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**Datasheet for the decision
of 03 June 2008**

Case Number: T 0488/06 - 3.4.02

Application Number: 98302520.6

Publication Number: 0869381

IPC: G02B 7/10

Language of the proceedings: EN

Title of invention:

Lens driving control apparatus and method

Patentee:

CANON KABUSHIKI KAISHA

Opponent:

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Headword:

-

Relevant legal provisions:

EPC Art. 111

Relevant legal provisions (EPC 1973):

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Keyword:

"New case" remitted to the first instance"

Decisions cited:

-

Catchword:

-



Case Number: T 0488/06 - 3.4.02

D E C I S I O N
of the Technical Board of Appeal 3.4.02
of 03 June 2008

Appellant:

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Representative:

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Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 28 October 2005
refusing European application No. 98302520.6
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: A. Klein
Members: M. Stock
C. Rennie-Smith

Summary of Facts and Submissions

I. The applicant and appellant has appealed against the decision of the examining division refusing European patent application No. 98 302 520.6 (publication EP 0 869 381 A1) for lack of novelty. Reference was made to the following documents:

D1: US 5,434,621

D2: US 5,515,204

D3: JAPENESE PATENT ABSTRACT JP-A-06250071

The examining division reasoned in particular that the subject-matter of claim 1 then on file was anticipated by document D1. As was apparent from previous communications the subject-matter of dependent claims 2 to 4 then on file was not novel or did not involve an inventive step with respect to documents D1 to D3.

II. With "Grounds of Appeal" the applicant filed new claims 1 to 4 and requested the Board to reconsider the examining division's rejection on the basis of grounds which can be summarised as follows:

The present application relates to a lens driving control apparatus for a zoom lens. More particularly the present invention concerns a method of controlling a lens driving control apparatus in such a manner as to correct for a change of angle-of-view arising due to focusing and zooming. The claimed method achieves this result more quickly than the prior art and hence

minimises a user's discomfort in the period whilst the correction takes place.

Document D1 does not disclose or suggest the claimed invention. More specifically document D1 does not disclose the calculation of an angle-of-view correction signal (δZ_n) using a reference angle-of-view and a subsequent focusing signal command (FC_n).

In document D1 a movement distance BZ' is obtained using the focal length F_0 and the local focal length F_1 . The focal length F_1 itself is computed using an initial distance L_0 , a second distance L_1 and the height of a CCTV imaging surface NC . The algorithm used to calculate these values is described in detail in column 7 line 19 to column 8 line 22 of document D1. The distance L_1 used to calculate focal length F_1 is computed using zoom position data and focal position data (see document D1 column 7 lines 19-29). The zoom position data is data detected using a zoom encoder 20 and the focal position data is data detected using a photosensor, see Figure 3 of document D1. It will therefore be apparent that the zoom position data and focal position data are position signals detected by detecting means and do not constitute command signals as in the present claimed invention.

Furthermore the calculation of an error correction signal in the manner described in document D1 is slower than that in the claimed system. This is because when the encoder in document D1 is used an angle-of-view correction signal (δZ_n) cannot be computed initially until a subsequent focusing position signal is detected and generated by the encoder as in contrast to the

claimed invention where an angle-of-view correction signal (δZ_n) starts immediately on receipt of a focusing command. In D1 an angle-of-view correction signal (δZ_n) only begins to be calculated after both focusing and zoom position signals have been obtained i.e. after the completion of a focusing action.

Thus for the above reasons D1 does not disclose any of the second to fifth steps appearing in revised claim 1. Further due to the addition of delay the disclosure of document D1 fails to solve the problem of minimising the time of which a user is subjected to an unwanted change of angle-of-view.

III. Claim 1 underlying this decision reads as follows:

"1. A method of controlling a lens driving control apparatus, comprising:

 a zooming operation member (z) for operating a zoom lens part (6) of a zoom lens;

 a focusing operation member (F) for operating a focusing lens part (10) of said zoom lens; and

 a control circuit (3,4,5,7,8,9,11) for driving and controlling said zoom (6) and focusing (10) lens parts of said zoom lens, said method comprising:

 a first step of performing focusing;

 a second step (23) of determining whether zooming is performed or not thereafter;

 a third step (25) of computing a reference angle of view on the basis of a zooming command signal (Z_{Cn-1}) of said zooming operation member and a focusing command signal (F_{Cn-1}) of said focusing operation member or a focusing position signal (F_{Pn-1}) of said focusing lens part and a zooming position signal (Z_{Pn-1}) of said zoom

part when it is determined that zooming is not being performed;

a fourth step of performing focusing thereafter;
a fifth step (23) of determining whether zooming is performed or not thereafter;

a sixth step (27) of computing an angle-of-view correction signal (Z_n) on the basis of said computed reference angle of view and a subsequent focusing command signal (FC_n) of said focusing operation member (F) when it is determined that zooming is not being performed; and

a seventh step (43-48) of controlling driving of said zoom lens part (6) on the basis of said angle-of-view correction signal (Z_n) so as to prevent a change in angle of view resulting from movement of said focusing lens part (10) in response to said subsequent focusing command signal (FC_n) of said focusing operation member (F) thereafter,

wherein said zooming command signal ($ZC_n; ZC_{n-1}$) is a signal input from said zooming operation member (Z) into said control circuit (3,4,5,7,8,9,11),

said focusing command signal ($FC_n; FC_{n-1}$) is a signal input from said focusing operation member (F) into said control circuit (3,4,5,7,8,9,11),
said zooming position signal (ZP_{n-1}) is a signal detected by a position detector (7) of said zoom lens part (6) and input into said control circuit (3,4,5,7,8,9,11), and

said focusing position signal (FP_{n-1}) is a signal detected by a position detector (11) and input into said control circuit (3,4,5,7,8,9,11)."

Reasons for the decision

1. Claim 1 has extensively been amended by taking up features from the description which *inter alia* set out the details of a seven-step controlling procedure. Such features were originally described in the context of other features or are generalised from more specifically described features. It should therefore be examined whether a person skilled in the art recognised the so amended subject-matter as being directly and unambiguously derivable from the application as originally filed. In the present case the following issues should in particular be considered under Article 123(2) EPC:

1.1 Claim 1 defines seven steps. However, in the description of Figure 2 allegedly forming the basis of the amendments, reference is made to steps 20 to 37 (18 steps).

1.2 The following items cited in the description of Figure 2 are not defined in claim 1:

(a) δZC_n ($ZC_n = ZC_{n-1} + \delta ZC_n$)

(b) Reference zooming position signal ZPorg

(c) Count Zcount

1.3 Concerning the feature of the seventh step (43-48) reference is made to Figure 3, steps 43-48. The following items described in connection with these steps are not indicated in present claim 1:

- (a) "Zooming speed error signal"
- (b) Zooming position error: $Z_{pen} = Z'_{Cn} - Z_{Pn}$
- (c) Speed signal: $Z_{Sn} = C_p \cdot Z_{pen}$
- (d) Zooming speed signal: $Z_{sfn} = C_{diff} \cdot (Z_{Pn} - Z_{Pn-1})$
- (e) Zooming speed error: $Z_{sen} = Z_{Sn} - Z_{sfn}$
- (f) Zooming speed error signal: $Z_{mon} = C_s \cdot Z_{sen}$

2. Concerning the question of patentability, the subject-matter now claimed apparently differs from the prior art according to D1 mainly by the computation method of an angle-of-view correction signal as now set out in detail in claim 1. It would have to be investigated whether such a computation method was obvious to the skilled person.
3. The Board has noted that as a result of the substantial amendments brought to the claims it is confronted to an entirely new case which raises issues not yet decided by the examining division. In fact, whether such a new case is admissible at all at this late stage of the proceedings shall have to be considered first taking into account that there were three communications of the examining division including the annex to summons to oral proceedings, giving the applicant an opportunity to amend its case.
4. Therefore, in order not to deprive the applicant of the opportunity of having its case considered by two instances, the Board makes use of its discretion to

remit the case to the examining division for deciding whether applicant's amended claims are admitted into the proceedings and, if so, whether they satisfy the requirements of the EPC.

5. Since the decision of the Board is not a final decision, the oral proceedings requested by the applicant need not be conducted at this stage.

Order

For these reasons it is decided that:

1. The decision of the examining division is set aside.
2. The case is remitted to the first instance for further prosecution.

The Registrar:

The Chairman:

N. Maslin

A. G. Klein