

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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

Appeal No. 2006-1435
Application No. 10/352,299

ON BRIEF

Before JERRY SMITH, BARRY, and MACDONALD, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-34, which constitute all the claims pending in this application.

The disclosed invention pertains to a method and apparatus for imaging an object using an ultraviolet light disposed on a carriage of a scanner apparatus. The invention converts light fluoresced by the object into electrical charges representative of the scanned object.

Representative claim 1 is reproduced as follows:

1. A method of imaging an object, comprising:
emitting ultraviolet light on the object via an illumination device disposed on a carriage of a scanner apparatus;

converting light fluoresced by the object into electrical charges comprising a scanned image of the object; and generating a data set defining the scanned image.

The examiner relies on the following references:

Liang et al. (Liang)	5,548,106	Aug. 20, 1996
Trulson et al. (Trulson)	5,834,758	Nov. 10, 1998
Sasanuma et al. (Sasanuma)	5,557,416	Sep. 17, 1997
Philyaw et al. (Philyaw)	6,758,398	July 06, 2004

(filed June 21, 2000)

The following rejections are on appeal before us:

1. Claims 1-5, 7-10, 13-18, 20-22 and 24-33 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Philyaw.

2. Claims 27, 29, 30 and 31 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the disclosure of Trulson.

3. Claims 1-5, 7-13 and 15-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the disclosure of Liang.

4. Claims 28 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Trulson.

5. Claims 6, 14 and 21-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Liang.

6. Claims 1-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Sasanuma.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's 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 supports the examiner's rejection of claims 1-20 and 24-32, but does not support the examiner's rejection of claims 21-23, 33 and 34. Accordingly, we affirm-in-part.

We consider first the rejection of claims 1-5, 7-10, 13-18, 20-22 and 24-33 as being anticipated by the disclosure of Philyaw. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the

recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

The examiner has indicated how the invention of these claims is deemed to be fully met by the disclosure of Philyaw [answer, pages 4-5]. Since appellant has only made arguments with respect to independent claims 1 and 21, we will consider claims 1 and 21 as representative of all the claims subject to this rejection. With respect to representative claim 1, appellant argues that the examiner has failed to identify which structure of Philyaw corresponds to the claimed carriage. Appellant suggests that the examiner apparently considers the reader 3700 of Philyaw to correspond to both the claimed carriage and the claimed scanner apparatus which is asserted to be improper [brief, pages 6-8]. The examiner responds that the illumination source in Philyaw is positioned in the reader so that it moves when the reader moves. The examiner asserts that this means that the illumination device is positioned on a structure or "carriage" that holds it in place inside the reader [answer, page 10]. Appellant essentially repeats the arguments noted above and responds that there does not appear to be any

reason to have a "carriage" in the reader of Philyaw [reply brief, pages 2-3].

We will sustain the examiner's rejection of claims 1-5, 7-10, 13-18, 20 and 24-26. The only issue with respect to these claims is whether Philyaw discloses the claimed carriage. We agree with the examiner that Philyaw meets the invention of argued claim 1. Since light source 3702 is "carried" within scanner 3700 and is attached to printed circuit board 2902, we find, like the examiner, that the illumination device is disposed on a carriage of the scanner apparatus within the broadest reasonable interpretation of claim 1. To the extent that appellant may believe that claim 1 requires that the carriage be separate and distinct from the scanner apparatus or separately movable from the scanner apparatus, we do not agree. We find nothing in claim 1 which requires these restrictions on the carriage.

With respect to representative claim 21, in addition to the arguments considered above with respect to claim 1, appellant argues that Philyaw does not identify, nor has the examiner identified any element in Philyaw as a platen [brief, pages 10-11]. The examiner responds that the object to be scanned in Philyaw is positioned on a platen and points to "platen" 1602 or 2506 [answer, page 11]. Appellant responds that the examiner has

identified a black line in the drawings or a surface on which the bar code is positioned as the claimed platen. Appellant argues that the examiner has provided no evidence to support the position that these elements are platens [reply brief, page 3].

We will not sustain the examiner's rejection of claims 21, 22 and 27-33. We agree with appellant that Philyaw does not disclose anything that corresponds to the claimed platen. Although neither appellant nor the examiner proposes a definition for the term "platen," it has a conventional definition in this art which is not met by the substrates on which the bar codes of Philyaw are affixed. The examiner's apparent definition of the term "platen" is clearly unreasonable in light of its conventional definition and in light of its manner of use in appellant's specification.

We now consider the rejection of claims 27, 29, 30 and 31 as being anticipated by the disclosure of Trulson. The examiner has indicated how the invention of these claims is deemed to be fully met by the disclosure of Trulson [answer, pages 5-6]. Since appellant has only made arguments with respect to independent claim 27, we will consider claim 27 as representative of all the claims subject to this rejection. Appellant argues that the examiner's position that the source of light in Trulson could be a UV source is incorrect because

Trulson only teaches light within the visible spectrum or other wavelengths (i.e., near ultraviolet or near infrared spectrum [brief, page 12]). The examiner responds that the "other wavelengths" of Trulson comprises UV wavelengths. The examiner asserts that the near UV range disclosed by Trulson encompasses the broad UV range claimed [answer, pages 10-11]. Appellant responds that the teaching of near ultraviolet in Trulson excludes UV [reply brief, page 5].

We will sustain the examiner's rejection of claims 27, 29, 30 and 31. As both appellant and the examiner point out, Trulson discloses that the source illumination can be within the visible spectrum as well as "near ultraviolet" and "near infrared" spectrum [column 6, lines 22-25]. The ultraviolet wavelength range runs from about 4-400 nanometers. It is loosely divided into the near (400-300 nm), far (300-200 nm) and extreme (below 200 nm) ultraviolet regions¹. Thus, the phrase "near ultraviolet" is a technical term that refers to ultraviolet radiation in the near ultraviolet region. Since near ultraviolet is a portion of the overall ultraviolet wavelength range, we agree with the examiner that the phrase "near ultraviolet" in Trulson meets the claimed "ultraviolet light."

¹ See for example McGraw-Hill Encyclopedia of Science & Technology, 7th Edition, Volume 19 (ULC-ZYG), page 20 (Ultraviolet radiation), 1992 by McGraw-Hill, Inc.

We now consider the rejection of claims 1-5, 7-13 and 15-20 as being anticipated by the disclosure of Liang. The examiner has indicated how the invention of these claims is deemed to be fully met by the disclosure of Liang [answer, pages 6-7]. Since appellant has only made arguments with respect to independent claim 1, we will consider claim 1 as representative of all the claims subject to this rejection. Similar to the rejection based on Philyaw, appellant argues that the examiner apparently considers the scanner apparatus illustrated in figures 10 and 11 of Liang to correspond to both the claimed carriage and the claimed scanner apparatus which is asserted to be improper [brief, page 8]. The examiner disagrees with appellant's argument for the same reasons discussed above with respect to Philyaw [answer, page 10]. Appellant responds by referring to the arguments considered above with respect to Philyaw [reply brief, page 4].

We will sustain the examiner's rejection of claims 1-5, 7-13 and 15-20 as anticipated by Liang. Since all the arguments with respect to this rejection are the same as the arguments we considered above with respect to the rejection of these claims based on Philyaw, we sustain this rejection for the same reasons discussed above with respect to the rejection of claim 1 based on Philyaw.

We now consider the various rejections of the claims under 35 U.S.C. § 103. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts

to the applicant 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 relative persuasiveness of the arguments. See Id.; 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). Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered and are deemed to be waived [see 37 CFR § 41.37(c)(1)(vii)(2004)].

We consider first the rejection of claims 28 and 32 as being unpatentable over the teachings of Trulson. Since we find that the examiner has established a prima facie case of the obviousness of these claims, and since appellant has offered no rebuttal arguments specifically directed to these claims, we sustain the rejection of these claims for the same reasons discussed above with respect to parent claims 27 and 31.

We now consider the rejection of claims 6, 14 and 21-34 as being unpatentable over the teachings of Liang. The examiner has indicated how the invention of these claims is deemed to be rendered obvious by the teachings of Liang [answer, page 8]. In addition to arguments considered above, appellant argues that

there is no motivation to modify Liang as proposed by the examiner because a platen does not appear to be needed or required in any of the devices depicted and described by Liang [brief, page 11].

We will sustain the rejection of claims 6 and 24-26 because they do not recite a platen and the limitations of these claims have not otherwise been argued by appellant. We will not sustain the rejection of claims 14, 21-23 and 27-34 because Liang fails to disclose a platen for the same reasons discussed above with respect to the rejection of these claims based on Philyaw.

We now consider the rejection of claims 1-34 as being unpatentable over the teachings of Sasanuma. The examiner has indicated how the invention of these claims is deemed to be rendered obvious by the teachings of Sasanuma [answer, pages 8-10]. Since appellant has argued these claims as a single group, we will consider claim 1 as representative of all the claims subject to this rejection. Appellant argues that the examiner has failed to establish a prima facie case of obviousness because the examiner has not pointed out where in the art it is taught that a UV light is an art-recognized equivalent of a non-UV light. Appellant argues that they are not equivalent because they can not be used interchangeably and produce the same result [brief, pages 9 and 12]. The examiner responds that since

Sasanuma discloses a general imaging method that works with any type of radiation, and since UV radiation was well known, it would have been obvious to the artisan to pick a UV source [answer, page 11]. Appellant responds that there is no motivation to substitute a UV source in Sasanuma other than appellant's own disclosure [reply brief, page 4].

We will not sustain this rejection because we agree with appellant that the examiner has failed to establish a prima facie case of obviousness. The examiner admits that Sasanuma fails to teach an imaging system using a UV light source, but the examiner simply concludes that it would have been obvious to the artisan to make the modification in Sasanuma because a UV light source is an art-recognized equivalent of a non-UV light source. We agree with appellant that these two light sources are not art recognized equivalents because they can not simply be interchanged with an expectation of the same results. The examiner needs to at least apply a secondary teaching that it was known to also create images of objects using UV light and detecting the fluorescence from the objects. The examiner simply has not provided the evidence necessary to support this rejection.

In summary, the rejection of claims 1-5, 7-10, 13-18, 20-22 and 24-33 as anticipated by Philyaw is sustained with respect

to claims 1-5, 7-10, 13-18, 20 and 24-26, but is not sustained with respect to claims 21, 22 and 27-33. The rejection of claims 27, 29, 30 and 31 as anticipated by Trulson is sustained with respect to all claims. The rejection of claims 1-5, 7-13 and 15-20 as anticipated by Liang is sustained with respect to all claims. The rejection of claims 28 and 32 as unpatentable over Trulson is sustained with respect to both claims. The rejection of claims 6, 14 and 21-34 as unpatentable over Liang is sustained with respect to claims 6 and 24-26, but is not sustained with respect to claims 14, 21-23 and 27-34. The rejection of claims 1-34 as unpatentable over Sasanuma is not sustained with respect to any of the claims on appeal. Accordingly, the decision of the examiner rejecting claims 1-34 is affirmed-in-part. With respect to those claims which have survived all the examiner's rejections, the examiner should consider whether the best reference was applied in the rejections or whether a combination of the cited references would have established a more appropriate evidentiary record in support of a rejection.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

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Administrative Patent Judge)	
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Lance Leonard Barry)	BOARD OF PATENT
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