

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 38

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte** MIN-KWAN YANG

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Appeal No. 2001-0476  
Application No. 08/768,231

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ON BRIEF

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Before FLEMING, RUGGIERO, and GROSS, **Administrative Patent Judges.**

FLEMING, **Administrative Patent Judge.**

**VACATUR IN PART, AFFIRM IN PART AND REMAND TO THE EXAMINER**

Pursuant to 37 CFR § 1.196(a) and the Manual of Patent Examining Procedure (MPEP) § 1211, this application is remanded to the Examiner for appropriate action with respect to the matters discussed below. Because the present rejection of claims 1, 3, 5 through 7, 13 through 16, 21 through 24 and 27 through 45

Appeal No. 2001-0476  
Application No. 08/768,231

on appeal and remand the application in view of the following.<sup>1</sup> Further, after a careful review of the evidence before us, we agree with the Examiner that claims 46 through 53 are properly rejected under 35 U.S.C. § 112, first paragraph. It is also noted that claims 9 through 12, 17 through 19 and 25 have been indicated as allowable by the Examiner while claims 2, 4, 8, 20 and 26 have been canceled.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Briefs<sup>2</sup> and the Answer for the respective details thereof.

#### **REFERENCES**

The prior art references relied upon by the Examiner are:

Moon et al. (Moon)	4,669,004	May 26, 1987
Blagaila et al. (Blagaila)	5,526,202	Jun. 11, 1996
Smith	5,608,587	Mar. 4, 1997 (filed Mar. 20, 1995)
Cowen	5,760,983	Jun. 2, 1998 (filed May 31, 1999)

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<sup>1</sup> The term "vacate" as applied to an action taken by an appellate tribunal, means to set aside or to void. **Blacks Law Dictionary**, 1075 (abridged 6<sup>th</sup> ed. 1991). When the Board vacates

Appeal No. 2001-0476  
Application No. 08/768,231

Park

5,828,516

Oct. 27, 1998  
(filed Feb. 23, 1996)

***Background***

The present invention relates to a hard disk wherein servo identification is recorded in the servo bursts. On pages 3 and 4 of Appellant's Brief, we note that the servo identification is recorded in A and B portions of said servo bursts to enable detection of said servo identification by a head when said head is in an off-track state and an on-track state, see independent claims 1 and 41. We further note that the servo identification can also be recorded in P and Q portions of said servo bursts to enable detection of said servo identification by a head when said head is on an even numbered track and an odd numbered track, see independent claims 3 and 44. Appellant's Brief, on pages 6 and 7, also explains that the invention includes a hard disk drive including a head means for reading data, a gate array for receiving a processed output signal and a processing means comprising an automatic gain control circuit and a servo

Appeal No. 2001-0476  
Application No. 08/768,231

### **VACATUR**

The decision of the Board must be supported by substantial evidence. ***In re Lee***, 277 F.3d 1338, 1341, 61 USPQ2d 1430, 1432 (Fed. Cir. 2002). Thus, the Board must set forth its findings and the grounds thereof as supported by the record and explain its application of the law to the facts. ***Id.*** 277 F.3d at 1343, 61 USPQ2d at 1433.

#### ***I. Determining the Rejection***

In deciding the issues before us, we must review the Examiner's rejection to determine what the prior art teaches and to see how the prior art is applied to Appellant's claims. In doing so, we note that claims 1, 3, 5 through 7, 13 through 16, 21 through 24 and 27 through 45 stand rejected under 35 U.S.C. § 103 as being obvious over a first reference "and/or" a second reference in "view of" a third reference "and/or" a fourth reference. We further note that claims<sup>3</sup> 1, 3, 41 and 45 also stand rejected under 35 U.S.C. § 103 as being obvious over a

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Appeal No. 2001-0476  
Application No. 08/768,231

fifth reference in "view of" the same aforementioned third reference "and/or" the same aforementioned fourth reference from the first rejection.

Upon review of these rejections, we find ourselves faced with a plethora of permutations regarding how the art should or "could" be applied to Appellant's claims. Further, the rejection itself offers us little guidance as to how the particular references are applied and what would have motivated one of ordinary skill to make the many possible combinations allotted by the five references relied upon.

Accordingly, this rejection of record is VACATED and the application is hereby remanded to the Examiner in accordance with the above-noted MPEP provision in § 1211, which indicates in part that in the case of multiple rejections of a cumulative nature, the Board may remand the application for selection of the preferred or best ground. We consider the approach taken by the Examiner, of essentially rejecting the same claims in the alternative an indeterminate number of times, as not in

Appeal No. 2001-0476  
Application No. 08/768,231

In light of the discussion *supra*, this application is remanded to the Examiner for selection of the best (and substantially limited in number of) references and ground of rejection. **All unnecessary, cumulative grounds of rejection and references are expected not to be made/applied** should the Examiner consider the formulation of any new rejections. In any event, for each reference relied upon in each rejection, the PTO's policy is for the Examiner to compare the rejected claims feature-by-feature with the reference. This comparison should map the language of the claims to the specific page number, column number, line number, drawing number, drawing reference number, and/or quotation for each reference relied upon. See MPEP § 1208. Also note ***Ex Parte Blanc***, 13 USPQ2d at 1383 (BPAI 1989).

## **II. Determining the Scope of the Claims**

The initial burden of presenting a ***prima facie*** case of obviousness rests on the Examiner. ***In re Oetiker***, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). In meeting this

Appeal No. 2001-0476  
Application No. 08/768,231

Our reviewing court has further stated that claims are construed in light of the specification. ***D.M.I., Inc. v. Deere & Co.***, 755 F.2d 1570, 1574, 225 USPQ 236, 238 (Fed. Cir. 1985).

In a first instance, we note that the claims are not all of the same scope. More specifically, and as stated *supra* in discussing the background of the invention, we note that independent claims 1 and 41 include the limitation "wherein said servo identification is recorded in A and B portions of said servo bursts to enable detection of said servo identification by a head when said head is in an off-track state and an on-track state." We further note that independent claims 3 and 44 do not include such a limitation. To the contrary, they include the limitation "wherein said servo identification is recorded in P and Q portions of said servo bursts to enable detection of said servo identification by a head when said head is on an even numbered track and an odd numbered track." However, this limitation is not found in claims 1 and 41. We also note that neither of these limitations is found in independent claims 13,

Appeal No. 2001-0476  
Application No. 08/768,231

comprising an automatic gain control circuit and a servo demodulator connected to said automatic gain control circuit for sampling and holding amplitudes of burst signals and for providing, as an output, information relative to the amplitudes of the burst signals."

These distinctions in claim scope appear to be lost on the Examiner since all of these claims were grouped and treated together in the rejections as if they were of the same scope. Therefore, this case is remanded so that the Examiner can determine the scope of each of the claims and apply the prior art accordingly.

Furthermore, it does not appear that the Examiner appreciated the entire scope of claims 1, 3, 41 and 44. To illustrate this point, we turn to the claims specifically addressed in the Examiner's rejection, independent claims 41 and 44. In particular, we note that claim 41 recites,

. . . wherein said **servo identification** is recorded in A and B portions of said servo bursts to enable detection of said **servo identification** by a head when said head is in an off-track state and an on-track

Appeal No. 2001-0476  
Application No. 08/768,231

said head is on an even numbered track and an odd numbered track. (Emphasis added).

The question that is raised is, "what is the servo identification?" Upon review of Appellant's disclosure, we note several instances where "servo identification" or "servo ID" is disclosed. However, there appears to be limited discussion defining the "servo identification" or "servo ID," with regards to the type of data or information that might be contained therein. Since we are unable to answer the question of "what is a servo identification," we cannot readily determine the scope of the claims in the application. Hence, we cannot know how the relevant prior art can or should be applied. Therefore, this case is also remanded to the Examiner to make the determination of the scope of the claims by determining: what is the "servo identification," what type of data or information is contained therein and how it fits into the Appellant's invention.

***III. How are the References Applied in view of the Scope of the Claims***

Our reviewing court in *In re Lee*, 277 F.3d 1338, 1342-43,

Appeal No. 2001-0476  
Application No. 08/768,231

When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., **McGinley v. Franklin Sports, Inc.**, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) ("the central question is whether there is reason to combine [the] references," a question of fact drawing on the Graham factors). (Emphasis added).

Once the scope of the claim is determined, the Examiner then needs to make a finding in the prior art for each limitation in the claim. Then the Examiner needs to apply the art by showing a one-to-one correspondence of what the art teaches to what the Appellant claims. By appreciating what each reference teaches as a whole, the Examiner can then apply the appropriate art to the claim limitations. This methodology was not performed by the Examiner.

In a first instance, it is unclear as to how the Examiner could apply the references in the 35 U.S.C. § 103 rejection without knowing the scope of the claims. More specifically, the Examiner failed to determine the scope and definitions for the

Appeal No. 2001-0476  
Application No. 08/768,231

art applies. Third, we fail to find any meaningful rejection of claims 13, 21 and 27 and would advise the Examiner to address these claims accordingly. Finally, based on the Examiner's discussion of the Moon et al. reference, we do not feel that the Examiner fully appreciated what Moon teaches.

Specifically, Moon teaches "track identification information contained in the C burst will be read by the microprocessor." See column 17, lines 47-49, generally column 16, line 40 to column 17, line 55 and Figure 9 of Moon. Moon also teaches,

[o]ne further object of the present invention is to provide an improved servo control system and embedded servo burst pattern for a positionable head disk data storage file which provides absolute positional information in each servo burst readable through the same transducer head, data channel and data controller which operates for user data, thereby facilitating and vastly improving track seeking operations and performance. See column 3, lines 58-66 of Moon.

However, in light of a careful review of Appellant's specification and drawings, we cannot determine an answer to the question, "what is a servo identification." As such, we are unable to make a meaningful and proper comparison of Moon's

Appeal No. 2001-0476  
Application No. 08/768,231

the meaning of Moon's track identification and apply Moon's teaching accordingly to the present claims.

Whether Moon's teachings meet the limitations of Appellant's claims is for the Examiner to determine based on the analysis stated above and in conforming with Patent Office policy seen in MPEP § 706.02.

As stated *supra*, we are even further confused as to how the Examiner applies the art rejection with respect to claims 13, 21 and 27 under 35 U.S.C. § 103. More specifically, the Examiner fails to specifically address and determine the scope of these claims. Rather, the Examiner provides a laundry list of components disclosed by Blagaila and Cowen.

See page 4, lines 1-3 of the Answer. Without analyzing the claims, how can the Examiner make a one-to-one correspondence of what the art teaches to what the Appellant claims? It is clear from the Answer that the Examiner did not. Therefore, we will not speculate on the Examiner's "intended art rejection" but will remand the case to the Examiner for a more complete application

Appeal No. 2001-0476  
Application No. 08/768,231

**IV. Sustaining 35 U.S.C. § 112, first paragraph rejection**

Now we turn to the rejection of claims 46 through 53 under 35 U.S.C. § 112, first paragraph. "The function of the description requirement [of the first paragraph of 35 U.S.C. § 112] is to ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him." *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). "It is not necessary that the application describe the claim limitations exactly, . . . but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that [A]ppellants invented the processes including those limitations." *Wertheim*, 541 F.2d at 262, 191 USPQ at 96 *citing In re Smythe*, 480 F.2d 1376, 1382, 178 USPQ 279, 284 (CCPA 1973). Furthermore, the Federal Circuit points out that "[i]t is not necessary that the claimed subject matter be described identically, but the disclosure originally filed must convey to those skilled in the art that applicant had invented the subject matter later claimed." *In re Wilder*,

Appeal No. 2001-0476  
Application No. 08/768,231

written description requirement, the patent specification 'must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.'" **Century Gallery Inc. v. Berkline Corp.**, 134 F.3d 1473, 1479, 45 USPQ2d 1498, 1503 (Fed. Cir. 1998) **citing In re Gosteli**, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1614 (Fed. Cir. 1989). "An applicant is entitled to claims as broad as the prior art and **his disclosure** will allow." **In re Rasmussen**, 650 F.2d 1212, 1214, 211 USPQ 323, 326 (CCPA 1981). (Emphasis added).

Appellant argues on page 10, lines 8-12 of the Brief that, claims 1 thru 16 . . . are part of the originally filed disclosure of the invention claimed herein. In that regard, it should be noted that original claims 8, 12 and 16 recited an embodiment of the invention wherein 'said servo sector number is recorded in P and Q portions of said servo bursts, and said head bit is recorded in A and B portions of said servo bursts' (quoting from the claims originally filed).

The Appellant further argues that the "originally filed disclosure recited the servo identification as being recorded in P and Q portions only (original claim 3) or in A and B portions

Appeal No. 2001-0476  
Application No. 08/768,231

(A,B) or (P,Q) servo bursts.'" See page 11, lines 13-15 of the Brief. Rather, "a **clear** statement of every detail is not required; only enough to enable the person of skilled in art to make and use the invention is necessary for the disclosure to be 'enabling' under 35 U.S.C. § 112 (first paragraph)." See page 11, line 19 to page 12, line 1 of the Brief. Appellants then make a concluding statement that "one of ordinary skill in the art, upon reviewing the disclosure of the invention as originally filed . . . would be able to make and use the invention recited in claims 46 thru 53 without undue experimentation." See page 12, lines 2-5 of the Brief.

In response to Appellant's arguments, the Examiner states that he can find no support in the specification, original claims or the drawings for the limitation "ONLY." See page 6, lines 5 and 6 of the Answer.

In our review of Appellant's originally filed application, (the entire specification, original claims and drawings), we fail to find any support for the newly claimed subject matter in

Appeal No. 2001-0476  
Application No. 08/768,231

bursts. Hence, we find that all of the servo bursts P, Q, A and B contain the servo identification and as such, the servo identification is not limited to one set or the other as is argued by Appellant. Therefore, we agree that claims 46 through 53 are properly rejected under 35 U.S.C. § 112, first paragraph.

We will therefore sustain the Examiner's 35 U.S.C. § 112, first paragraph rejection of claims 46 through 53. However, we have decided to vacate the Examiner's 35 U.S.C. § 103 rejections of claims 1, 3, 5 through 7, 13 through 16, 21 through 24 and 27 through 45 and remand the case for further proceedings, consistent with the discussion *supra*, rather than reverse the Examiner's rejection or enter a new ground of rejection under 37 CFR § 1.196(b). As outlined *supra*, the Examiner needs to determine the scope of "each" of the claims and further determine the meaning of the "servo identification." Next, the Examiner must pick the most relevant prior art references and then the Examiner must set forth an "unambiguous ground of rejection." As such, we have concluded that the Moon reference, U.S. Pat. No.

Appeal No. 2001-0476  
Application No. 08/768,231



This application is accordingly remanded to the Examiner for further action consistent with the foregoing.

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

***VACATED-IN-PART, AFFIRMED-IN-PART AND REMANDED***

MICHAEL R. FLEMING	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
JOSEPH F. RUGGIERO	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
ANITA PELLMAN GROSS	)	
Administrative Patent Judge	)	

Appeal No. 2001-0476  
Application No. 08/768,231

ROBERT E. BUSHNELL  
ATTORNEY-AT-LAW  
1522 K ST. N.W. SUITE 300  
WASHINGTON, DC 20005-1202