content items 116, 117, and 118 and a
         scrollbar device consisting of a timeline ("navigation
         list" 160) of the time values of all the content items
         ("associated common properties", 111a to 120a) and a
         movable "navigation element" 170 which spans the times
         of the currently displayed content items ("measure of
         the common property") on the timeline [0012].

         Thus, in addition to a scrolling function, the
         navigation element also gives a sense of scale of the
         time spanned by the displayed content items relative to
         the total time spanned by all the items [0013].

2.   Fourth to sixth auxiliary requests - admittance

         The appellant justified the amendments in the light of
         the new clarity objections raised in the Board's
         communication and the use of D2 as the starting point
         for inventive step. The Board judges that these are

cogent reasons that justify the filing of the fourth to sixth auxiliary requests and admits these requests into the proceedings (Article 13(2) RPBA).

3.   Sixth auxiliary request - inventive step

3.1   The Board finds it convenient to start with the sixth auxiliary request because it defines the most concrete version of the invention.

3.2   The Board observed that the reference to a "distribution" of the measure of the common property in features [4] and [6] of claim 1 was confusing. A distribution necessarily required multiple values, whereas the measure, as defined in feature [3], had a single value (i.e. the distance between the properties of the first and last displayed items). It appeared rather that the measure itself reflected the distribution of the property values of the displayed items (in the sense of the range of the common property covered by the displayed items - compare Figures 7 and 8 and [0017] and [0018] of the application). The Board thus interpreted the "distribution of the measure" in claim 1 simply as "the measure".

The Board also observed that features [5] and [6] appeared to be redundant as they only re-phrased the content of feature [4], which already specified that the width of the navigation element varied with the subset of displayed items.

The appellant did not object to the Board's interpretation. The Board therefore maintains its view.

3.3   D2 concerns a GUI for navigating through a large list of sorted items using a scrollbar.

In the GUI of D2, the scrollbar can be placed next to a scrolling window displaying a subset of items from a filtered list. For instance, Figure 6 of D2 shows an alphabetically ordered list of words from a dictionary comprising the pattern "˷q" and Figure 12 shows a chronologically ordered list of file names comprising the pattern "uist". These correspond to the "plurality of content items" in feature [1]. Ordering the items chronologically suggests that the associated "common property" can be time as in feature [7].

The positions of the items in the filtered list are highlighted in the background of the scrollbar to show the locations of entries that match the pattern. The user can navigate through the filtered list by moving the scrollbar's knob, corresponding to the "navigation element" in feature [2], along the background, corresponding to the "navigation list", or by clicking the mouse on the scroll window and dragging it vertically. The items shown in the scrollable area correspond to the position of the knob (D2, first page, last full paragraph; second page, right-hand column, fourth paragraph).

3.4   Claim 1 essentially differs in that:

(i) the width of the navigation element varies and is defined by the distance between the properties of the first and last item in the displayed subset of items (features [3] and [4]).

(ii) the method runs on a portable electronic device with a touch-sensitive display (preamble).

3.5   The appellant argued that the "associated common
        properties" of the content items in the invention were
        absolute properties inherent to the content items,
        whereas the alphabetic ranks of words in D2 were
        relative to the chosen dictionary. Moreover, the
        properties of the items in claim 1 were unevenly
        distributed, whereas the alphabetic ranks defined a
        constant distribution.

3.6   The Board is not convinced because claim 1 only limits
        the common property to time, which is known from D2.
        Moreover, time alone does not necessarily imply
        absolute or unevenly distributed property values. It
        may, for instance, designate the relative times of
        images taken at regular time intervals.

3.7   The Board considers that feature (i) relates to the
        presentation of information, as it merely informs the
        user about a property of the currently displayed items
        (i.e. their span). Features directed to the
        presentation of information may contribute to the
        technical character of the invention if they credibly
        assist the user in performing a technical task
        (T 336/14 - *Presentation of operating instructions/
        GAMBRO*, headnote; T 1802/13 - *Brain stimulation/
        CLEVELAND*, point 2.1.5). In the Board's view, however,
        the claimed GUI does not prompt or otherwise incite the
        user to use the displayed information in a particular
        way. Instead, it is entirely up to the user to make
        sense of the displayed information and to decide what
        to do with it.

3.8   The appellant argued that changing the width of the
        navigation element provided a better sense of the range
        spanned by the displayed items. This improved the
        user's navigation through the content items, i.e.

assisted the user to find an item of interest while
reducing the number of necessary user interactions.
This, in turn, reduced the usage of the device's
computing resources and extended its battery life.

3.9   The Board agrees that an improved navigation and a
        reduced usage of computing resources are technical
        effects, but is not convinced that these effects are
        credibly achieved. The width of the navigation element
        might indeed give the user a better sense of the range
        spanned by the displayed items. But this range provides
        no information about the property values of the
        individual items (whether displayed or not). Hence,
        when the user looks for an item with a particular
        property value, the width provides no guidance about
        the position of this item within the list of content
        items.

3.10   The appellant argued that the invention improved
        navigation of items with unevenly distributed
        properties, such as chronologically sorted items
        separated by irregular time intervals. The width of the
        navigation element reflected the density of the
        displayed items. A larger width indicated that the
        displayed items were sparsely distributed and that the
        user could quickly navigate through the items by
        dragging the navigation element along the navigation
        list. A smaller width indicated that the displayed
        items were densely distributed and that there was a
        higher risk of overlooking an item due to a high
        scrolling speed. A smaller width thus suggested to the
        user to change to the slower navigation mode of swiping
        through the displayed items.

3.11   The Board agrees that the user could navigate through
        the list of items in this way, but the advantage is not

derivable from the application as filed. Moreover, the
Board does not consider that this would be self-evident
when using the interface. Hence, the Board cannot see
why adapting the width of the navigation element as in
feature (i), would motivate the user to navigate any
differently than with the GUI of D2.

3.12   Finally, the appellant argued that it was not necessary
        to describe in the application how a user should use
        the claimed GUI for navigation as this was intuitive.
        If a user was given a ladder, he would know how to use
        it even without instructions.

        The Board does not find this argument convincing
        because intuition is subjective. It depends on personal
        factors, such as experience, preferences and cognitive
        abilities (see e.g. T 0407/11 - *Objektorientierte
        Benutzeroberfläche/SIEMENS*, point 2.1.4). A credibly
        achieved technical effect, however, requires an
        objective and reliable link between the feature and the
        effect. Since the effect of improved navigation depends
        on the user's intuition, i.e. on the user's subjective
        evaluation, it is not credibly achieved.

        The appellant's comparison with a ladder is not
        persuasive because different things may require
        different degrees of intuition to use. Just because
        someone might find using a ladder intuitive, does not
        mean they will find using the claimed GUI equally
        intuitive. This comparison is also tainted by hindsight
        since, unlike the claimed GUI, a ladder is a well-known
        item with established use. What might seem intuitive
        today is actually our knowledge of how ladders work.

3.13   Since feature (i) does not credibly assist the user in
        performing a technical task, it lacks technical
        character and cannot contribute to inventive step.

3.14   As regards feature (ii), the Board agrees with the
        examining division that it defines an obvious choice of
        an alternative computing environment. In the Board's
        view, the idea of implementing a GUI with a scrollbar
        on a portable device with a touch screen is not based
        on any technical considerations, but merely follows the
        general trend in technology at the priority date of the
        application (2012).

        The Board, moreover, cannot see any obstacles the
        skilled person would face when implementing the GUI of
        D2 (with the additional requirement given by feature
        (i)) on a portable device with a touch screen display.
        The only adaptation that would have to be carried out
        is to translate the mouse operations to their
        corresponding touch screen equivalents. The Board
        judges this to be obvious.

3.15   Hence, claim 1 of the sixth auxiliary request does not
        involve an inventive step (Article 56 EPC).

4.   Fourth and fifth auxiliary requests - inventive step

        Claim 1 of these requests is broader in scope than
        claim 1 of the sixth auxiliary request. Therefore, it
        does not involve an inventive step (Article 56 EPC) for
        the same reasons.

5.   Main, first and second auxiliary requests - inventive
        step

5.1   Claim 1 of the sixth auxiliary request essentially
         contains all features of claim 1 of the main request,
         and the first and second auxiliary requests. Any
         different wordings in the sixth auxiliary request only
         aim at overcoming the objections with regard to
         Articles 123(2) and 84 EPC raised by the Board in the
         communication accompanying the summons to oral
         proceedings.

5.2   Accordingly, claim 1 of the main request, and the first
         and second auxiliary requests does not involve an
         inventive step (Article 56 EPC) for the same reasons as
         given above for claim 1 of the sixth auxiliary request.

6.   Third auxiliary request - added subject-matter

6.1   According to steps [5] and [6] of the third auxiliary
         request, when the subset of displayed content items
         changes from a first to a second subset, the colour of
         the navigation element is set to correspond to the
         distribution of a second measure of second common
         properties.

6.2   The Board agrees with the examining division that the
         original application does not disclose an embodiment
         where for a first subset of displayed items, *only the
         length* of the navigation element is changed according
         to a first measure of a first common property (e.g.
         time) and for a second subset of displayed content
         items, *only the colour* of the navigation element is
         changed according to a second measure of a second
         common property (e.g. size).

6.3   Accordingly, claim 1 of the third auxiliary request
         extends beyond the scope of the application as filed
         (Article 123(2) EPC).

7.   Since none of the requests on file is allowable, the
        appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek   W. Chandler

Decision electronically authenticated