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Datasheet for the decision of 18 August 2010

Case Number: T 0552/06 - 3.5.04

Application Number: 00904592.3

Publication Number: 1147664

IPC: H04N 7/167

Language of the proceedings: EN

Title of invention:
Method and apparatus for carrying data with a video signal so that the data is not recorded

Applicant:
MACROVISION CORPORATION

Opponent:
-

Headword:
-

Relevant legal provisions:
RPBA Art. 13(1), 15(3)

Relevant legal provisions (EPC 1973):
EPC Art. 84, 113(1), 116(1)
EPC R. 71(2)

Keyword:
"Request admitted in oral proceedings in absence of appellant"
"Right to informal telephone consultation (no)"
"Basis of decisions - opportunity to comment (yes)"
"Claims - clarity (no)"

Decisions cited:
-

Catchword:
See points 2 and 6.2.

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0552/06 - 3.5.04

D E C I S I O N
of the Technical Board of Appeal 3.5.04
of 18 August 2010

Appellant: MACROVISION CORPORATION
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 18 November 2005 refusing European application No. 00904592.3 pursuant to Article 97(1) EPC 1973.**

Composition of the Board:

Chairman: F. Edlinger
Members: A. Teale
T. Karamanli

Summary of Facts and Submissions

I. This is an appeal against the decision by the examining division to refuse European patent application No. 00 904 592.3.

II. The reasons for the decision stated *inter alia* that the "scope" of the independent claims 1, 5, 7 and 11, received with the letter dated 8 September 2005, was unclear, contrary to the requirements of Article 84 EPC 1973. Specifically, the formulation "arranged to only be recorded ... by compliant ... recorders" was only a result to be achieved and not a definition of the technical features which actually yielded the desired result.

III. The applicant appealed and subsequently filed a statement of grounds of appeal accompanied by amended claims. The appellant (applicant) requested that the decision be set aside and that a patent be granted based on the documents on file or, as an auxiliary request, on the basis of the claims filed with the statement of grounds of appeal. The appellant also requested that oral proceedings be held should the board not grant the appellant's main request.

IV. In an annex to a summons to oral proceedings the board set out its preliminary opinion on the appeal, raising *inter alia* objections of lack of clarity, Article 84 EPC 1973. The annex set out the following comments, amongst others, which are reproduced here *verbatim*:

"The board has doubts as to the clarity of all four independent claims, since they all refer to "compliant"

digital video recorders without explicitly defining their technical features. The features of these digital video recorders are merely defined implicitly by setting out that "compliance" means that they can record a predetermined part of an undefined "modified" video signal with the modified video signal and to extract encoded data from said predetermined part to enable "effective playback" of the video signal when recorded. According to the claims, non-compliant digital video recorders cannot record the predetermined part of the modified video signal with the modified video signal."

"However the independent claims do not make clear the essential features of the predetermined part of the modified signal to achieve the desired effect. The examples referring to known video recorders indicate different inherent characteristics which make it possible, in a modified video signal, to hide the predetermined part to these recorders so that this would not be recorded with the modified video signal. Although, in a given case of a known video recorder, it may be deduced by implication what the term "compliant" is intended to mean, the scope of the subject-matter for which protection is sought remains nevertheless unclear, at least at the borderlines."

V. In a response dated 24 June 2010 the appellant stated that he did not intend to be present at the oral proceedings, but indicated that "If the Board agree we should be happy to discuss with them, either on the date of the oral proceedings, or in advance thereof, any outstanding matters which might lead to a further requirement to amend the application."

The appellant also withdrew the main and auxiliary requests then on file and filed a new set of four independent claims and amended description pages, requesting as his sole request that a patent be granted in the following version.

Claims:
claims 1 to 4 filed with the letter dated 24 June 2010.
Description:
pages 1 to 6 filed with the letter dated 24 June 2010;
pages 7 to 11 being the renumbered original pages 6 to 10 as published;
page 12 filed with the letter dated 24 June 2010.
Drawings:
sheets 1/6 to 5/6 as originally published.

VI. The claims according to the appellant's sole request read as follows.

"1. A method of transmitting data in an analog video signal comprising the steps of: providing data; encoding the data; modifying a predetermined part of the video signal by inserting therein the encoded data; and transmitting the modified signal; the method being characterised in that the data is a key for descrambling or decrypting the analog video signal, and in that to hide the data from standard analog video recorders such that it will not be recorded thereby the predetermined part is in a blanking interval of the video signal and below a selected voltage level, or the predetermined part is above a predetermined frequency, or the predetermined part is below the blanking level."

"2. A method of receiving a transmitted video signal having data encoded in a predetermined part thereof, the method being characterised in that the encoded data is a key for descrambling or decrypting the analog video signal, and in that to hide the data from standard analog video recorders such that it will not be recorded thereby the predetermined part is in a blanking interval of the video signal and below a selected voltage level, or the predetermined part is above a predetermined frequency, or the predetermined part is below the blanking level, and in that the method further comprises using a digital video recorder to record the modified video signal including the encoded data, and subsequently extracting the encoded data and using it to descramble or decrypt the recorded modified video signal."

"3. An encoder for transmitting data encoded in an analog video signal comprising: an input video terminal (52) for receiving a video signal; an input data terminal (62) for receiving data; a sync separator (56) coupled to the input video terminal; encoding circuitry (60, 64) coupled to the data input terminal (62) and the sync separator (56), thereby to encode the data; and a summer (78) coupled to the encoding circuitry and the input video terminal for outputting the modified video signal; characterised in that the data is a key for descrambling or decrypting the analog video signal, and is encoded into a predetermined part of the modified video signal, and in that to hide the data from standard analog video recorders such that it will not be recorded thereby the predetermined part is in a blanking interval of the video signal and below a selected voltage level, or the predetermined part is

above a predetermined frequency, or the predetermined part is below the blanking level."

"4. A decoder for receiving data in a predetermined part of a modified analog video signal, comprising: a video input terminal (90) for receiving the modified video signal; a video output terminal (100) coupled to the input terminal; extraction circuitry (104,110,112,118) having an input terminal coupled to the video input terminal (90) and being arranged to extract the data from the predetermined part of the modified video signal; and a data output terminal (120) coupled to the extraction circuitry (104,110,112,118) to output the extracted data; characterised in that the data is a key for descrambling or decrypting the analog video signal, and has been encoded into the predetermined part of the modified video signal; and in that to hide the data from standard analog video recorders such that it will not be recorded thereby the predetermined part is in a blanking interval of the video signal and below a selected voltage level, or the predetermined part is above a predetermined frequency, or the predetermined part is below the blanking level; and in that the extracted data output at the data output terminal (120) is used to descramble or decrypt the modified video signal at the video output terminal (100)."

VII. The appellant essentially argued that the invention related to a method and apparatus for modifying an analogue video signal so that it could not be readily recorded by "non-compliant or standard video recorders". To do this, data constituting a key for descrambling or decrypting the analogue video signal was hidden in a

predetermined part of the signal. The claims broadly defined this feature in terms of its function, but this did not make the claims unclear. There were various ways in which data could be inserted to modify the video signal such that a degree of copy protection was enabled. To include further specific limitations would result in undue restriction of the protection that the applicant should be entitled to.

VIII. Oral proceedings were held on 18 August 2010 in the absence of the appellant, as the appellant had announced in advance. At the end of the oral proceedings the board announced its decision.

Reasons for the Decision

1. *Admissibility of the appeal*

The appeal is admissible.

2. *The absence of the appellant at the oral proceedings*

2.1 As announced in advance, the duly summoned appellant did not attend the oral proceedings. According to Rule 71(2) EPC 1973, the proceedings could however continue without him. In accordance with Article 15(3) RPBA (Rules of Procedure of the Boards of Appeal of the European Patent Office, OJ EPO 2007, 536), the board relied for its decision only on the appellant's written submissions. The board was in a position to decide at the conclusion of the oral proceedings, since the case was ready for decision (Article 15(5) and (6) RPBA),

and the voluntary absence of the appellant was not a reason for delaying a decision (Article 15(3) RPBA).

2.2 Also the fact that in its reply to the summons the appellant had indicated his readiness to discuss with the board, either on the date of the oral proceedings, or in advance thereof, "any outstanding matters which might lead to a further requirement to amend the application" was not a reason for the board to delay its decision. According to established case law, the EPC foresees the absolute right to oral proceedings under Article 116(1) EPC 1973, but not the right to an informal interview or an informal telephone consultation (cf. Case Law of the Boards of Appeal of the EPO, 6th edition, 2010, VII.B.2.7.2). Hence the board was not required to contact the appellant by holding a telephone interview, for instance with the rapporteur, either after receipt of the response dated 24 June 2010 or on the day of the oral proceedings. Also a further communication by the board after the summons to oral proceedings was not necessary. Under Rule 100(2) EPC the board shall invite the parties "as often as necessary" to file observations. In the present case oral proceedings were arranged as requested by the appellant. The purpose of oral proceedings is to give the party the opportunity to present its case and to be heard. However a party gives up that opportunity if it does not attend the oral proceedings. It is also the board's view that by filing amended claims before the oral proceedings and then not attending those oral proceedings the appellant must also expect a decision based on objections which may be raised against such claims in his absence, Article 15(3), (6) RPBA. In the present case the board

had already raised objections concerning the clarity of the claims then on file in the annex to the summons to oral proceedings. Since this objection still applied to the claims of the appellant's sole request, filed with the reply to the summons, the board considered a further communication to be unnecessary. Finally, the board notes that the appellant did not request that the oral proceedings be cancelled and the procedure be continued in writing.

3. *Admissibility of the appellant's sole request*

3.1 The request concerns an amendment of the appellant's case after oral proceedings have been arranged. Under Article 13(1) RPBA any amendment to the appellant's case after he has filed his grounds of appeal may be admitted and considered at the board's discretion. The discretion shall be exercised in view of *inter alia* the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy. Moreover, according to Article 13(3) RPBA, amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the board cannot reasonably be expected to deal with without adjournment of the oral proceedings.

3.2 In the present case the board finds that the amendments made to the claims and description are in response to the objections raised in the annex to the summons to oral proceedings and do not require adjournment of the oral proceedings. The appellant's sole request is consequently admitted into the proceedings, Article 13 RPBA.

4. *The requirements of Article 123(2) EPC*

The board finds no reason to object to the amendments made to the application and concludes that the amendments satisfy Article 123(2) EPC.

5. *The invention*

The invention, as now claimed, relates to preventing unauthorized copies of analogue video signals being made by standard (also termed "non-compliant") video recorders; see page 4, lines 18 to 23, and page 5, lines 4 to 15, of the description. In essence, this is achieved by scrambling or encrypting the video signal and then inserting data constituting a key into a predetermined part of the video signal which cannot be recorded by a standard (or non-compliant) video recorder and is thus "hidden" from it. In contrast, "compliant" video recorders can extract and use the hidden data to unscramble or decrypt the video signal; see page 5, lines 7 to 10, of the description.

6. *Clarity, Article 84 EPC 1973*

6.1 In the annex to the summons to oral proceedings (see point IV above) the board objected *inter alia* that all four independent claims were unclear, since the features of inserting encoded data into a predetermined part of a modified video signal, set out in each of the independent claims, were merely defined implicitly by the fact that the predetermined part of the modified video signal was arranged to only be recorded with the modified video signal by "compliant" digital video

recorders, there being no explicit definition of the features of such "compliant" digital video recorders. The claims did not make clear the essential features of the predetermined part of the modified signal to achieve the desired effect of hiding the data from non-compliant video recorders. Hence although, in the case of a known video recorder, i.e. a "problematic standard (non-compliant) video recorder" (see page 4, lines 4 to 15, of the description), it might be deduced by implication what the term "compliant" was intended to mean, and how a video signal could be modified to hide the encoded data from this particular standard (non-compliant) video recorder, the scope of the subject-matter for which protection was sought was unclear, at least at the borderlines.

6.2 All four independent claims have now been amended to set out essentially that data which is a key for descrambling or decrypting an analogue video signal is inserted in a predetermined part of the video signal so that it is hidden from "standard" analogue video recorders such that it will not be recorded thereby. The predetermined part of the video signal can be modified in one of three ways set out in the claims to achieve this effect. The claims do not set out which way to chose for a given type of standard recorder. Therefore each of the three different solutions (which were previously defined in different dependent claims) should contain the essential features setting out how to modify the predetermined part of the video signal in order to hide the data from standard analogue video recorders (of which there are many types; see, for example, page 5, line 17, to page 6, line 22, of the description). The values of the "selected voltage

level", the "predetermined frequency" and the "blanking level" cited in the claims completely depend on the inherent characteristics of known (and future) non-compliant video recorders. The description does not give clear guidance as to how to select these values in general for standard video recorders, let alone for standard analogue video recorders. Therefore the board finds that the clarity objection raised in the annex to the summons to oral proceedings concerning the claims then on file still applies to the claims of the appellant's sole request. As the appellant has already had the opportunity to comment on this objection in the response dated 24 June 2010 and the appellant could have expected this objection to be raised against the present claims, the board finds that the requirements of Article 113(1) EPC 1973, regarding the appellant's opportunity to present comments, are satisfied even though the appellant did not make use of his opportunity to present comments at the oral proceedings.

6.3 The lack of clarity of the claims, understood in the context of the description and figures, can be illustrated by taking the embodiment disclosed in the context of figures 2 to 4; see also page 6, line 8, to page 9, line 4, of the description. According to this embodiment, encoded data is inserted in the vertical blanking interval (VBI) of an analogue video signal in an amplitude range, namely that below -48 mV (see page 7, lines 22 to 24), which is lost (clipped) "when converted to a CCIR-601 type signal's digital representation" during digitization in a digital video recorder. In the light of this embodiment the skilled person would understand that the encoded data has to be inserted in the video signal during the VBI and

below -48 mV (or, more generally, the digitization limit level) in order to hide it from a digital video recorder. However claims 1 to 4 set out hiding encoded data in a predetermined part of the video signal from standard analogue video recorders. The description and figures do not disclose generally applicable voltage levels in the case of standard analogue video recorders. It is consequently unclear, when interpreting the claims in the light of the description and figures, what "selected voltage level" or "blanking level", set out in the claims, is required to achieve the claimed effect of hiding the encoded data from standard analogue video recorders.

6.4 Claims 1 to 4 are consequently unclear, contrary to the requirements of Article 84 EPC 1973.

6.5 The appellant's argument that the applicant is entitled to a broad functional protection because of the various possible ways of achieving the desired result is not convincing in the present case, where the description and figures do not disclose sufficient details of how the desired result is achieved for the meaning of the terms set out in the claims to be clearly understood.

6.6 The board notes that the reasons for the decision under appeal set out a similar objection, albeit against differently worded claims (see point II above).

6.7 The board could not see a simple amendment which might have overcome this objection.

7. *Conclusion*

Since the appellant's sole request cannot be allowed, the appealed decision cannot be set aside.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

L. Fernández Gómez F. Edlinger