

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRIEDER KLOSTER

Appeal No. 96-0122
Application No. 08/096,581¹

ON BRIEF

Before HAIRSTON, TORCZON and CARMICHAEL, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 7. In an Amendment After Final (paper number 12), claims 1 and 3 through 7 were amended. After entry of the amendment, the examiner allowed claims 6 and 7, and objected to claims 3 and 4 as being dependent upon a rejected base claim, but explained that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any

¹ Application for patent filed July 21, 1993.

intervening claims (Answer, page 1). Accordingly, claims 1, 2 and 5 remain before us on appeal.

The disclosed invention relates to a method and a device for determining a residual playing time and an available total playing time of a magnetic tape on a supply reel and a take-up reel in a magnetic-tape cassette.

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

1. A method of determining the playing time of a magnetic tape on a supply reel and a take-up reel in a magnetic-tape cassette, said method comprising the steps:

briefly winding the magnetic tape from the supply reel to the take-up reel;

generating and counting first winding pulses (i_1, i_2) relating to the amount of rotation of said supply reel and said take-up reel during said step of briefly winding the magnetic tape;

subsequently extracting the magnetic tape accommodated in the magnetic-tape cassette over a given length (L_H);

generating and counting second winding pulses (j_1, j_2) relating to the amount of rotation of said supply reel and said take-up reel during said step of extracting the magnetic tape; and

calculating a residual playing time (T_R) of the magnetic tape left in the magnetic-tape cassette on the basis of values determined for the counted first and second winding pulses ($i_1, i_2, j_1, j_2,$) and on the basis of given values relating to the thickness (d) and speed (v) of the magnetic tape, to the hub

Appeal No. 96-0122
Application No. 08/096,581

diameter (K) of the supply and take-up reels, and to the number (u) of winding pulses generated per revolution of the supply and take-up reels.

No references were relied on by the examiner in the rejections.

Claims 1, 2 and 5 stand rejected under the first and second paragraphs of 35 U.S.C. § 112 as being based upon a non-enabling disclosure, and for indefiniteness.

Reference is made to the brief and the answer 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 35 U.S.C. § 112 rejections.

According to the examiner (Answer, page 3):

The disclosure sets forth specific tape winding and extraction steps with rotational values to be measured during those steps. It also sets forth specific formulae using those rotational values with other known values to determine the total playing time or the residual playing time. There is no disclosure of other formulae or any other guidance for determining these times without the two formulae disclosed.

It is the examiner's position (Answer, page 4) that the claims "do not recite the critical formulae disclosed in the specification," and that "[t]he disclosure does not enable one skilled in the art to determine the claimed times without using the formulae disclosed." The examiner has additionally stated

Appeal No. 96-0122
Application No. 08/096,581

that the claims "are indefinite and incomplete because they do not recite the critical formulae disclosed in the specification" (Answer, page 4).

Appellant argues that it is permissible to broadly claim the method and apparatus without the limitations of the particular formulae (Brief, pages 2 and 4), and that:

While the specification only recites one winding/extracting procedure and one set of formulae to use with the winding/extracting procedure, Appellant submits that Appellant is not limited to claiming only the described winding/extracting procedure along with the disclosed formulae. Rather, Appellant is permitted to claim the procedure alone if the disclosed procedure by itself is patentably distinct from the prior art.

As indicated supra, appellant's decision to not include the formulae for calculating the playing times in the claims has led to rejections under the first and the second paragraphs of 35 U.S.C. § 112.

As a lexicographer, appellant may choose the language of the claims. On the other hand, the language chosen for the claims must set out and circumscribe a particular area with a reasonable degree of precision and particularity when read in light of the application disclosure as they would be by one possessing ordinary skill in the art. See In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971).

Appellant acknowledges (Brief, page 2) that [i]n all prior art methods, it is necessary to perform at least two winding operations (in addition to the loading operation)." If the claimed invention is indeed "patentably distinct from the prior art" (Brief, page 3), then appellant is under an obligation to specifically define the claimed invention so that it does not read on the prior art methods. When the claims on appeal are given their broadest reasonable interpretation,² they do not preclude the additional winding operation of the acknowledged prior art. The claimed invention can only be distinguished over the acknowledged prior art by reading the formulae from the disclosure into the step-plus-function limitations of the claims. "During patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed." In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). The claims before us require a calculation of a residual playing time (T_r) (claims 1 and 5) and a calculation of an available total playing time (T_e) (claim 2), and such mathematical calculations³ can not be

² See In re Morris, 127 F.3d 1048, 1053-54, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).

³ "Mathematical precision should not be imposed for its own sake." Modine Manufacturing Co. v. International Trade

Appeal No. 96-0122
Application No. 08/096,581

performed without looking to appellant's disclosure for the specific steps involved in the mathematical calculations. Thus, we will look to appellant's disclosure for an understanding of the steps needed to solve the required calculations of claims 1, 2 and 5.⁴ When we turn to appellant's disclosure for an understanding of the calculation steps, the meaning of the claimed calculations is no longer in doubt,⁵ and the claims satisfy the provisions of the second paragraph of 35 U.S.C. § 112. The indefiniteness rejection of claims 1, 2 and 5 is reversed. The non-enablement rejection under the first paragraph

Commission, 75 F.3d 1545, 1557, 37 USPQ2d 1609, 1617 (Fed. Cir.), cert.denied, 116 S.Ct. 2523 (1996).

⁴ Keeping in mind that appellant has never relied on the provisions of the sixth paragraph of 35 U.S.C. § 112 or In re Donaldson, 16 F.3d 1189, 29 USPQ 1845 (Fed. Cir. 1994) to distinguish the claimed invention over any applied prior art.

⁵ "When the meaning of claims is in doubt . . . they are properly declared invalid." Amgen Inc. v. Chugai Pharmaceutical Co. Ltd., 927 F.2d 1200, 1218, 18 USPQ2d 1016, 1031 (Fed. Cir. 1991).

Appeal No. 96-0122
Application No. 08/096,581

of 35 U.S.C. § 112 is reversed because the examiner has not questioned the adequacy of the disclosed formulae per se to teach one of ordinary skill in the art to make and/or use the claimed invention without undue experimentation.⁶

DECISION

The decision of the examiner rejecting claims 1, 2 and 5 under the first and second paragraphs of 35 U.S.C. § 112 is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
RICHARD TORCZON)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
JAMES T. CARMICHAEL)	
Administrative Patent Judge)	

⁶ The enablement clause of the first paragraph of 35 U.S.C. § 112 requires that the disclosure adequately describe the claimed invention so that the artisan could practice it without undue experimentation. See Genentech Inc. v. Novo Nordisk A/S, 108 F.3d 1361, 1364, 42 USPQ2d 1001, 1004 (Fed. Cir.), cert. denied, 118 S.Ct. 397 (1997).

Appeal No. 96-0122
Application No. 08/096,581

Corporate Patent Counsel
U.S. Philips Corporation
580 White Plains Rd.
Tarrytown, NY 10591

KWH/jrg

JENINE GILLIS

Appeal No. 96-0122
Serial No. 08/096,581

Judge HAIRSTON

Judge TORCZON

Judge CARMICHAEL

Received: 11 Aug 98

Typed: 11 Aug 98

DECISION: REVERSED

Send Reference(s): Yes No
or Translation(s)

Panel Change: Yes No

3-Person Conf. Yes No

Heard: Yes No

Remanded: Yes No

Index Sheet-2901 Rejection(s): _____

Acts 2: _____

Palm: _____

Mailed:

Updated Monthly Disk: _____

Updated Monthly Report: _____