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Datasheet for the decision
of 19 April 2012

Case Number:	T 0993/08 - 3.5.04
Application Number:	03253738.3
Publication Number:	1377050
IPC:	H04N5/445
Language of the proceedings:	EN

Title of invention:
Video apparatus having an OSD function

Patentee:
Samsung Electronics Co., Ltd.

Opponent:
Interessengemeinschaft
für Rundfunkschutzrechte e.V. (IGR e.V.)

Headword:

Relevant legal provisions:
EPC 1973 Art. 56, 84

Keyword:
inventive step (main request, first and second auxiliary
requests) - no
clarity (third to fifth auxiliary requests) - no

Decisions cited:

Catchword:

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Boards of Appeal

Chambres de recours

Case Number: T0993/08 - 3.5.04

D E C I S I O N
of the Technical Board of Appeal 3.5.04
of 19 April 2012

Appellant: (Patentee)	Samsung Electronics Co., Ltd. 416 Maetan 3-dong Yeongtong-gu Suwon-si, Gyeonggi-do 442-742 (KR)
Representative:	Walaski, Jan Filip Venner Shipley LLP 200 Aldersgate London EC1A 4HD (UK)
Respondent: (Opponent)	Interessengemeinschaft für Rundfunkschutzrechte e.V. (IGR e.V.) Bahnstraße 62 40210 Düsseldorf (DE)
Representative:	Kinnstätter, Klaus Maryniok & Eichstädt Kuhbergstraße 23 96317 Kronach (DE)

Decision under appeal: **Decision of the Opposition Division of the European Patent Office posted 17 March 2008 revoking European patent No. 1377050 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman:	F. Edlinger
Members:	R. Gerdes
	T. Karamanli

Summary of Facts and Submissions

I.   The present appeal arises from the decision of the
        opposition division revoking European patent
        No. 1 377 050.

II.   Opposition had been filed against the patent as a
        whole, based on the grounds of lack of novelty and
        inventive step (Article 100(a) together with
        Articles 54 and 56 EPC 1973).

III.   In its decision dated 17 March 2008 the opposition
        division found that the subject-matter of independent
        claims 1 and 5 according to all of the patent
        proprietor's requests did not involve an inventive step
        (Article 56 EPC 1973) in view of the prior art document

        D1: US 6 169 543 B1.

IV.   The patent proprietor filed an appeal against this
        decision. In the statement of grounds of appeal the
        appellant requested that the impugned decision be set
        aside and that the patent be maintained on the basis of
        the attached claims of a main request, a first or a
        second auxiliary request.

V.   The respondent (opponent) replied by letters dated
        5 June 2008 and 11 November 2008 and requested that the
        appeal be dismissed.

VI.   In a communication annexed to the summons to oral
        proceedings, the board *inter alia* expressed doubts that
        the subject-matter of the independent claims of all
        requests met the requirements of Article 84 EPC 1973.
        The board also indicated that, according to its
        provisional opinion, it was inclined to follow the view

taken by the opposition division regarding inventive
step of the subject-matter of claim 1 of the main
request (Article 56 EPC 1973).

VII.   By letter of 20 February 2012 the respondent announced
        that it would not attend the oral proceedings, but
        maintained its request that the appeal be dismissed.

VIII.   By letters of 19 March 2012 and 4 April 2012 the
        appellant submitted several sets of new claims and
        requests.

IX.   Oral proceedings were held on 19 April 2012. As
        announced beforehand, the respondent was not
        represented at the oral proceedings. The appellant
        finally requested that the decision under appeal be set
        aside and the patent maintained in amended form on the
        basis of the claims of the main request, or of
        auxiliary requests 1 or 2, all submitted in the oral
        proceedings, or on the basis of the claims of one of
        auxiliary requests 3, 4 or 5, filed as "1st Auxiliary
        Request", "2nd Auxiliary Request", "3rd Auxiliary
        Request", respectively, with letter of 19 March 2012.

X.   Independent claim 1 according to the appellant's **main
        request** reads as follows:

        "A video reproduction device comprising:
        a reproduction component (202), adapted to read out
        video data stored in a recording medium;
        an on-screen display (OSD) menu component
        (205a, ..., 205n) separate from the recording medium,
        adapted to store and output graphic data in order to
        set an OSD menu display, the OSD menu display
        comprising a plurality of predetermined OSD display
        images corresponding to different menus selectable in

response to user input; and
a controller (220, 240), adapted to select and display
the video data and/or the graphic data, and a decoder
(206) for decoding video data from the reproduction
component (202), the graphic data being in a form that
can be decoded by the decoder (206);
wherein the OSD menu component consists of a plurality
of OSD menu units (205a, ..., 205n), each storing
graphic data corresponding to one of the plurality of
OSD display images; and
the controller (220, 240) comprises:
a selection component (220), adapted to output
selectively the graphic data from one of the plurality
of OSD menu units (205a, ..., 205n) and/or video data
from the reproduction component (202) to the decoder
(206); and
a selection control component (240), adapted to control
the selection component (220)."

XI.   Claim 1 according to the **first auxiliary request** is
        identical to claim 1 of the main request, except for
        the feature "each storing graphic data corresponding to
        one of the plurality of OSD display images", which is
        replaced by the following feature:

        "wherein graphic data for each one of the plurality of
        OSD display images is stored in a respective OSD menu
        unit in a compressed format".

XII.   Claim 1 of the **second auxiliary request** differs from
        claim 1 of the first auxiliary request by the deletion
        of the expression "in a compressed format".

XIII.   Claim 1 of the **third auxiliary request** is worded as
        follows:

"A video reproduction device comprising:
a reproduction component (202), adapted to read out
video data stored in a recording medium;
an on-screen display (OSD) menu component (205a, ...,
205n) separate from the recording medium, adapted to
store and output graphic data in order to set an
OSD menu display, the OSD menu display comprising a
plurality of predetermined OSD display images
corresponding to different menus selectable in response
to user input, wherein each of the predetermined OSD
display images comprises a screen image, each screen
image being arranged to provide one OSD menu for
display; and
a controller (220, 240), adapted to select and display
the video data and/or the graphic data, and a decoder
(206) for decoding video data from the reproduction
component (202), the graphic data being in a form that
can be decoded by the decoder (206);
wherein the OSD menu component comprises a plurality of
OSD menu units, each storing graphic data corresponding
to one of the plurality of OSD display images; and
the controller (220, 240) comprises:
a selection component (220), adapted to output
selectively the graphic data from one of the plurality
of OSD menu units (205a, ..., 205n) and/or video data
from the reproduction component (202) to the decoder
(206); and
a selection control component (240), adapted to control
the selection component (220)."

XIV.   The wording of claim 1 of the **fourth auxiliary request**
        is the same as that of claim 1 of the third auxiliary
        request with the following feature appended to the
        latter:

"wherein each screen image comprises a plurality of sub-images, each sub-image corresponding to a menu item, one of the plurality of sub-images being user selectable in each screen image."

XV.   Claim 1 of the **fifth auxiliary request** has the same wording as claim 1 of the third auxiliary request with the following feature being appended to the latter:

"wherein each screen image comprises a plurality of sub-images, each sub-image corresponding to a menu item, one of the plurality of sub-images being highlighted in each screen image, the device being operative such that, when a cursor is positioned over a given menu item of a screen image being displayed, the selection component (220) is arranged to select for subsequent display the screen image in which the sub-image corresponding to the given menu item is highlighted."

XVI.   In the decision under appeal the opposition division expressed the opinion that providing an OSD menu component separate from the recording medium where the video data were stored merely represented a choice of a suitable storage medium. Moreover, it was common practice to compress data before they were transmitted or stored in order to save transmission bandwidth and memory capacity. D1 was silent as to how the OSD images were stored and whether or not they were synthesised from graphics and text components. It was obvious to store whole images if the system had sufficient memory capacity because the skilled person always had to consider a trade-off between memory capacity and processing power.

XVII. Essentially the appellant argued as follows:

Re: "main request"

D1 fails to disclose storage of OSD graphic data
separate from the recording medium.

In addition, the video reproduction device of the
invention is distinguished from D1 by the fact that
each screen display of an OSD menu display is stored as
a whole image in one of the OSD menu units. It follows
from the above that the OSD images need not be
synthesised for display from different elements. In D1,
graphic data of one OSD display image are received from
various sources. Based on these data, program guide
information is customised and menus are generated as
needed (see D1, column 7, line 45 to column 8, line 3).
D1 points away from the invention by combining a number
of different components from different sources.

The invention provides a simple and efficient mechanism
by which OSD menus can be provided as high-quality
displays in a video reproduction device.

Re: "first and second auxiliary requests"

Claim 1 of these requests was amended to illustrate
more clearly the difference with respect to D1 that all
graphic data of one OSD display image are stored in one
OSD menu unit. Claim 1 according to the first auxiliary
request additionally specifies that the graphic data
are stored in compressed format, which results in a
reduction of storage space.

Re: "third to fifth auxiliary requests"

With respect to clarity of claim 1 of the third
auxiliary request it was argued that an "OSD display
image" is to be understood as one of the OSD screens
shown in figures 4 to 6. The expression "screen image"
in claim 1 designates the same OSD screen of figures 4
to 6 as the OSD display images. This argument also
applied to claims 1 of the fourth and fifth auxiliary
requests.

XVIII. The arguments of the respondent which are of relevance
with respect to the appellant's final requests may be
summarised as follows:

D1 does not explicitly refer to the place of storage of
graphic data for the OSD menus. D1 refers to media such
as DVDs and video tapes as a source of audio and video
data. It was evident that storage of OSD menus did not
make sense on these removable media. Therefore, they
would have to be stored separately from the recording
medium.

The content of the EPG screens in D1 was not
predetermined and therefore had to be generated by the
video reproduction device itself. However, OSD menus
for general user guidance were well-known at the
effective filing date of the patent. It was common
practice for the skilled person to balance the
requirements with respect to memory capacity and
processing power.

Reasons for the Decision

1.   The appeal is admissible.

2.   For the sake of consistency with references made by the
        appellant, in the following, references to the
        description apply to the application as originally
        filed, which underlies the patent in suit if not
        otherwise mentioned.

3.   *Main request*

3.1   It is not disputed that Dl may be considered as
        reflecting the closest prior art with respect to the
        subject-matter of claim 1.

3.2   D1 discloses a video reproduction device for
        reproducing video and audio data received via broadcast
        or stored on recording media such as digital video
        disks, compact disks and video tapes. D1 is concerned
        with the task of customising an electronic program
        guide such that information from different sources is
        integrated into a single program guide and such that -
        in addition - calendaring or scheduling functions are
        provided (see D1, column 1, line 61 to column 2,
        line 49, column 6, lines 21 to 65, column 10, lines 47
        to 59).

        D1 shows several examples of OSD menus in grid guide
        format and in addition predetermined OSD menus for
        entering calendaring or scheduling information (see
        figures 4 to 8). According to D1, OSD menus are
        generated from "stored program guide information,
        stored graphics information, and/or program guide and
        graphics information received via the input signal".

The OSD menu information may be received from the input transport stream, i.e. via broadcast, or retrieved from storage (see column 7, line 41 to column 8, line 14).

D1 (see figure 2) discloses a recording medium (105) and a reproduction component (90, 95) adapted to read out video data stored in the recording medium. It also discloses a controller (115, 37, 65, 70) including a selection control component (115) and a selection component (37, 65, 70) to select and display the video and/or the graphic data. A decoder (55, 80, 85) is provided to decode video data and graphic data from the reproduction component and to transmit the decoded data to an OSD menu display (see column 6, lines 23 to 43 and lines 53 to 64, column 8, lines 4 to 15, column 10, lines 1 to 15, column 11, lines 32 to 36).

3.3   D1 does not explicitly disclose where graphic data for the OSD menu display are stored. However, it may be deduced from the passage in column 6, lines 53 to 64, that they would be stored together with video data in storage medium 105 and not as specified in claim 1 in an on-screen display menu component "separate from the recording medium" for the video data.

In addition, D1 (see e.g. column 7, line 56 to column 8, line 3) seems to generate OSD menus from stored EPG data and graphics when the OSD menus are needed. D1 does not disclose the specific arrangement for storing graphic data, as specified in claim 1, in the OSD menu component which "consists of a plurality of OSD menu units (205a, ..., 205n), each storing graphic data corresponding to one of the plurality of OSD display images".

3.4   The first difference provides an alternative to the
        storage of video data and graphic data on a common
        recording medium. The storage of video data on a
        removable storage medium such as a video tape or a DVD
        is also envisaged in D1, see column 6, lines 30 to 34.
        In this case, it would be evident for the skilled
        person that graphic data for an OSD menu should not be
        stored on the same (removable) storage medium.
        Otherwise, they would not be available whenever OSD
        menus were needed and the medium was removed from the
        video reproduction device. The storage of graphic data
        on a separate medium therefore follows as a necessity
        from the choice of a removable storage medium for the
        video data. As a result this difference cannot justify
        an inventive step.

3.5   A technical effect resulting from the second difference
        relating to the storage of graphic data corresponding
        to one OSD display image in a corresponding OSD menu
        unit is not explicitly disclosed in the application.
        However, the board accepts that it is implicit for the
        skilled person that such an arrangement of data may
        result in a reduction of computational power necessary
        to generate the corresponding OSD display image, in
        particular, if each OSD display image is stored as a
        complete image in one of the OSD menu units. Such a
        reduction of computational power potentially goes along
        with an increase in memory capacity required to store
        the graphic data because graphic data usually require
        more memory, in particular when copies of the same
        graphic data have to be stored in different OSD menu
        units.

3.6   The associated technical problem may therefore be seen
        as being how to reduce the computational load for the
        controller in a video reproduction device.

3.7   The opposition division stated in the decision under
        appeal (see Reasons, point 3.3) that "[i]t is always a
        trade-off between memory capacity and processing power,
        and therefore it would be obvious to the skilled person
        to store whole images if the system has sufficient
        memory capacity". It was not contested by the appellant
        that the skilled person was well aware of this trade-
        off. The board is also convinced that - when designing
        a video reproduction device - the skilled person will
        consider which factors contribute to processor load and
        that he will try to find a suitable balance with other
        design requirements such as limitations of available
        memory space. Hence, depending on the requirements for
        the presentation of the OSD menus and the availability
        of sufficient memory or processing power in the video
        reproduction device of D1, a skilled person would have
        considered adopting the storage concept of claim 1.

3.8   The arguments of the appellant did not convince the
        board. It is correct that in general D1 refers to OSD
        display images which are combined from a number of
        different components from different sources. However,
        this is not the case for all of the OSD display images
        (see figures 5 and 5A) and it does not imply that these
        components are not available in good time before they
        are requested for display. The board also notes that
        according to D1 "[p]referably, this EPG menu is
        generated in response to the EPG display being
        activated (e.g., a user activating a particular key on
        remote control 125)", see column 11, lines 29 to 33.
        The skilled person would understand this sentence to
        mean that even though generating EPG menus in response
        to a user request is the preferred method, there are
        also other options, i.e. generating them beforehand.
        Depending on the availability of computational power

and memory, the skilled person would have chosen the
one or the other option.

3.9   The board concludes that the subject-matter of claim 1
       was obvious to a person skilled in the art having
       regard to the state of the art in D1 and thus lacks an
       inventive step (Article 56 EPC 1973).

4.   *First auxiliary request*

4.1   As conceded by the appellant, the amendments over
       claim 1 of the main request (see point XVII above) are
       intended to improve clarity and essentially only add to
       the subject-matter of claim 1 that the graphic data are
       stored in compressed format.

4.2   The fact that graphic data are generally stored in
       compressed format (JPEG, GIF, PNG, etc.) and not as a
       bitmap is well-known. In addition, D1 discloses that
       data are stored in compressed format on the recording
       medium 90 (see column 6, lines 58 and 59). Hence, the
       added feature cannot justify an inventive step.

4.3   It follows from the above that the subject-matter of
       claim 1 lacks an inventive step (Article 56 EPC 1973).

5.   *Second auxiliary request*

       Claim 1 of the second auxiliary request is identical to
       claim 1 of the first auxiliary request except for the
       deletion of the words "in a compressed format". Claim 1
       thus defines the same subject-matter as claim 1 of the
       main request in a slightly amended wording to improve
       clarity over this claim. This was not contested by the
       appellant. In view of the above, the subject-matter of

claim 1 also lacks an inventive step (Article 56 EPC
1973).

6.   *Third auxiliary request*

6.1   Claim 1 of the third auxiliary request comprises
        different features referring to OSD display images:

        (a) "the OSD menu display comprising a plurality of
            predetermined OSD display images corresponding to
            different menus selectable in response to user
            input",
        (b) "wherein each of the predetermined OSD display
            images comprises a screen image, each screen image
            being arranged to provide one OSD menu for
            display", and
        (c) "... OSD menu units, each storing graphic data
            corresponding to one of the plurality of OSD
            display images".

        Feature (b) was added to claim 1 of the third auxiliary
        request.

6.2   The expression "OSD display image" in feature (a) is
        neither expressly used in the opposed patent nor in the
        application as originally filed. The board accepts the
        appellant's view that this expression may be seen as an
        alternative designation for the "OSD screens" shown in
        figures 4 to 6 and referred to on page 10, lines 17 to
        20 of the description. This interpretation is
        consistent with that of feature (c) according to which
        graphic data of a (whole) OSD screen are stored in one
        OSD menu unit.

6.3   Feature (b) introduces the expression "screen image",
        which is likewise neither expressly used in the opposed

patent nor in the application as originally filed. The
first part of feature (b) implies that a screen image
is not necessarily the same as an OSD display image
because each OSD display image **"comprises** a screen
image" (emphasis added). However, the second part of
feature (b) implies that the screen image refers to the
same OSD screen as the OSD display image. The usage of
different terms for the same entities creates obscurity
concerning the true meaning of the terms for the
definition of the claimed subject-matter. On the other
hand, if these terms were intended to define different
(although similar) entities, such as parts of a
complete OSD screen, the board considers that even a
purposive construction of the terms in the context of
claim 1 does not allow unambiguously delimiting them
from one another. This problem is exacerbated by the
fact that there is no clear correspondence for these
terms in the description and thus a lack of support.

6.4   It follows from the above that claim 1 does not meet
       the requirements of Article 84 EPC 1973.

7.   *Fourth and fifth auxiliary requests*

7.1   Claim 1 of the fourth auxiliary request and claim 1 of
       the fifth auxiliary request also contain features (a)
       to (c) (see point 6.1 above). The additional features
       of these claims are not suitable to overcome the lack
       of clarity resulting from feature (b). On the contrary,
       these claims specify that "each screen image comprises
       a plurality of sub-images", the term "sub-image" being
       a further expression which is neither expressly used in
       the opposed patent nor in the application as originally
       filed.

7.2   Hence, neither claim 1 of the fourth auxiliary request
        nor claim 1 of the fifth auxiliary request meet the
        requirements of Article 84 EPC 1973.

8.   *Conclusion*

        Since none of the appellant's requests are allowable,
        the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

K. Boelicke   F. Edlinger

Decision electronically authenticated