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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte M. ERIC KRISL and
ROBERT L. BATEMAN

Appeal No. 96-1615
Application 08/249,650[1]

ON BRIEF

Before THOMAS, KRASS, and TORCZON, Administrative Patent Judges.

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[1] Application for patent filed May 26, 1994. According to appellants, this application is a continuation of Application 07/831,706, filed February 5, 1992, now abandoned; which is a division of Application 07/708,825, filed May 29, 1991, now Patent No. 5,138,219; which is a continuation of Application 07/382,153, filed July 19, 1989, now abandoned.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 1 to 22 and 33 to 53, which constitute all the claims remaining in the application.

Representative claim 1 is reproduced below:

1. An optical interference coating for reflecting infrared radiation and transmitting visible light radiation which comprises a plurality of alternating high and low refractive index layers, said coating having a spectrally broad high transmittance of at least about 90% average at a normal angle of incidence between about 400 to 700 nm, a spectrally broad high transmittance of at least about 90% average at about a 30 degree angle of incidence between about 400 to 700 nm and a spectrally broad high reflectance of at least about 70% average between about 800 and 1900 nm.

The following references are relied on by the examiner:

Rancourt et al. (Rancourt)	4,229,066	Oct. 21, 1980
Martin, Jr. et al. (Martin)	4,663,557	May 05, 1987
Brock et al. (Brock)	4,940,636	Jul. 10, 1990
		(filed Jul. 21, 1988)

Lotz, "Computer-Aided Multilayer Design of Optical Filters with Wide Transmittance Bands Using SiO_2 and TiO_2," Applied Optics, vol. 26, no. 20, pp. 4487-90 (1987).

Claims 1 to 22 and 33 to 53 stand rejected under the first paragraph of 35 U.S.C. § 112 as being based upon a nonenabling disclosure. Independent claims 1, 10, 33, 34, and 43 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, as being obvious over the teachings of Martin alone. Claims 2 to 9, 11 to 22, 35 to 42 and 44 to 50 stand rejected under 35 U.S.C. § 103 as being obvious over the collective teachings of Martin, further in view of Rancourt, Lotz, and "common knowledge in the art." Finally, claims 51 to 53 stand rejected under 35 U.S.C. § 103 as being obvious over Martin in view of Brock, further in view of admitted prior art.

Rather than repeat the positions of the appellants and the examiner, reference is made to the briefs and the answer for the respective details thereof.

OPINION

We reverse all rejections of the claims on appeal.

As to the rejection under the first paragraph of 35 U.S.C. § 112, it appears that the statement at page 11 of the answer best expresses the examiner's view "whether there is enough structural support in the claimed product in order to achieve the functional limitations as claimed. Applicants are claiming a product for what it does rather than for what the product is."

We reverse this rejection since we are in general agreement with the positions of appellants in the brief and the reply brief. They properly rely upon In re Swinehart, 439 F.2d 210, 169 USPQ 226 (CCPA 1971) which appears to answer the examiner's just noted criticisms by indicating that there is nothing intrinsically wrong in defining something by what it does rather than by what it is. Note also In re Hallman, 655 F.2d 212, 210 USPQ 609 (CCPA 1981). The examiner's position appears to be requiring the appellants to structurally claim the specific forty some layers of coating material in a specific configuration as a basis of removal of the rejection. This is not required. Each independent claim on appeal is,

granted, somewhat structurally broad but, on the other hand, functionally specific as to the recitations of the spectral transmittance and reflectance properties of the coating material. We do not regard each of the independent claims as an overly broad recitation of an invention which clearly details and justifies the functional recitations based upon a relatively large number of alternating high and low refractive index layers in three different stack configurations, the details of which are set forth in the dependent claims. The specification does not detail how such spectral properties as recited in each independent claim would be achievable by any means with a lesser number of layers than those disclosed.

Generally speaking, the bottom line is still that "[t]he test of enablement is whether one reasonably skilled in the art could make or [sic and] use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." United States v. Telectronics, Inc., 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988), citing Hybritech, Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed.

Cir. 1986). The examiner has presented to us no rationale that would lead us to conclude that the artisan would have required undue experimentation to have made and used the presently claimed invention. Therefore, the rejection of claims 1 to 22 and 33 to 53 under 35 U.S.C. § 112, first paragraph, is reversed.

Turning next to the rejection of the independent claims on appeal under 35 U.S.C. § 102 or, in the alternative, under 35 U.S.C. § 103 in light of Martin alone, we reverse both rejections.

As to the anticipation rationale, the examiner's position is misplaced simply because the examiner gives little weight to the limitation of the range of up to 770 nm as claimed, as opposed to 700 nm which is clearly the outer range as set forth in Figure 4 of Martin, because it is generally in the same range as taught by Martin, that is, the visible range, as expressed at page 5 of the answer. Basically, there can clearly be no anticipation without some manner of deriving this value from the reference. The examiner's position that the limitation would have alternatively been functionally

inherent has been addressed by appellants in the submission of the two declarations by declarant Parham.

Again, at page 6 of the Answer, the examiner asserts that the claims generally are given little weight because they do not differentiate from the reference structurally. This rationale is additionally developed in the responsive arguments portion of the answer in an effort to force in some way appellants to structurally recite the basis for the functional recitations of the claims on appeal. Without providing any other evidence as to this rejection or persuasive line of reasoning, the examiner asserts that the wider claimed window of transmittance of about 400-770 nm would have been clearly a consequence of the suggested construction [of Martin, we presume] well within ordinary experimentation to the artisan. This is purely speculative and conclusory.

The "about" language of the independent claims on appeal aptly describes the features disclosed in the written description portion as well as the drawings as originally filed, particularly Figures 3 and 4. The examiner cannot

ignore the functional limitations of the claims on appeal in their consideration within prior art rejections either. The range of transmittance in Figure 4 of Martin is from 400 to 700 nm, whereas the spectrally wider high transmittance range of claim 1 is from 400 to 770 nms. This 300 nanometer range of Figure 4 of Martin has been extended by 70 nanometers which, as appellants assert at the top of page 10 of the principal brief on appeal, results in a 25% increase. The examiner has not explained to us how this is an inherent property within Martin within 35 U.S.C. § 102 or § 103 and has not provided a basis or evidence or rationale to justify how this extension would have been obvious to the artisan within 35 U.S.C. § 103.

In any event, the weight of the evidence provided by the two declarations confirms the teachings of appellants' own specification as well as providing comparisons with the best available prior art, Martin. Thus, we find ourselves in general agreement with the conclusion reached by declarant Parham at paragraph 18 of the second declaration filed on April 29, 1994 that Martin "does not show at least about 90%

transmittance from about 400 to 770nm. on average and at least about 90% transmittance at about a 30E angle between about 400 to 700nm." Finally, we note that each independent claim on appeal recites this 30E angle, whereas Martin appears silent as to any angular representation other then what the artisan may be able to perceive as a normal 90E representation.

In view of the foregoing, we have reversed the rejection of all claims on appeal under the first paragraph of 35 U.S.C. § 112. Additionally, we have reversed the alternative rejections of each independent claim on appeal under 35 U.S.C. § 102 and 35 U.S.C. § 103. It follows then that we cannot sustain the
rejection of the remaining dependent claims under 35 U.S.C. § 103 in light of additional prior art. Therefore, the decision of the examiner rejecting the claims on appeal is reversed.

REVERSED

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JAMES D. THOMAS)
Administrative Patent Judge)
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	)	BOARD OF PATENT
ERROL A. KRASS	)	
Administrative Patent Judge	)	APPEALS AND
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RICHARD TORCZON	)	
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