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Datasheet for the decision
of 12 November 2018

Case Number:	T 1648/13 - 3.5.07
Application Number:	05821645.8
Publication Number:	1825472
IPC:	G11B27/031, G06F3/048, H04N5/262, G11B27/34, G06T5/00
Language of the proceedings:	EN

Title of invention:
Method and apparatus for video editing on small screen with minimal input device

Applicant:
Core Wireless Licensing S.à r.l.

Headword:
Video editing/CORE WIRELESS

Relevant legal provisions:
EPC Art. 52(2)(d), 54(1), 56
EPC 1973 Art. 54(3), 54(4)

Keyword:
Inventive step - main request (no) - auxiliary request (yes) - mixture of technical and non-technical features
Novelty - auxiliary request (yes) - prior European application

Decisions cited:
T 1214/09, T 0505/13

Case Number: **T 1648/13 - 3.5.07**

D E C I S I O N
of Technical Board of Appeal 3.5.07
of 12 November 2018

Appellant: (Applicant)	Core Wireless Licensing S.à r.l. 12, rue Jean Engling 1466 Luxembourg (LU)
Representative:	Derry, Paul Stefan Venner Shipley LLP 200 Aldersgate London EC1A 4HD (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 12 April 2013 refusing European patent application No. 05821645.8 pursuant to Article 97(2) EPC**

Composition of the Board:

Chairman	R. Moufang
Members:	P. San-Bento Furtado
	R. de Man

Summary of Facts and Submissions

I.   The appeal lies from the decision of the Examining
        Division to refuse European patent application
        No. 05821645.8 after the appellant's disapproval of the
        text intended for grant. The present application was
        filed on 16 December 2005 as international application
        PCT/IB2005/003802, which was published as WO
        2006/064358, and claims the priority of US application
        11/016,098 filed on 17 December 2004. In the decision
        under appeal the Examining Division cited the following
        documents:
        D4: EP 1 806 920 A1, published in accordance with
              Article 158(3) EPC 1973 on 11 July 2007;
        D5: US 2003/0122861 A1, published on 3 July 2003;
        D7: EP 0 843 311 A2, published on 14 November 1997.

        The European patent application D4 was filed on
        15 September 2005 as international application PCT/
        JP2005/017038 and claims the priority of Japanese
        application JP 2004285824 with filing date of
        30 September 2004.

        The application was refused for lack of novelty under
        Article 54(3) and (4) EPC 1973 of claims 1 to 8, 11 and
        12 of a main request over European application D4, in
        so far as the same contracting states DE, FR and GB
        were designated, and for lack of inventive step,
        Articles 52(1) and 56 EPC, of the subject-matter of all
        claims of the main request in view of document D7 in
        combination with the teachings of document D5.

II.   With the statement of grounds of appeal the appellant
        requested that the decision be set aside and that a
        patent be granted on the basis of the main request

considered in the decision under appeal, which was re-submitted with the grounds of appeal.

III.   In a communication accompanying the summons to oral proceedings, the Board was of the preliminary opinion that claim 1 was novel over document D4, but that the subject-matter of independent claims 1 and 9 appeared to lack inventive step because they concerned implementations of a non-technical method of displaying two video streams in a given manner, that implementation using known conventional technical means in a usual way. Moreover, none of the claims of the request then on file seemed inventive over document D7.

IV.   With a letter of reply the appellant filed a first auxiliary request.

V.   Oral proceedings were held on 12 November 2018, during which the appellant submitted amended claims 1 to 11 to replace the previous claims of the first auxiliary request. At the end of the oral proceedings, the chairman pronounced the Board's decision.

VI.   The appellant's final requests were that the decision under appeal be set set aside and that a patent be granted on the basis of the main request filed with the statement of grounds of appeal or, in the alternative, on the basis of the first auxiliary request filed at the oral proceedings before the Board.

VII.   Claim 1 of the main request reads as follows:
         "A method comprising:
            displaying a first video stream, the first video stream including a plurality of frames, and a second video stream, the second video stream being distinct from the first video stream and including a plurality

of frames, such that at least one of the plurality of
frames within the first video stream and at least one
of the plurality of frames within the second video
stream overlap at an overlapping image area,
wherein displaying comprises displaying the first video
stream along a horizontal axis and displaying the
second video stream along a vertical axis such that at
least a portion of at least one additional frame
outside of the overlapping image area from each stream
is also displayed."

VIII.   Claim 1 of the first auxiliary request reads as
         follows:
         "A method comprising:
            displaying a first video stream, the first video
         stream including a plurality of frames, and a second
         video stream, the second video stream being distinct
         from the first video stream and including a plurality
         of frames, such that one of the plurality of frames
         within the first video stream and one of the plurality
         of frames within the second video stream overlap at an
         overlapping image area, and such that at least one
         frame in the overlapping image area is at least
         partially transparent such that both frames are
         visible, wherein displaying comprises displaying frames
         of the first video stream along a horizontal axis and
         displaying frames of the second video stream along a
         vertical axis such that at least a portion of at least
         one additional frame outside of the overlapping image
         area from each stream is also displayed;
            in response to user input, changing the frames
         displayed in the overlapping image area by moving the
         first video stream left/right and moving the second
         video stream up/down; and
            selecting the frames displayed in the overlapping
         image area for creating a single video stream by

transitioning between the first video stream and the
second video stream."

Claims 2 to 5 of the first auxiliary request are
dependent upon claim 1.

Claim 6 of the first auxiliary request reads as
follows:
"A computer program product, comprising computer
program code which, when executed by a computer
apparatus, causes the computer apparatus to perform a
method according to any of the preceding claims."

Claim 7 of the first auxiliary request reads as
follows:
"An electronic device, comprising:
   means (32, 56) for displaying a first video stream,
the first video stream including a plurality of frames,
and a second video stream, the second video stream
being distinct from the first video stream and
including a plurality of frames, such that one of the
plurality of frames within the first video stream and
one of the plurality of frames within the second video
stream overlap at an overlapping image area, and such
that at least one frame in the overlapping image area
is at least partially transparent such that both frames
are visible,
   wherein the means for displaying comprises means for
displaying frames of the first video stream along a
horizontal axis and displaying frames of the second
video stream along a vertical axis such that at least a
portion of at least one additional frame outside of the
overlapping image area from each stream is also
displayed;
   means (56) responsive to user input for changing the
frames displayed in the overlapping image area by

moving the first video stream left/right and moving the
second video stream up/down; and

means (56) for selecting the frames displayed in the
overlapping image area for creating a single video
stream by transitioning between the first video stream
and the second video stream."

Claims 8 to 11 of the first auxiliary request are
dependent upon claim 7.

IX.   The appellant's arguments, where relevant to this
        decision, are discussed in detail below.

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 present application concerns a system and a method
        for a user to quickly and easily view two different
        video clips simultaneously for video editing purposes
        and in particular for selecting a particular video
        frame for use in clipping and/or combining two video
        clips e.g. by cross-fading or wiping (see international
        publication, paragraphs [0001], [0005], [0013] and
        [0018]). According to the description, the invention is
        particularly advantageous when used in devices with
        small screens (paragraphs [0004] and [0006]).

2.1   In order to facilitate matching two video clips ("video
        streams" in the claims), in the present invention the
        frames of one video clip are arranged along a vertical
        timeline and the frames of the other video clip along a
        horizontal timeline. Either video clip can be moved

along the respective timeline by moving an input device to the left and right, for the video arranged horizontally, and up and down, for that arranged vertically (paragraph [0005]).

2.2   The two video clips are displayed to cross each other such that corresponding two frames, one from each video, overlap on one image area. Leading and trailing frames of the overlapping frames may be shown for both video streams (paragraph [0015], Figures 3 and 4). At least one frame in the overlapping image area is at least partially transparent such that the overlapping frames of both videos are visible (paragraph [0014], original claim 9).

Main request

3.   *Technical contribution and inventive step – claim 1*

3.1   Claim 1 merely defines a particular way of displaying two video streams by specifying how the video frames of each video are arranged on the display for the purpose of presenting the video streams to the user. From the text of the claim it is impossible to derive any other purpose of displaying the two video streams in the specific way claimed, let alone a technical purpose. The video streams could be displayed in that manner for instance for aesthetical reasons.

The appellant's argument that the horizontal and vertical orientation led to a technical effect related to the ease with which video clips could be displayed and edited on a small screen is not convincing with regard to claim 1 of the main request. This claim does not define at all the interaction with the user, an editing purpose or editing steps. The Board is not

convinced either that "ease of display" is achieved and
that that by itself could be considered a technical
effect in the context of claim 1.

Although claim 1 implicitly requires the use of
technical means, including a computer and a display,
all the other features of claim 1 do not achieve a
technical effect and relate to presentation of
information as such, which is excluded from
patentability under Article 52(2)(d) and (3) EPC.

3.2   In accordance with established case law, such features
        lack technical character and cannot contribute to
        inventive step. The claim describes the method features
        only in terms of how the video streams are displayed on
        the screen. It does not describe specific details of
        the implementation, which thus has to be assumed to be
        well known.

        The Board thus concludes that the method of claim 1
        corresponds to an implementation of a non-technical
        method of displaying two video streams in a given
        manner, that implementation using widely known
        conventional technical means in a usual way.

3.3   It follows that claim 1 does not fulfil the
        requirements of Article 56 EPC over a general-purpose
        computer including a well-known display.

First auxiliary request

4.   Claim 1 of the first auxiliary request differs from
        that of the main request essentially in that
        (a) "displaying the first/second video stream along a
            horizontal/vertical axis" was amended to

"displaying the frames of the first/second video
stream ...";
and in that the following features were added:

(b) at least one frame in the overlapping image area is
at least partially transparent such that both
frames are visible;

(c) in response to user input, the frames displayed in
the overlapping image area are changed by moving
the first video stream left/right and the second
video stream up/down;

(d) the frames displayed in the overlapping image area
are selected for creating a single video stream by
transitioning between the first and the second
video streams.

5.   *Clarity and support – Articles 84 and 123(2) EPC*

5.1   Claim 1 of the first auxiliary request is supported by
original claims 8 to 12, in combination with features
disclosed on page 3, last three lines, to page 4, third
line, and on page 6, third to fifth lines, the same
applying for corresponding independent claims 6 and 7.
Dependent claims 2 to 5 correspond to original
claims 14, 15, 12 and 13, respectively. The same basis
holds for dependent claims 8 to 11, which recite
features of an electronic device corresponding to those
of method claims 2 to 5.

5.2   There are no outstanding clarity objections.

5.3   The Board is therefore satisfied that the claims of the
first auxiliary request satisfy the requirements of
Articles 84 and 123(2) EPC.

6.   *Technical contribution and inventive step*

6.1   Due to the additional features, an inventive-step
        reasoning similar to that given above with regard to
        the main request cannot be applied to claim 1 of the
        first auxiliary request, as explained in the following.

6.2   In general, the implementation of a graphical user
        interface (GUI) includes non-technical aspects of the
        GUI layout but also technical aspects regarding user-
        computer interaction (for an overview of decisions see
        Case Law of the Boards of Appeal, 8th edition, July
        2016, I.D.9.1.6). In decision T 1214/09 of 18 July 2014
        the present Board found that a particular arrangement
        of thumbnail file images did not contribute to the
        technical solution of the problem of enabling more
        efficient image retrieval (reasons 4.8.8), but that
        providing a mechanism for inputting a selection from a
        number of items was a technical task (reasons 6.3).
        Similarly, in decision T 505/13 of 6 June 2018 the
        Board found that, even though the user interface in
        that case fulfilled user requirements of a non-
        technical nature, the decisions of what input
        mechanisms to use in the user interface to support
        those tasks were of a technical nature (reasons 8.3).

6.3   In the present case, amendments (c) and (d) introduced
        specific features of a user-interface for video editing
        in a computer which are technical features going beyond
        a non-technical method for presentation of information.
        Unlike claim 1 of the main request, the method of
        claim 1 of the first auxiliary request can no longer be
        seen as concerning mere presentation of information.
        The consideration of which features of the claimed
        invention make a technical contribution has hence to be
        reviewed.

6.4   In the Board's opinion, the display of the frames of
        the video streams vertically and horizontally makes a
        technical contribution in combination with the other
        features of the claimed invention, since it influences
        the way the user interacts with the computer to perform
        a video-editing operation for combining two video
        streams by selecting a frame from each video stream.

6.5   Since the Board is not convinced that the claimed
        solution is notoriously known, a comparison with the
        prior art other than a general purpose computer is
        necessary.

7.   *Novelty – Document D4*

7.1   Since European application D4 was published after the
        date of priority of the present application, but enjoys
        an effective filing date prior to that of the present
        application (see section I above), it may only form
        part of the state of the art under Article 54(3) and
        (4) EPC 1973 with regard to the question of novelty.

7.2   In the decision under appeal, the Examining Division
        found that document D4 disclosed all the features of
        claim 1 of the then main request in paragraphs [0135]
        and [0164] to [0168] and Figures 10A to 12B.

7.3   The cited passages of D4 describe a method for removing
        a portion of a video stream consisting of GOP (group of
        pictures) units, each such unit comprising a number of
        frames. The video stream is first displayed in a "GOP
        mode" as a sequence of GOP-unit thumbnails along a
        horizontal axis. The thumbnail that is currently
        selected is shown in an area 500C (paragraph [135],
        Figures 10A, 10B and 11A). When the user operates the

Up key, the system shifts to a "frame mode" in which
the frames of the currently selected GOP-unit are
displayed along a vertical axis, so that the user can
select one of the frames as an edit point (paragraphs
[0143] and [0164], Figures 11B to 12B). The vertical
frame sequence overlaps the horizontal GOP sequence in
the area 500C. When the right or left key is operated
in the frame mode, the system changes to the GOP mode
and displays only the GOP-unit thumbnails along the
horizontal axis (paragraph [0173]).

7.4   In the grounds of appeal the appellant disagreed with
        the interpretation of "video stream" by the Examining
        Division and contested that document D4 disclosed
        displaying two video streams. As was commonly known in
        the art, a video stream comprised a number of frames
        that were included in a sequence for the purpose of
        playing back as video. The GOP-unit thumbnail array of
        images of D4 was not intended to be played as a video
        and were not a video stream.

        The appellant also argued that the images arranged
        vertically in the system of document D4 were part of
        the same video stream as the I pictures displayed
        horizontally. Document D4 did not disclose the video
        streams as being distinct from each other, it only
        disclosed displaying different portions of a single
        video stream. Furthermore, it did not disclose the
        overlapping frames. The frames displayed vertically in
        the system of D4 were the frames represented by the
        selected thumbnail displayed in the center of the
        horizontal array of pictures.

7.5   The Board agrees that the system of D4 is different
        from the present invention. Document D4 does not
        disclose the feature of overlapping frames, since the

area 500C of overlap between the horizontal and
vertical arrays of Figures 11B to 12B displays either
the common frame between the two video streams (the
frame used to represent the GOP-unit) or only a frame
of the vertical stream 600. In the frame mode, in which
the system displays a horizontal GOP sequence and a
vertical frame sequence, the area 500C is used to
select a single frame, whereas in the claimed method
one frame from each video stream is selected.

7.6   The subject-matter of claim 1 is hence new over the
        disclosure of document D4 (Article 54(1) EPC).

8.   *Inventive step – Document D7*

8.1   Document D7 discloses systems for video editing which
        display video-frame sequences of two distinct video
        streams (or clips or cuts) to be edited along
        horizontal time lines (column 14, line 35 to column 16,
        line 9, Figure 1; column 4, lines 25 to 51, Figure 3;
        column 22, line 42 to column 24, line 29, Figures 17A
        and 17B). In each of the systems of Figures 1 and 3,
        two different video streams are displayed along
        horizontal time lines (column 14, lines 35 to 39,
        Figure 1, time lines 102 and 103; column 4, lines 25 to
        28, Figure 3, time lines 302, 303). Using either of
        those video editing systems, the user may append one
        video stream to the other by means of "effect editing"
        in such a way that "a picture is switched over to
        another one while the contents of the picture are
        changed" using some visual effect (column 1, lines 47
        to 49). For example, in Figure 1 the synthesised video
        stream 104 is obtained from video streams 102 and 103
        by applying a dissolve effect to transition a scene in
        video clip 102 to one in video clip 103 (column 14,
        lines 50 to 55). A third horizontal line is used to

render the film image synthesised from both videos
using the chosen effect (column 14, lines 54 and 55,
Figure 1, time line 104), or an "effect pattern
symbol" (column 4, lines 38 to 43, Figure 3, time
line 304).

In order to append one video to the other by "effect
editing", the user may select the overlapping range of
both videos (column 4, lines 34 to 37; column 15,
lines 14 to 26) and a wipe or a dissolve effect (or
pattern) to be used for transitioning from the first to
the second video stream (column 4, lines 38 to 43,
column 15, line 52 to column 16, line 4, Figure 1).

8.2   The method of claim 1 differs from that of document D7
        at least in that it includes features b and c listed
        under point 4. above and in that
        (e) the second video stream is displayed along a
            vertical axis and
        (f) one frame within the first video stream and one
            within the second video stream overlap at an
            overlapping image area; where
        (g) the overlapping image area is used to select the
            frames for creating a single video stream.

8.3   The systems disclosed in document D7 support the kind
        of video editing operation involving a transition
        described in claim 1.

        Therefore, the distinguishing features represent an
        alternative solution to implement a user interface for
        combining two video streams by a transition, where a
        frame from each video stream has to be chosen for the
        editing operation.

8.4   Document D7 does not include any pointer to the
        solution. Moreover, in order to display the second
        video stream along a vertical axis in one of the
        systems disclosed in document D7, the system's user
        interface and its technical functioning would have to
        be completely redesigned. The Board is of the opinion
        that the skilled person would not modify any of the
        solutions of document D7 in that manner. Document D7
        discloses video editing systems that provide complete
        solutions and advanced video-editing functionality.
        Some of the functionality supported, e.g. a number of
        frames constituting the transition or the simultaneous
        display of the result, could not be supported without
        major redesign if the second video frames were
        displayed along a vertical line.

8.5   The subject-matter of claim 1 is therefore inventive
        over the disclosure of document D7.

9.   *Inventive step – document D5*

9.1   Document D5 discloses a video browsing interface which
        simultaneously displays a scene key-frame list (scene
        list) along a horizontal axis, and a scene-structure
        key-frame list (scene-structure list) for a selected
        scene along a vertical axis (paragraphs [0037] and
        [0039], Figure 2). The scene list is composed of key
        frames representing each scene, and the scene-structure
        list is composed of important key frames of a scene
        (paragraph [0038]). The user can move to a position of
        a media file by "determining which part of key frames
        represents a desired scene, and selecting a
        corresponding key frame" (paragraph [0040]).

Document D5 refers to the possible use of the interface for editing (paragraph [0070]), but does not give any details of such a solution.

10. The user interface of document D5 has a different purpose than the present invention. It supports video browsing of one video, whereas the present invention concerns video editing of two videos.

The scene and scene-structure lists of document D5 are similar to those disclosed in document D4, since they are used to select a single frame of a video stream. Using the horizontal sequence, the user browses from one scene to another; using the vertical sequence the user may browse within the scene selected in the horizontal sequence. This concept is very different from that of the present invention, in which the frames of the two video streams can be independently shifted along the two directions.

10.1 Document D5 does not disclose an editing operation based on one frame from a first video stream and one frame from a second video stream, nor how to select two video frames, one from each video stream. The subject-matter of claim 1 differs from the method of document D5 in that two frames, one of each video stream, overlap at an overlapping image area and in that it includes features b to d.

10.2 In order to arrive at the present invention starting from the disclosure of document D5, the skilled person would have to fundamentally change the way a frame of a video sequence is chosen in document D5. In the Board's opinion, that would involve a complete change of the system of document D5, which would not be an obvious choice. In fact, it is even questionable that

document D5 is an appropriate starting point for the inventive-step assessment of the claimed invention, since it does not solve a problem of video editing or selecting two frames, one from each video stream.

10.3   The subject-matter of claim 1 is therefore inventive over the disclosure of document D5.

11.   *Inventive step – conclusion*

11.1   For the reasons given above, the subject-matter of claim 1 of the first auxiliary request is inventive over documents D5 and D7. The same conclusion applies to independent claims 6 and 7, which correspond to claim 1, and to claims 2 to 5 and 8 to 11, by virtue of their dependence upon the corresponding independent claim 1 or 7.

11.2   The Board is therefore satisfied that the first auxiliary request fulfils the requirements of Article 56 EPC.

Conclusion

12.   The main request is not allowable because it does not fulfil the requirements of Article 56 EPC. With regard to the first auxiliary request, the Board is satisfied that the subject-matter is new and inventive and that the claims are allowable. The decision under appeal is therefore to be set aside.

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 11 of the amended first auxiliary
        request filed at the oral proceedings, figures 1 to 5
        as published and a description yet to be adapted.

The Registrar: The Chairman:

I. Aperribay   R. Moufang

Decision electronically authenticated