

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MAMORU SHOJI,
ATSUSHI NAKAMURA, TAKASHI ISHIDA
and
SHUNJI OHARA

Appeal No. 2002-1674
Application 09/089,901

ON BRIEF

Before KRASS, FLEMING, and RUGGIERO, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-20, which are all of the claims pending in the present application.

The claimed invention relates to an apparatus and method for recording on or reproducing information from an optical disk in which groove-shaped groove tracks and land tracks present between the groove tracks are alternately connected to each other in a spiral shape. More particularly, a signal is recorded in both at least one continuous groove track and at least one continuous land track and, thereafter, the signal is reproduced from both the groove track and land track. Control parameters are determined based on a detected quality of the recorded and reproduced signal. Appellants assert (specification, pages 29 and 30) a savings in time and number of disk rotations over the conventional approach in which optimal control settings are obtained separately for the land and groove tracks.

Claim 1 is illustrative of the invention and reads as follows:

1. An optional disk apparatus performing either one of recording and reproduction of an optical disk in which groove-shaped groove tracks and land tracks present between the groove tracks are alternately connected to each other in a spiral shape, comprising:

a recording and reproduction unit for recording a signal in both at least one continuous groove track and at least one continuous land track, and after recording the signal in both the

groove track and the land track, then reproducing the signal from both the groove track and the land track;

a detector for detecting a quality of the signal thus recorded and reproduced by the recording and reproduction unit;

a control parameter setting unit for setting a control parameter related to at least one of the recording and the reproduction of the optical disk; and

a controller for changing the control parameter set by the control parameter¹ setting unit, repeating the recording and reproduction performed by the recording and reproduction unit and detection performed by the detector every time the control parameter is changed, and determining the control parameter based on the quality of the signal detected by the detector.

The Examiner relies on the following prior art references:²

Johann et al. (Johann)	5,341,360	Aug. 23, 1994
Moriya et al. (Moriya)	5,508,995	Apr. 16, 1996
Pietrzykoski et al. (Pietrzykoski)	5,812,506	Sep. 22, 1998
	(effectively filed)	Oct. 02, 1996)
Nakane et al (Nakane '932)	5,936,932	Aug. 10, 1999
		(filed Mar. 25, 1997)
Nakane et al. (Nakane '285)	5,946,285	Aug. 31, 1999
		(filed Feb. 28, 1997)
Nakane et al. (Nakane '699)	6,091,699	Jul. 18, 2000
		(filed Apr. 10, 1997)

¹ The language "set by the control parameter" is inadvertently duplicated at line 2 of claim 1 appearing in the amendment filed August 7, 2000, Paper No. 8.

² In addition, the Examiner relies on Appellants' admissions as to the prior art at pages 29 and 30 of Appellants' specification.

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Ohara et al. (Ohara)³ JP 4-141827 May 15, 1992
(Published Japanese Patent Application)

Claims 1-20, all of the appealed claims, stand finally rejected under 35 U.S.C. § 103(a).⁴ As evidence of obviousness, the Examiner offers JP 4-141827 in view of Moriya with respect to claims 1, 2, 7, 9, 11, 12, 17 and 19. The Examiner adds the admitted prior art to the basic combination of JP 4-141827 and Moriya with respect to claims 3, 6, 13, and 16, and adds Pietrzykoski to the basic combination with respect to claims 8, 10, 18, and 20. The Johann reference is further added to the combination of JP 4-141827, Moriya, and the admitted prior art with respect to claims 4, 5, 14, and 15. In a separate rejection under 35 U.S.C. § 103(a), any one of Nakane '285, Nakane '699, or Nakane '932, is added to each of the stated rejections listed above.

³ Since both Appellants and the Examiner refer to the Ohara reference by document number (JP 4-141827), we will do so also to maintain consistency. A copy of an English translation of this reference provided by the U.S. Patent and Trademark Office, April 2000, is enclosed with this decision.

⁴ As indicated at page 2 of the Answer, the Examiner has withdrawn the 35 U.S.C. § 112, first paragraph, rejection of claims 1-20.

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Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs⁵ and Answer for the respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner, the arguments in support of the rejections, and the evidence of obviousness relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill

⁵ The Appeal Brief was filed August 2, 2001 (Paper No. 14). In response to the Examiner's Answer dated September 7, 2001 (Paper No. 15), a Reply Brief was filed January 2, 2002 (Paper No. 16), which was acknowledged and entered by the Examiner as indicated in the communication dated April 23, 2002 (Paper No. 18).

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in the art the obviousness of the invention as set forth in claims 1-20. Accordingly, we affirm.

Appellants' arguments in response to the Examiner's rejection of the appealed claims are organized according to a suggested grouping of claims indicated at page 5 of the Brief. We will consider the appealed claims separately only to the extent separate arguments for patentability are presented. Any dependent claim not separately argued will stand or fall with its base claim. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Briefs have not been considered [see 37 CFR § § 1.192(a)].

As a general proposition in an appeal involving a rejection under 35 U.S.C. § 103, an Examiner is under a burden to make out a prima facie case of obviousness. If that burden is met, the burden of going forward then shifts to Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the

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relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

With respect to independent claims 1 and 11, Appellants' arguments in response to the Examiner's obviousness rejection based on the combination of JP 4-141827 and Moriya initially assert a failure by the Examiner to set forth a prima facie case of obviousness since all of the claimed limitations are not taught or suggested by the applied prior art references. After careful review of the applied JP 4-141827 and Moriya references in light of the arguments of record, we find Appellants' assertions to be unpersuasive. In our view, Appellants' arguments unpersuasively focus on the individual differences between the limitations of claims 1 and 11 and each of the applied references. It is apparent, however, from the Examiner's line of reasoning in the Answer, that the basis for the obviousness rejection is the combination of JP 4-141827 and

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Moriya. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986).

In other words, while Appellants contend (Brief, pages 6-10) that the JP 4-141827 reference, in contrast to the claimed invention, has no disclosure of continuous recording on land and groove tracks thereby requiring separate evaluations of such groove and land tracks, the feature of continuous recording and/or reproducing on alternate land and groove tracks is clearly taught by Moriya. Similarly, while Appellants contend that Moriya fails to teach the setting and evaluation of control parameters after a recording and reproducing cycle, this teaching is specifically provided by JP 4-141827.

We further find to be unpersuasive Appellants' arguments in the Briefs which assert that:

[w]hile the elements of the claimed invention, e.g., recording and reproducing from each of the lands and grooves, may be present in the prior art, none of the references contains any suggestion which would motivate a person of skill in the art to select and combine the presently claimed features as recited in Appellants' claims. (Brief, pages 17 and 18).

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Our review of the applied prior art references in addition to Appellants' acknowledged prior art reveals that, in our view, even assuming, arguendo, that there is no explicit teaching in the references themselves suggesting their combination, the nature of the existing problems as described in the references clearly suggests their combination. As the Federal Circuit recently stated, " ... this court has consistently stated that a court or examiner may find a motivation to combine prior art references in the nature of the problem to be solved." See Ruiz v. A.B. Chance, 357 F.3d 1270, 1276, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004).

As discussed by Appellants at pages 29 and 30 of their specification, and as argued at pages 3, 4, and 6 of the Brief, the acknowledged prior art and JP 4-141827 disclose the recording and subsequent reproducing of information on land tracks and groove tracks separately. As evident from the described operation of the acknowledged prior art, in order to gather necessary control setting information from the land and groove tracks, it is necessary to jump from an outer land or groove track to an inner land or groove track.

Similarly, the Moriya reference also recognizes the problems of recording and/or reproducing information on separate land and groove tracks including the need to jump, for example, from an outer groove track to an inner land track in order to continuously record or reproduce information (Moriya, column 12, lines 35-55). To address this "track jumping" problem, Moriya teaches the use of a single spiral format (Example 2, beginning at column 12, line 56) with alternately connected land and groove tracks as presently claimed. In our view, Appellants' arguments notwithstanding, the nature of the problem to be solved coupled with Moriya's suggested alternate land/groove track solution provides clear motivation to the skilled artisan to modify the separate land and groove track format of the acknowledged prior art and JP 4-141827. Moriya also provides for the identification of land and groove tracks in the form of a track address (Moriya, column 13, lines 40-50).

We also make the observation that, in our view, the language of claims 1 and 11 which sets forth the recording and reproducing operation does not distinguish over the operation of the conventional system acknowledged as prior art by Appellants. For

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example, the repeated record and reproduce operations in the prior art, as would be necessary to achieve optimum control settings (e.g., as discussed in JP 4-141827) would result in recording on a continuous land track and on a continuous groove track, i.e., a recording on both land and groove tracks, followed eventually by reproduction from both the land and groove tracks as claimed. While such an operation may not be the same as that specifically disclosed by Appellants, it is the claimed invention which is at issue in this appeal. To whatever extent Appellants are alleging a reduction of disk revolutions as a distinguishing factor in the present appealed claims, no such language appears in the claims.

For the above reasons, since it is our opinion that the Examiner's prima facie case of obviousness has not been overcome by any convincing arguments from Appellants, the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 1 and 11 is sustained.

Turning to a consideration of the Examiner's 35 U.S.C. § 103(a) rejection of dependent claims 2 and 12, grouped and argued together by Appellants, we sustain this rejection as well.

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It is apparent to us, as implied by the Examiner, that the land and groove tracks in the applied prior art have control parameters in common, e.g., the focus position in Appellants' acknowledged prior art and the power discussed at column 12, line 61 of Moriya.

We also sustain the Examiner's obviousness rejection of dependent claims 7, 9, 17, and 19 grouped together by Appellants. We find no compelling arguments from Appellants that convince us of any error in the Examiner's assertion that power can be interpreted as intensity, as discussed at page 5 of the English translation of JP 4-141827, nor in the Examiner's position with respect to the claimed groove track and land track sectors (Answer, pages 9 and 10).

As to the Examiner's 35 U.S.C. § 103(a) rejection of dependent claims 3-6, 8, 10, 13-16 and 20 grouped together by Appellants, in which the Johann and Pietrzykoski references are applied to address the various claimed features, we sustain this rejection as well. Appellants' arguments (Brief, pages 13-15) rely on assertions made previously with respect to independent

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claims 1 and 11, assertions which we found to be unpersuasive as discussed supra.

Lastly, we also sustain the Examiner's obviousness rejection of all the appealed claims in which the Nakane references are added to each of the rejections previously discussed. Although the Examiner has added the Nakane references to supply a teaching of a single spiral-land/groove (SS-L/G) recording format, we consider such teachings to be cumulative to those of Moriya for all of the reasons discussed above. Accordingly, it is our opinion that the Nakane references are not necessary for a proper obviousness rejection of the appealed claims, and the Examiner's various obviousness rejections are sustained based on the applied prior art without the Nakane references.

In summary, we have sustained the Examiner's 35 U.S.C. § 103(a) rejection of all of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-20 is affirmed.

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

AFFIRMED

ERROL A. KRASS)	
Administrative Patent Judge)	
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MICHAEL R. FLEMING)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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