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Application No./Patent No.	Ref.	Date
90902741.9-2202	IJ/M-914	2 2. 04. 94
Applicant/Proprietor		
LANG, Richard A.		

## Communication pursuant to Article 96(2) and Rule 51(2) EPC

The /further/ examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable to correct the indicated deficiencies within a period

> months 4

from the notification of this communication, this period being computed in accordance with Rules 78(3) and 83(2) and (4) EPC.

Amendments to the description, claims and drawings are to be filed where appropriate within the said period in three copies on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



A. Schinnerl Primary examiner for the Examining Division

Communication despatched, EXRE and statistical data recorded

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12 page/s reasons (Form 2906) **Enclosures:** Copies of three documents

Initials Date

Registered letter

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EPO Form 2001.2 07.93

Bescheid/Protokoll (Anlage) Communication/Minutes (Annex) Notification/Proces-verbal (Annexe)

Datum Blatt Annelde-Nr.

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The examination is being carried out on the following application documents:

### Description:

Pages 1 to 24 as originally filed

# Claims:

Nos. 1 to 72 filed with your letter of 12/09/90 Nos. 73 to 149 filed with your letter of 10/03/93

# Drawings:

Sheets 1/6 to 6/6 as originally filed

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The following documents are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1 = I.E.E.E. Transactions on Consumer Electronics
"1988 International Conference on Consumer Electronics, Part 1", 34 (1988) August, No. 3, New
York, US, pages 838-845; Hildering et al.:
"Programmable Compact Disk Picture Memory and Video
Processing System"

D2 = EP-A-0 283 727

D3 = US-A-4 698 664

D4 = EP-A-0 082 077

Copies of the documents D1, D2 and D4 are annexed to the communication.

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The claims filed with the letters dated 12/09/90 and 1) 10/03/93 introduce subject-matter which extends beyond the content of the application as originally filed, contrary to Article 123(2) EPC. The amendments concerned are the following:-

Claims 1-39, 47-88 and 102-149 define the compression of source information into a time compressed representation thereof. Moreover, all claims define the storing of time compressed representation of source information. In the application as originally filed no such time compression or storing of time compressed information could be identified. In the description, page 7, lines 5-27, the compression refers to data reduction and not to accelerated transmission of information (see also paragraph 2)a) of this communication).

- The application does not meet the requirements of 2) Article 84 EPC, because claims 1-149 are not clear, not concise and they are not supported by the description.
  - a) In claims 1, 47, 57, 73, 102, 132 and 145-149 it is not clear why the received source information is time compressed before it is written into a storage means since the time compression loses its effect (increased amount of information/second) by storing the information.

Moreover, the time compression and the storing of the time compressed information is not supported by the description. In the description, page 7, lines 5-27, it is clearly stated that the compression of information refers to a reduction of number of digits. No indication

of a time compression as claimed could be identified. Therefore, claims 1-39, 57-102 and 132-149 are not supported by the description.

- b) In claims 57 and 132 it is not clear why the digital information is first compressed and then decompressed before it is stored in the memory. Moreover, when interpreting these claims by use of the description it is not clear which memory (29 or 13) is used for storing.
- c) Claims 59 and 60 depend on claim 60. Since this dependency is not possible claims 59 and 60 have been regarded as dependent on claim 57. Moreover, claim 117 apparently does not depend on claim 89 but on claim 92, since in claim 89 the editing is not defined.
- d) The various definitions of the invention given in independent claims 1, 57, 73, 102, 132 and 145-149 are such that the claims as a whole are not concise, contrary to Article 84 EPC. The claims should be recast to include only the minimum necessary number of independent claims in any one category, Rule 29(2) EPC, with dependent claims as appropriate, Rule 29(4) EPC.

In this connection the requirements of Rule 29(5) EPC should be born in mind, i.e. the number of claims should be reasonable and repitition should be avoided.

- 3) The Examining Division considers that the following separate inventions or groups of inventions are not so linked as to form a single general inventive concept:
  - 1. Claims 1-39, 47-88 and 102-149 refer to an appara-

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tus and a method wherein information is received and time compression is performed in order to transmit said information time compressed.

2. Claims 40-46 and 89-101 refer to an apparatus and a method wherein time compressed information is received, stored and transmitted.

Therefore, the application lacks unity within the meaning of Article 82 EPC.

- Independent of the objections set out above and insofar 4) the present claims can be understood, the present application does not meet the requirements of Article 52 (1) EPC because the subject-matter of claims 1-149 does not involve an inventive step in the sense of Article 56 EPC.
  - a) Claim 1:
  - i) Document D1, see in particular sections 1. and 2. and figure 1, discloses a transceiver apparatus comprising:
    - input means (CD-ROM, Modem) for receiving audio and/or video source information;
    - compression means (page 838, right-hand column, lines 7-9);
    - random access storage means (CD-RAM); and
    - output means (Modem) for transmission away from said audio and/or video transceiver.

The apparatus disclosed in document D1 differs from that claimed in claim 1 only in, that in document D1 it is not explicitly stated that the information is transmitBescheid/Protokoll (Anlage) Datum Date

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ted in a time compressed form.

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However, the data transfer rate of the CD-player of document D1 is 150 kbytes/sec (page 840, left-hand column, last two lines). If the data are compressed as in the present application, page 7, lines 23-27, only approximately 35 kbytes/sec (250 megabytes for 2 hours) are required for real time transmission.

Therefore, the transceiver apparatus of document D1 is also capable of transmitting time compressed audio and/or video information and thus claim 1 does not appear to involve anything inventive.

- ii)Document D2, see in particular column 4, lines 25-47, figures 1-3, discloses a transceiver apparatus comprising:
  - input means (16) for receiving audio source information;
  - compression means (figure 2; column 4, lines 25-30);
  - random access storage means (74 a-d); and
  - output means (84 a-d) for receiving time compressed audio source information stored in said random access storage for transmission away (to 86) from said audio transceiver.

The only difference between the subject-matter as claimed in claim 1 and the apparatus disclosed in document D2 appears to be, that claim 1 also refers to video source information (the slash in "audio/video" is considered as standing for "and" and "or"), whereas in document D2 only audio source information is processed.

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Faced with the problem of transmitting time compressed video information the skilled person would regard it as a normal design option to apply the apparatus of document D2 (where the RAM is already a video laser disk) to video source information.

Therefore, claim 1 is not inventive.

b) The additional feature introduced by claim 2 is the editing means. This feature, however, is disclosed in document D1, page 838, right-hand column, lines 7-9. Therefore, claim 2 does not add anything inventive to claim 1.

It is to be noted that document D3 also discloses an editing apparatus (see in particular column 3, lines 5-61, figure 1). The mere a juxtaposition of a transceiver apparatus as claimed in claim 1 and an editing apparatus does not involve an inventive step because it does not appear that there is a functional relationship between them.

- c) Dependent claims 3-39 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step for the following reasons:-
  - The features introduced by claims 3-6, 15, 16, 22, i) 27-30, 32, 33 and 37 are disclosed in document D3.
  - ii) The features introduced by claims 4, 17, 28, 32, 34-36 and 39 are disclosed in document D2.
  - iii) The features introduced by claims 8-10, 15-17, 19, 20, 22-27, 30, 31, 37 and 39 are disclosed in

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document D1.

- The features introduced by claims 7 and 21 are disclosed in document D4.
- The features introduced by claims 11-14, 18, and 38 v) are obvious to the skilled person.

#### d) Claim 40:

Document D1, see in particular sections 1. and 2. and figure 1, discloses a transceiver apparatus comprising:

- input means (CD-ROM, Modem) for receiving audio and/or video source information;
- random access storage means (CD-RAM); and
- output means (Modem) for transmission away from said audio and/or video transceiver.

The apparatus disclosed in document D1 differs from that claimed in claim 40 only in, that in document D1 it is not explicitly stated that the information is received and transmitted in a time compressed form.

However, the data transfer rate of the CD-player of document D1 is 150 kbytes/sec (page 840, left-hand column, last two lines). If the data are compressed as in the present application, page 7, lines 23-27, only approximately 35 kbytes/sec (250 megabytes for 2 hours) are required for real time reception and transmission.

Therefore, the transceiver apparatus of document D1 is also capable of receiving and transmitting time compressed audio and/or video information and, thus, claim 1 does not appear to involve an inventive step.

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It is to be noted, that the transmission and the reception of time compressed information merely is a matter of a high transfer rate of the transmission channel and of data reduction of the information. Such a time compressed information exchange is already a common practice in computer networks or high speed duplication of audio or video tapes. Therefore, claim 40 does not involve an inventive step.

- e) Dependent claims 41-46 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step for the following reasons:-
  - Claims 41-45 can be derived from document D4. i)
  - Claim 46 refers to microwave transmission. The skilled man would regard it as a normal design possibility in order to transmit information.
- f) Claim 47 defines a transfer network comprising a plurality of transceivers as claimed in claim 1. It is obvious to the skilled person and a common practice to use a plurality of transceivers in an information network.
- g) Dependent claims 48-56 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step for the following reasons:-
  - Claims 48-52 and 56 can be derived from document i) D4.
  - The use of the different storage media as claimed ii) in claims 53-55 is obvious to the skilled person.

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- h) In claim 57 a slight constructional change in the transceiver of claim 1 (addition of A/D and D/A converters and controller means) is suggested which lies within the scope of the customary practice followed by persons skilled in the art. Consequently, the subject-matter of claim 57 also appears to lack an inventive step.
- i) Dependent claims 58-72 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step for the following reasons:
  - i) Claims 59, 61 and 66 can be derived from document D4.
  - ii) The subject-matter of claims 60, 62-64, 67, 69 and 70-72 can be derived from document D1.
  - iii) Claim 58 can be derived from document D2 (column 10, line 56 - column 11, line 10).
  - iv) The use of an optical bus (claim 65) and conversion of information to an RGB format (claim 68) appears to lie within the design competence of the skilled person.
- j) Claims 73-88, 94-101, 116, 121-127, 130 and 131 are closely related to claims 1-39. Therefore, similar objections as set out in paragraphs 4)a)-4)c) of this communication also apply to claims 73-88, 94-101, 116, 121-127, 130 and 131, respectively.
- k) Claims 89-91, 119 and 128 are closely related to claims 40-45. Therefore, similar objections as set out in paragraphs 4)d) and 4)e) of this communication also ap-

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ply to claims 89-91, 119 and 128, respectively.

- 1) Claims 92-93, 117, 118, 120, 129 refer to editing. These claims do not appear to involve an inventive step for similar reasons as set out in paragraphs 4)b) and 4)e) of this communication.
- m) Claims 102-115 are closely related to claims 47-56. Therefore, similar objections as set out in paragraphs 4)f) and 4)g) of this communication also apply to claims 102-115, respectively.
- n) Claims 132-144 are closely related to claims 57-71. Therefore, similar objections as set out in paragraphs 4)h) and 4)i) of this communication also apply to claims 132-144, respectively.
- o) In claims 145-149 slight constructional modifications in the method of claim 1 is suggested which lies within the scope of the customary practice followed by persons skilled in the art. Consequently, the subject-matter of claims 145-149 also appears to lack an inventive step.
- 5) In amending the application in order to meet the objections set-out above, the following matters should also receive attention:
  - a) In the description of the present application there are several documents "incorporated by reference" (pages 5. 7, 8, 13 and 20). This is not allowed because of problems which may arise concerning the translations required under Article 65 EPC (see Guidelines C-II, 4.18).

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- b) The ultimately adopted independent claims should be divided in the proper two-part form based on documents D1 or document D2 (Rule 29(1)(a) and (b), EPC). This requires inclusion in the preamble of at least those features known in combination from document D1 or document D2.
- c) The opening pages of the description should be augmented to provide an acknowledgment of the prior art (Rule 27(1)(b), EPC) as disclosed in the documents noted above.
- d) The consistory clause forming the disclosure of the invention as claimed should be brought into agreement with the claim of broadest scope (Rule 27(1)(c), EPC).
- e) In order to improve the intelligibility of the claims bracketed reference numerals should be included throughout them (Rule 29(7), EPC).
- f) Care should be taken to avoid giving rise to further objection by the inadvertent addition of subject-matter (Article 123(2), EPC), and to ensure that the claims relate to a single invention (Article 82, EPC).

In this respect it is to be noted that the indication, in his letter of reply, of the part(s) of the originally filed application serving as basis for subject-matter newly introduced (if any) into the claims by the Applicant would be useful since it would facilitate the subsequent substantive examination of the claims with respect to Article 123(2).

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g) Amendments of the application should be filed by way of replacement pages, in triplicate.

A. Schinnerl

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