

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte JAMES A. GAVNEY, JR. and JAMES E. LINDQUIST

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Appeal No. 1997-1414  
Application 08/406,706<sup>1</sup>

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ON BRIEF

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Before DOWNEY, GARRIS and LIEBERMAN, Administrative Patent Judges.

DOWNEY, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. §134 from the final rejection of claims 1-14, all of the claims pending in the application. The subject matter on appeal is directed to an infrared

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<sup>1</sup> Application for patent filed March 20, 1995.

spectrally sensitized negative-acting silver halide photographic element containing an anthraquinone compound which compound is said to control the sensitometric response curve in the toe area, i.e., the part of the curve corresponding to the most sensitive crystals or sensitive response of crystals in the photographic film.

All of the claims stand or fall together (Brief, page 9). Claim 1 is illustrative and reads as follows:

1. An infrared spectrally sensitized negative-acting silver halide photographic element comprising a hydrophilic colloidal binder containing a silver halide emulsion and from 50 to 1000 milligrams of an anthraquinone per mole of silver halide.

The references relied upon by the examiner are:

Saunders et al. (Saunders)	2,865,752	Dec. 23, 1958
Kretchman et al. (Kretchman)	3,449,122	Jun. 10, 1969
Kadowaki et al (Kadowaki)	62-14152 (JP)	Jan. 22, 1987
Marui	3-100645 (JP)	Apr. 25, 1991

The reference relied upon by the Board is:

Kirk-Othmer, Encyclopedia for Chemical Technology, vol. 17, pgs. 612, 626-28, (1982).

The rejections before us are:

I. Claims 1-10 stand rejected under 35 U.S.C. § 102 (b) as anticipated by, or in the alternative under 35 U.S.C. § 103 as being obvious over Kretchman.<sup>2</sup>

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<sup>2</sup> The appellants STATUS OF THE CLAIMS (Brief, page 5) inaccurately states that claims 1-10 have been finally rejected alternatively under 35 U.S.C. §§ 102(e) and 35 § U.S.C. 103.

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II. Claims 1-14 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Saunders, Marui, or Kadowaki.

After careful consideration of the rejections before us, the prior art, the arguments presented by appellants and the examiner, we reverse rejections I and II.

A.

The decisional process begins with an analysis of a key legal question--what is the invention claimed? Panduit Corp. v. Dennison Manufacturing Co., 810 F.2d 1561, 1566-1568, 1 USPQ2d 1593, 1597 (Fed. Cir.), cert. denied, 481 U.S. 1052 (1987). "Claim interpretation, in light of the specification, claim language, other claims, and prosecution history, is a matter of law and normally will control the remainder of the decisional process" (footnote omitted) Id. In the present appeal, a key question in determining what is being claimed is whether the words "infrared spectrally sensitized" in the preamble give "life and meaning" and provide further positive limitations to the invention claimed. Corning Glass Works v. Sumitomo Electric U.S.A. Inc., 868 F.2d 1251, 1257, 9 USPQ2d 1962, 1966 (Fed. Cir. 1989); citing Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 866, 228 USPQ 90, 92 (Fed. Cir. 1985) and Perkins-Elmer Corp. v. Computervision Corp. 732 F.2d 888, 896, 221 USPQ 669, 675 (Fed. Cir.) cert. denied, 469 U. S. 857 (1984). If the body of the claim fully and intrinsically sets forth the complete invention, including all of its limitations, and the preamble offers no distinct definition of any of the claimed invention's limitations, but rather

merely states, for example, the purpose or intended use of the invention, then the preamble is of no significance to claim construction because it cannot be said to constitute or explain a claim limitation Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1166 (Fed. Cir. 1999).

On this record, the examiner gives no weight to the words “infrared spectrally sensitized” in his evaluation of the claims and the prior art whereas the appellants submit that these words provide positive limitations to the claims. Appellants, in their specification state: [T]he response of a photographic film to radiation exposure (either to wavelengths of native sensitivity or to regions of the electromagnetic spectrum to which the grains have been spectrally sensitized) is measured by a sensitometric curve( page 1, lines 20-23).

Kirk-Othmer indicates that silver halide grains are naturally blue sensitive (page 612). Thus, extending the sensitivity of the silver halide to other regions of the electromagnetic spectrum requires the addition of a spectral sensitizing dye to the silver halide grain surface. Kirk-Othmer further indicates that the structural part of the dye molecule that enables the molecule to absorb visible or infrared light is called a chromophore and that the length of the chromophore and the nature of the terminal nuclei are important factors in establishing the wavelengths at which a dye molecule absorbs incident radiation.

Accordingly, “an infrared spectrally sensitive” photographic element comprising a silver halide emulsion must necessarily include a specific type of sensitizing dye which extends the natural sensitivity of the silver halide grains to the infrared region of the electromagnetic spectrum. Therefore, we find that the words “infrared spectrally sensitized” do more than merely state the purpose or the intended use of the invention and thus provide further positive limitations to what is being claimed by breathing “life and meaning” into the claim.

B.

I. 35 U.S.C. REJECTION UNDER 102(b) over Kretchman

Anticipation within 35 U.S.C. § 102 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 Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Note also W.L. Gore and Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984); and Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 1984. The PTO has the burden, via the examiner, to establish anticipation. See In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990).

Kretchman teaches a photographic element which comprises a spectrally sensitized silver halide gelatin emulsion comprising an anthraquinone compound in an amount of 1 to 100 mg per mole of silver halide (column 1, lines 20-25; column 2, lines 47-51; column 3, lines 12-13; and column 4, lines 68-71). Even though Kretchman does not disclose the use of an infrared sensitized dye in his emulsion, the examiner urges that Kretchman is an anticipation because the prior art composition is similar or identical to that claimed and the words "infrared spectrally sensitized" in the preamble do not provide much weight.

As noted supra, the words "infrared spectrally sensitized" provide further limitations to the claim requiring the presence of an infrared sensitizing dye. The examiner, having given no weight to these words, has failed to sustain his burden of establishing that Kretchman discloses each and every element of the claimed invention. Accordingly, we reverse this rejection.

## II. 35 U.S.C. 103 rejections

The PTO also has the burden, via the examiner, to establish a prima facie case of obviousness. In re Lowry, 32 F.3d 1579, 1584, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994); In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). A proper analysis under § 103 requires, *inter alia*, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the

claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. In re Vaeck, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). Both the suggestion and reasonable expectation of success must be found in the prior art, not in appellant's disclosure. Id.

Each of Kretchman, Saunders, Marui, and Kadowaki describe spectrally sensitized silver halide gelatin emulsions containing an anthraquinone compound. Even though the examiner recognizes that these references do not teach the use of an infrared sensitizing dye to sensitize the silver halide, he argues that the use of a infrared sensitizing dye in these emulsions would have been obvious to one of ordinary skill in this art because silver halide emulsions sensitized to the visible and infrared regions have been conventionally known in the art and thus one of ordinary skill in the art would have selected the appropriate sensitizing dye based on the choice of light used to expose the silver halide emulsion. (Answer, page 5).

On this record, the examiner has failed to provide some objective teaching in either the prior art, or knowledge generally available to one of ordinary skill in the art, that would lead a person of ordinary skill in the photographic art to use an infrared sensitizing dye for the spectral sensitizing dyes in the anthraquinone containing silver halide emulsions of Kretchman, Saunders, Marui, or Kadowaki . A simple statement that visible and infrared

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silver halide materials are “commonly known in the art” is not sufficient to establish obviousness. See Ex parte Levengood, 28 USPQ2d 1300, 1302 (Bd. Pat. App. & Int. 1993). Accordingly, the examiner has not sustained his burden and the 35 U.S.C. § 103 rejections are reversed.

REVERSED

MARY F. DOWNEY	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
BRADLEY R. GARRIS	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
PAUL LIEBERMAN	)	
Administrative Patent Judge	)	

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