

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HENRY U. BRYANT, GEORGE J. CULLINAN,
JEFFREY A. DODGE, KENNAN J. FAHEY and
CHARLES D. JONES

Appeal No. 1997-1955
Application 08/423,498¹

ON BRIEF

Before WILLIAM F. SMITH, Administrative Patent Judge, McKELVEY, Senior Administrative Patent Judge, and SCHEINER, Administrative Patent Judge.

SCHEINER, Administrative Patent Judge.

¹ Application for patent filed April 19, 1995. According to appellant, this application is a divisional of Application Serial No. 08/309,301, filed September 20, 1994, now abandoned.

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resulting in a wide range of symptoms. There are various approaches to treating endometriosis, including administration of estrogens, progestins or weak androgens, but, according to the specification, "treatment by hormonal therapy is diverse, poorly defined, and marked by numerous unwanted . . . side effects." Page 5.

DISCUSSION

Claims 46 through 51 on appeal are directed to a method of inhibiting endometriosis by administering an effective amount of a benzothiophene of formula I (see the Appendix accompanying appellants' Brief). Claim 36 of co-pending application serial no. 08/438,334 is also directed to a method of inhibiting endometriosis, but the base ring structure of the compound administered is a benzofuran, rather than a benzothiophene. A comparison of the formulas of the compounds administered in the methods of the present and co-pending applications shows that the only difference between them is in the base ring structure: position 1 of the benzothiophenes is sulfur, while position 1 of the benzofurans is oxygen.

In the Examiner's Answer, the examiner refers to paper nos. 5 and 7 for the statement of the rejection, although the rejection appears only in paper no. 5. In view of its brevity, we reproduce the rejection in its entirety:

The instant application claims the use of a benzothienyl compound for treating endometriosis while SN 08/438,334 claims the same method using a prima facie obvious compound i.e. a benzofuranyl compound as recognized in the prior art as equivalence of the instant claim (see Crenshaw and Erber). One having ordinary skill in the art would recognized all the

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optional choices of the triaryl antifertility compounds. In absence of unexpected result it is *prima facie* obvious to choose some among many.

“When chemical compounds have ‘very close’ structural similarities and similar utilities, without more a *prima facie* case may be made.” *In re Grabiak*, 769 F.2d 729, 731, 226 USPQ 870, 871 (Fed. Cir. 1985); *see, e.g., In re Wilder*, 563 F.2d 457, 195 USPQ 426 (CCPA 1977) (adjacent structural homologs and structural isomers). Be that as it may, “generalization should be avoided insofar as specific chemical structures are alleged to be *prima facie* obvious one from the other . . . there must be adequate support in the prior art for the [] change in structure, in order to complete the PTO’s *prima facie* case and shift the burden of going forward to the applicant.” 769 F.2d at 731-32, 226 USPQ at 872.

If we understand the examiner’s rationale correctly, it is that it would have been obvious to treat endometriosis by administering either the subject benzothiophenes or the corresponding benzofurans to a patient because of the structural similarity between the compounds, as well as Crenshaw II’s classification of certain benzothiophenes and benzofurans as “potential antifertility agents.”² Nevertheless, in our view, the evidence relied on by the examiner does not support her conclusion that the benzothiophenes of the

² The examiner has not explained the relevance of the Erber and Crenshaw I references in the rejection of the claims, and indeed, we are unable to discern any. We note that the examiner, unfortunately, relies on an abstract of Erber, rather than the complete document; the very limited information available in the abstract appears to have little or no bearing on the issue at hand. Crenshaw I describes 2-phenyl-3-tertiary-aminoalkoxy phenyl and corresponding tertiaryaminoalkyl thio benzofurans, but does not involve substitution of oxygen for sulfur in the base ring structure.

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present application and the benzofurans of the co-pending application would have been “recognized in the prior art as equivalen[t]” in treating endometriosis.

Crenshaw II, one of the references cited by the examiner, describes synthesis and testing of potential antifertility agents, including a 2,3-diarylbenzothiophene (designated “3m”) and a 2,3-diarylbenzofuran (designated “8b”) differing only in the substitution of oxygen for sulfur in the base ring structure. According to the reference, the diarylbenzothiophene (3m) was found to be a potent antiestrogen in rats, but the counterpart diarylbenzofuran (8b) did not exhibit antiestrogenic activity in rats. Inasmuch as Crenshaw II reports that the two compounds behave very differently in terms of their hormone-like activity, we cannot agree with the examiner that one skilled in the art would have found it obvious to use benzofurans and benzothiophenes interchangeably to treat endometriosis.

In our judgment, the examiner has not established a prima facie case of obviousness; accordingly, the provisional rejection of claims 46 through 51 under the judicially-created doctrine of obviousness-type double patenting is reversed.

REVERSED

William F. Smith)
Administrative Patent Judge)
Fred E. McKelvey)
BOARD OF PATENT)

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