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Datasheet for the decision of 24 February 2010

Case Number: T 1749/06 - 3.4.03

Application Number: 01307922.3

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Language of the proceedings: EN

Title of invention:
Three-dimensional icons for graphical user interface

Applicant:
Nokia Corporation

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 52

Relevant legal provisions (EPC 1973):
EPC Art. 83, 84, 111(1)

Keyword:
"Technical features"
"Remittal"

Decisions cited:
T 1194/97, T 1121/02, T 0258/03

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1749/06 - 3.4.03

D E C I S I O N
of the Technical Board of Appeal 3.4.03
of 24 February 2010

Appellant: Nokia Corporation
Keilalahdentie 4
FI-02150 Espoo (FI)

Representative: Piotrowicz, Pawel Jan Andrzej
Venner Shipley LLP
Byron House
Cambridge Business Park
Cowley Road
Cambridge CB4 0WZ (GB)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 12 June 2006 refusing European application No. 01307922.3 pursuant to Article 97(1) EPC 1973.**

Composition of the Board:

Chairman: G. Eliasson
Members: V. L. P. Frank
T. Bokor

Summary of Facts and Submissions

I. This is an appeal against the refusal of application 01 307 922 for added subject-matter (Article 123(2) EPC) and lack of inventive step (Article 56 EPC 1973).

II. The appellant applicant requested that the decision under appeal be set aside and that a patent be granted on the basis of:

Claims: 1 to 9 filed with letter of 21 July 2009;

Description: pages 1 to 3 filed with letter of 21 July 2009;
4 and 5 as originally filed;
6 filed with letter of 8 December 2004

Figures: 1/4 to 4/4 as originally filed.

III. The independent claims of this request read:

"1. A computer-readable medium (54) encoded with a data structure for use in providing a graphical icon (12) for display on a display (14) of a portable communications device (10), characterized in that said data structure is encoded as digital data indicative of said graphical icon defined by alternating light and dark stripes (30, 32), that selected stripes of said light and dark stripes change from light to dark and back to light to indicate a shadow adjacent an edge of said icon and from dark to light and back to dark to indicate a highlight adjacent another edge of said icon, and that altogether said light and dark

stripes with shadows and highlights provide said icon with a three-dimensional appearance."

"6. A method of displaying an icon (12) on a portable communication device (10), comprising: retrieving, in response to an event signal, digital data from a computer-readable medium (54), wherein said digital data is indicative of said icon (12) defined by alternating light and dark stripes (30, 32), that selected stripes of said light and dark stripes change from light to dark and back to light to indicate a shadow adjacent an edge of said icon and from dark to light and back to dark to indicate a highlight adjacent another edge of said icon, and that altogether said light and dark stripes with shadows and highlights provide said icon with a three-dimensional appearance; and displaying said icon in response to said digital data."

Claims 2 to 5 are dependent on claim 1 and claims 7 to 9 on claim 6.

IV. The following document is mentioned in this decision:

D1: WO 00/57617 A

V. The examining division argued on inventive step essentially as follows:

– The preamble of claim 1 was known from document D1. The claim's characterizing portion described further the cognitive information of the icon which did not have an effect on the normal function of the

computer-readable medium, since the image data was stored in a standard format and did not include functional data (eg commands or data structures specific to the stripes). The data was taken and displayed exactly as in the device of D1. The characterizing features of the claim were therefore non-technical and could not be considered when assessing inventive step.

– The arrangement of light and dark stripes as specified in the claim provided a three-dimensional effect using a two-dimensional display. These images would indeed be perceived by the viewer as having a three-dimensional effect. The effect, however, depended only on the perception of the viewer ("happens in the brain of the viewer") and thus related to presentation of information. It was therefore non-technical.

The examining division also objected in its communications that the application did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 83 EPC 1973) and that the claims lacked clarity as they tried to define the subject-matter to be protected by the result to be achieved (Article 84 EPC 1973) although these reasons were not invoked in the decision under appeal.

VI. The appellant applicant argued essentially as follows:

– The examining division had considered that the claims described the cognitive information of the icon and, thus, that these were nontechnical

features which could not be used as a basis for inventive step. Starting from D1, the technical problem was how to provide a three-dimensional effect using a two dimensional display. The computer-readable medium according to claim 1 solved this problem.

– The distinguishing features did not concern the content of the information, but rather how the content was conveyed to the user. It was evident that the claim was concerned with how the stripes should be arranged for any icon so as to achieve the intended effect. Such an arrangement was technical and should be considered when assessing inventive step.

Reasons for the Decision

1. The appeal is admissible.

2. *Amendments (Article 123(2) EPC)*

Claims 1 to 9 correspond to originally filed claims 1 to 5 and 9 to 12, respectively. Hence no objections of added subject-matter arise.

3. *Sufficiency of disclosure and clarity (Article 83 and 84 EPC 1973)*

3.1 The decision under appeal does not contain objections under Article 83 or 84 EPC 1973. However, as the claims of the appellant's request are identical to the originally filed claims on which the examining division

raised these objections, the board considers it expedient to consider these objections, as it does not share the view of the examining division on the issues of sufficiency of disclosure and clarity of the original claims as explained below.

3.2 The patent application relates to displays of mobile phones and the need to represent on low-resolution displays icons having a three-dimensional appearance (page 1, lines 11 to 14). To this effect, the application discloses the use of alternating dark and white stripes to suggest the presence of highlights and shadows in a low-resolution icon.

3.3 The examining division objected that the application did not sufficiently disclose how to create low-resolution icons with a strong three-dimensional effect, since the teaching contained in the application did not necessarily lead to a three-dimensional effect and it was only the knowledge of the designer of the icon which lead ultimately to a three-dimensional effect with highlights and shadows (point 2 of the communication of 21 June 2004).

3.3.1 The board agrees with the examining division that the application does not disclose an algorithm for automatically creating an icon with a three-dimensional effect. The board, however, considers that a skilled person is able to modify an icon by applying the concept disclosed in the application to create the three-dimensional effect. This concept being to alternate dark and white stripes so that the shadows produced by an imaginary light source are represented by dark stripes at the borders of the icons which would

create a shadow and that the borders of the icons illuminated by that imaginary light source are represented by white stripes so as to simulate highlighted regions. This concept is further illustrated by the exemplary icons depicted in the drawings which give sufficient guidance on how it can be implemented.

3.3.2 Although the possibility exists that a three-dimensional effect cannot be created for all imaginable icons merely by using dark and white stripes, the board has no doubts that for a large number of icon shapes this can be done.

3.4 The examining division further objected that the original claims stated the result to be obtained as a result to be achieved, ie in functional terms, and were therefore not clear.

3.4.1 Although claim 1 states *"that altogether said light and dark stripes with shadows and highlights provide said icon with a three-dimensional appearance"* it also states how this is to be achieved, namely by changing the stripes from dark to white or from white to dark at the icon's border. The means for achieving the three-dimensional appearance are therefore indicated in the claims.

3.5 The board considers for these reasons that the application fulfils the requirements of Articles 83 and 84 EPC 1973.

4. *Claim 1 - Technical features*

4.1 The examining division objected in the decision under appeal that some features of the claims were directed to the presentation of information, as they described the cognitive information of the icon, and could therefore not be considered when assessing inventive step.

4.1.1 The Guidelines for Examination (C-IV 2.3.7, June 2005, the version in force at the time of the decision under appeal. The text has remained unchanged through to the April 2009 version currently in force) state that "a presentation of information defined **solely** by the content of the information is not patentable" and that "the arrangement or manner of representation, as distinct from the information content, may well constitute a patentable technical feature". The present application relates to the manner of representation of the icon and not to its contents, ie whether the icon depicts a house or a butterfly.

4.1.2 In decision T 1194/97 (OJ 2000, 525), invoked by the examining division to support their conclusion, the then deciding board held that *"A record carrier characterised by having functional data recorded thereon is not a presentation of information as such and hence not excluded form patentability by Article 52(2)(d) and (3) EPC"* (Headnote, point I). The converse, however, ie that from the lack of functional data the presentation of information as such can be inferred, is not true. Hence decision T 1194/97 does not support the conclusion of the examining division.

4.1.3 The present board agrees with the finding of T 1194/97 and the statements of the Guidelines cited above. Presentation of information arises when *"what is displayed"* is claimed without specifying *"how it is displayed"*. Claim 1 comprises the feature of an icon formed of dark and white stripes having thus a three-dimensional effect, but does not comprise the icon's cognitive content, ie its specific shape. The latter feature, ie the icon representing eg a butterfly, is a presentation of information, but not the former.

4.1.4 The board finds for these reasons that the features of the characterizing portion of claim 1 do not fall under the category of presentation of information within the meaning of Article 52(2)(d) EPC.

4.2 The examining division further invoked decision T 1121/02 (not published) for ignoring the features of the claim leading to an icon's three-dimensional appearance when assessing inventive step, as these features depended only on the perception of the viewer ("happens in the brain of the viewer") and were therefore not technical.

4.2.1 Claim 1 of the application leading to decision T 1121/02 was directed to an elongate fencing element having along its surface contrasting markings resembling the warning pattern of an animal (eg a bee) which acted as a deterrent to another animal (eg a horse or cow). The then deciding board found that the contrasting markings were not technical features, as the explanation provided in the application for the deterring effect was only a theory (the animals had a built-in instinct which warned them that other

creatures bearing dark and light colouring were harmful and should be avoided), although it provisionally accepted that the markings had an effect on the animal seeing them. The contrasting markings therefore did not contribute to the solution of any technical problem by providing a technical effect and hence had no significance when assessing inventive step (Summary of facts and submissions, points V and VII).

4.2.2 The present board is aware of the difficulty of assessing whether or not a feature contributes to the technical character of a claim. It agrees, however, with the approach followed in decision T 258/03 (OJ 2004, 575) that even a so familiar activity such as the act of writing using pen and paper has technical character (reasons, point 4.6). Applying the same approach to the medium of claim 1, the board finds that the feature of modifying the edge of an icon with alternate dark and light stripes has technical character and should be considered when assessing inventive step.

4.2.3 The board is further of the view that the test "happens in the brain of the viewer", invoked by the examining division, is not useful for deciding whether a feature contributes to the technical character of a claim or not. Inventions such as the cinematograph are based on an effect which only "happens in the brain of the viewer", namely that the projection of a rapid succession of still images on a screen creates the illusion of fluent motion. Although the illusion of perceiving a real action is only created in the viewer's brain, nobody would seriously contest that the cinematograph is an invention based on technical

features. It may be argued that the apparatus of the cinematograph comprises technical elements with the ultimate purpose to create the illusion of motion in the viewer's brain. However, in the present case the dark and light stripes are also technical elements which contribute to creating the three-dimensional illusion.

4.3 For these reasons, the board considers that the features of the characterizing portion of claim 1 have technical character and should be considered when assessing inventive step.

5. *Independent method claim 6*

Claim 6 is directed to a method of displaying an icon on a portable communication device, the icon being defined in the same manner as in claim 1, ie by alternating light and dark stripes that create a three-dimensional appearance. The above findings on claim 1 therefore also apply to the method of claim 6.

6. *Novelty and inventive step*

It is premature for the board to comment on novelty or inventive step at this stage of the proceedings, as the assessment of the board on whether the features of the claims are technical or not differs from that of the examining division. Under these circumstances it is appropriate to remit the case to the department of first instance for further prosecution, so that the examining division can decide whether a further search would be required in which all the technical features

of the claims are taken into account (Article 111(1) EPC 1973).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance for further prosecution.

Registrar | Chair

S. Sánchez Chiquero | G. Eliasson