

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(2) is not binding precedent of the Board.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. 35

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KAZUYA OGINO, NARUTOSHI HAYASHI,
SETSUKO YAMAMOTO and TAKASHI OMURA

Appeal No. 1997-1513
Application No. 08/249,736

HEARD: June 7, 2000

Before JOHN D. SMITH, GARRIS, and LIEBERMAN, Administrative
Patent Judges.

JOHN D. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

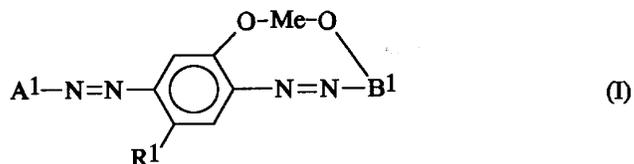
This is an appeal pursuant to 35 U.S.C. § 134 from the
final rejection of claims 2 through 11 and 13.

Claim 13 is representative and is reproduced below:

13. A dye containing polarizing film which

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comprises, in a film substrate, at least one disazo dye represented by the formula (I) in the form of the free acid

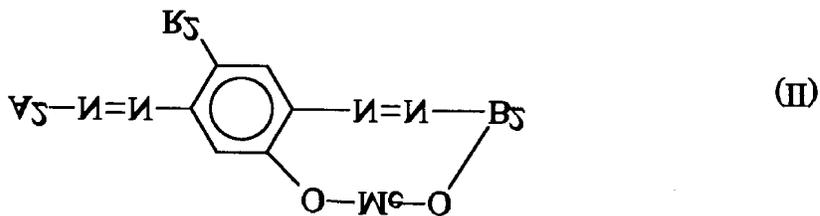


wherein Me is copper, A^1 is a phenyl group which is substituted by at least one member selected from the group consisting of sulfo, sulfamoyl, nitro, C_1-C_4 alkyl, C_1-C_4 alkoxy, carboxy, halogen, and unsubstituted amino or amino substituted by one or two substituents selected from C_1-C_4 alkyl, hydroxy or cyano-substituted C_1-C_4 alkylcarbonyl; or a naphthyl group which is substituted by at least one of sulfo or hydroxy, B^1 is a 1-naphthol or 2-naphthol residue which is substituted by sulfo or by sulfo and at least one member selected from the group consisting of hydroxy, unsubstituted amino and amino substituted by one or two substituents selected from C_1-C_4 alkyl, C_1-C_4 alkylcarbonyl, carbamoyl, sulfamoyl, unsubstituted phenyl, unsubstituted benzoyl, and phenyl or benzoyl substituted by sulfo, amino or C_1-C_4 alkoxy, and in which its hydroxy group is adjacent to the azo group and is linked with the transition metal Me to form the complex, and R^1 is a C_1-C_4 alkoxy; and at least two kinds of dyes selected from

a group [A] consisting of disazo dyes represented by the following formula (II) in the form of free acid

wherein Me copper, A² is a phenyl group which is substituted by at least one member selected from the group consisting of sulfo, sulfamoyl, nitro, C₁-C₄ alkyl, C₁-C₄ alkoxy, carboxy, halogen, and unsubstituted amino or amino substituted by one or two substituents selected from C₁-C₄ alkyl, hydroxy or cyano-substituted C₁-C₄ alkyl and C₁-C₄ alkylcarbonyl; or a naphthyl group which is substituted by at least one of sulfo or hydroxy, B² is a 1-naphthol or 2-naphthol residue which is substituted by sulfo or by sulfo and at least one member selected from the group consisting of hydroxy, unsubstituted amino and amino substituted by one or two substituents selected from C₁-C₄ alkyl, C₁-C₄ alkylcarbonyl, carbamoyl, sulfamoyl, unsubstituted phenyl, unsubstituted benzoyl, and phenyl or benzoyl substituted by sulfo, amino or C₁-C₄ alkoxy, and in which the hydroxy group is adjacent to the azo group and is linked with the transition metal Me to form the complex, and R² is hydrogen, C₁-C₄ alkyl, sulfo or unsubstituted amino or amino substituted by C₁-C₄ alkyl, C₁-C₄ alkylcarbonyl, C₁-C₄ alkylsulfonyl or carbamoyl,

a group [B] consisting of trisazo dyes represented by the following formula (III) in the form of free acid



wherein A³ and B³ are same or different and are phenyl group which is substituted by at least one member selected from the group consisting of sulfo, sulfamoyl, nitro, C₁-C₄ alkyl, C₁-C₄ alkoxy, carboxy, halogen, unsubstituted amino and amino substituted by C₁-C₄ alkyl, hydroxy or cyano-substituted C₁-C₄ alkyl, C₁-C₄ alkylcarbonyl, phenyl, sulfophenyl, disulfophenyl, benzyl or carbamoyl; or naphthyl group which is substituted by at least one member selected from sulfo, hydroxy, unsubstituted amino and amino substituted by C₁-C₄ alkyl, hydroxy or cyano-substituted

C₁-C₄ alkyl, C₁-C₄ alkylcarbonyl, phenyl, sulfophenyl, disulfophenyl, benzyl or carbamoyl, R³ is hydrogen, C₁-C₄ alkyl,

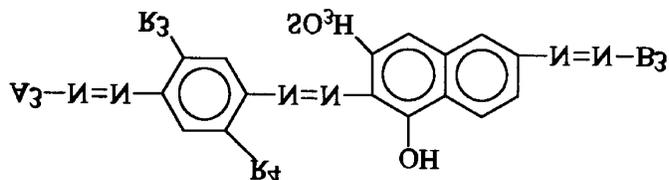
alkoxy,

or
 substitute

amino
 amino
 ituted

C₄

, C₁-C₄ alkylcarbonyl, C₁-C₄ alkylsulfonyl or carbamoyl, R⁴ is hydrogen, hydroxy or C₁-C₄ alkoxy; copper complex salts thereof; and



(III)

C₁-C₄
 sulfo
 unsub
 d
 or
 subst
 by C₁-
 alkyl

a group [C] consisting of C.I. Direct Yellow 12, C.I. Direct Yellow 28, C.I. Direct Yellow 44, C.I. Direct Orange 26, C.I. Direct Orange 39, C.I. Direct Orange 107, C.I. Direct Red 2, C.I. Direct Red 31, C.I. Direct Red 79, C.I. Direct Red 81 and C.I. Direct Red 247. --

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particularly from 400 to 700 nm. Additionally, the claimed polarizing film is characterized as exhibiting excellent polarizing activity as well as having excellent durability to water and heat.

As evidence of obviousness of the herein claimed polarizing film, the examiner relies principally on the Ogino reference. Similar to the herein claimed polarizing film, Ogino also discloses a dye-containing polarizing film comprising a polarizing film material and a metal-containing dye represented by the generic formula (I) which is shown in the abstract and page 1 of the publication. The metal-containing dye represented by formula (I) of Ogino may be used either as the sole dye incorporated into the film substrate or in combination of "two or more" dyes. See Ogino at page 7, lines 16 and 17. Additionally, the metal-containing dye represented by the formula (I) of Ogino may also be used in combination with other organic dyes for the purpose of correcting the hue and improving the polarizing activity. See Ogino at page 7, lines 17 and 18. Also see claims 13 and 14 of the Ogino patent publication. As clearly evident from the arguments presented by appellants in their briefs and the

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findings of the examiner in her answer, Ogino's structural formula (I) generically includes the identical disazo dyes represented by appellants' structural formula (I); appellants' group [A] disazo dyes represented by appellants' structural formula (II); and appellants' group [B] trisazo dyes which are represented by appellants' structural formula (III), as defined in the appealed claims. Further, with respect to the organic dyes defined as appellants' group [C], Ogino discloses each of the 11 members of this group. See Ogino at page 7, lines 18 through 46.

In their reply brief at pages 4 and 5, appellants argue that there is no motivation in Ogino that would have directed those skilled in the art to the specific combination of dyes as claimed which achieve the objects of appellants' invention, i.e., dyes which provide for a polarizing film having excellent polarizing activity which causes no discoloration or deterioration of polarizing activities under high temperature and high humidity conditions, and causes no light to break through the "cross state" over the visible wave length region, particularly from 400-700 nanometers. Based on this argument, appellants apparently believe that the appealed claims are

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inherently limited to polarizing films having all of the above capabilities. However, none of these objects or features are expressly set forth in any appealed claim, and we will not construe the claims as so limited. It has been consistently held that no limitation of the specification should be read into a claim where no express statement of the limitation is included in the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). Appellants further argue that since Ogino does not disclose the specific combination of dye groups required by the claimed invention, Ogino cannot make the presently claimed invention prima facie obvious. However, even assuming that Ogino did not expressly disclose that two or more dye compounds from his formula (I) dyes could be combined in his invention, it would have been prima facie obvious to combine the dyes in the manner claimed by appellants (i.e., the combination of dyes of formula group I, group [A], and group [B]) because it is prima facie obvious to combine two or more components or two or more compositions each of which is taught by the prior art to be individually useful for the same purpose to form a third composition which is to be used for the very same purpose. In re Susi, 440 F.2d

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442, 445, 169 USPQ 423, 426 (CCPA 1971). In this regard, Ogino's examples describe the individual use of dyes falling within the classes of dyes required by the appealed claims. See, e.g., Ogino's example 1 dye, at page 8, which is a group [A] dye; Ogino's example 2 dye, at page 9, which is a formula I dye; and Ogino's example 4, at page 13, which is a group [B] dye. Moreover, respecting appellants' characterization of Ogino as a prior art reference which is no more than a "dictionary" of dye chemicals, the examiner accurately points out in her answer at page 7 that such a prior art "dictionary" is limited to those dye chemicals which have utility in forming heat and humidity resistant polarizing films. Moreover, the examiner specifically found that "all of said dyes in said dictionary are claimed by the current applicants for the same utility as disclosed and claimed in the reference." This factual finding of the examiner has not been contested by appellants and appears accurate, at least with respect to appellants' claimed dyes as represented by their formula (I) dyes; the group [A] dyes; and the group [B] trisazo dyes.

In light of the foregoing, we agree with the examiner

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that the disclosures of Ogino establish a prima facie case of obviousness for the subject matter defined by appealed claim 13. We recognize that appellants have asked for separate consideration of each of the dependent claims on appeal. We have reviewed the subject matter defined by these claims. However, we agree with the examiner's implicit conclusion that such subject matter would have been prima facie obvious in view of the teachings of Ogino. In this regard, appellants' dependent claims simply define features that are either expressly disclosed in Ogino or at least prima facie obvious from the disclosures of this reference. For example, dependent claim 2 simply defines appellants' disazo dye represented by appellants' formula (I) as a copper complex salt. Not only does Ogino indicate that his metal-containing dyes represented by his formula (I) include metal selected from copper, Ogino shows numerous examples of these copper dyes. See the dyes represented by the structural formula numbers 1 through 8 at pages 10 and 11 of Ogino. Respecting dependent claim 4 which calls for the combination of one kind of disazo dye represented by appellants' formula (I) and two kinds of dyes selected from appellants' group [C], we again

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observe that Ogino indicates that any organic dye may be used in combination with his formula (I) dyes for the purpose of correcting the hue and improving the polarizing activity. Thus the use of combined organic dyes in combination with Ogino's formula (I) dye compound would have been prima facie obvious under the legal theory set forth in In re Susi, supra.

Appellants argue that evidence of unexpected results is of record which rebuts the prima facie case of obviousness established by the applied prior art. In this regard, appellants refer to the comparative example 1 in the specification at pages 27 and 28 in the comparative examples set forth in the declaration of record. Respecting this evidence, we agree with the examiner that it is insufficient to rebut the prima facie case of obviousness. In submitting evidence to establish unobvious results, it is appellants' burden to indicate how the examples asserted to represent the claimed invention are considered to relate to the examples intended to represent the prior art, and particularly to indicate how the prior art examples represent the closest

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prior art.¹ Moreover, such evidence relied upon must be reasonably commensurate in scope to the subject matter claimed. See Ex parte Gelles, 22 USPQ2d 1318, 1319 (Bd. of Pat. App. & Int. 1992) and cases cited therein. It is our view, as it was the view of the examiner, that appellants have failed to meet their legal burden in the above respects. First of all, with respect to the examples said to represent the claimed invention, Table 1 at page 29 of the specification illustrates seven examples apparently within the scope of the claimed invention. The appealed claims, however, are much broader in scope, covering thousands of dye combinations with no restriction on the relative amounts of the individual dyes. Thus, it is not apparent to us, and appellants have not attempted to establish, that there is an adequate basis for reasonably concluding that the great number and variety of dye combinations included by the claims, would behave in the same manner as the tested dye combinations. As we stated earlier,

¹ This principle is particularly applicable in the present appeal, since co-applicant Kazuya Ogino is a co-inventor of the applied prior art Ogino reference.

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we have not construed appellants' claims as inherently limited to polarizing films having all the characteristics and properties attributed to them by appellants. With respect to the comparison set forth in the declaration of record, the examiner correctly points out that the dye "recipes" compared are not the dye "recipes" suggested by the primary reference. In this regard, the comparative showings in the declaration all involve comparisons of various organic dyes with other known direct dyes which are not even identified or described by their chemical formula. In contrast, Ogino describes the individual use of dyes falling within appellants' alkoxy disazo dyes represented by the claimed formula (I) (See dyes 1 through 8 at pages 10 and 11 of Ogino); dyes falling within appellants' group [A] disazo dyes (See dyes 9 through 14, 20 and 21 of Ogino at pages 11 and 12; and dyes falling within appellants' group [B] triazo dyes (See dyes 1 through 29 at pages 15 through 20 of Ogino).

Upon consideration anew of the evidence of obviousness relied upon by the examiner, and weighing such evidence of obviousness against the evidence of nonobviousness relied upon by appellants, it is our judgement that the evidence of

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obviousness outweighs the evidence of nonobviousness. We, therefore, agree with the examiner's conclusion that one having ordinary skill in this art would have found the claimed invention as a whole obvious within the meaning of 35 U.S.C § 103.

The decision of the examiner is affirmed.

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

AFFIRMED

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