

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. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALLAN F. SOWINSKI,
RICHARD P. SZAJEWSKI, LOIS A. BUITANO,
FRANK R. BROCKLER and JOHN D. BUHR

Appeal No. 2002-0148
Application No. 09/104,675

ON BRIEF

Before GARRIS, WALTZ, and MOORE, *Administrative Patent Judges*.
MOORE, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1, 3, 5, 8-11, 13-17, 19, 20, 23-27, 44 and 45. Claims 2, 4, 6, 12, 21 and 22 have been canceled; claims 7 and 18 are objected to; and claims 28-43 have been withdrawn. Thus, this appeal concerns claims 1, 3, 5, 8-11, 13-17, 19, 20, 23-27, 44 and 45.

REPRESENTATIVE CLAIM

The Appellants have stated that the claims stand or fall together. We therefore select claim 45, the broadest independent

Appeal No. 2002-0148
Application No. 09/104,675

claim, to be representative of the claims on appeal. See In re McDaniel, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002) and 37 CFR § 1.192(c)(7)(2000). This claim reads as follows:

45. A color photographic element suited for preloading in a one-time-use camera and for producing a color image suited for conversion to an electronic form and subsequent reconversion into a viewable form,

said element comprising a support and, coated on the support,

a plurality of hydrophilic colloid layers, including radiation-sensitive silver halide emulsion layers, forming layer units for separately recording blue, green and red exposures,

each of the layer units containing dye image-forming coupler chosen to produce image dye having an absorption half-peak bandwidth lying in a different spectral region in each layer unit,

WHEREIN

at least one of the layer units contains two or more emulsion layers differing in sensitivity,

the layer units each comprises less than 0.02 millimole/m² of colored masking coupler,

Appeal No. 2002-0148
Application No. 09/104,675

the layer units each exhibits a dye image gamma of less than 1.5,

the element exhibits an exposure latitude of at least 2.7 log E, where E is exposure measured in lux-seconds, and a light sensitivity of at least ISO 50, and

the gamma ratio of each of the red, green, and blue light recording layer units is between 0.80 and 1.20 20 [sic] wherein said support defines two faces and all the sensitized layers are supplied on a common face of said support and the total thickness of the layers on the sensitized layer bearing face of said support is between 5 and 30 μm .

The References

In rejecting the claims under 35 U.S.C. § 103(a), the examiner relies upon the following reference:

Bohan et al. (Bohan) 5,840,470 Nov. 24, 1998

The Rejection

Claims 1, 3, 5, 8-11, 13-17, 19, 20, 23-27, 44 and 45 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bohan.

The Invention

The invention relates to a photographic imaging element designed for use in a single-use camera and intended for electronic scanning. Image noise can be reduced, and image

Appeal No. 2002-0148
Application No. 09/104,675

sharpness and colorfulness increased by controlling the gamma ratio of the light recording layer units between 0.80 and 1.20. (Appeal Brief, page 2, lines 1-8).¹

The Rejection Under 35 U.S.C. §103(a) over Bohan

We refer to the Briefs and the Examiner's Answer for a complete exposition of the respective positions of the examiner and the appellants on appeal. We shall focus on the principal points of contention.

In this instance, the examiner has found, and it is not in dispute, that Bohan teaches:

- a color photographic element which may be scanned to digital signals and corrected for gamma mismatches
- the element preferably contains red, green, and blue light sensitive silver halide layers
- the layers may contain color masking couplers
- the layers may be multilayers with different sensitivities
- the layers may contain masking couplers in an amount of up to 0.01 mmol/m²
- the layer gamma values are 0.1 to 1.0
- the element has an ISO of at least 25, preferably at least

100

¹ It is requested that the Appellants insert pagination in their future briefs. The absence of page numerals makes accurate pinpoint citation difficult.

Appeal No. 2002-0148
Application No. 09/104,675

-the element has two faces (as exemplified by the magnetic backing)

-the layer thickness is less than 30 μ m. (See Examiner's Answer, page 3, line 6 - page 7, line 12, and the reference sections cited therein).

We have carefully reviewed Bohan and agree with the examiner's findings of fact. We also note that the appellants have not challenged any of those findings listed above.

The appellants' chief substantive arguments that the prior art does not render the instant claims obvious are that "there's no teaching or suggestion in Bohan et al. that the gamma ratio of each of the red, grain [sic-green], and blue light recording layer units be designed to be between 0.80 and 1.20" (Brief, page 8, line 27-page 9, line 1) and that "there's no disclosure suggestion that would lead one to the particular exposure latitude in the appealed claims." (Id., page 9, lines 18-19).

As both of these terms are defined by the appellants in the specification, some understanding of their meaning is necessary. We note that the specification, page 2, lines 7-12, defines the term "gamma ratio" as follows:

The term "gamma ratio" when applied to a color recording layer unit refers to the ratio determined by dividing the color gamma of a cited layer unit after an imagewise color separation exposure and process that enables development of primarily that layer unit by the color gamma of the same

Appeal No. 2002-0148
Application No. 09/104,675

layer unit after an imagewise white light exposure and process that enables development of all layer units.

The specification, page 2, lines 1-3, also defines "exposure latitude" as follows:

The term "exposure latitude" indicates the exposure range of a characteristic curve segment over which instantaneous gamma ($\Delta D/\Delta \log E$) is at least 25 percent of gamma, as defined above.

With these definitions in mind, we proceed to the appellants' arguments. Initially, we note that the contention regarding the exposure latitude has no merit.

Bohan expressly teaches that it is preferable that the color film have "an exposure latitude of at least about 1.5 log E, preferably having an exposure latitude of at least about 2 log E, more preferably having an exposure latitude of at least about 2.5 log E, and most preferably having an exposure latitude of at least about 3.0 log E." (Bohan, column 12, lines 4-9). The preferred (and most preferred) ranges in Bohan overlap the claimed range, and therefore we are not persuaded by this argument.

Turning to the gamma ratio, the examiner has found that it would have been obvious to prepare a multilayer color photographic material of the type exemplified by Bohan having a thickness of less than 30 μm , comprising a DIR compound, layer

Appeal No. 2002-0148
Application No. 09/104,675

units with gamma values of 0.1 to 1.0, and less than 0.01 mmol/m² of masking coupler with an exposure latitude of at least 3.0 log E and a light sensitivity of at least 100 with reasonable expectation for achieving a rapidly processed color image having desired aim color and tone scale reproduction. (Examiner's Answer, page 4, lines 13-18). The examiner has further found that Bohan teaches that the most preferable amount of color masking couplers is in amounts of up to 0.01 mmol/m². As the appellants teach one way of keeping the gamma ratio between 0.8 and 1.2 is by restricting the amount of color masking coupler (specification, page 15, lines 14-15), the examiner has concluded that the low-coupler embodiment taught by Bohan would reasonably be expected to have the claimed gamma ratios. (Examiner's Answer, page 5, lines 8-10; page 6, lines 2-10).

The appellants first contend that Bohan and the appellants have different goals; that Bohan is silent on the appellants' goal and does not teach towards it; and that no example is within the scope of the appellants' claims. (Appeal Brief, page 5, lines 18-22).

It is well-established that the motivation of the reference need not be the same as the motivation of the applicants. An obviousness rejection does not require a suggestion of the same problem that is being solved by appellant - all that is required

Appeal No. 2002-0148
Application No. 09/104,675

is that the rejection provides a teaching, suggestion, or motivation to make the combination. See In re Dillon, 919 F.2d 688, 692-93, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991). Bohan expressly teaches a most preferred low-coupler embodiment within the appellants' claimed range.

Additionally, it is not fatal to a case of obviousness that a particular example in the reference may fail to have the gamma ratio characteristics recited in the claim. It is well-settled that a prior art reference is relevant for all that it teaches to those of ordinary skill in the art (In re Fritch, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992)) and that a reference is not limited to the specific working examples (In re Chapman, 357 F.2d 418, 424, 148 USPQ 711, 716 (CCPA 1966)). We also reject this argument as Sample 2 must be modified to reflect the closest prior art.

The appellants also object to the examiner's position as based upon hindsight reconstruction. (Appeal Brief, page 6, lines 8-19; page 8, lines 1-3). We disagree.

The examiner's position is based upon the disclosure of the prior art reference, which he reasonably believes to have the claimed ratios. Appellant's definition of the term "gamma ratio" within the specification requires the examiner to reference the

Appeal No. 2002-0148
Application No. 09/104,675

specification to determine whether the prior art disclosure reasonably contains the claimed gamma ratio. As explained by the examiner:

... the examiner has not relied upon the present specification as being prior art. Rather, it is relied upon solely for its teachings of what features of the material (i.e. additives) cause the claimed gamma ratios to be realized since the reference does not provide that data (Examiner's Answer, page 6, lines 13-16).

The examiner has found that the composition of example 2 of Bohan, if the amount of masking coupler is reduced to its preferred concentration of less than 0.01 mmol/m², would have the claimed gamma ratios. This understanding of the prior art properties is based upon the appellants' teaching that the claimed gamma ratios can be realized by limiting or excluding color masking couplers from the elements of the claimed invention. (Examiner's Answer, page 6, lines 4-11) (See also the specification, page 15, lines 14-15).

As stated in In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977):

Where . . . the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product. Whether the rejection is based on "inherency" under 35 U.S.C. § 102, on "prima facie obviousness" under 35 U.S.C. § 103, jointly or alternatively, the burden of proof is the same, and its fairness is evidenced by the PTO's inability to manufacture products or to obtain and compare prior art products.

Appeal No. 2002-0148
Application No. 09/104,675

Thus, the burden of showing that the material of Bohan, made with its preferred lower amount of masking coupler, would not be within the claimed gamma ratios, falls to the appellant. "[W]hen the PTO shows sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

The examiner has put forth sufficient facts to reasonably support a position that the preferred embodiment contains the claimed gamma ratios. A prima facie case of obviousness has therefore been established.

Evidence

To counter the prima facie case of obviousness, the appellants point to declaration evidence and examples contained within the specification. More specifically, the appellants state that:

...it has been pointed out that the examples of the instant specification as well as the declaration of Szajewski et al. show that this is not true [realization of the gamma ratios by Bohan]. (Appeal Brief, page 9, lines 11-13). "Further, it has been shown by the extensive examples in this application that are similar to Bohan et al. and by the declaration of Dr. Szajewski that the invention as claimed is not inherently performed by Bohan et al." (Appeal Brief, page 9, line 24-page 10, line 1).

Appeal No. 2002-0148
Application No. 09/104,675

In support of these conclusions, the appellants have discussed the comparative examples at page 7 of the Brief and seem to conclude that as the comparative examples in the specification use the same DIR compound as Bohan, this proves that Bohan cannot meet the claim limitation. The conclusory nature of the explanation renders it capable of being reproduced in full below:

The Board's attention is directed to the examples in the provided specification that precisely show comparative examples 002 and 102 and inventive samples 001 and 101. The full working examples include detailed formulations for comparative and inventive film samples, their imagewise exposure, photo processing, scanning, digital manipulation, printing, and the results of both objective measurements and observer evaluation of the derived images. This material occupies page 49 to page 99 of the 108-page specification.

Since the rejection appears to be based on the Examiner's impermissible hindsight driven by the combination of the Appellants' own teachings with the Bohan et al reference, the rejection is improper and ought to be reversed.

Further, the rejection appears to have its' root in the Examiner's inability to find both comparative and inventive examples in the present specification. It is respectfully pointed out that about half of the specification is devoted to describing these comparative and inventive samples and the objective and visual results observed with these samples. As is clear from a reading of the present specification, it is Appellants' comparative examples that fail to achieve the gamma ratio required by Appellants' invention. It is precisely these comparative samples that employ a DIR compound common with Bohan et al. To repeat, it is Appellants' comparative samples that might be derived from the teaching of Bohan et al. (Appeal Brief, page 7, line 23 - page 8, line 13).

Appeal No. 2002-0148
Application No. 09/104,675

Other than these conclusory statements, the appellants have not favored us with any explanation in the Briefs or direct citation of evidence in the record as to why their selected comparative example is reflective of the teachings of Bohan or represents a comparison with the closest prior art.

Whether evidence shows unexpected results is a question of fact and the party asserting unexpected results has the burden of proving that the results are unexpected. In re Geisler, 116 F.3d 1465, 1469-70, 43 USPQ2d 1362, 1364-5 (Fed. Cir. 1997).

We have reviewed pages 49-99 of the instant specification in hope of discerning that the comparative examples 002 and 102 are closer than Bohan's Sample 2, with the most preferred coupler range. We are unable to discern where the appellants derive support for their contention that the level of DIR components in each layer of their comparative examples are somehow more representative than Bohan's preferred range.

Of note, the appellants have directed no specific argument towards this point or pointed to any specific locations in the record where it may be found. Accordingly, the appellants have failed to carry their burden.

In their Reply Brief, the appellants further assert that Example 2 of Bohan "clearly states that the masking couplers are omitted from the sample" (Reply Brief, page 2, lines 2-3) and

Appeal No. 2002-0148
Application No. 09/104,675

that the declaration states that Example 2 does not have a gamma ratio within the claimed range, concluding that there is evidence of record that the material of Bohan would not realize the presently claimed gamma ratios even when a lower amount of masking coupler is used. (Reply Brief, page 2, lines 3-8).

As regards their interpretation of the Bohan disclosure, we note that the appellants are in error. What Bohan actually states is that:

Photographic Film Sample 2, a film illustrating the preparation of a typical multilayer multicolor light sensitive color negative photographic element useful in the invention was prepared generally like Photographic Film Sample 1 except that the masking couplers C-2, C-3 and C-6 and the absorber dyes DYE-2 and DYE-3 were omitted from the sample. Film Sample 2 also contained less than about 0.2 mmol/m² of color masking couplers, and less than about 0.1 mmol/m² of dyes that function as incorporated permanent Dmin adjusting dyes. (Bohan, column 20, lines 28-37).

Reviewing Sample 1 of Bohan reveals that other couplers (e.g. C-1 and C-5) were present in Sample 1, thus the appellants' conclusion that Sample 2 is without these masking couplers is apparently wrong. Further, the uncited portion of the reference indicates that "less than about 0.2 mmol/m² of color masking couplers" were present, which exceeds the claim limitations.

As regards the Declaration, we, like the examiner, remain unpersuaded by its conclusory nature. The declarant has merely stated that:

Appeal No. 2002-0148
Application No. 09/104,675

That same Photographic Sample 2 of '470 [Bohan] was prepared under my direction and control. I am familiar with the formula and have evaluated the photographic properties of Photographic Sample 2. I have found that photographic sample 2 **fails** to provide a photographic material with a gamma ratio between 0.8 and 1.2 in each of its red, green, and blue light recording layer units. Accordingly, I conclude that **none** of the disclosed samples of '470 has the composition and photographic properties required of color photographic elements as set out in each of the independent claims of United States Patent Application 09/104,675." (Declaration of Szajewski, paragraph spanning pages 1-2) (emphasis in original).

First, we note that this entire conclusion is based upon an apparent error of fact. If the sample of Sample 2 was prepared under the declarant's direction and control, the declarant should have recognized that the reference discloses Film Sample 2 has less than 0.2 mmol/m², not "less than 0.02" as stated in the declaration, page 2, line 1, and explained the difference.

Second, the declaration completely misses the point of the rejection. It is not Sample 2 which is the applied prior art; it is Sample 2 adjusted for the most preferred range of color coupler as disclosed in Bohan, column 11, line 3 (up to 0.01 mmol/m²).

Thus, the appellants' evidence is not convincing because the appellants have not provided a comparison of the claimed invention to the closest prior art, see In re Baxter Travenol Labs., 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991);

Appeal No. 2002-0148
Application No. 09/104,675

In re De Blauwe, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984).

Further, the appellants have not adequately explained the results obtained in their Briefs. The appellants have stated their conclusions, leaving the board to ferret out the compositions asserted to be closest prior art, and to compare those compositions and their results. While we observe the difference in the gamma ratios found at page 93 of the specification, we are left to wonder how these differences are achieved by the compositions. We also have no explanation assisting us in determining whether these results are due to the claimed subject matter (less than 0.02 mmol/m² coupler) or some other unexplained factor. For example, some samples have 14 layers while others have 13, and there are occasional changes in the multicomponent layers.

As the burden rests with the appellants, we conclude that the appellants have failed to provide sufficient evidence of unexpected results which would overcome the prima facie case of obviousness and we shall affirm this rejection.

Summary of Decision

The rejection of claims 1, 3, 5, 8-11, 13-17, 19, 20, 23-27, 44 and 45 under 35 U.S.C. § 103 is sustained.

Appeal No. 2002-0148
Application No. 09/104,675

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

AFFIRMED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
THOMAS A. WALTZ)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
JAMES T. MOORE)	
Administrative Patent Judge)	

JTM/eld

Appeal No. 2002-0148
Application No. 09/104,675

PATENT LEGAL STAFF
EASTMAN KODAK COMPANY
343 STATE STREET
ROCHESTER NY 14650-2201