

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte FRANK J. HUGHES  
and  
EDWARD A. TRAVNICEK

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Appeal No. 1998-0653  
Application No. 08/282,278

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ON BRIEF

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Before KIMLIN, LIEBERMAN, and DELMENDO, Administrative Patent Judges.

LIEBERMAN, Administrative Patent Judge.

**DECISION ON APPEAL**

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner refusing to allow claims 1 through 7, 37, 38 and 41, which are all the claims pending in this application.<sup>1</sup> Claims 8 through 33 have been canceled. Claims 34 through 36 and

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<sup>1</sup>The Final Rejection indicated that claims 34 through 36 were allowed and claims 1 through 9 and 37 through 38 were rejected. An amendment subsequent to the Final Rejection received March 3, 1997 containing proposed claims 39 through 40, was not entered by the examiner. See the Advisory Action mailed April 24, 1997. A second amendment after final received May 2, 1997, containing proposed claims 41 and 42 and canceling claims 8 and 9 was entered by the examiner. See the Supplemental Examiner's Answer, page 1.

42 have been allowed.

### THE INVENTION

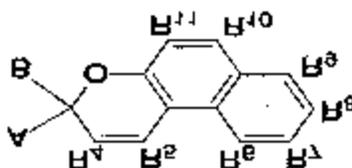
The invention is directed to a naphthopyran compound having a specific formula and substituents. Other features of the claimed subject matter are set forth in the following illustrative claim.

### THE CLAIM

Claim 1 is illustrative  
and is reproduced below:

of appellants' invention

1. A naphthopyran  
by the formula:



compound represented

wherein,

$R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ ,  $R_{10}$ , and  $R_{11}$  are each selected from the group consisting essentially of hydrogen, a first stable organic radical, a heterocyclic group, halogen, a first nitrogen-substituted group, and a first nitrogen-substituted ring group;

A and B are each selected from the group consisting essentially of hydrogen, substituted phenyl, and substituted naphthyl, provided that at least one of A or B is substituted phenyl or substituted naphthyl; and

any substituent of any substituted phenyl or substituted naphthyl at A or B is selected from the group consisting essentially of hydrogen, a second stable organic radical, a heterocyclic group, halogen, a second nitrogen-substituted group, and a second nitrogen-substituted ring group, provided that at least one substituent of at least one substituted phenyl or substituted naphthyl at either A or B is phenyl, naphthyl, or furyl.

### THE REJECTIONS

Claims 1 through 7 and 41 stand rejected under 35 U.S.C. § 112, first and second paragraphs as the claimed invention is not described in such full, clear, concise, and exact terms to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which appellants regard as the invention.

Claims 1 through 7 stand rejected under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which appellants regard as the invention.

Claims 1 through 7 and 37 stand rejected under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which appellants regard as the invention.

Claims 1 through 7, 37 and 38 stand rejected under 35 U.S.C. § 112, first paragraph for failing to enable one skilled in the art to make the compounds wherein  $R_4$

and/or R<sub>5</sub> are other than hydrogen.

**OPINION**

We have carefully considered all of the arguments advanced by the appellants and the examiner, and agree with the appellants that the rejections of claims 1 through 7, 37, 38, and 41 are not well founded. Accordingly, we reverse each of the rejections.

**The Rejections under 35 U.S.C. § 112**

With respect to the first rejection, although the rejection has been entered under both the first and second paragraphs of the statute, we find that the rejection of record as stated in the Answer is directed to the scope and definiteness of the claim. We fail to find any portion of the rejection directed to enablement or lack of a written description requirement as argued in part by the appellants. The principal issue argued by the examiner is directed to the scope of the claimed subject matter, i.e., breadth. Specifically, the examiner argues that the term “stable organic radical” is the broadest member present. See Answer, page 3. In addition, the examiner further argues that each of the groups encompasses other groups and is not mutually exclusive. See Answer, pages 4 to 6. As to the *issue of breadth*, it is well settled that breadth does not necessarily render a claim indefinite. In re Gardner, 427 F.2d 786, 788, 166 USPQ 138, 140 (CCPA 1970) (“Breadth is not indefiniteness”); In re Borkowski, 422 F.2d 904, 909, 164 USPQ 642, 645-46 (CCPA 1970). Accordingly, the fact that one or more moieties or terms found in the claimed subject matter may be broadly defined does not in and of itself render them indefinite. In our view, the person having ordinary skill in the art would understand what is covered by each of the moieties and terms present in the claimed subject matter.

The other argument presented by the examiner is that the moieties and terms that

appear in the claimed subject matter are overlapping in scope. However, the mere fact

that a moiety or term may be embraced by more than one member of a group recited in the claim does not necessarily render the scope of the claim unclear.

Rather, "[t]he legal standard for definiteness [under the second paragraph of 35 U.S.C. § 112] is whether a claim reasonably apprises those of [ordinary] skill in the art of its scope." In re Warmerdam, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). The inquiry is to determine whether the claim sets out and circumscribes a particular area with a reasonable degree of precision and particularity. The definiteness of the language employed in a claim must be analyzed not in a vacuum, but in light of the teachings of the particular application. In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971).

On the facts before us, the specification and original claims contain the descriptive language, "wherein R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, and R<sub>11</sub> are each selected from the group consisting essentially of . . . a second stable organic radical, a heterocyclic group, halogen, a second nitrogen-substituted group and a second nitrogen-substituted ring compound." See specification, page 4 lines 18-26. As to the scope of each term, and their possible overlap with other terms in the group, we find the terms to be usual and customary within the art and not indefinite.

The second ground of rejection is directed to the claimed language "selected from the group consisting essentially of" which appears three times in claim 1 and in the

specification, each occurrence in the specification respectively having the same language presented in the claimed subject matter. Id. The examiner rejects the terminology "selected from the group consisting essentially of," for being an improper Markush and indefinite. In our view, the terminology used is not that of a Markush group. It is however, one of many alternative expressions that are permitted if they present no uncertainty or ambiguity with respect to the question of scope and clarity of the claims. See M.P.E.P. § 2173.05(h) Seventh Ed., Revision 1, Feb. 2000. Accordingly, the issue before us is whether the terminology is definite within the meaning of the second paragraph of the statute. On this record, we find nothing in the language which is inconsistent with understanding the metes and bounds of the language present in the aforesaid claims. It is the intent of the appellants that the groupings of the claimed subject matter are open ended to the extent that it includes the specific members of the grouping plus other members which do not affect the basic and novel photochromic characteristics of the claimed compound. See Brief, page 55. The intent is evident from the onset as we found supra that both the original specification and claims are directed to the specific language "selected from the group consisting essentially of." Accordingly, based on the very specific fact situation and record before us, we will not sustain this portion of the rejection.

The third ground of rejection is directed to the definition of "hydrogen" as a

substituent as hydrogen is part of the original component. However, the use of "hydrogen" as a substituent is customary, clear, and without ambiguity. Accordingly, we conclude that no lack of definiteness occurs.

Finally, the fourth and final ground of rejection is directed to the first paragraph 35 U.S.C. § 112, issue of enablement. When rejecting a claim under the enablement requirement of section 112, the PTO bears the initial burden of setting forth a reasonable explanation as to why it believes the scope of protection provided by the claimed subject matter is not adequately enabled by the description of the invention provided in the specification of the application. This includes providing sufficient reasons for doubting any assertions in the specification as to the scope of enablement. If this burden is met, the burden then shifts to the appellants to provide suitable proofs that the specification is enabling. In re Wright, 999 F.2d 1557, 1561-62, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993); In re Marzocchi, 439 F.2d 220, 223-24, 169 USPQ 367, 369-70 (CCPA 1971). The examiner finds that the specification fails to enable one skilled in the art to make the compounds wherein R<sub>4</sub> and/or R<sub>5</sub> are other than hydrogen. It is the examiner's position that "[t]he **lithium acetylide** disclosed on page 7, line 19, does not contain any substituent groups capable of generating the R<sub>4</sub> and/or R<sub>5</sub> groups in the claimed naphthopyran compounds." See Answer, pages 7 and 8. In our view, the examiner has not met his burden of establishing a prima facie case of lack of enablement.

On the facts and arguments presented by the examiner in this case, the burden of proof is on the examiner to show that substituted lithium acetylide compounds cannot replace the unsubstituted hydrogen on the acetylide corresponding to R<sub>4</sub> on the naphthopyran with a different moiety, or in the alternative, if a different moiety is placed on the lithium acetylide, it could not react to form the requisite naphthopyran compound of the claimed subject matter having a substituent other than hydrogen on the R<sub>4</sub> position. This burden of proof has not been met. We find that the examiner's statement, Answer, page 12, is merely speculative and does not rise to the requisite level of evidence required to establish a prima facie case of lack of enablement.

Based upon the above findings and analysis the rejection by the examiner under 35 U.S.C. § 112 is not sustained.

#### DECISION

The rejection of claims 1 through 7 and 41 under 35 U.S.C. § 112, first and second paragraphs as the claimed invention is not described in such full, clear, concise, and exact terms to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which appellants regard as the invention is reversed.

The rejection of claims 1 through 7 under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which appellants

regard as the invention is reversed.

The rejection of claims 1 through 7 and 37 under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which appellants regard as the invention is reversed.

The rejection of claims 1 through 7, 37 and 38 under 35 U.S.C. § 112, first paragraph for failing to enable one skilled in the art to make the compounds wherein R<sub>4</sub> and/or R<sub>5</sub> are other than hydrogen is reversed.

The decision of the examiner is reversed.

REVERSED

EDWARD C. KIMLIN	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
PAUL LIEBERMAN	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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ROMULO H. DELMENDO	)	
Administrative Patent Judge	)	
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PL:hh

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