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# Datasheet for the decision of 25 September 2007

**Case Number:** T 0654/03 - 3.5.04

**Application Number:** 96916594.3

**Publication Number:** 0832536

**IPC:** H04N 7/62

**Language of the proceedings:** EN

**Title of invention:**
Bus and interface system for consumer digital equipment

**Patentee:**
THOMSON CONSUMER ELECTRONICS, INC.

**Opponent:**
IGR GmbH & Co. KG

**Headword:**
-

**Relevant legal provisions:**
EPC Art.

**Relevant legal provisions (EPC 1973):**
EPC Art. 54, 84, 123(2)

**Keyword:**
-

**Decisions cited:**
"Claims - clarity (yes, after amendments)"
"Added subject-matter (no, after amendments)"
"Decision re appeals - remittal"

**Catchword:**
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

**Case Number:** T 0654/03 - 3.5.04

# D E C I S I O N
**of the Technical Board of Appeal 3.5.04**
**of 25 September 2007**

**Appellant:** (Patent Proprietor)
THOMSON CONSUMER ELECTRONICS, INC.
10333 North Meridian Street
Indianapolis, IN 46290-1024 (US)

**Representative:**
Schäferjohann, Volker
Deutsche Thomson-Brandt GmbH
Licensing & Intellectual Property
Karl-Wiechert-Allee 74
D-30625 Hannover (DE)

**Respondent:** (Opponent)
IGR GmbH & Co. KG.
Bahnstraße 62
D-40210 Düsseldorf (DE)

**Representative:**
Eichstädt, Alfred
Maryniok & Partner
Kuhbergstraße 23
D-96317 Kronach (DE)

**Decision under appeal:**
**Decision of the Opposition Division of the European Patent Office posted 25 March 2003 revoking European patent No. 0832536 pursuant to Article 102(1) EPC.**

**Composition of the Board:**

**Chairman:** F. Edlinger
**Members:** A. Dumont
T. Karamanli

## Summary of Facts and Submissions

I. The appellant (patent proprietor) appealed against the decision of the opposition division to revoke European patent No. 0 832 536.

II. An opposition was filed based on Article 100(a) EPC in conjunction with Articles 54 and 56 EPC, relying on document:

D1: ISO/IEC 1-13818 CD, MPEG-2 Systems, 1225 Monday 08 November 1993, pages i to iv, I, 1 to 9, 86 to 96 and 106 to 109.

III. The appellant contested that D1 belonged to the state of the art, since it was a version of the MPEG-2 standard with only CD (Committee Draft) status.

IV. The opposition division revoked the patent for the following reasons. The independent claims according to the "main request and the first to third auxiliary request filed with the letter dated 6.02.2003" were not clear (Article 84 EPC) and contained subject-matter extending beyond the content of the application as filed (Article 123(2) EPC). The "main request filed during the oral proceedings" was not acceptable because the independent claims contained subject-matter extending beyond the content of the application as filed (Article 123(2) EPC). Furthermore, D1 was considered to belong to the state of the art and it deprived the subject-matter of all independent claims as granted of novelty (Article 54 EPC).

V. In a communication annexed to the summons to oral proceedings, the board made observations on the issues to be discussed, *inter alia* expressing the preliminary opinion that the public availability of D1 before the priority date of the opposed patent did not appear to be decisive in the present case.

VI. The respondent (opponent), in a letter dated 18 July 2007, withdrew his request for oral proceedings and informed the board that he would not attend the oral proceedings.

VII. Oral proceedings took place on 25 September 2007 in the absence of the duly summoned respondent, in accordance with Rule 71(2) EPC.

VIII. The appellant (patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of claims 1 to 17 of the single request filed during the oral proceedings on 25 September 2007.

IX. The respondent (opponent) requested in writing that the appeal be dismissed.

X. The independent claims read as follows.

"1. A signal processing apparatus for processing a packetized data stream (SP) subjected to timing perturbations ($\Delta$t), said data stream comprising a plurality of MPEG transport packets (TP), each having a length of 188 bytes, each of said MPEG transport packets (TP) being included in a respective superpacket, the superpacket consisting of one complete MPEG

transport packet and a superpacket header, said superpacket header having included a time stamp (TS) for correcting said timing perturbations, being indicative of a relationship in time between said each superpacket (SP) and a reference oscillator prior to said timing perturbations ($\Delta$t),
said apparatus comprising:
means (102) for receiving said superpackets from said perturbed packetized data stream (SP $\pm$ $\Delta$t);
means (51) coupled to said receiving means (102) for storing said superpackets (SP);
means (52) for reading respective timestamps (TS) from each of said received superpackets (SP $\pm$ $\Delta$t);
a counter (53); and,
means (55) coupled to said reading means (52) and to said counter (53) for generating a control signal (EN) indicating each coincidence between successive ones of said timestamps (TS) from said received superpackets (SP $\pm$ $\Delta$t) and a count (CTR) of said counter (53), said control signal (EN) initiating reading of said superpackets (SP) from said storing means (51)."

"5. An apparatus for reproducing a recorded signal from a recording medium (405), said recorded signal being representative of a plurality of MPEG transport packets (TP), each having a length of 188 bytes, each of said MPEG transport packets (TP) being included in a respective superpacket (SP) consisting of one complete MPEG transport packet and a superpacket header, said superpacket header having included a timestamp (TS) for correcting said timing perturbations being indicative of a relationship in time between said each superpacket (SP) and a reference oscillator prior to said timing perturbations ($\Delta$t),

said apparatus comprising:
a transducer (406) operable with said recording medium (405) and generating a transduced signal (407) representative of said recorded signal;
means (27) for recovering said superpackets (SP) from said transduced signal (407); and,
means (450) for restoring said time intervals of said recovered superpackets and for generating an output signal (402) of said recovered superpackets (SP) in which said time intervals have been restored,
wherein said output signal generating means (450) comprises:
means (453) for storing said recovered superpackets (401);
means (452) for reading respective timestamps (TS) from each of said recovered superpackets (401);
a counter (36); and,
means (451) coupled to said reading means (452) and to said counter (36) for generating a control signal (EN) indicating each coincidence between successive ones of said timestamps (TS) from said recovered superpackets (401) and a count of said counter (36), said control signal (EN) initiating reading of said superpackets (SP) from said storing means (453)."

"6. An apparatus for reproducing a recorded signal from a recording medium (405), said recorded signal being representative of a packetized signal having a plurality of MPEG transport packets (TP), each having a length of 188 bytes, each included in a respective superpacket (SP), the superpacket consisting of one complete MPEG transport packet and a superpacket header and said superpacket header having included a timestamp (TS) for correcting said timing perturbations, said

timestamps (TS) being indicative of a relationship in time between said each superpacket (SP) and a reference oscillator prior to said timing perturbations ($\Delta$t), said apparatus comprising:
a transducer (406) operable with said recording medium (405) and generating a transduced signal (407) representative of said recorded signal;
means (27) for recovering said superpackets from said transduced signal (407);
means (452) for reading respective timestamps (TS) from each of said recovered superpackets (401);
means (453) for storing said recovered superpackets (401);
a source of a clock signal (37);
a counter (36) coupled to said clock signal (37) for counting; and,
means (451) coupled to said reading means (452) and to said counter (36) for generating a control signal (EN) indicating each coincidence between successive ones of said separated timestamps (TS) and a count of said counter (36), said control signal (EN) initiating reading of said superpackets (SP) from said storing means (453)."

"13. A recording medium (405) having recorded thereon a packetized data stream comprising MPEG transport packets (TP), each having a length of 188 bytes, each being included in a respective superpacket (SP), the superpacket consisting of one complete MPEG transport packet and a superpacket header and said superpacket header having included a timestamp (TS) for correcting said timing perturbations, said timestamps being indicative of a relationship in time between said each superpacket (SP) and a reference oscillator prior to

said timing perturbations ($\Delta t$), said timestamps (TS) being suitable for controlling a reproduction apparatus (400) to restore said intervals between said superpackets (SP)."

XI. The reasons given in the decision under appeal may be summarised as follows.

(a) Transport packets according to the MPEG-2 standard may have more than a single piece of timing information (for instance PCR, PTS, DTS and SCR). If the meaning of "extra" timestamp is "additional", then the independent claims of the "main request and the first to third auxiliary request filed with the letter dated 6.02.2003" are unclear and "extra" is inconsistent with a "single timing information". Furthermore, it is nowhere disclosed in the application as originally filed that the timestamp of the superpackets is a single timing information. Concerning the "main request filed in the oral proceedings", the independent claims of this request also contain subject-matter which extends beyond the content of the application as filed (Article 123(2) EPC) because the application as originally filed nowhere discloses that there is only one timestamp, ie that more than one timestamp is excluded.

(b) The subject-matter of all the independent claims of the "opposed patent as granted" lacks novelty (Article 54 EPC) because the superpackets according to these claims can be read onto a subset of standard MPEG-2 transport packets comprising timing information known from D1.

XII. The appellant argued essentially as follows.

(a) The application as originally filed discloses in numerous places "a timestamp" (TS) which is not part of a standard MPEG transport packet (see, for instance, figures 4A and 4B). The claims as amended therefore comply with Articles 84 and 123(2) EPC.

(b) The timestamp (TS) constitutes a difference and an improvement over the prior art in that it allows timing perturbations to be corrected more easily than is the case with the timestamps of data streams known from the MPEG-2 standard, in which PCR timestamps are too seldom. The invention is therefore new (and involves an inventive step).

XIII. The respondent reiterated in writing objections under Articles 54 and 56 EPC relying on D1 and further documents. He did not argue on objections under Articles 84 and 123 EPC in his written submissions filed during the appeal proceedings.

## Reasons for the Decision

1. The appeal is admissible.

2. *Amendments in the appeal proceedings (Article 123(2) EPC)*

2.1 Present claim 1 is based on claim 1 as originally filed and further defines the transport packets as being MPEG

transport packets, each having a length of 188 bytes (see page 7, lines 29 to 33, of the description as originally filed, published as WO 97/00580). Claim 1 further sets out that a timestamp is included in a superpacket header. This feature can be gathered for instance from page 5, lines 15 to 20, and figure 4B. Claim 1 further sets out a reference oscillator which is disclosed on page 6, lines 6 to 29 and page 12, lines 17 to 33.

2.2 Present independent claim 5 is based on a combination of independent claim 5 with dependent claim 6 as originally filed and incorporates the additional features set out in point 2.1 above.

2.3 Present independent claim 6 is based on independent claim 7 as originally filed and incorporates the additional features set out in point 2.1 above.

2.4 Present independent claim 13 is based on independent claim 14 as originally filed and incorporates the additional features set out in point 2.1 above, whereby the expression "MPEG transport packets" now replaces the former expression "MPEG like signal transport packets".

2.5 The characterisation of timestamps as "being indicative of a relationship in time between said each superpacket (SP) and a reference oscillator prior to said timing perturbations", which is derivable from claim 1 as originally filed, has been incorporated in independent claims 5, 6 and 13 to replace similar expressions ("being indicative of time intervals between corresponding parts of superpackets (SP) in a

data stream prior to being recorded" in claim 5; "being indicative of gaps between corresponding parts of said superpackets (SP) in a data stream prior to being recorded" in claim 6; and "representing intervals between successive superpackets (SP) existing prior to recording" in claim 13). The board sees no difference in meaning between the former and the present characterisations.

2.6 In conclusion, present claims 1, 5, 6 and 13 each comprise a definition of the superpackets including a timestamp which is disclosed in the application as filed.

3. *Remittal*

3.1 The independent claims now set out that a superpacket consists of a header including a timestamp (TS) and one complete 188-byte long MPEG transport packet (supported in paragraphs [0014] and [0019] and in figure 4A of the patent specification). The superpacket header is therefore not part of the 188 bytes of a complete MPEG transport packet, which, according to the MPEG-2 standard, may still contain one or more further pieces of timing information (such as PCR, PTS or DTS). The definition thus prevents any assimilation between the timestamp (TS) of the superpacket header and timestamps possibly included in an MPEG transport packet header. The claims also do not set out that the timestamp should be unique and do not contain the expressions ("single timing information" and "only one timestamp") objected to by the opposition division.

3.2 As a result, the corresponding objections under Articles 84 and 123(2) EPC in the decision under appeal (see point XI.(a) above) do not apply to the present independent claims.

3.3 Since the claims have been clarified and restricted during the appeal proceedings so as to exclude superpackets which may be read onto 188 byte long transport packets according to the MPEG-2 standard, including one or more timestamps (see also paragraph [0013] of the patent specification), the objection raised in the decision under appeal regarding lack of novelty (see point XI.(b) above) no longer applies and the board need not decide whether or not D1, relating to the disclosure of the MPEG-2 standard, is comprised in the state of the art according to Article 54(2) EPC.

3.4 The subject-matter of the claims has been substantially restricted in appeal proceedings. In order not to deprive the parties of two instances the board judges it appropriate to remit the case to the opposition division for further prosecution in accordance with Article 111(1) EPC, in particular for the division to examine whether the invention is new and inventive.

## Order

**For these reasons it is decided that:**

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

The Registrar The Chairman

D. Sauter F. Edlinger