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DECISION
of 28 April 2004

Case Number: T 0636/02 - 3.5.1
Application Number: 01101681.3
Publication Number: 1100274
IPC: H04N 7/50, H03M 7/42, H04N 7/30
Language of the proceedings: EN

Title of invention:
Image decoding method using variable length codes

Applicant:
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

Opponent:
-

Headword:
Run-level decoding/MATSUSHITA

Relevant legal provisions:
EPC Art. 76(1), 109(1), 111(1)

Keyword:
"Extension beyond the content of the earlier application - no"
"Remittal - yes"

Decisions cited:
G 0010/93

Catchword:
-
Case Number: T 0636/02 - 3.5.1

DECISION
of the Technical Board of Appeal 3.5.1
of 28 April 2004

Appellant: MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.
1006, Oaza Kadoma
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Representative: Balsters, Robert
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 15 February 2002 refusing European application No. 01101681.3 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: S. V. Steinbrener
Members: R. R. K. Zimmermann
E. Lachacinski
Summary of Facts and Submissions

I. European patent application number 01 101 681.3 (EP-A-1 100 274) concerning image compression methods involving run-level and variable length coding was filed as a divisional application, on 6 November 1997. The earlier application was the then pending European patent application number 97 911 464.2 (EP-A-0 873 018).

II. In a communication, the examining division informed the applicant that it was not able to determine the passages of the earlier application on which the claims of the divisional application were based.

Therefore, the applicant was requested to indicate which parts of the parent application document was to form the basis of the present set of claims.

In addition, the examining division objected lack of inventive step, citing two prior art documents of the European search report and arguing that "all essential features of claim 1 appear(ed) to be disclosed" in a first one of these documents and the features relating to the claimed code transformation of run and level values were to be "considered as obvious alternatives" in view of a particular drawing of the second document.

The applicant filed new claims, differing from the previous claims by the insertion of reference numerals and the correction of typographical errors. Concerning the invitation to indicate wherefrom in the earlier application the claims had been derived, the applicant indicated that the claims were supported by the three decoding methods described in the earlier application
in correspondence to Figures 5, 7 and 9. The applicant made also observations regarding the cited prior art.

III. The examining division refused the application with a decision issued on 15 February 2002. The only reason given for the refusal was that the claim feature of decoding a variable length code by using a variable length code table and then transforming the run value using a predetermined function was not derivable from the earlier application. Neither the embodiment with respect to Figure 5 nor the embodiment with respect to Figure 7 did show, as alleged by the appellant, the transformation of the run value of the variable length code.

IV. Filed by the applicant, a notice of appeal including a debit order in respect of the appeal fee and a written statement setting out the grounds of appeal were received by the European Patent Office on 16 April 2002 and on 10 June 2002, respectively.

With the statement of appeal grounds, the appellant filed the following two claims:

"1. An image decoding method for extracting a variable length code from compression-coded data, obtaining an event corresponding to said variable length code by using a variable length code table wherein a reference event consisting of Last, Run, Level, is assigned to each reference variable length code, and deriving an output transform coefficient from said event, the method comprising:

    judging whether said variable length code includes a control code, and if said variable length code is
judged to include no control code (S703), obtaining an event corresponding to said variable length code by using said variable length code table (S704), and, if said variable length code is judged to include said control code, further judging whether said variable length code includes a second mode code (S705), and if said variable length code is judged to include said second mode code, obtaining an event corresponding to said variable length code by using said variable length code table and then obtaining a transformed event by transforming the Run value of said event corresponding to said variable length code using a predetermined function (S706).

2. The image decoding method according to claim 1, further comprising judging whether said variable length code includes a first mode code (S705), and if said variable length code is judged to include said first mode code, obtaining an event by subjecting said variable length code to fixed length decoding (S708)."

The wording of these claims 1 and 2 is in substance identical to refused claims 1 and 4, respectively, except for the expression "third mode code" which was replaced by "second mode code" wherever the expression occurred.

V. Regarding the support of the claims by the earlier application, the appellant cited Figure 7 of the earlier application, which referred to a second embodiment described in column 15, line 24 to column 17, line 57 (A publication) and the further modification of this embodiment as described in column 17, lines 50 to 53.
VI. The appellant requested that the decision under appeal be cancelled and, as a precautionary measure, oral proceedings if the Board intended to maintain the decision of the examining division.

Reasons for the Decision

1. The appeal is admissible.

2. Moreover, the appeal is allowable on the basis of the appellant's request to reverse the impugned decision since Article 76(1) EPC was not a valid ground for refusal of the application (see points 3 ff. below). The case is to be remitted to the examining division for further prosecution (see point 8 below).

3. The present claims and the claims in the refused version do not differ in any substantial aspects. The renumbering of the "third mode code" as "second mode code" amounts to a minor clarification, only two different mode codes being referred to in the original set of claims of the divisional application. It is therefore sufficient to consider the feature of transforming the Run value by using a predetermined function since all the remaining features of claims 1 and 2 follow directly and unambiguously from the earlier application, in particular from claim 13 if construed in the context of the embodiment 2 as described in columns 15 to 17 and illustrated in Figures 6 and 7. The support of the divisional application in the earlier application was insofar
unquestioned so that it seems unnecessary to expound on the details.

On the other hand, it is also unquestioned that Figure 7, step S706 does not indicate the transformation of the Run value as claimed in the divisional application but rather the transformation of the Level value with the inverse function for reconstructing an event.

4. However, as readily pointed out by the appellant, the encoding of the input event by transforming the Run value is a modification of the encoding process of the embodiment 2 which is clearly and explicitly disclosed in column 17, lines 50 to 53, which reads as follows: "Although in the second embodiment a Level of an input event is transformed to obtain a transformed input event as in the first embodiment, it is possible to transform a Run thereof."

5. Since for every encoding process a closely corresponding decoding process must exist, the skilled person would directly and unambiguously derive therefrom the corresponding modification of the decoding process, which has then to include the transformation of the Run value by using a predetermined function, which is the inverse of the function used for transforming the Run value of the input event.

6. In the divisional application as in the earlier application, the Run transformation as an alternative to the Level transformation is disclosed for almost all the embodiments (see the earlier application, column 14,
7. It follows that the examining division erred in refusing the application on the basis of Article 76(1), second sentence, EPC and that on the basis of the present claims the divisional application fully complies with this requirement. Under these circumstances, the examining division should have rectified its decision (Article 109(1) EPC).

8. Exercising its discretion given under Article 111(1), second sentence, EPC, the Board decides to remit the case to the examining division for further prosecution.

Remittal to the examining division is appropriate in the present case since the examining division did not decide on patentability requirements. Although the issue of inventive step was addressed obiter in the communication, the opinion given by the examining division was provisional in character and appears, prima facie, inconclusive in respect of features concerning the code transformation.

To proceed with the case, the Board would first have to carry out a full examination of the application, which is the task of the examining division (see decision G 10/93 - Scope of examination in ex parte appeal / SIEMENS, OJ EPO 1995, 172, section 4 of the Reasons). The decision under appeal is 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 examining division for further prosecution.

The Registrar: 

The Chairman:

M. Kiehl 

S. V. Steinbrener