

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte DONGWEI CAI,  
DAVID L. HUGHES, SYLVAIN LEVAC  
and THOMAS R. VERHOEVEN

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Appeal No. 1997-3190  
Application 08/443,616

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ON BRIEF

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Before WINTERS, ROBINSON, and ADAMS, Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

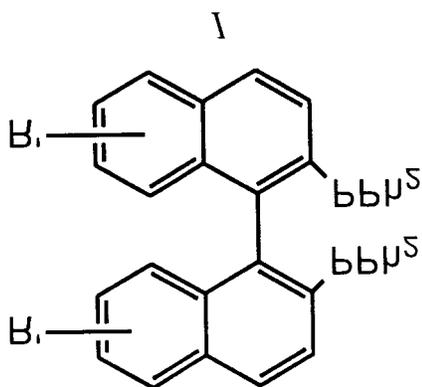
DECISION ON APPEAL

This appeal was taken from the examiner's decision rejecting claims 16, 17, 20, and 21. Claims 18, 19, and 22 through 25, which are the only other claims remaining in the application, stand allowed.

REPRESENTATIVE CLAIM

Claim 16, which is illustrative of the subject matter on appeal, reads as follows:

16. A compound represented by the formula:



wherein R' is selected from: -CH<sub>3</sub>, -CO<sub>2</sub>CH<sub>3</sub> and -OCH<sub>3</sub> and Ph represents phenyl.

THE REFERENCE

The prior art reference relied on by the examiner is:

Cai et al. (Cai)

5,399,771

Mar. 21, 1995

THE ISSUE

The issue presented for review is whether the examiner erred in rejecting claims 16, 17, 20, and 21 under 35 U.S.C. § 103 as unpatentable over Cai.

### DELIBERATIONS

Our deliberations in this matter have included evaluation and review of the following materials: (1) the instant specification, including all of the claims on appeal; (2) applicants' Appeal Brief; (3) the Examiner's Answer; and (4) the above-cited prior art reference.

On consideration of the record, including the above-listed materials, we affirm the examiner's rejection under 35 U.S.C. § 103.

### DISCUSSION

The reliance on per se rules of obviousness, eliminating the need for a fact-specific analysis of claims and the prior art, is legally incorrect and must cease. In re Ochiai, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995). By the same token, we follow precedent and guidance handed down in the relevant case law by our reviewing court. In this regard, the examiner invites attention to the following cases:

In re Wood, 582 F.2d 638, 199 USPQ 137 (CCPA 1978); In re Hoke, 560 F.2d 436, 195 USPQ 148 (CCPA 1977); and In re Lohr, 317 F.2d 388, 137 USPQ 548 (CCPA 1963).

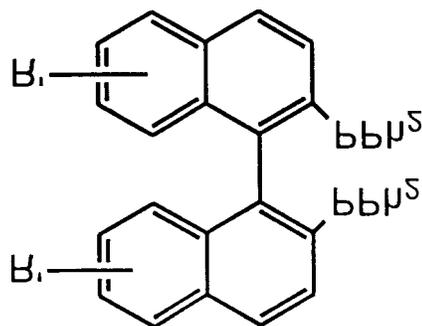
Each reported case, like the situation before us, involves a claimed compound differing from the closest prior art compound in that the former contains two additional methyl groups. For example, Mitsuda compound (III) illustrated in In re Wood,

582 F.2d F.2d at 640-41, 199 USPQ at 139, has two hydrogen atoms attached at the 7- position of the dihydropteridine ring whereas Wood's claims read on the same compound di-substituted at that position with methyl groups in lieu of hydrogen. Likewise, the essential difference between Jennes' Example 2 compound in In re Hoke, 560 F.2d at 437, 195 USPQ at 148, and the most structurally similar of Hoke's compounds is that Hoke has methyl groups in lieu of hydrogen atoms on the arrowed carbon. This amounts to the difference between an unbranched alkylene chain and a branched alkylene claim. Finally, the claimed compounds illustrated in In re Lohr, 317 F.2d at 389, 137 USPQ at 549, are “homologs” of compounds disclosed in the Haubein reference “with the sole difference being the presence in the claimed compounds of two methyl groups at the 2 and 6 positions of the heterocyclic nucleus.”

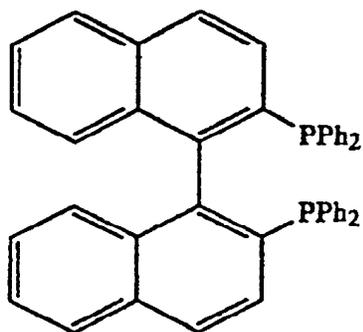
Emphasizing the close structural similarity, and the similarity of utility, between the claimed compound and prior art compound, the court concluded, in each reported case, that the claimed subject matter would have been prima facie obvious. Further, in each case, the court found that applicant had not submitted objective evidence of non-obviousness sufficient to rebut the prima facie case. Accordingly, in each case, the court affirmed the PTO's rejection under 35 U.S.C. § 103. We shall do the same.

Here, we agree with the examiner's finding that Cai discloses every feature of the subject matter sought to be patented in claim 16 except that the claim recites an R'

substituent group, which may be  $\text{CH}_3$ , on each naphthyl ring, whereas Cai discloses hydrogen atoms. This is illustrated in the formulas below:



Claim 16 ( $\text{R}'$  may be  $\text{CH}_3$ )



Cai

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Likewise, we agree that Cai discloses every feature of the subject matter sought to be patented in claims 17, 20, and 21 except that the claims include a CH<sub>3</sub> group on each naphthyl ring, whereas Cai discloses hydrogen atoms. Additionally, based on a careful review of the cited reference, we find that Cai discloses a similar method of making the prior art compounds, and similar properties possessed by those compounds, compared with the instantly claimed compounds. Under these circumstances, considering the close structural similarity between the claimed and prior art compounds, the similar method of making the respective compounds, and the similar properties of those compounds, we conclude that the claimed compounds would have been prima facie obvious in view of the cited prior art. Further, on this record, applicants do not rely on objective evidence of non-obviousness which would serve to rebut the prima facie case. Accordingly, we conclude that the claimed subject matter, considered as a whole, would have been obvious within the meaning of 35 U.S.C. § 103 based on the disclosure of Cai.

Applicants' main argument is that Cai does not provide adequate reason, suggestion, or motivation to modify his naphthyl rings with CH<sub>3</sub> groups in the manner claimed. We disagree.

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As stated in In re Wood, 582 F.2d at 641, 199 USPQ at 139,

In view of the close structural similarity between the claimed compounds and Mitsuda compound III, and the fact that the latter is disclosed as possessing antimicrobial activity, we believe that one skilled in the art would have been, prima facie, motivated to make the claimed compounds in the expectation that they, too, would possess antimicrobial activity. [citations omitted]

We believe that the same reasoning applies to the facts before us, and that Cai does, in fact, provide the requisite “motivation” to sustain a rejection under 35 U.S.C.

§ 103.

The examiner's decision is affirmed.

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

AFFIRMED

Sherman D. Winters	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
Douglas W. Robinson	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
Donald E. Adams	)	
Administrative Patent Judge	)	

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