

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

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte Richard J. Pittaro

Appeal No. 2005-2057
Application No. 09/906,362

ON BRIEF

Before GROSS, BARRY, and BLANKENSHIP, *Administrative Patent Judges*.
BARRY, *Administrative Patent Judge*.

A patent examiner rejected claims 1-28. The appellant appeals therefrom under 35 U.S.C. § 134(a). We affirm.

I. BACKGROUND

The invention at issue on appeal concerns "the analysis of signals involving the optical detection of fluorescent-labeled molecules or scattering structures." (Spec. at 1.) Determining the nucleotide sequences and expression levels of nucleic acids (i.e., DNA and RNA) is critical to understanding the function and control of genes and their relationship to diseases. Such a determination permits the early detection of infectious organisms, genetic diseases, and cancer. (*Id.* at 1-2.)

Biological assays involving fluorescent molecules or scattering structures often use optical detection and imaging. In particular, sensing may be accomplished by means of an intensity-based scanning system or a "SPEX Fluorolog." (*Id.* at 3.) Unfortunately, explains the appellant, these sensing systems "are all relatively high cost." (*Id.*)

Accordingly, the appellant's invention analyzes signals that exhibit time decay such as a luminescent signals. More specifically, the invention employs "[r]elatively inexpensive area sensor detectors" to detect signals. (*Id.* at 27.) The detected signals are processed to determine the characteristics thereof. (*Id.*)

A further understanding of the invention can be achieved by reading the following representative claim.

1. A method for analyzing a fluorescent signal, said method comprising:

(a) detecting said fluorescent signal using at least two predetermined integration periods that are offset by ninety degrees with respect to a fundamental excitation frequency, and

(b) determining the characteristics of said fluorescent signal by processing said fluorescent signals detected during said at least two integration periods.

Claims 1-28 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,317,207 ("French").

II. OPINION

"[T]o assure separate review by the Board of individual claims within each group of claims subject to a common ground of rejection, an appellant's brief to the Board must contain a clear statement for each rejection: (a) asserting that the patentability of claims within the group of claims subject to this rejection do not stand or fall together, and (b) identifying which individual claim or claims within the group are separately patentable and the reasons why the examiner's rejection should not be sustained." *In re McDaniel*, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002) (citing 37 C.F.R. §1.192(c)(7) (2001)). "Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable." 37 C.F.R. § 1.192(c)(7) (2004). "If the brief fails to meet either requirement, the Board is free to select a single claim from each group of claims subject to a common ground of rejection as representative of all claims in that group and to decide the appeal of that rejection based solely on the selected representative claim." *McDaniel*, 293 F.3d at 1383, 63 USPQ2d at 1465.

Here, the appellant neither asserts that claims 1-28 do not stand or fall together nor argues any of the claims separately. Although he reads the independent claims on his specification, (Appeal Br. at 2-3), this is not an argument that the claims are separately patentable. Therefore, claims 2-28 stand or fall with representative claim 1. With this representation in mind, rather than reiterate the positions of the examiner or the appellant *in toto*, we focus on the two points of contention therebetween.

A. TIMING OF INTEGRATION

The examiner finds, "French teach[es] that the '[s]uitable detectors' 'capable of converting energy from detected light into signals that may be processed by the apparatus, and by the processor in particular' comprise 'charge-coupled devices (CCDs)' in an 'analog (e.g., current-integration)' mode." (Examiner's Answer at 9.) The appellant argues, "French appears to teach away from¹ conducting the integration prior to or during the detection. At column 18, lines 55-58, French states that 'detectors comprise any mechanism capable of converting energy from detected light into signals that may be processed by the apparatus, and by the processor in particular.' (emphasis added)." (Appeal Br. at 5.) The examiner responds, "the features upon

¹"[T]he question whether a reference 'teaches away' from the invention is inapplicable to an anticipation analysis." *Celeritas Techs. Ltd. v. Rockwell International Corp.*, 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522 (Fed. Cir. 1998).

which appellant relies (*i.e.*, integration prior to or during the detection) are not recited in the rejected claim(s)." (Examiner's Answer at 8.)

In addressing the point of contention, the Board conducts a two-step analysis. First, we construe the representative claim at issue to determine its scope. Second, we determine whether the construed claim is anticipated.

1. Claim Construction

"Analysis begins with a key legal question — *what is the invention claimed?*" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). In answering the question "[t]he Patent and Trademark Office (PTO) must consider all claim limitations when determining patentability of an invention over the prior art." *In re Lowry*, 32 F.3d 1579, 1582, 32 USPQ2d 1031, 1034 (Fed. Cir. 1994) (citing *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 403-04 (Fed. Cir. 1983)).

Here, claim 1 recites in pertinent part the following limitations: "fluorescent signals detected during said at least two integration periods." Accordingly, the representative claim requires contemporaneous detection and integration.

2. Anticipation Determination

"Having construed the claim limitations at issue, we now compare the claims to the prior art to determine if the prior art anticipates those claims." *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349, 64 USPQ2d 1202, 1206 (Fed. Cir. 2002).

"[A]nticipation is a question of fact." *In re Hyatt*, 211 F.3d 1367, 1371, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000) (citing *Bischoff v. Wethered*, 76 U.S. (9 Wall.) 812, 814-15 (1869); *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997)). "A reference anticipates a claim if it discloses the claimed invention 'such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention'" *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995) (quoting *In re LeGrice*, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962)).

Here, French "provides apparatus and methods for measuring a temporal property of a luminescent sample." Col. 5, ll. 28-29. "Luminescence generally refers to all emission of light, except incandescence, and may include photoluminescence. . . ." Col. 1, ll. 64-66. In turn, "photoluminescence . . . includes fluorescence. . . ." Col. 2, l. 1.

The reference's measuring "include[s] (1) illuminating the sample with intensity-modulated incident light, (2) detecting luminescence emitted from the sample in response to the illumination, and (3) determining the temporal property using the measured luminescence." Col. 5, ll. 30-34. Regarding the step of detecting, "detection modes include (1) discrete (e.g., photon-counting) modes, (2) analog (e.g., current-integration) modes, and/or (3) imaging modes. . . ." Col. 18, ll. 63-65. Because the second mode of detection comprises integration of current, we find that French teaches contemporaneous detection and integration.

B. CONTROL OF INTEGRATION

The appellant argues, "It is the processor of French that controls the integration of the signals. In the presently claimed subject matter, however, the integration periods are controlled by the detector." (Appeal Br. at 7.)

"[T]he Board must give claims their broadest reasonable construction. . . ." *Hyatt*, 211 F.3d at 1372, 54 USPQ2d at 1668. In doing so, "limitations are not to be read into the claims from the specification." *In re Van Geuns*, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)).

Here, contrary to the premise of the appellant's aforementioned argument, claim 1 does not specify that "the integration periods are controlled by the detector." (Appeal Br. at 7.) Because it is based on limitations that are not claimed, we are unpersuaded by the argument. Therefore, we affirm the anticipation rejection of claim 1 and of claims 2-28, which fall therewith.

III. CONCLUSION

In summary, the rejection of claims 1-28 under § 102(e) is affirmed.

"Any arguments or authorities not included in the brief will be refused consideration by the Board of Patent Appeals and Interferences. . . ." 37 C.F.R. § 1.192(a). Accordingly, our affirmance is based only on the arguments made in the briefs. Any arguments or authorities omitted therefrom are neither before us nor at issue but are considered waived. *Cf. In re Watts*, 354 F.3d 1362, 1367, 69 USPQ2d 1453, 1457 (Fed. Cir. 2004) ("[I]t is important that the applicant challenging a decision not be permitted to raise arguments on appeal that were not presented to the Board.") No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

ANITA PELLMAN GROSS
Administrative Patent Judge

LANCE LEONARD BARRY
Administrative Patent Judge

HOWARD B. BLANKENSHIP
Administrative Patent Judge

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