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D E C I S I O N
of 23 October 2003

Case Number: T 0450/01 - 3.5.1

Application Number: 96921906.2

Publication Number: 0835585

IPC: H04 N5/235

Language of the proceedings: EN

Title of invention:

Digital camera image recording method and system

Patentee:

Phase One Denmark A/S

Opponent:

Leica Camera AG

Headword:

Digital image recording/PHASE ONE

Relevant legal provisions:

EPC Art. 54, 123(2)

Keyword:

"Novelty (after amendment - yes)"

Decisions cited:

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Catchword:

-



Case Number: T 0450/01 - 3.5.1

D E C I S I O N
of the Technical Board of Appeal 3.5.1
of 23 October 2003

Appellant: Phase One Denmark A/S
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Respondent: Leica Camera AG
(Opponent) Oskar-Barnack-Strasse 11
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 5 February 2001
revoking European patent No. 0835585 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: S. V. Steinbrener
Members: R. Randes
M. Vogel

Summary of Facts and Submissions

- I. This appeal is against the decision of the Opposition Division revoking the patent.

The Opposition Division found that the subject-matter of the independent claims 1 and 14 as granted was not novel having regard to the teaching of document

D1: Linnemann, Wurmus et al.: CCD-Bildsensortechnik, 1983, TH Ilmenau, table of contents, pages 1, 22 to 25, 90 to 93, 128 to 135 and 150 to 155.

Claim 1 as granted read as follows (identification symbols a) to c) of three features having been introduced by the Board for reasons made clear at point II below):

"An image recording method for recording of an image of objects illuminated by light incident upon them by an image recording system comprising an electronic camera with a solid state imaging device (1), the method comprising

- a) moving the solid state imaging device (1) across the image to be recorded and
- b) synchronising the recording of the image with intensity fluctuations (a) of the illuminating light
- c) whereby different areas of the image are recorded as if the objects were illuminated with light of a

temporally substantially constant light intensity."

Independent claim 14 as granted read as follows (identification symbols a) to c) have been introduced by the Board in correspondence to claim 1):

"An image recording system comprising

- a) an electronic camera with a solid state imaging device (1) that is moved across the image during image recording and
- b) synchronizing means for synchronizing recording of an image of illuminated objects with intensity fluctuations (a) of light that illuminates the objects to be recorded
- c) so that different areas of the image are recorded as if the objects were illuminated with light of a temporally substantially constant light intensity".

II. In the statement of grounds, the Appellant (Proprietor) requested that the contested decision be set aside and the patent be upheld with amended claims 1 to 16. An auxiliary request was made for oral proceedings. Amended claim 1 is, in comparison with claim 1 as granted, basically changed in that feature c) is deleted and replaced by a characterising part with the following wording:

"characterised in that light intensities of the recorded image are modified in accordance with a

measured illuminating light intensity whereby modified intensity values are generated that are substantially independent of fluctuation (a) of intensity of the illuminating light, the measurement of intensity of illuminating light being performed as part of synchronising step, b), during recording of the image".

The identification symbols a) and b) as shown in point I above are included in the preamble of the claim.

Independent claim 9, corresponding to granted independent claim 14, has been amended in a similar way as claim 1 in that the features a) and b) are included in the preamble of the claim and feature c) is deleted and replaced by a characterising part with the following wording:

"characterised in that the synchronising means comprises monitoring means for monitoring intensity of light received from the illuminated objects, and comprises processing means for modification of values of recorded light intensities of the recorded image in accordance with the monitored illuminating light intensity so that modified intensity values of the recorded image are generated that are substantially independent of fluctuations (a) of intensity of the illuminating light".

III. The Respondent has not made any submissions in proceedings before the Board.

Reasons for the Decision

1. The appeal complies with the requirements stated in Rule 65(1) EPC and is therefore admissible.
2. The independent claims 1 and 9 have been drafted in the two-part form and are delimited against the disclosure of D1. The preambles of both claims are in principle identical to the corresponding parts of the claims as granted and are also supported by the original patent application.
 - 2.1 The characterising part of claim 1 corresponds mainly to granted claim 10 with the addition of the feature that the measurement of intensity of illuminating light is performed **as part of synchronising step b)**. The Board understands that this means that the measurement is made in connection with the synchronisation. This is supported, for example, by the last paragraph in column 4 of the published patent specification, this paragraph corresponding to the original text.

The fact that feature c) has been deleted from the claim does not, in the opinion of the Board, extend the scope of the claim. It is true that the present claim no longer states that "**different areas of the image** are recorded as if the objects were illuminated with light of a temporally substantially constant light intensity". However, due to the scanning movement of the imaging device set out in feature a) of the claim the recorded intensity values necessarily correspond to different areas of the image, and the temporal intensity variations are converted into a spatial variation of recorded light intensity in the image.

Since, according to the characterising part of present claim 1, "modified intensity values are generated that are substantially independent of fluctuations (a) of intensity of the illuminating light" it appears to be implicitly indicated also in the present claim that different **areas** of the "image of objects" to be recorded (see first line of present claim 1) must be recorded as if the objects were illuminated with light of a temporally substantially constant light intensity.

The subject-matter of claim 1 has been more restricted by specifying the synchronising step b) to be based on measuring the intensity of illuminating light and modifying the recorded intensity values in accordance with measured light intensity.

Thus the Board is of the opinion that claim 1 meets the requirements of Articles 123(2) and (3) EPC.

- 2.2 The characterising part of claim 9 can be derived from the same passage of the patent specification (see point 2.1 above), which makes clear that the **synchronising means comprises monitoring means** for monitoring the intensity of light fluctuations, from granted claim 15 (identical to the original claim), which makes clear that the monitoring means monitors the intensity of light **received from the illuminated objects** and from granted claim 23 (identical to original claim) which sets out the additional features of present claim 9.

The deletion of feature c) from granted claim 9, which corresponds to the deleted feature c) of claim 1 (see point 2.1 above), does not extend the scope of protection of the claim either.

2.3 The Board also considers that both independent claims 1 and 9 are clear in the sense that the language can be understood and that the features of the claims can be derived from the description of the patent specification.

3. According to the teaching of D1 (see in particular page 134), the image repetition frequency is synchronized to the alternating supply current frequency. However, according to the Appellant, the method according to D1 only reduces light flicker introduced by light intensity fluctuations having a frequency twice that of the alternating current supplying the light source illuminating the object. Using the technique of D1 a flicker suppression can only be achieved for light intensity fluctuations having specific and well-defined frequencies. However recording of images often takes place in environments where the operator is not in control of the light sources illuminating the object to be recorded. Moreover random frequency light intensity fluctuations may also be present. The method suggested in D1 will thus not suppress such random light intensity fluctuations and if one were to apply the D1-method in such an environment, the recorded images would be disturbed. The present invention according to claims 1 and 9 is, in contrast to the teaching of D1, not limited to the suppression of light intensity fluctuations at specific well-defined frequencies, but

also suppresses light intensity fluctuations occurring at random frequencies.

According to independent claims 1 and 9, this is apparently achieved by the characterizing features of the claims, these features being based on the fact that the illuminating light intensity is measured (in claim 9: "...synchronising means comprises monitoring means for monitoring intensity of light received...") and that the result of the measurement or of the monitoring is used for the manipulation of the light intensities of the recorded image.

The Appellant points out, and the Board agrees, that D1 does not disclose anything about monitoring or measuring the intensity of the illuminating light and the use of the measured intensity for image data processing. Therefore the subject-matter of amended claims 1 and 9 is novel over D1 (Article 54 EPC).

4. As stated above, the Opposition Division has revoked the patent because of lack of novelty of claims 1 and 9 having regard to the teaching of D1. The appealed decision discussed novelty and is based only on that point. It is true that at the end of the decision there is a general remark that the features of the dependent claims do not add anything inventive to the independent claims. However there are no reasoned statements as to why the features of those claims add nothing inventive and there are no quotations, or even references cited, in respect of these claims. Moreover, the present independent claims do not result from a mere combination of claims as granted, but also include additional features derived from the description as has

been pointed out above (see points 2.1 and 2.2). It is noted that the first part of the decision mentions references D2 to D4 and D4a, cited by the Opponent, but the second part of the decision (Reasons for the Decision) is silent on the relevance of these documents with respect to the patentability.

5. Thus it appears that a substantially different situation has been created by the amendments of the independent claims in that new and significant features have been introduced into the claims. Moreover the ground of revocation of lack of novelty over document D1 is no longer valid, since the subject-matter of present independent claims is new over the teaching of D1.

The prime function of the *inter partes* appeal procedure is to give the losing party the possibility of challenging the decision of the Opposition Division on its merits (see G 10/91, OJ EPO 1993, 420), and not normally for the Board of Appeal to consider a new case as sole instance. In the present circumstances the Board thus considers it appropriate to exercise its discretion pursuant to Article 111(2) EPC by remitting the case to the Opposition Division.

Since the Board has not decided negatively on the Appellant's main request, oral proceedings in accordance with the Appellant's auxiliary request need not be arranged in the present proceedings. They may, of course, be newly requested in any forthcoming proceedings.

The Board hence finds that the independent claims 1 and 9 meet the requirements of Article 123(2) and (3) EPC, that the subject-matter of these claims is novel in relation to document D1 and that the claims are clear in the sense as explained above (see point 2.3). It thus falls to the Opposition Division to examine whether the present patent meets all the other requirements of the EPC. In the event of a positive decision for the Appellant, it must in particular be investigated whether the patent specification as a whole corresponds to the independent claims 1 and 9, or whether the dependent claims and the description should be adapted to the new independent claims in the sense of Article 84, second sentence, EPC.

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:

M. Kiehl

S. V. Steinbrener