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**Datasheet for the decision
of 17 September 2020**

Case Number: T 0689/15 - 3.5.04

Application Number: 03749490.3

Publication Number: 1547360

IPC: H04N1/00

Language of the proceedings: EN

Title of invention:
A METHOD AND SYSTEM FOR MEMORY PVR FUNCTIONS IN A BROADCAST
ENVIRONMENT

Applicant:
InterDigital CE Patent Holdings

Headword:

Relevant legal provisions:
EPC 1973 Art. 56
RPBA 2020 Art. 13(2)

Keyword:
Inventive step - main request (no)
Late-filed auxiliary request - amendments after arrangement of
oral proceedings

Decisions cited:

Catchword:

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: **T 0689/15 - 3.5.04**

D E C I S I O N
of Technical Board of Appeal 3.5.04
of 17 September 2020

Appellant:	InterDigital CE Patent Holdings
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Representative:	Huchet, Anne
	InterDigital CE Patent Holdings
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Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 13 November 2014 refusing European patent application No. 03749490.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	M. Paci
Members:	B. Willems
	G. Decker

Summary of Facts and Submissions

I.   The appeal is against the decision of the examining
        division dated 13 November 2014 refusing European
        patent application No. 03 749 490.3, which was
        published as international application
        WO 2004/023786 A2.

II.   The documents cited in the decision under appeal
        included the following:

        D1: WO 01/93587 A2;

        D2: WO 00/60820 A2.

III.   On 23 September 2014, the applicant filed three
        auxiliary requests and withdrew the main request. The
        decision under appeal was based on the grounds that the
        subject-matter of none of the claims of the first
        auxiliary request met the requirements of Article 56
        EPC. The second and third auxiliary requests were not
        admitted into the proceedings because they were late
        filed and the subject-matter of claim 1 of these
        requests did "*not add any technical effect which would
        help*" to overcome the lack-of-inventive-step objection
        raised against claim 1 of the first auxiliary request.

IV.   The applicant (hereinafter: appellant) filed notice of
        appeal. With the statement of grounds of appeal, the
        appellant withdrew the requests forming the basis for
        the decision under appeal and submitted amended claims
        of a sole request. The appellant stated that the claims
        of this request were based on the claims of the first
        auxiliary request forming the basis for the decision
        under appeal. It requested that the decision under

appeal be set aside and that a European patent be granted on the basis of the claims of the sole request filed with the statement of grounds of appeal. The appellant indicated a basis for the claims in the application as filed and provided arguments as to why the subject-matter of claim 1 was inventive over the combined disclosures of D1 and D2 (Article 56 EPC 1973).

V.   The board issued a summons to oral proceedings. In a communication under Article 15(1) RPBA 2020 (Rules of Procedure of the Boards of Appeal, Supplementary publication 2, OJ EPO 2020), annexed to the summons, the board gave the following preliminary opinion.

-       Claims 1 and 7 of the sole request did not meet the requirements of Article 56 EPC 1973 because the claimed subject-matter lacked inventive step over the combined disclosures of D1 and D2 and the common general knowledge of the person skilled in the art.

-       The board agreed with the examining division that the subject-matter of dependent claims 2 to 6 and 8 to 12 did not meet the requirements of Article 56 EPC 1973 for the reasons set out in points 10.6 to 10.10 of the decision under appeal.

VI.   By letter dated 15 July 2020, the appellant requested that the oral proceedings scheduled for 17 September 2020 be held by video conference.

VII.   By communication dated 21 July 2020, the registrar of the board informed the appellant that the oral proceedings scheduled for 17 September 2020 would be held by video conference and that one board member

would participate in the oral proceedings from a remote location.

VIII.   With a reply dated 23 July 2020, the appellant filed amended claims according to an auxiliary request. It indicated a basis for the amendments in the application as filed and submitted arguments as to why the amended claims met the requirements of Articles 54 and 56 EPC 1973. The appellant requested that the decision under appeal be set aside and that a European patent be granted on the basis of the claims according to the main request filed with the statement of grounds of appeal, or on the basis of the claims of the auxiliary request filed with the letter dated 23 July 2020.

IX.   The board held oral proceedings on 17 September 2020.

        The appellant's final requests were that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request filed with the statement of grounds of appeal, or on the basis of the claims of the auxiliary request filed by letter dated 23 July 2020.

        At the end of the oral proceedings, the chairman announced the board's decision.

X.   Claim 1 of the main request reads as follows:

        "A method of providing a pause function for a broadcast program in a multi-client network, the method comprising:

        Allocating an amount of storage for each client of a plurality of clients on the network in a storage device located in a head-end unit

delivering (54) a client broadcast program to a
plurality of clients;

receiving (56) a pause request from one of the clients;

determining (58) if said client's stored broadcast
program has reached said client's predetermined storage
limit defined by said storage amount;

pausing (60) the delivery of the client broadcast
program to said client and continue

- delivering of the client broadcast program to a
  storage device responsive to receipt of the pause
  request and a determination that said client's
  stored broadcast program has not reached said
  client's predetermined storage limit; and

- delivering of the client broadcast programs to
  the other clients of the plurality of clients which
  storage space have not reached their predetermined
  limits,

delivering the stored client broadcast program from the
storage device to the client while continuing
delivering of the client broadcast program to the
storage device responsive to a further determination
that the client's stored broadcast program has reached
the client's predetermined storage limit."

XI.   Claim 1 of the auxiliary request reads as follows:

"A method of providing a pause function for a broadcast
program in a multi-client network, the method
comprising:

allocating predetermined storage limit in a storage device (32) in a head-end unit for each client of a plurality of clients on the network;

delivering (54) first portions of a broadcast program to a plurality of clients;

receiving (56) a pause request from a client;

determining (58) if said client's stored broadcast programming has reached said client's predetermined storage limit;

pausing (60) the delivery of the broadcast program to said client and delivering of second portions of the broadcast program to a storage device responsive to receipt of the pause request and a determination that said client's stored broadcast programming has not reached said client's predetermined storage limit;

- delivering the stored second portions of the broadcast program from the storage device to the client while delivering third portions of the broadcast program to the storage device responsive to a further determination that the client's stored broadcast program has reached the client's predetermined storage limit;

- receiving a rewind request from the client; and

- permitting the client to rewind through the stored second portions of the broadcast program if the client's stored broadcast programming has not reached the client's predetermined storage limit."

XII.   The examining division's arguments relevant to the
        present decision may be summarised as follows.

        (a) D1 was the closest prior art for the assessment of
            inventive step (see decision under appeal,
            point 10.1.1).

        (b) The person skilled in the art would consult D2 to
            solve the problem of storage space management (see
            decision under appeal, point 10.4).

XIII.   The appellant's arguments relevant to the present
        decision may be summarised as follows.

        (a) D1 did not disclose: determining whether the
            client's stored content had reached the allocated
            storage limit; delivering content to the allocated
            storage space if the storage limit had not been
            reached; and delivering content from the allocated
            storage space to the client while continuing to
            deliver content to the storage space if the storage
            limit had been reached (see statement of grounds of
            appeal, page 4 and letter dated 23 July 2020, pages
            2 and 3, the second, third and fourth bullet points
            of the section "*D1 does at least not disclose the
            above underlined features*").

        (b) D1 did not disclose that limited storage capacity
            was allocated to each (entitled) user (see
            statement of grounds of appeal, page 4, first full
            paragraph and the letter dated 23 July 2020,
            page 2, the first bullet point of the section "*D1
            does at least not disclose the above underlined
            features*").

(c) The problem to be solved might be identified as
    that of managing a shared storage space so that no
    one client can use all of the storage space by
    recording a program and preventing the other
    clients from recording, pausing and receiving
    recorded programs independently (see statement of
    grounds of appeal, page 5, first paragraph).

(d) The person skilled in the art would not consult D2
    to solve the problem of storage space management
    (see statement of grounds of appeal, page 5, second
    paragraph).

(e) The person skilled in the art would provide a
    common storage space for all clients (entitled to
    submit pause requests) with separate read pointers
    but one write module (see statement of grounds of
    appeal, page 5, second paragraph and page 6, first
    paragraph).

(f) The auxiliary request should be admitted under
    Article 13(2) RPBA 2020 because the amendments took
    into account the preliminary opinion of the board.
    The appellant had had no opportunity as yet to
    respond to the objections raised by the board, and
    the amendments *prima facie* overcame these
    objections, did not give rise to new objections and
    had been filed more than one month before the oral
    proceedings (see letter dated 23 July 2020, section
    "*Remarks*").

(g) In comparison with the reasons set out in the
    decision under appeal, the board had redefined the
    problem to be solved in its preliminary opinion.
    This change in reasoning constituted exceptional
    circumstances within the meaning of Article 13(2)

RPBA 2020. The auxiliary request should be admitted
into the appeal proceedings to give the appellant a
chance to respond to the changed reasoning.

Reasons for the Decision

1.   The appeal is admissible.

2.   The invention provides personal video recording (PVR)
        functions in a system in which a client is connected to
        a head-end of a multi-client network, with a hard drive
        being arranged at the head-end of the network provider.
        To provide the PVR functions, a predetermined storage
        limit on the hard drive is allocated to each client
        (see description of the application at issue, page 1,
        lines 25 to 38).

3.   *Claim 1 of the main request – inventive step*
        (Article 56 EPC 1973)

3.1   The board agrees with the examining division that D1 is
        the closest prior art for the assessment of inventive
        step (see point XII(a) above).

3.2   D1 discloses a method of providing a pause function for
        a broadcast program in a multi-client network, the
        method comprising:

        allocating an amount of storage for each client of a
        plurality of clients on the network in a storage device
        located in a head-end unit (see Figure 1B; page 7,
        lines 26 and 27: "*The server 200 is [...] suitable for
        use as [...] the video delivery center 152 illustrated
        in FIG. 1B*" and page 10, lines 17 and 18: "*the
        server-side retention can operate to record the*

remaining program content in an allocated local storage
space (e.g., rented by the subscriber)");

delivering a client broadcast program to a plurality of
clients (see Figure 1B);

receiving a pause request from one of the clients (see
page 2, lines 29 to 32: "*receiving a pause request from*
at least a particular one of the client machines
requesting to pause a particular one of the broadcasted
programs being delivered to the particular one of the
client machines" and page 9, lines 12 to 16: "*While the*
broadcasted programs are being delivered 306 to the
client machines as scheduled, the server may receive a
pause request or a play request. A pause request is
associated with a subscriber (client) of a client
machine and serves to request to pause a particular
broadcasted program that the subscriber is viewing");

pausing the delivery of the client broadcast program to
said client and continuing delivery of the client
broadcast program to a storage device responsive to
receipt of the pause request (see page 2, line 32 to
page 3, line 1: "*performing the pause request by*
server-side retention of the program content for the
particular one of the broadcasted programs" and
page 10, lines 17 and 18: "*the server-side retention*
can operate to record the remaining program content in
an allocated local storage space (e.g., rented by the
subscriber)"); and

delivering the stored client broadcast program from the
storage device to the client while continuing delivery
of the client broadcast program to the storage device
(see page 3, lines 1 to 3: "*to render the program*
content following the pause request to be subsequently

available to a device decided by a user of the particular one of the client machines" and page 14, lines 9 and 10: "*The remaining portion represents that portion of the broadcasted program following the activation of a pause request*").

3.3   The board agrees with the appellant that D1 does not disclose: determining whether the client's stored content has reached the allocated storage limit; delivering content to the allocated storage space if the storage limit has not been reached; and delivering content from the allocated storage space to the client while continuing to deliver content to the storage space if the storage limit has been reached (see point XIII(a) above).

3.4   Document D1, page 10, lines 16 to 18, discloses that the retained program content is stored in an allocated, rented storage space. User account information is used to manage pause and playback features (see page 8, lines 14 to 17). If the account status permits pause requests, the data to be retained is stored in the storage space rented by and allocated to the user (see page 10, lines 3 to 18). Thus each user account permitting pause requests has a separate storage space allocated to the account. Each storage space inherently has limited storage capacity. Consequently, the board is not persuaded that D1 does not disclose that limited storage capacity is allocated to each (entitled) user (see point XIII(b) above).

        According to page 11, lines 6 and 7, retained program content may be deleted "*due to an expired term or time*". Hence D1 discloses memory management for the limited allocated storage space, i.e. delivering

content to each allocated storage space is managed separately.

3.5   Therefore the board is not convinced that the problem to be solved can be identified as that of managing a shared storage space so that no one client can use all of the storage space by recording a program and preventing the other clients from recording, pausing and receiving recorded programs independently (see point XIII(c) above).

Rather, the problem to be solved can be identified as how to find an alternative to deleting retained content "*due to an expired term or time*".

3.6   In contrast to the appellant (see point XIII(d) above), the board agrees with the examining division that the person skilled in the art would consult D2 to solve the problem of storage space management (see point XII(b) above).

3.7   D2, page 30, lines 2 to 9, discloses that if, depending on the size of the circular buffer and the time for which the reader module has been paused, the writer module catches up to the point where the reader module is paused, the reader module is forcibly "*unpause[d]*".

The person skilled in the art would apply this storage space management separately to each of the allocated storage spaces. Providing a common storage space for all clients (entitled to submit pause requests) with separate read pointers but one write module (see point XIII(e) above) would restrict different clients to retaining content from the same program. This would run counter to the teaching of D1 that the content is retained for the particular program being viewed by the

subscriber (see page 10, lines 6 to 8), that the pause
request is associated with a particular subscriber (see
page 10, lines 13 and 14) and that the data is retained
in a storage space rented by this subscriber (see
page 10, lines 17 and 18).

3.8   In view of the above, claim 1 of the main request does
        not meet the requirements of Article 56 EPC 1973
        because the claimed subject-matter lacks inventive step
        over the combined disclosures of D1 and D2 and the
        common general knowledge of the person skilled in the
        art.

4.   *Admission of the auxiliary request into the appeal*
        proceedings

4.1   According to Article 13(2) RPBA 2020, "*[a]ny amendment*
        to a party's appeal case made ... after notification of
        a summons to oral proceedings shall, in principle, not
        be taken into account unless there are exceptional
        circumstances, which have been justified with cogent
        reasons by the party concerned".

        The following explanatory remarks are given with
        respect to Article 13(2) RPBA 2020 in Rules of
        Procedure of the Boards of Appeal, Supplementary
        publication 2, OJ EPO 2020.

        The basic principle of the third level of the
        convergent approach is that, at this stage of the
        appeal proceedings, amendments to a party's appeal case
        are not to be taken into consideration. However, a
        limited exception is provided for: it requires a party
        to present compelling reasons which justify clearly why
        the circumstances leading to the amendment are indeed
        exceptional in the particular appeal ("*cogent*

reasons"). For example, if a party submits that the
board raised an objection for the first time in a
communication, it must explain precisely why this
objection is new and does not fall under objections
previously raised by the board or a party.

4.2   None of the arguments set out in the appellant's letter
        dated 23 July 2020 (see point XIII(f) above) is a
        cogent reason within the meaning of Article 13(2)
        RPBA 2020 since they do not relate to any exceptional
        circumstances.

4.3   The board is not persuaded that, in the present case, a
        redefinition of the problem to be solved constitutes an
        exceptional circumstance within the meaning of
        Article 13(2) RPBA 2020.

        The application was refused *inter alia* because the
        subject-matter of claim 1 of the then first auxiliary
        request lacked inventive step over the combined
        disclosures of documents D1 and D2 (Article 56
        EPC 1973).

        In its preliminary opinion, the board agreed with the
        examining division that document D1 was the closest
        prior art for the assessment of inventive step (see
        communication of the board under Article 15(1)
        RPBA 2020, point 3.1).

        The board tended to share the appellant's view that D1
        did not disclose: determining whether the client's
        stored content had reached the allocated storage limit;
        delivering content to the allocated storage space if
        the storage limit had not been reached; and delivering
        content from the allocated storage space to the client
        while continuing to deliver content to the storage

space if the storage limit had been reached (see
communication of the board under Article 15(1)
RPBA 2020, point 3.3).

However, in contrast to the examining division and the
appellant, the board was of the preliminary opinion
that D1 disclosed that limited storage capacity was
allocated to each (entitled) user (see communication of
the board under Article 15(1) RPBA 2020, point 3.4).
The examining division reasoned that the "*circular
buffer*" known from document D2 by definition had a
limited storage capacity (see decision under appeal,
point 10.4). The board was of the preliminary opinion
that this was also the case for rented storage capacity
and hence document D1 implicitly disclosed limited
storage capacity.

Thus the board identified one difference with respect
to document D1 (see communication of the board under
Article 15(1) RPBA 2020, point 3.3), whereas the
examining division identified two differences: the
limited storage capacity and the difference
acknowledged by the board. As a result, the board
defined an objective technical problem (how to find an
alternative to deleting retained content "*due to an
expired term or time*") which was not as broad as the
objective technical problem defined by the examining
division in point 10.3 of the decision under appeal
("*How to prevent the storage requirement in the server
to grow above the storage capacity*").

In points 3.6 and 3.7 of its communication under
Article 15(1) RPBA 2020, the board in essence confirmed
the examining division's reasoning set out in
point 10.4 of the decision under appeal that the person
skilled in the art would implement the storage space

management known from document D2 in the method known
from document D1.

In summary, the board's assessment of inventive step in
its preliminary opinion was based on the same documents
as cited in the decision under appeal (documents D1
and D2), and the board identified the same closest
prior art (document D1). While the board was of the
preliminary opinion that document D1 implicitly
disclosed limited storage capacity, the examining
division was of the opinion that limited storage
capacity was obvious in view of the disclosure of
document D2. The board confirmed the examining
division's assessment that the person skilled in the
art would implement the storage space management known
from document D2 in the method known from document D1.

4.4   Therefore the board is not convinced that the arguments
        set out in its communication under Article 15(1) RPBA
        2020 differ from the arguments set out in the decision
        under appeal to such an extent that they present a
        whole new line of reasoning (see point XIII(g) above).
        Hence the board sees no exceptional circumstance
        leading to the amendment which would justify admitting
        the auxiliary request into the appeal proceedings.
        Therefore the auxiliary request is not admitted into
        the appeal proceedings (Article 13(2) RPBA 2020).

5.   Since neither of the appellant's requests is allowable,
        the appeal is to be dismissed.

Order

For these reasons it is decided that:

    The appeal is dismissed.

The Registrar: The Chairman:

K. Boelicke   M. Paci

Decision electronically authenticated