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Datasheet for the decision
of 17 July 2019

Case Number: T 1228/15 - 3.5.07

Application Number: 07805125.7

Publication Number: 2044538

IPC: G06F17/30

Language of the proceedings: EN

Title of invention:
Determining an ambient parameter set

Applicant:
Signify Holding B.V.

Headword:
Determining an ambient parameter set/SIGNIFY HOLDING

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - after amendment (yes)

Case Number: T 1228/15 - 3.5.07

D E C I S I O N
of Technical Board of Appeal 3.5.07
of 17 July 2019

Appellant:

(Applicant)

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Representative:

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Decision under appeal: **Decision of the Examining Division of the**
European Patent Office posted on 28 January 2015
refusing European patent application
No. 07805125.7 pursuant to Article 97(2) EPC

Composition of the Board:

Chairman   R. Moufang
Members: M. Jaedicke
                  P. San-Bento Furtado

Summary of Facts and Submissions

I.   The applicant (appellant), which at the time was
        Koninklijke Philips N.V., appealed against the decision
        of the Examining Division refusing European patent
        application No. 07805125.7, filed as international
        application PCT/IB2007/052778 and published as
        WO 2008/010158 A1. The application claims a priority
        date of 17 July 2006.

II.   In the course of the appeal proceedings, the
        application was first transferred to Philips Lighting
        Holding B.V., which obtained the status of appellant.
        The appellant later changed its name to Signify
        Holding B.V.

III.   The documents cited in the contested decision were:

        D1: US 2006/153469 A1, published on 13 July 2006
        D2: US 2002/169817 A1, published on 14 November 2002
        D3: EP 1 473 643 A2, published on 3 November 2004

IV.   The Examining Division did not admit the then main
        request and the then second and third auxiliary
        requests into the proceedings. It decided that the
        subject-matter of independent claims 1 and 5 to 7 of
        the then first auxiliary request did not meet the
        requirements of Article 123(2) EPC.

V.   In its statement of grounds of appeal, the appellant
        requested that the decision under appeal be set aside
        and that a patent be granted on the basis of one of the
        requests considered in the contested decision and
        submitted during the oral proceedings before the
        Examining Division. It requested that the Board
        reassesses the requirements of Articles 56 and

123(2) EPC for its substantive requests.

VI.   In a communication under Article 15(1) RPBA
        accompanying the summons to oral proceedings, the Board
        expressed, *inter alia,* its provisional opinion that the
        subject-matter of claim 1 of the then main request
        lacked novelty in view of document D1 and that the
        subject-matter of claim 1 of the then first and second
        auxiliary requests lacked inventive step in view of
        document D1.

VII.   By letter of 15 July 2019, the appellant submitted a
        new main request and arguments.

VIII.   In the course of oral proceedings held as scheduled,
        the appellant filed a new sole request replacing all
        requests on file. At the end of the oral proceedings,
        the chairman pronounced the Board's decision.

IX.   The appellant's final request was that the decision
        under appeal be set aside and that a patent be granted
        on the basis of claims 1 to 6 of the amended main
        request filed in the oral proceedings before the Board.

X.   Claim 1 of the sole request reads as follows:
        "A method of determining an ambient parameter set
        associated with a textual description, the ambient
        parameter set for controlling a lighting application
        device (3,4), the method comprising the steps of:
            searching a database (19) by using the textual
        description, the database (19) comprising a plurality
        of files wherein the files comprise content in the form
        of a picture, characterized in that each file comprises
        information related to the file content, for obtaining
        a subset of files whose information matches the textual
        description;

analyzing the subset of files for obtaining the
ambient parameter set related to the textual
description,
        wherein the ambient parameter set comprise [*sic*]
    one or more ambient parameters selected from the
    group of a color value, an intensity value, a hue
    value and a saturation value; and
        wherein the analyzing comprises determining
    average parameter values for the one or more
    ambient parameters of the ambient parameter set
    across the subset of files, and
    controlling the lighting application device (4, 5)
in accordance with the average parameter values of the
obtained ambient parameter set."

Claims 2 and 3 are dependent on claim 1.

Claim 4 reads as follows:
"An apparatus comprising an ambient controller system
(10) for an ambient device (15) which allows having an
ambient characteristic, and an ambient device (15)
connected to the ambient controller system in which the
ambient controller system (10) is arranged to receive
an ambient parameter input, to determine an ambient
parameter set for the ambient characteristic on the
basis of the received ambient parameter input, using
the method according to any one of claims 1 to 3, and
to control the ambient characteristic of the ambient
device (15), using the ambient parameter set, wherein
the ambient device is a lighting application device (4,
5) and wherein the ambient parameter set comprise [*sic*]
one or more ambient parameters selected from the group
of a color value, an intensity value, a hue value and a
saturation value."

Claim 5 reads as follows:
"A computer program product comprising a computer-executable code which, when loaded in a computer system, enables the computer system to carry out a method according to any one of claims 1 to 3."

Claim 6 reads as follows:
"A computer readable medium having recorded thereon a computer-readable program product comprising code means adapted to perform all the steps of any of the method claims 1 to 3 when said code means are loaded and executed on a computer."

Reasons for the Decision

1.   The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.

The invention

2.   The application relates to determining an ambient (environment) parameter set associated with a textual description of an ambiance, such as 'sunset' or 'autumn' or a sentence. The ambient parameter set may comprise one or more sensor parameters, such as background lighting colour, light intensity, but also background audio or even scent (description as published, page 1, lines 2 to 5 and 24 to 26).

A method according to the application comprises searching a database such as the internet. The database comprises a plurality of files which may comprise content in the form of a picture, video or even sound. Furthermore, each file comprises information (metadata) related to the file content. When a textual description

in the form of a word or sentence reflecting a desired
ambiance is received as input, it is used for obtaining
a subset of files whose information matches the textual
description (page 1, line 27, to page 2, line 7;
Figure 3).

The subset of files matching the textual description of
the desired ambiance may be analysed for one or more of
the ambiance parameters such as colour. This may
comprise determining average parameter values for the
ambient parameter set from the content stored in the
subset of files.

By using the internet, or another large public
database, a good translation of the textual
description, e.g. 'sunset', into a subset of files
comprising a picture, video, audio sample, light or
ambient atmosphere is possible, all the features of
which represent 'sunset' (page 2, lines 8 to 27).

The method further comprises setting an ambient device,
using the ambient parameter set. The ambient device may
include, but is not limited to, a lighting application
device, or an ambilight home entertainment device, etc.
(page 2, lines 28 to 34; Figures 1, 2 and 5).

3.   *The appellant's request*

Claim 1 of the appellant's sole request relates to a
method of determining an ambient parameter set
associated with a textual description in which the
ambient parameter controls a lighting application
device, which comprises the following features, as
itemised by the Board:

A   searching a database by using the textual
        description, the database comprising a plurality
        of files wherein the files comprise content in
        the form of a picture, characterised in that each
        file comprises information related to the file
        content, for obtaining a subset of files whose
        information matches the textual description

B   analysing the subset of files for obtaining the
        ambient parameter set related to the textual
        description

C   wherein the ambient parameter set comprises one
        or more ambient parameters selected from the
        group of a colour value, an intensity value, a
        hue value and a saturation value

D   wherein the analysing comprises determining
        average parameter values for the one or more
        ambient parameters of the ambient parameter set
        across the subset of files

E   controlling the lighting application device in
        accordance with the average parameter values of
        the obtained ambient parameter set.

4.   *Admission*

The request was filed after oral proceedings had been
arranged. It clarifies, in response to objections
raised by the Board, the set of claims filed as the
first auxiliary request in the oral proceedings before
the Examining Division and limits the subject-matter
further to controlling a lighting application device as
a particular example of an ambient device. As the Board
has no difficulty to decide on the request in
substance, and the appellant agreed to discuss
inventive step also in view of document D2, the Board
exercises its discretion under Article 13(1) and 13(3)
RPBA and admits the request into the appeal

proceedings.

5.   *Amendments*

The present set of claims has been amended during the
proceedings. Claim 1 is based on originally filed
claims 1, 2, 4 and 5, the originally filed description
(see page 1, line 27, to page 2, line 1; page 2, lines
29 and 30; page 4, lines 21 and 22; page 5, line 28, to
page 6, line 5) and originally filed Figure 3. Claim 2
is based on originally filed claim 3 and the
description, page 7, lines 19 to 21. Claim 3 is based
on originally filed claim 7. Present claim 4 is based
on originally filed claims 8 and 9 and the originally
filed description (see page 2, lines 29 and 30, and
page 6, lines 3 to 5). Present claims 5 and 6 are based
on originally filed claim 10 and the description as
originally filed (see page 5, lines 4 to 6).

The Board is therefore satisfied that the claims comply
with the requirements of Article 123(2) EPC.

6.   *Clarity and support*

In its communication, the Board raised an objection of
lack of support against the then main request arguing
that claim 1 could not be sufficiently supported by the
description for some ambient parameters such as smells
or background noise. As the appellant has removed these
ambient parameters from claim 1, this objection has
been overcome. The Board is therefore satisfied that
the claims meet the requirements of Article 84 EPC.

7.   *Inventive step*

7.1   Interpretation of the claimed subject-matter

In the oral proceedings, the appellant submitted that a
skilled person would have understood the term intensity
as brightness (see feature C). It stated that the
expression lighting application device had the same
meaning as lighting device. Both expressions were used
synonymously in the description. The database files
each contained content in form of a picture (see step
A), and the analysis according to features B to D
involved analysing the picture content. The Board
agrees with the appellant's reading of the claim.

7.2   Document D1 as the starting point

Document D1 was cited in the proceedings before the
department of first instance as a suitable starting
point for assessing inventive step.

7.2.1   Document D1 explains that it was known to search for
images by matching a query to features extracted from
the image or labels that are associated with the image
(paragraph [0007]). An object of the proposed method is
to facilitate the processing of digital images captured
by a digital camera by using measured ambient air
attributes (paragraph [0008]).

Document D1 discloses in Figure 5 an image management
system that uses ambient air characteristic data
(paragraph [0060]). The images are stored in image
files comprising further data such as a timestamp, a
GPS-position and/or ambient air attribute data
(paragraphs [0028], [0030] and [0067]). A user submits
a query, and a search engine uses ambient air

characteristic data that are associated with images in
a digital-image database to determine the search
results - a set of images from the digital-image
database that best satisfy the query. For example, the
user can specify the query as "Images at temperatures
≤ 0°C" when attempting to find an image of a ski trip
(D1, paragraph [0060]).

The search engine compares the ambient air
characteristics with the query conditions and
determines the set of images that best satisfy the
query. The features related to ambient air
characteristics may be just some of several or many
features used in the query by the user to search for
images. The user may also specify specific colours or
materials (i.e. snow, people, grass, etc.) that must
appear in the search-result images found by the search
engine (D1, paragraph [0060]).

7.2.2   The overall effect and purpose of the method disclosed
in document D1 is to help users to find photos based
among other things on the ambient air temperature when
the photo was taken. This overall purpose is quite
different from the overall purpose of the subject-
matter of claim 1, which is controlling a lighting
application device in accordance with the average
parameter values of an obtained ambient parameter set
(see feature E of claim 1). Moreover, document D1 does
not disclose features B and D of claim 1 as no average
values are determined in a set of retrieved images.
Hence, document D1 is not a suitable starting point for
assessing inventive step of the subject-matter of
present claim 1.

7.3   Document D3 as the starting point

Document D3 is somewhat similar to document D1 as it
discloses a method for annotating images and retrieving
images using metadata (see abstract; paragraphs [0010]
to [0032]; Figures 2 to 6, 15 to 17, 22, 26, 27(a) and
27(b)). It does not relate to controlling a lighting
application device and thus is not a suitable starting
point for assessing inventive step of present claim 1.

7.4   Document D2 as the starting point

Document D2 discloses a method of operating a set of
devices, including a lighting device, based on a
received real-world description in a markup language
and operating said devices according to said
description (abstract; paragraphs [0001] to [0004] and
[0020]; Figures 1 and 2). Thus, the method disclosed in
document D2 is similar to the method of claim 1 and
constitutes a suitable starting point for assessing
inventive step.

7.4.1   Figure 1 of D2 discloses a real-world representation
system comprising a set of devices including a display
device, audio speakers, a lighting device, a heating
device and so on. These devices together contribute to
make up the ambient environment, each device being
arranged to provide one or more real-world parameters.
For example, the lighting device provides colour tones
and a luminance level. The devices are interconnected
by a network (paragraph [0020]).

At least one of the devices making up the real-world
representation system is arranged to receive a
description as an instruction set in a markup language
such as "<FOREST>, <SUMMER>, <EVENING>". The devices

are then operated according to this description. This description may be part of a broadcast signal or retrieved from a local or remote store. As the description is provided in a markup language format, descriptions and fragments of descriptions can easily be stored on servers for retrieval via a PC or suitably enabled digital TV. The descriptions can be updated and amended by the authors, thereby allowing a large and varied library of descriptions to be created (paragraphs [0023], [0024] and [0035]). A user can operate the system from a user interface such as a remote control, or a mobile terminal such as a PDA can be employed (paragraph [0033]).

According to a first embodiment (D2, paragraph [0024]; Figure 3), each markup language enabled device operates in essentially the same manner. For example, the lighting device (Figure 2) has receiving means for receiving the real-world description in the form of an instruction set of a markup language, the receiving means including part of a distributed browser that interprets the instructions of the instruction set. The portion of the browser in the receiving means communicates with adjusting means arranged to adjust one or more parameters of the lighting device such as colour tones and luminance level.

According to a second embodiment (D2, Figure 4 and paragraph [0026]), the description is read at a local server. In this embodiment, a browser or operating system present on the local server interprets the instructions of the real-world description and generates specific parameter adjustments for communicating to the relevant device. In this way, usual devices can be used without modification in the system disclosed in document D2.

Document D2 also discloses to include descriptions of desired real-world environments in TV broadcast signals (paragraph [0028]). An authoring program receiving text or video input can be used to generate descriptions/ sets of instructions in a markup language (paragraph [0052]).

7.4.2   The claimed invention therefore differs from the method disclosed in document D2 in that it includes features A, B and D. Moreover, document D2 discloses to control a lighting device with colour values as control parameters, but it does not disclose to do so with obtained average parameter values (see feature E of claim 1).

7.4.3   At the oral proceedings, the appellant argued that the claimed method achieved the same overall effect as the method disclosed in document D2. Hence, it solved the problem of providing an alternative implementation of the known method of controlling a lighting device.

7.4.4   The Board essentially agrees with the appellant in that the overall effect, i.e. controlling parameters of a lighting device on the basis of a textual description, of the method disclosed in document D2 and the method of present claim 1 is the same. However, document D2 does not explain in detail how the real-world description is interpreted into specific parameter adjustments for the lighting device. Hence, the skilled person trying to implement the method disclosed in document D2 would have to fill a gap in the disclosure. Consequently, the Board considers that the objective technical problem can be formulated as how to implement the interpretation of the textual description into

control parameters for the lighting device.

7.4.5   The skilled person faced with the above problem would
         have considered providing a fixed mapping from the
         description into device parameters. This mapping could
         then be used by the interpreter. Given that users may
         have subjective preferences for ambient parameters, it
         would have been a routine improvement to store
         descriptions together with user-specific ambient
         parameters in the library disclosed in document D2
         (paragraph [0035]). The skilled person would thus have
         arrived at a searchable database with textual
         descriptions and associated control parameters for
         ambient devices. However, document D2 does not hint at
         including pictures in this database.

         There is no other passage in D2 that would have led the
         skilled person to the claimed method. For example, the
         authoring program disclosed in paragraph [0052] of D2
         generates descriptions for video content, but how this
         is done is not disclosed. In any case, the (automatic)
         generation of textual descriptions for video content
         does not point to (automatically) interpreting textual
         descriptions using an image database. The Board is also
         not aware of any common general knowledge which could
         have led the skilled person to the claimed method.
         Hence, the subject-matter of claim 1 is not obvious in
         view of document D2 alone.

7.4.6   Documents D1 and D3 concern methods for annotating and
         retrieving images such as photos. There is nothing in
         document D2 which would have prompted the skilled
         person to consult these documents.

         Even if the skilled person had considered documents D1
         and D3 when searching for a solution starting from D2,

they would not have found the claimed solution. None of these documents suggests extracting average parameter values from a retrieved subset of images, let alone the use of such average parameter values for controlling an ambient device such as a lighting device.

Thus, the subject-matter of claim 1 is not rendered obvious by a combination of document D2 with either D1 or D3.

In sum, the method of claim 1 involves an inventive step in view of the prior-art documents on file. The same holds for the further independent claims which correspond to claim 1 in terms of apparatus, computer program product and computer-readable medium.

The Board is therefore satisfied that the claims of the sole request meet the requirements of Articles 52(1) and 56 EPC.

8.   *Conclusion*

In view of the above, the claims of the sole request satisfy the requirements of the EPC. However, the description and drawings may still require adaptation.

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 with the order to grant a patent on the basis
        of claims 1 to 6 of the amended main request filed in
        the oral proceedings before the Board, with drawings
        and the description to be adapted.

The Registrar: The Chairman:

D. Magliano   R. Moufang

Decision electronically authenticated