

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. 37

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte  
VOLKER REIFFENRATH,  
DETLET PAULUTH  
and  
HERBERT PLACH

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Appeal No. 1999-0310  
Application No. 08/225,267

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ON BRIEF

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Before PAK, WARREN and LIEBERMAN, Administrative Patent Judges.

LIEBERMAN, Administrative Patent Judge

REQUEST FOR REHEARING

Pursuant to the provisions of 37 CFR § 1.197(b) (1997), appellants have submitted a timely Request for Rehearing (hereafter "Request") of our Decision dated October 31, 2002, affirming the rejection of claims 1, 7, 9 through 11, 17 and 18

under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U. S. Patent 5,487,845.

Appellants request rehearing as the Board has denied consideration of appellants' declaration under 37 CFR § 1.132. In support of this conclusion, the Board stated that:

in a rejection on the grounds of obviousness-type double patenting an affidavit under 37 CFR § 1.132 is ineffective to overcome the rejection except in the instance wherein, the prior art effect of the first patent may be avoided by a showing under 37 CFR § 1.132 that any unclaimed invention disclosed in the first patent was derived from the inventor of the application before the examiner in which the 35 U.S.C. §§102(e)/103(a) rejection was made. *In re Katz*, 687 F.2d 450, 215 USPQ 14 (CCPA 1982). Such in not the case on the record before us. [Decision, pp. 6-7.]

Upon careful reconsideration, we find that our reviewing court in at least one instance has reviewed and considered a Declaration purporting to show unexpected results to overcome a rejection on the grounds of obviousness-type double patenting. Our reviewing court considered the Declaration and found that it failed to provide the unexpected results necessary to rebut the prima facie case of obviousness. See *In re Longi*, 759 F.2d 887, 896-97, 225 USPQ 645, 651-52 (Fed. Cir. 1985).

Accordingly, we hold that under appropriate circumstances a declaration under 37 CFR § 1.132 submitted as a rebuttal to a sustainable rejection on the grounds of obviousness-type double patenting must be considered.

In rebuttal to our conclusion that the claimed subject matter was an obvious variation of the invention defined in the claims of the 5,487,845 patent and accordingly,

continued protection improperly beyond the date of expiration of the first patent, the appellants request consideration of the Declaration of Plach. It is the appellants' position that, "the mixtures containing the compounds in accordance with the invention have substantially improved threshold voltages, that is, lower in all cases than the prior art Example 1." See Request, p. 5.

Having reviewed the data present, we conclude that the appellants have not met their burden of showing unexpected results. In re Klosak, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972). It is not sufficient to assert that the results obtained are unusual or unexpected. The burden of showing unexpected results rests on those who assert them.

Upon consideration of the data before us, the Declaration is directed to four examples containing liquid crystalline compositions, each composition containing a base mixture of six compounds designated in the Plach Declaration on page 4. With respect to each of the Examples I to IV, the declarant has measured the clearing points,  $\Delta n$  and the threshold voltages  $V_{(10, 0, 20)}$  and  $V_{(90, 0, 20)}$ . It is the appellants' position that the threshold voltages of the invention are substantially improved over the prior art voltages. See Examples II, III, and IV wherein the threshold voltages are lower in all cases than that of prior art Example I. We find that the threshold voltages,  $V_{(10, 0, 20)}$ , in Examples I to IV are 1.56, 1.47, 1.50 and 1.49 respectively. We find that the threshold voltages are indeed lower in Examples II, III and IV, the amount of lowering being between 0.06 and 0.09

Volts for  $V_{(10, 0, 20)}$  and between 0.07 and 0.10 volts for  $V_{(90, 0, 20)}$ . There is, however, no explanation by the declarant why a change lowering the threshold voltage of at most 0.10 volts is significant, let alone establishes unusual or unexpected results.

Significantly, the appellants, in describing their invention, disclose that, “[t]he threshold voltages  $V_{(10, 0, 20)}$  achieved are generally  $\leq 1.8$  volts, preferably  $\leq 1.6$  volts and particularly preferably in the range from 1.4 to 1.6 volts, or lower.” See Specification, p. 10, lines 14-17. We, accordingly, conclude that the threshold voltage of Example 1, representative of the prior art falls within the appellants’ most preferable threshold voltage range. Furthermore, in the mixture examples present in the Specification, only Example A teaches threshold voltages. The threshold voltages recorded therein are  $V_{(10, 0, 20)} = 1.63$  and  $V_{(90, 0, 20)} = 2.58$ . These numbers within the scope of the claimed subject matter far exceed any of the threshold voltages measured in any of the examples in the Declaration of Plach.

Based upon the above findings and analysis, we conclude that the appellants’ assertion that they have obtained substantially improved threshold voltages is unsupported by the evidence of record and in conflict with the teachings found in the Specification.

As to the Plach Declaration, we further conclude that the data present in the Declaration are not commensurate in scope with the degree of protection sought by the claimed subject matter. See In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 778-79 (Fed. Cir. 1983); In re Tiffin, 448 F.2d 791, 792, 171 USPQ 294, 294 (CCPA

1971). It is well settled that "objective evidence of nonobviousness must be commensurate in scope with the claims . . . ." (quoting In re Lindner, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972)). In re Dill, 604 F.2d 1356, 1361, 202 USPQ 805, 808 (CCPA 1979) ("The evidence presented to rebut a prima facie case of obviousness must be commensurate in scope with the claims to which it pertains.")

The comparison present in the Declaration is directed to four examples containing a mixture of 9 to 10 liquid crystal compounds. As the declarant has stated ,

some of the most important requirements to be met by technically and commercially usable liquid crystalline mixtures exhibiting a positive dielectric anisotropy for active matrix liquid-crystal displays are the following:

- (a) a broad temperature range of nematic liquid crystalline mesophase,
- (b) a low viscosity which is important for achieving a short response time,
- © a high dielectric anisotropy which is important in achieving a low threshold voltage,
- (d) high values of the voltage holding ratio (HR) even after high temperature treatment;

THAT until now no single compound has been found which fulfills all of these requirements; thus , liquid crystalline dielectrics for electrooptical displays usually are mixtures of at least three liquid crystalline components, while technically and commercially used high performance liquid crystalline dielectrics contain five to more than ten such compounds; [Plach Declaration, p. 2.]

As each of the examples in the Declaration contain nine or ten components, and being cognizant of the appellants statement that mixtures of at least three components are needed to meet the requirements of the invention, we conclude that a showing of nine or ten mixed components are not commensurate in scope with the claimed subject matter, which requires no more than, “a mixture of polar compounds.” See claim 1.

Moreover, as declarant Plach has stated with respect to the above-described properties that, “each compound exerts an influence on more than one of the above mentioned properties; . . . .” and that no single compound fulfills each of these requirements, how can a single base mixture containing a mixture of 10 compounds be representative of the prior art as a whole or commensurate in scope with a claim requiring only two compounds, i.e. , “ a mixture.” See the Plach Declaration, p. 2.

Finally, the appellants have argued that, “Example II is directly comparative with Example I, but the cyclohexylene compounds have been replaced by the same amount of the two cyclohexenylene compounds in accordance with the invention.” See Brief, p. 10. Although the appellants allege that Examples I and II of the Plach Declaration are a side-by-side comparison between the claimed invention and the closest prior art, we find that the declarant has not shown that other than the unsaturation present in the ring, the compounds are otherwise identical in all respects. Neither the appellants nor the declarant have explained the acronyms presented with respect to each of the compounds listed as numbers 1 through 8. See the Plach Declaration, pp. 3 and 4. What is the meaning of 3

F.F.F, 5F.F.F, 2-F, 3-F, 5-F and 3-OD? In their absence we cannot determine which moieties are present on each of compounds 1 through 8. Accordingly, we conclude that there is no appropriate side-by-side comparison between the claimed invention and the closest prior art.

Based on our consideration of the totality of the record before us, and having evaluated the prima facie case of obviousness in view of the appellants' arguments and evidence, we conclude that the preponderance of evidence weighs in favor of obviousness of the claimed subject matter within the meaning of Section 103. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

In view of the foregoing, the appellants' Request for Reconsideration has been granted to the extent of considering the Declaration of Plach of record, but is denied with respect to making any changes in our prior decision.

Accordingly, the request for rehearing is denied.

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

**REHEARING DENIED**

CHUNG K. PAK	)	
Administrative Patent Judge	)	
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CHARLES F. WARREN	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS



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10

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