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Datasheet for the decision of 30 August 2023

Case Number: T 2367/19 - 3.5.06

Application Number: 08157500.3

Publication Number: 1978436

IPC: G06F1/16

Language of the proceedings: EN

Title of invention:
Rotarily configurable handheld communication device

Applicant:
BlackBerry Limited

Headword:
T-shaped profile/BLACKBERRY

Relevant legal provisions:
EPC 1973 Art. 56
EPC Art. 123(2)

Keyword:
Inventive step - (yes)

Decisions cited:

Catchword:

Europäisches Patentamt
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Beschwerdekammern

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Case Number: T 2367/19 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 30 August 2023

Appellant: (Applicant)	BlackBerry Limited 2200 University Avenue East Waterloo, ON N2K 0A7 (CA)
Representative:	Murgitroyd & Company Murgitroyd House 165-169 Scotland Street Glasgow G5 8PL (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 11 March 2019 refusing European patent application No. 08157500.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair	A. Jimenez
Members:	G. Zucka
	T. Alecu

Summary of Facts and Submissions

I. The appeal is against the decision by the examining division, dispatched with reasons on 11 March 2019, to refuse European patent application 08157500.3, on the basis that neither the main request nor one of both auxiliary requests satisfied the condition of Article 56 EPC 1973. The following documents were referred to in the reasons for the appealed decision:

D1 = EP-A-1 548 544
D7 = WO 2006/038499 A1

II. A notice of appeal was received on 23 April 2019, the appeal fee being paid in full on 10 May 2019. A statement of grounds of appeal was received on 15 July 2019.

III. The appellant requested that the decision under appeal be set aside and a patent granted on the basis of the claims of a main request or one of auxiliary requests 1 or 2 that were the subject of the refusal, or on the basis of the claims of auxiliary request 3 filed with the statement of the grounds of appeal. The appellant made a conditional request for oral proceedings.

IV. The board issued a communication setting out its preliminary opinion on the appeal.

V. On 12 May 2023, the appellant responded and filed claims for additional auxiliary requests 4 to 6.

VI. The board issued a summons to oral proceedings. In a further communication it set out an updated preliminary opinion on the appeal, indicating that the claims of

auxiliary request 4 may be allowable subject to certain amendments required to ensure compliance with Article 123(2) EPC.

VII. With its response of 28 July 2023, the appellant filed claims for a single request replacing all previously existing requests and taking into account the board's observations.

VIII. The appellant requests that the decision under appeal be set aside and a patent be granted on the basis of claims 1 to 4 filed with the letter of 28 July 2023, as well as on the basis of description pages 1 to 83 and drawing sheets 1 to 33 as originally filed.

IX. The independent claim, i.e. claim 1, reads as follows:

"A handheld electronic communication device transitionable between compact and expanded configurations, said device comprising:

an elongate display panel (2108) positioned adjacent to and in substantial parallel orientation with an elongate keyboard panel (2019) when the device is configured in the compact configuration (2103), said display panel and keyboard panel being coupled together by a rotation interconnection, said interconnection configured to maintain said panels in parallel orientation to one another through out transition between the compact and expanded configurations;

said device having an elongate front-facing profile in the compact configuration and a generally T-shaped front-facing profile in the expanded configuration; said elongate keyboard panel (2019) comprising a keyboard that is entirely exposed in the expanded configuration, said elongate display panel (2108) comprising a display screen having a greater length

than width and a lengthwise oriented centerline, said lengthwise oriented centerline being horizontally oriented when said device is configured in the expanded configuration whereby said elongate display panel forms a portion of said T-shaped front-facing profile in the expanded configuration;

wherein the interconnection further comprises a translation accommodating interconnection, wherein said rotation and translation accommodating interconnection further comprises:

an elongate track (2110) associated with one of said display and keyboard panels (2108, 2109), wherein said elongate track (2110) is parallel to the lengthwise oriented centerline of said elongate display panel (2108) in the compact configuration, and a key (2120) associated with the other of said display and keyboard panels, said key (2120) consisting of an insert portion (2120) having a circular section, a track follower (2122) having a circular section, and a connecting member (2121) connecting the track follower (2122) to the insert portion (2120), the insert portion (2120) being restrained within said track (2110) and which is permitted to translate longitudinally within said track, the insert portion (2120) being permitted to rotate relative to the elongate track (2110) about an axis of rotation of said key, said insert portion having a periphery that is at least partially rounded and that is laterally bounded by internal sides of said track thereby facilitating rotation of said key relative to said track about the axis of rotation of said key;

wherein the track follower (2122) is located at a distance from said axis of rotation of said key (2120), the track follower (2122) being offset from the insert portion (2120) by the connecting member (2121), and a rotation of the insert portion of the key within the

elongate track (2110) causes rotation of the key relative to said track about the axis of rotation of said key; and a pair of follower-receiving tracks (2112, 2114) associated with said panel with which said elongate track (2110) is associated, each of said follower-receiving tracks (2112, 2114) being linear and oriented at an outwardly directed incline relative to said elongate track and located opposite one another relative said elongate track and wherein each of said pair of follower-receiving tracks (2112, 2114) terminates in a delimiter surface against which said track follower abuts when said elongate display panel (2108) reaches a horizontal orientation relative to a vertically oriented keyboard panel (2109) upon transition from the compact configuration (2103) to the expanded configuration (2105),

wherein the rotation and translation accommodating interconnection accommodates simultaneous rotation and translation during transition of the device between the compact and expanded configuration;

wherein, as the insert portion of the key (2120) is translating longitudinally within the elongate track (2110), the track follower (2122) is guided linearly in a translation movement along one of the pair of follower-receiving tracks, whereby the translation of the track follower (2122) along the one of the pair of follower-receiving tracks causes the insert portion (2120) of the key to be rotated accordingly relative to the elongate track (2110) as the insert portion of the key (2120) is translating longitudinally within the elongate track (2110), so that the key is simultaneously translating longitudinally within the elongate track (2110) and rotating relative to the elongate track (2110) about the axis of rotation of the key."

Reasons for the Decision

1. *The invention*

The application relates to handheld communication devices with a rotating keypad and a display (see description par. [0001]).

The introductory part of the description (par. [0002] to [0030]) describes several possible ways of achieving a transition between "compact and expanded configurations" of such a device.

2. *Inventive step; Article 56 EPC 1973*

2.1 The board considers D7 to be a suitable starting point for the assessment of inventive step.

2.2 D7 discloses a handheld electronic communication device (abstract) transitionable between compact (figure 5) and expanded (figures 6 and 7) configurations.

The device comprises an elongate display panel positioned adjacent to and in substantial parallel orientation with an elongate keyboard panel (figure 4: display panel 21) when the device is configured in the compact configuration, the display panel and keyboard panel being coupled together by a rotation interconnection (figures 24, 25 and 26: rotation shaft 31), the interconnection configured to maintain said panels in parallel orientation to one another through out transition between the compact and expanded configurations (as is apparent from the design of the interconnection).

The device has an elongate front-facing profile in the compact configuration (figure 4), the elongate display panel comprising a display screen having a greater length than width and a lengthwise oriented centerline, the lengthwise oriented centerline being horizontally oriented when said device is configured in the expanded configuration (figures 25 and 26), whereby said centerline is horizontal in the compact configuration (figure 23).

The interconnection further comprises a translation accommodating interconnection (figure 5).

The rotation and translation accommodating interconnection further comprises:

an elongate track associated with one of the display and keyboard panels (figure 24, slide portion of the slot shape 12), wherein said elongate track is parallel to the lengthwise oriented centerline of the elongate display panel in the compact configuration (figures 23 and 24), and

a key associated with the other of said display and keyboard panels (figures 23 and 24: rotation shaft 31), the key having an insert portion restrained within said track and which is permitted to translate longitudinally within said track (paragraph 46, figures 23 and 24), the insert portion having a periphery that is at least partially rounded (paragraphs 49 and 50) and that is laterally bounded by internal sides of said track thereby facilitating rotation of said key relative to said track about an axis of rotation of said key (paragraphs 54 and 55, figures 11 and 12), wherein said key further comprises a track follower located at a distance from said axis

of rotation of said key (figures 23 and 24: element 62); and
a pair of follower-receiving tracks associated with said panel with which said elongate track is associated (figures 23 and 24: rotation portions of the slot shape 12), each of said follower-receiving tracks being oriented at an outwardly directed incline relative to said elongate track and located opposite one another relative said elongate track and wherein each of said pair of follower-receiving tracks terminates in a delimiter surface against which said track follower abuts when said elongate display panel reaches a horizontal orientation relative to a vertically oriented keyboard panel upon transition from the compact configuration to the expanded configuration (figures 23, 24, 25 and 26).

2.3 The subject-matter of claim 1 therefore distinguishes itself from the disclosure of D7 by containing the following features:

(a) the device has a generally T-shaped front-facing profile in the expanded configuration;
(b) the elongate keyboard panel comprises a keyboard that is entirely exposed in the expanded configuration;
(c) the elongate display panel forms a portion of the T-shaped front-facing profile in the expanded configuration;
(d) the key *consists* of an insert portion;
(e) the insert portion has a circular section;
(f) the key further consists of a track follower having a circular section and a connecting member connecting the track follower to the insert portion;

(g) the insert portion is restrained within said track and is permitted to translate longitudinally within said track, the insert portion being permitted to rotate relative to the elongate track about an axis of rotation of said key, said insert portion having a periphery that is at least partially rounded and that is laterally bounded by internal sides of said track thereby facilitating rotation of said key relative to said track about the axis of rotation of said key;

(h) the track follower is located at a distance from said axis of rotation of said key, the track follower being offset from the insert portion by the connecting member, and a rotation of the insert portion of the key within the elongate track causes rotation of the key relative to said track about the axis of rotation of said key;

(i) the rotation and translation accommodating interconnection further comprises a pair of follower-receiving tracks associated with said panel with which said elongate track is associated, each of said follower-receiving tracks being linear and oriented at an outwardly directed incline relative to said elongate track and located opposite one another relative said elongate track and wherein each of said pair of follower-receiving tracks terminates in a delimiter surface against which said track follower abuts when said elongate display panel reaches a horizontal orientation relative to a vertically oriented keyboard panel upon transition from the compact configuration to the expanded configuration;

(j) the rotation and translation accommodating interconnection accommodates simultaneous rotation and translation during transition of the device between the compact and expanded configuration; and

(k) as the insert portion of the key is translating longitudinally within the elongate track, the track follower is guided linearly in a translation movement along one of the pair of follower-receiving tracks, whereby the translation of the track follower along the one of the pair of follower-receiving tracks causes the insert portion of the key to be rotated accordingly relative to the elongate track as the insert portion of the key is translating longitudinally within the elongate track, so that the key is simultaneously translating longitudinally within the elongate track and rotating relative to the elongate track about the axis of rotation of the key.

2.4 Feature (a) was already present in claim 1 as originally filed. The board is satisfied that features (b) to (k) do not introduce any additional subject-matter (Article 123(2) EPC), as they are disclosed in figure 40 and the corresponding passages in the description as originally filed.

2.5 These distinguishing features allow the user to switch from the compact to the expanded configuration with a single movement.

2.6 The arrangement of D7 does not allow such a switch with a single movement. In that arrangement, the user first needs to carry out a translation, and then a rotation.

2.7 It can therefore be said that said features solve the problem of providing an alternative way of switching from a compact to an expanded configuration.

2.8 None of the documents cited in the search report, taken alone or in combination, disclose or render obvious such a way of proceeding.

2.9 The board therefore concludes that the subject-matter of claim 1 is inventive (Article 56 EPC 1973).

2.10 The remaining claims, i.e. claims 2 to 4, are dependent from claim 1 and are consequently also allowable.

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 on the basis of claims 1 to 4 of the current single request filed with letter of 28 July 2023 and a description and figures to be adapted where necessary.

The Registrar: The Chair:

L. Stridde A. Jimenez

Decision electronically authenticated