BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [X] To Chairmen
(D) [ ] No distribution

D E C I S I O N
of 16 October 2001

Case Number: T 1192/97 - 3.4.2

Application Number: 90107629.9

Publication Number: 0394901

IPC: G02B 7/10, G02B 7/28, H04N 5/232

Language of the proceedings: EN

Title of invention:
Optical lens control device

Patentee:
CANON KABUSHIKI KAISHA

Opponent:
Asahi Kogaku Kogyo K. K.

Headword:
-

Relevant legal provisions:
EPC Art. 54(2)

Keyword:
"Claim 1 - novelty (no)"

Decisions cited:
-

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1192/97 - 3.4.2

D E C I S I O N
of the Technical Board of Appeal 3.4.2
of 16 October 2001

Appellant: (Proprietor of the patent)
CANON KABUSHIKI KAISHA
30-2, 3-chome, Shimomaruko
Ohta-ku
Tokyo (JP)

Representative:
Pellmann, Hans-Bernd, Dipl.-Ing.
Patentanwaltsbüro
Tiedtke-Bühling-Kinne & Partner
Bavariaring 4
D-80336 München (DE)

Respondent: (Opponent)
Asahi Kogaku Kogyo K. K.
36-9, Maenocho 2-chome
Itabashi-ku
Tokyo (JP)

Representative:
Schaumburg, Thoenes, Thurn
Patentanwälte
Postfach 86 07 48
D-81634 München (DE)

Decision under appeal: **Decision of the Opposition Division of the European Patent Office posted 16 October 1997 revoking European patent No. 0 394 901 pursuant to Article 102(1) EPC.**

Composition of the Board:

Chairman: E. Turrini
Members: M. A. Rayner
V. Di Cerbo

Summary of Facts and Submissions

I. The appellant (=patent proprietor) lodged an appeal against the decision of the opposition division revoking European patent number 0 394 901 (application number 90107629.9). The patent concerns optical control apparatus for an imaging operation. In the decision under appeal the opposition division held that the subject matter of claim 1 of the patent as granted was not novel with regard to the disclosure of document

D1: WO-A-87/07036

II. The appellant requested setting aside of the decision and maintenance of the patent in amended form on the basis of an amended claim 1 replacing claim 1 as granted. The respondent (=opponent) requested the board to dismiss the appeal. Oral proceedings were requested by both parties on an auxiliary basis.

III. According to the appellant, in contrast to the disclosure of document D1, claim 1 refers to the control of the position of a lens which is movable within a range of operating positions also including a reset position. According to document D1 the lens is moved to a LOCK position when the mode changeover switch is set to the LOCK mode and the lens position is restored to the previously stored operating position when the LOCK mode is changed to the ZOOM mode but without performing properly a reset operation of the lens position before the movement of the lens to the stored operating position. However, claim 1 requires that after the power switch has been switched on, the lens is first driven to the reset position and then moved to the stored operating position immediately at

the beginning of the imaging operation. Thus, in document D1 the LOCK position of the lens merely constitutes a rest or initial position and not a reset position for the precise control of the lens movement as needed in the patent. In addition, in document D1 the LOCK position of the lens is merely a specific encoder position of an encoder of absolute type while in the patent the detection of the operating position of the lens is made on the basis of the reset position.

IV. According to the respondent, electronic control devices generally only operate after the power switch has been switched on and the feature of claim 1 relating to the power switch is therefore redundant and cannot substantiate the patentability of the claim. Claim 1 is silent as to whether a reset operation is carried out before the lens is moved to the stored operating position. In addition, in document D1 the position of the lens is detected by means of the zoom encoder 104 with reference to the positions POS 2 to POS 7, which are assigned with respect to POS 0 associated with the LOCK position as a reference position, and the lens is brought to the LOCK position and then to the stored position with the LOCK position as a start position.

V. Oral proceedings were appointed consequent to the auxiliary requests of the parties and in a communication accompanying the summons, the board indicated that the lens being movable within a range of operating positions including a reset position appeared to be only one of the alternatives in the claim. The board also drew attention to specific passages of document D1 as being of interest in the discussion of the novelty issue, for instance lines 23 to 25 on page 28, lines 20 to 26 on page 51 lines 27 to 34 on

page 75.

VI. During the oral proceedings, the appellant requested maintenance of the patent in amended form on the basis of an amended claim 1 submitted during the oral proceedings. The appellant argued that, while in the patent the position of the lens is detected with respect to a reference initial position by means of an increment-type counter that is reset at said reference position, in document D1 the detection of the position of the zoom lens is carried out by means of a sensor of an absolute type which neither requires a reference position nor needs to be reset. Thus, in document D1 the LOCK position of the zoom lens merely constitutes a mechanically protected position to which the lens can be retracted. Furthermore, the position of the zoom lens is detected in document D1 only in a stepwise manner and the patent allows for a more precise detection of the position of the lens. In addition, the reset operation disclosed in document D1 refers to the resetting of a control process and not to the resetting of both a lens position and a position detector as is the case in the patent.

VII. The respondent maintained the request for dismissal of the appeal and argued during the oral proceedings that the meaning of the term "reset" position of a lens includes a "reference" or "null" position with respect to which the position of the lens is detected. Furthermore, in document D1 the LOCK position triggers a reset operation of the camera control process to the switch scan control process S2C in Figure 51(a) and therefore also in this sense the LOCK position constitutes a reset position. The appellant's submissions are based on a narrow and restrictive

interpretation of the subject matter of the claim that is not reflected in the actual wording of the claim.

VIII. Claim 1 of the appellant's request reads as follows:

"An optical control apparatus for an imaging operation, comprising:
a lens (102, 103; 402, 403) movable within a range of operating positions and to a reset position, said reset position being situated within or outside said range of operating positions;
detecting means (118; 301; 421, 422, 423, 424) for detecting the operating positions of said lens (102, 103; 402, 403) with respect to said reset position; and
control means (109; 409; 602; 608) for moving said lens (102, 103; 402, 403) to its reset position;
characterized by
storing means (425) for storing the detected operating position of said lens (102, 103; 402, 403) before the lens is moved to its reset position; and
said control means (409; 602; 608) being further arranged to move said lens (102, 103; 402, 403) to said stored operating position after a power switch (601) has been switched on and immediately at the beginning of the imaging operation. "

IX. At the end of the oral proceedings, the board gave its decision.

Reasons for the Decision

1. *Admissibility of the appeal*

The appeal complies with the provisions mentioned in

Rule 65(1) EPC and is therefore admissible.

2. *Prior art document D1*

2.1 The fourth embodiment disclosed in document D1 on page 70, line 21 to page 79, line 17 with reference to Figures 4 and 5 relates to a camera comprising means for driving a zoom lens (see the abstract), the fourth embodiment constituting a modification (see page 71, lines 9 to 12) of the first embodiment disclosed on page 25, line 26 to page 51, line 26 with reference to Figures 1 and 5. According to the fourth embodiment, the means for driving the zoom lens D11 shown in Figure 4 includes a motor D12 for driving the zoom lens and means constituted by the switch means D2 and the control means D5 for controlling operation of the motor for movement of the zoom lens to a position establishing the focal length of the camera lens for photography (see page 70, line 22 to page 71, line 8). The means for driving the zoom lens therefore constitute an optical control apparatus for an imaging operation of the camera.

Furthermore, according to part of the first embodiment also included in the fourth embodiment (page 26, line 19 to page 27, line 15 together with Figures 29 and 30 and the flow charts in Figures 51 and 52), the optical control apparatus also includes control means for moving the zoom lens within a range of focal length positions f0 to f7' when a mode changeover switch 101 is set to the ZOOM mode (page 27, lines 10 to 11 together with page 28, lines 25 to 36) and for moving the zoom lens to a LOCK position when the mode changeover switch 101 is set to the LOCK mode (page 27, line 8 together with page 71, lines 14 to 18). When the

zoom lens is in the LOCK position the shutter cannot be released (page 29, lines 22 to 24 and page 42, lines 14 to 25); therefore, whereas the different focal length positions constitute operating positions of the zoom lens, the LOCK position, which is situated in a retracted position beyond the range of operating focal length positions (see Figures 29 and 30), does not itself constitute an operating position and is therefore situated outside the range of operating positions of the zoom lens.

2.2 The optical control apparatus of the fourth embodiment comprises in addition detecting means (means D1 in Figure 4) for detecting the operating positions of the zoom lens (page 70, lines 33 and 34) and storing means (means D6 in Figure 4) for storing data representative of the detected operating position of the zoom lens (page 70, lines 33 to 36 and page 72, line 34 to page 73, line 1 together with page 78, line 29 to page 79, line 17). When the zoom lens is in one of the operating positions and the mode changeover switch 101 is switched to the LOCK mode, then the storing means stores the operating position of the zoom lens previously detected by the detecting means before the zoom lens is then moved from the operating position to the LOCK position (page 78, lines 29 to 35 and the sequence of process steps S10C, S11C, S12C, S13C, S14C and S15C in Figure 51(a)).

2.3 According to the disclosure of document D1 (page 35, lines 24 to 31 together with page 34, lines 10 to 13 and the corresponding steps in the flow chart shown in Figure 38(A) together with the respective steps in Figure 51(a) of the fourth embodiment) upon detection of the actual position of the zoom lens being the LOCK

position (page 35, lines 24 to 25 together with S11 in Figure 38(A)) or, in its default, upon movement of the zoom lens to the LOCK position (page 35, lines 29 to 31 together with S12 and S13 in Figures 38(A) and S134 and S135 in Figure 39(a)), the control process of the control apparatus is reset (page 35, lines 25 to 26 and 30 to 31) to a switch scan control process (page 34, lines 10 to 13 and S2 in Figure 38(A)).

2.4 In the fourth embodiment of document D1 the detection of the operating positions of the zoom lens is carried out as disclosed for the first embodiment (see page 72, lines 18 to 20), i.e. by means of the code sheet 90 shown in Figure 29 (see page 26, line 19 to page 27, line 15). The code sheet 90 assigns a series of discrete positional values POS 0, 1, 2 and so on to the detectable positions of the zoom lens according to the table shown in Figure 30, the first one of the positions, POS 0, designating the LOCK position of the zoom lens (page 27, line 8 and Figure 30) and the positions POS 1, 2, 3, etc. designating the respective operating focal positions of the zoom lens (page 27, lines 8 to 15 and Figure 30).

2.5 Finally, document D1 specifies that the camera starts the initialization process as soon as voltage regulator 105 is actuated (page 34, lines 8 to 10 together with page 28, lines 23 to 25) and that power from the camera battery is applied to the voltage regulator 105 when a manually operable switch inserted into the power supply line from the battery to regulator 105 is switched on (page 51, lines 20 to 26). The document specifies in addition that "the next time the camera is used" the zoom lens is moved by the control means from the LOCK position to the stored operating position (page 75,

lines 27 to 34, movement to the stored operating position being disclosed in page 73, line 15 to page 74, line 4, page 75, lines 8 to 34 and page 77, lines 18 to 20 together with the corresponding process steps in Figures 51 and 52). Since using the camera a second time requires switching on of the manually operable power supply switch, it follows, the changeover switch being set to the ZOOM mode in order to start the imaging operation of the camera, that upon switching on the power supply switch the zoom lens is then moved by the control means to the operating position previously stored by the storing means. Therefore, the control means of the camera disclosed in document D1 is arranged in the ZOOM mode to move the zoom lens to the stored operating position after the power switch has been switched on and immediately at the beginning of the zooming imaging operation.

3. *Novelty of the subject matter of claim 1*

Having regard to the disclosure of document D1 mentioned in point 2 and the fact that a counterpart to all the features actually claimed in claim 1 is present in this document, the board reached the view that the subject matter of claim 1 lacked novelty.

3.1 A first line of argument to the contrary advanced by the appellant and in favour of novelty relies on the interpretation of the LOCK lens position of document D1 as merely a rest or mechanically retreated position of the lens, i.e. that the LOCK position is not a reset position within the meaning of claim 1. However, the LOCK position of the zoom lens disclosed in document D1 constitutes a rest or retracted position to which the zoom lens is brought from the operating position and

also constitutes a start position from which the zoom lens is brought to an operating position upon actuation of the mode changeover switch 101. The board shares the view of the respondent that no more is required to fall within the meaning of a reset position according to the claim. This view is confirmed by the disclosure of document D1 itself in which the control process of the control apparatus is said explicitly to be reset to a switch scan control process upon detection that the zoom lens is brought to the LOCK position, see point 2.3 above.

Therefore, the first line of argument of the appellant fails to convince the board.

3.2 A second line of argument of the appellant is that the operating positions of the zoom lens are not detected in document D1 with respect to the LOCK position. However, the board concurs with the respondent that detection of the positions of the zoom lens by means of the code sheet 90 inherently assigns to each detectable operating position a discrete positional value POS 1, 2, 3 and so on with respect to the reference value POS 0 assigned to the outermost detectable position corresponding to the LOCK position, see point 2.4 above.

The second line of argument of the appellant is therefore also not convincing as to novelty.

3.3 A third line of argument of the appellant relies on an approach construing the claimed detection of the lens operating positions with respect to the reset position in a narrow way according to the description of the patent, i.e. as designating the detection of the lens

position with respect to a reference position by means of a positional counter that is reset at said reference position. However, these features are not present in the wording of claim 1 and accordingly the interpretation made by the appellant is not reflected in the actual wording of the claim. The board sees no reason on the face of the wording of claim 1 for interpreting the subject matter of the claim exclusively according to the particular resetting operation of the position detector disclosed in the description of the patent.

The further argument of the appellant involving the position detector concerns the stepwise detection of the position of the zoom lens in document D1 and the degree of precision in the detection of the lens position according to the patent. Again this argument does not bear on features defined in the claim and is therefore not pertinent to the assessment of novelty of the subject matter actually claimed.

For these reasons, the third line of argument of the appellant does not persuade the board.

3.4 The submissions of the appellant according to which in claim 1 once the power switch has been switched on the lens is driven to the reset position and then is moved to the previously stored operating position immediately at the beginning of the imaging operation also fails to provide a convincing argument because, as submitted by the respondent, claim 1 does not require that the lens is moved to the reset position after the power switch has been switched on and before the lens is moved to the stored operating position.

3.5 The appellant relied finally on the argument that in claim 1 the lens is movable within a range of operating positions including the reset position. This argument, however, did not convince the board because it concerns only one of the two alternatives defined at lines 4 to 6 of the claim, the remaining alternative being anticipated by the disclosure of document D1, see third paragraph of point 2.1 above.

3.6 In view of the foregoing, the subject matter of the second of the alternatives defined in claim 1 according to which the reset position is situated outside the range of operating positions of the lens lacks novelty under Article 54 EPC. Accordingly, claim 1 of the appellant's request is not allowable under Article 52(1) EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

P. Martorana E. Turrini