

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board

Paper No. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte SHIGEYSOHI TANAKA, TORU IKEDA,  
SHIGENORI YANAGI and TAKASHI MASAKI

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Appeal No. 1998-2479  
Application 08/419,512

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HEARD: March 6, 2001

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Before THOMAS, BARRETT and LEVY, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 1, 2, 4 through 7, 10 through 14 and 24 through 26.

Representative claim 1 is reproduced below:

1. An optical pickup servo control apparatus in an optical disk apparatus comprising:

an optical pickup;

optical pickup servo signal generating means for generating a focus error signal which drives a focus actuating means and for generating a tracking error signal which

drives a tracking actuating means to maintain said optical pickup at a predetermined position opposite to a recording surface of an optical information storing medium;

nonvolatile memory means for storing a compensatory value corresponding to differences of servo characteristics of at least either a focus servo control apparatus or a tracking servo control apparatus, said value being determined through use of external measurement means and stored when said memory means is incorporated into the optical disk apparatus with said optical pickup; and

compensation means for compensating either said focus error signal or said tracking error signal according to said compensatory values stored in said nonvolatile memory means.

The examiner has relied upon the following references:

Minami	4,707,648	Nov. 17, 1987
Hofer et al. (Hofer)	4,942,564	July 17, 1990
Horie et al. (Horie)	5,048,002	Sept. 10, 1991
Suzuki	5,097,458	Mar. 17, 1992 (filed May 22, 1990)

Claims 1, 2, and 4 through 7 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Suzuki alone. Claims 1, 2, 4, 5, 7 and 10 through 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Minami. Claims 1, 2, 7 and 10 through 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Horie. Finally, claims 24 through 26 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hofer.

Rather than repeat the positions of the appellants and the examiner, reference is made to the brief<sup>1</sup> and the answer for the respective details thereof.

### OPINION

Based upon a reasoning set forth by the examiner in Paper No. 19, mailed on August 9, 1995 and the answer, we sustain each of the rejections of the claims on appeal. The examiner's reasoning is amplified by the following.

Turning to the first rejection of claims 1, 2 and 4 through 7 under 35 U.S.C. § 103 as being obvious over the teachings and suggestions of Suzuki alone, appellants' arguments focus only upon the features recited in claim 1. No arguments are presented as to its dependent claims. Essentially, we agree with the examiner's views expressed in the answer which respond directly to each of the arguments raised by appellants as to this rejection in the brief. We agree with appellants' observation at the top of page 11 of the brief that Suzuki's memory 126 is not explicitly disclosed to be a RAM or a ROM. But, we also agree with appellants' assessment that this memory is essentially to the artisan a ROM rather than a RAM for the reasons expressed by appellants there that due to the need of the system to maintain the measured result for

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<sup>1</sup> The examiner's communication mailed on January 29, 1997 indicates the examiner has not entered the reply brief. As such, we have not considered it in our deliberations.

the life of the unit, the artisan would have utilized a ROM. Therefore, at least from a structural point of view, the memory 126 in representative Figure 4 of Suzuki comprises the claimed nonvolatile memory means.

Because of the alternative approach utilized in the memory means clause of storing a compensatory value corresponding to differences of servo characteristics of either a focus servo control apparatus or a tracking servo control apparatus, the teachings of Suzuki have not been questioned by appellants since it directly utilizes the memory 126 in Figure 4 to change or alter the focus servo control apparatus at the top of this figure.

We do not agree with appellants' views that Suzuki's storage of the table lookup data does not comprise a discrete compensatory value, that the reference discloses that the compensatory values are computed internally within the MPU 125 not through the use of external measurement means and that the compensatory values disclosed in this reference are not uniquely determined for an individual optical disc apparatus. At least with respect to the teachings of Figure 2, the discussion at column 8, lines 36 through 48 indicates that certain offset correction data has already been memorized in the logic circuit 23 of this Figure for correcting offset errors in that circuit. At column 11, lines 11 through 13, the memory 126 in Figure 4 memorized data for correcting the focus offset and is connected to the same MPU 125 for the Figure 4 embodiment. The examiner has correctly referenced the material at column 12 indicating that that

memory memorizes in advance certain relationships between certain parameters later utilized by the MPU for correction of focus offset errors. The discussion at column 12, lines 19 through 57 indicate that the tables shown there are derived “on the basis of the result of measurement of the data at the time of fabricating the optical pickup device.” Lines 54 through 56. It is thus clear that this reference meets the functional language at the end of the nonvolatile memory means clause and that such external measurement means obviously was utilized in the measurement determination just discussed with respect to the fabrication of the optical pickup device. As such, they would be individually determined for the actual device in question encompassed by the claim.

We also do not agree with appellants' view that the data stored in the memory 126 is not a compensatory value as claimed. The argument at the bottom of page 8 of the brief is misplaced because a discrete compensatory value is not recited in the claim. Only a compensatory value corresponding to differences of servocharacteristics is recited. In accordance with the arguments presented at page 9 of the brief, the claim merely requires “a” compensatory value and the claim does not recite restrictively that only one compensatory value or that a single compensatory value is necessarily recited. The claim does not exclude the capability of the reference to store plural compensatory values, and since it teaches a plurality stored, it obviously stores “a” compensatory value. The latter arguments at page 11 of the brief go well beyond the broad scope of the subject matter recited in claim 1 on appeal. Because we remain unpersuaded of

any error in the examiner's position as to the rejection of representative claim 1 on appeal under 35 U.S.C. § 103 over Suzuki, the rejection of this claim and its dependent claims 2 and 4 through 7 is sustained.

As to the rejection under 35 U.S.C. § 102 relying upon Minami, appellants again argue only the features of independent claim 1 on appeal. Like the previous rejection, appellants argue the features recited in the non-volatile memory clause. The five embodiments discussed in Minami are reflected in the overall structures set forth in Figures 6, 12, 13, 17 and 21 respectively. The examiner's correlation of the read only memory 93 is only explicitly shown in Figures 13, 17 and 21. The Figure 6 showing of the MPU 60 is expanded upon in Figure 7 where this memory 93 is clearly shown on the right portion of that Figure. MPU 60 is shown in the same manner in Figure 12 as is shown in Figure 6. The discussion as to this rejection at pages 13 and 14 of the brief is misplaced because it argues features not recited in the claim, but which relate to the motives and assessments of appellants' disclosed invention. Also, an assertion that a reference teaches away in the context of an anticipation rejection is misplaced. See Celeritas Techs. LTD v. Rockwell Int'l. Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522 (Fed. Cir. 1998)("[t]he question whether a reference 'teaches away' from the invention is inapplicable to an anticipation analysis.").

This reference reflects a prior invention of the same assignee as the present application. The focus of the arguments in pages 15 and 16 of the brief is that the

reference to Minami determines offset values internally and not through the use of external measurement means in accordance with the function recitation of the non-volatile memory means clause of claim 1 on appeal. Column 6, lines 47 through 48 state that the “ROM 93 stores a plurality of offset data for determining a maximum offset value.” The MPU 60 utilizes the maximum value in comparison with the normal operation of the rest of circuit of representative Figure 6, including the use of the TES or tracking error signal during the power on operation of the device as expressed beginning at column 7, line 5. The question that MPU 60 may utilize information stored within memory 93 in its determination of the ultimate offset value applied as signal OS in Figure 6, even though the ultimate determination is made by the MPU internally, is not dispositive of the issue as to where the data placed in a read only memory 93 has been originally derived. Minami does not indicate anywhere in the reference that the data placed in the read only memory is determined by the circuitry disclosed in the reference as a whole. Similar prestored data in ROM 93 is generally taught at column 7, lines 25 through 28 and column 8, lines 17 through 22.

Because the reference explicitly teaches that corrective offset information is placed in ROM 93 and does not indicate that it is derived according to the teachings of the reference circuits per se, we find that it necessarily inherently has been predetermined in accordance with external measurement means to the extent

recited and then stored in the ROM 93 itself. The rule that anticipation requires that every element of a claim appears in a single reference accommodates situations where the common knowledge of “technologists” is not recorded in a reference, i.e., where technical facts are known to those in the field of the invention. Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1269, 20 USPQ2d 1746, 1749-50 (Fed. Cir. 1991). Similarly, In re Graves, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), confirms the longstanding interpretation that the teachings of a reference may be taken in combination with knowledge of the skilled artisan to put the artisan in possession of the claimed invention within 35 U.S.C. § 102 even though the patent does not specifically disclose certain features. We add to this discussion the background of the invention assessment that in the prior art to Minami the offset values utilized were determined manually and apparently individually according to the discussion in the paragraph bridging columns 1 and 2.

Appellants' view expressed at the bottom of page 15, for example, of the brief that the offset data in ROM 93 of Minami is not the compensatory data of the present invention is misplaced. We disagree with this assessment because appellants' own discussion beginning at specification page 12, and particularly the discussion at the top of page 15 and the entire page 16 indicates that offset data is determined and placed into appellants' memory 25 such as in Figure 4 of the disclosed invention. That Minami's offset data corresponds to maximum peak values of the track error signal is

not dispositive of the issues since the claim merely broadly requires a compensatory value corresponding to differences of servo characteristics. The actual language of the claim is broader than appellants' arguments and clearly is met by the teachings of the ROM 93 in Minami. Therefore, the decision of the examiner rejecting claims 1, 2, 4, 5, 7 and 10 through 14 under 35 U.S.C. § 102 as being anticipated by Minami is sustained.

Turning next to the rejection of claims 1, 2, 7 and 10 through 14 as being anticipated by Horie under 35 U.S.C. § 102, it is also sustained and only independent claim 1 on appeal again is argued. Once again, appellants present arguments only as to the nonvolatile memory means clause. We agree with the examiner's assessment that ROM 11 of the embodiments shown in Figures 1, 6, 7 and 10 corresponds to the claimed nonvolatile memory means claimed. As noted by the examiner, the discussion at column 3, lines 56 through 62 indicates that ROM 11 stores "a predetermined standard value" as a base starting point for use by the CPU 8 for determining the ultimate offset correction signals. This predetermined standard value is referenced in the discussion at column 2, lines 1 through 13 as well as the last sentence of the abstract. Similar references to this standard value are made at column 4, lines 38 through 40; column 5, lines 59 through 61; the discussion in the entire paragraph at column 6, lines 36 through 50; the discussion at column 7, lines 21 through 25 and the discussion at column 8, lines 31 through 33. It is thus apparent that the predetermined

standard values referenced in these various locations are not determined within the disclosure in Horie per se and therefore clearly have been previously determined and placed in the memory 11. On the basis of these specific teachings, we make reference again to the case law just listed as to how we believe the artisan would interpret such teachings within 35 U.S.C. § 102. Note the contrasting manual approach at column 1, lines 50-54. Therefore, we sustain this rejection.

Lastly, we turn to the rejection under 35 U.S.C. § 102 of claims 24 through 26 over Hofer. As with the earlier rejections, appellants argue only the nonvolatile memory means features. Appellants' brief indicates certain similarities between these three independent claims 24 through 26. For purposes of the nonvolatile memory means clause, claim 24 merely recites that the values placed in the nonvolatile memory means have been determined through the use of external measurement means. Claims 25 and 26 extend this reasoning by indicating that this is done when or after the nonvolatile memory is incorporated into the disc apparatus.

We do not agree with appellants' views expressed at pages 19 and 20 of the brief that the examiner has effectively ignored these latter limitations of these three independent claims on appeal. We are unpersuaded of appellants' views that the offset values discussed in this reference can not be stored in the ROM 38 despite the teachings at the bottom of column 5, lines 63 and 64 that the offset value "is stored in RAM 36 or ROM 38." Appellants' arguments belie the plain teaching of the reference.

Furthermore, as to the noted external measurement features differently recited and noted earlier in claims 24 through 26, the examiner refers to the statements in the paragraph bridging columns 5 and 6 that the “the Offset Value is a numeric value which compensates for electrical, mechanical, and other characteristics of the tracking servo system. The Offset Value for the tracking servo system is typically selected and stored during the initial calibration of disc drive 10, following its assembly.” Finally, we note that the discussion at column 7, lines 39 through 50 of Hofer indicates that both the tracking and focus offset circuits have been corrected according to offset values stored in ROM 38 even though the bulk of the discussion in the reference pertains only to the tracking offset features. Note also the first sentence of the abstract. Therefore, the rejection of claims 24 through 26 as being anticipated by Hofer under 35 U.S.C. § 102 is sustained.

Since we are unpersuaded of any error of the examiner's views in reliance upon the noted references as to each of the four separately stated rejections, each of them is affirmed. Therefore, the decision of the examiner rejecting various claims under 35 U.S.C. § 102 and 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

Appeal No. 1998-2479  
Application 08/419,512

James D. Thomas  
Administrative Patent Judge

Lee E. Barrett  
Administrative Patent Judge

Stuart S. Levy  
Administrative Patent Judge

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