

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 PHILIP RAY WOODS

---

Appeal No. 2002-1384  
Application No. 09/330,311

---

HEARD: MARCH 19, 2003

---

Before HAIRSTON, BARRETT, and SAADAT, Administrative Patent Judges.  
HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 11 and 12.

The disclosed invention relates to the control of the position of a head with respect to a rotatable disc in a disc drive.

Claims 11 and 12 are the only claims on appeal, and they read as follows:

11. A disc drive, comprising:

a head positionable adjacent a rotatable disc; and

control means for controlling the position of the head with respect to the disc.

12. A disc drive, comprising:

a head positionable adjacent a rotatable disc; and

error compensation means for compensating for errors in radial locations of servo fields stored on tracks of the disc using a second integral of coil input current to determine compensation values which are added to subsequent position error signals generated from the servo fields.

The reference relied on by the examiner is:

Wallis

4,594,622

June 10, 1986

Claims 11 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wallis.

Reference is made to the brief (paper number 10) and the answer (paper number 13) for the respective positions of the appellant and the examiner.

#### OPINION

We have carefully considered the entire record before us, and we will reverse the anticipation rejection of claim 11, and we will sustain the anticipation rejection of claim 12.

According to the examiner (answer, page 3), “Wallis Figure 1 and col. 5, line 67 through col. 6, line 61 meet all the limitations of the claims, where 20-37 is a control means for controlling the position of the head with respect to the disk, while the examiner considers 20-37 error

compensation means that compensates for the errors in radial locations of servo fields by using the second integral of the coil input signal picked off at 30 to determine compensation values 35/36 which are added to a subsequent PES [position error signal] at 24 after a one revolution delay through 37.”

Appellant argues (brief, page 7) that “[c]laims 11 and 12 are each written in accordance with 35 U.S.C. § 112, sixth paragraph, and the proper examination of these claims requires an identification of the corresponding structure, material or acts in the specification, and equivalents thereof, that carry out the functions recited by the claims. *In re Donaldson Inc.*, 16 F.3d 1189 (Fed. Cir. 1994)(*en banc*).” In response to the examiner’s analysis of Wallis, appellant states (brief, pages 11 and 12) that:

First, the Applicant agrees with the Examiner that Wallis ‘622, FIG. 1, provides current signals at node 30 which are twice integrated at block 31 to form an actuator position signal. Col. 3, line 65 to col. 4, line 10; col. 6, lines 5-15.

However, Wallis ‘622 fails to teach using the second integral of current to determine compensation values which are added to *position error samples*, as covered by the structure of claim 11 (see FIG. 8 of the present application). Rather, Wallis ‘622 adds compensation values from FIFO 37 to *current command signals* at summing junction 24. See col. 4, lines 15-19; col. 6, lines 38-49.

Appellant concludes (brief, page 13) that “Wallis ‘622 is not an equivalent under § 112, ¶6 . . .” because:

Wallis ‘622 performs . . . in a substantially different way, . . . calculates a double integral of current, sums this with the raw PES (summing junction 34), and double differentiates this output to provide current correction signals (current profile). This provides a substantially different result - compensated current command signals instead of compensated PES signals.

Lastly, appellant argues (brief, page 14) that “it is essential to the operation of Wallis ‘622 that the resulting position signal be subsequently double differentiated back to a current signal.”

We agree with the examiner (answer, page 3) that “claims 11-12 invoke 35 U.S.C. § 112, sixth paragraph,” and that Wallis “performs the function” specified in claim 12.” To prove that Wallis performs the specified function of claim 12, the examiner’s analysis (answer, pages 3, 5 and 6) of the teachings of Wallis should have stopped at summing junction 34 (Figure 1). The summing junction 34 in Wallis performs the same function in exactly the same way as the summing junction 318 (Figure 8) of appellant’s disclosed and claimed invention. In other words, the summing junction 34 functions as “error compensation means for compensating for errors in radial locations of servo fields stored on tracks of the disc using a second integral [on line 32] of coil input current to determine compensation values which are added [summing junction 34] to subsequent position error signals [on line 33] generated from the servo fields.” Wallis, like the disclosed invention, processes this error compensation signal at another summing junction (summing junction 24 in Wallis; summing junction 324 in Figure 8 of the disclosed invention). The latter summing junction (after the double differentiator 36) in Wallis, however, is not needed to demonstrate that Wallis performs the claimed function of claim 12. Our reviewing court has stated that it is not necessary to incorporate “structure from the written description beyond that necessary to perform the claimed function.” Micro Chemical Inc. v. Great Plains Chemical Co., 194 F.3d 1250, 1258, 52 USPQ2d 1258, 1263 (Fed. Cir. 1999).

In view of the foregoing, the anticipation rejection of claim 12 is sustained.

With respect to the broadly recited “control means for controlling the position of the head with respect to the disc” in claim 11, appellant argues (brief, page 10) that the corresponding structure for performing this function is “the servo circuit 148 [Figure 2] with a DSP [digital signal processor] having associated programming as set forth by FIGS. 7 and 8.” The examiner has not made a prima facie showing that Wallis’ Figure 1 servo system has a digital signal processor, programmed in the manner set forth in Figures 7 and 8 of the disclosure, to control “the position of the head with respect to the disc.” Thus, in keeping with Donaldson, we will reverse the anticipation rejection of claim 11 for lack of a showing that all of the structure and programming imported into the limitations of claim 11<sup>1</sup> are indeed disclosed by Wallis.

#### DECISION

The decision of the examiner rejecting claims 11 and 12 under 35 U.S.C. § 102(b) is affirmed as to claim 12 and is reversed as to claim 11. Accordingly, the decision of the examiner is affirmed-in-part.

---

<sup>1</sup> At oral hearing, appellant’s counsel suggested that maybe the specification should be amended to fully delineate the exact structure and programming that is needed to perform the function of broadly recited claim 11. From the standpoint of notice to the public as to what is covered by such a broad claim, this panel certainly agrees with the appellant’s suggestion. We note to the examiner that any amendment to identify the structure and programming corresponding to the means-plus-function limitation would not constitute new matter.

Appeal No. 2002-1384  
Application No. 09/330,311

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

AFFIRMED-IN-PART

KENNETH W. HAIRSTON	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
LEE E. BARRETT	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
MAHSHID D. SAADAT	)	
Administrative Patent Judge	)	

KWH/dal

Appeal No. 2002-1384  
Application No. 09/330,311

FELLERS, SNIDER, BLANKENSHIP, BAILEY  
and TIPPENS, PC  
Bank One Tower  
100 North Broadway  
Ste. 1700  
Oklahoma City, OK 73102-8820