

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 11

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte F. GEORGE NJOROGÉ,  
BANCHA VIBULBHAN, and  
VIYYOOR M. GIRIJAVALLABHAN

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Appeal No. 2002-1438  
Application No. 09/345,966

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ON BRIEF

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Before WINTERS, GRIMES, and GREEN, Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

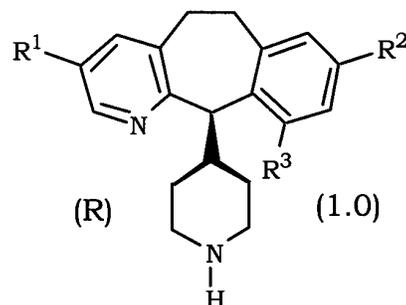
DECISION ON APPEAL

This appeal was taken from the examiner's decision rejecting claims 1, 2, 6 through 12, and 16 through 21, all of the claims pending in this application.

Representative Claim

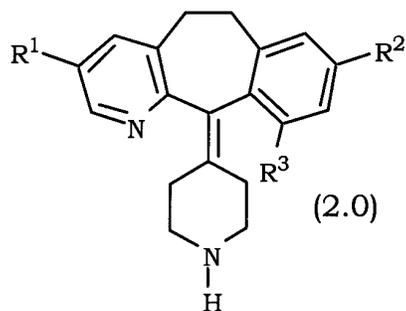
Claim 1, which is illustrative of the subject matter on appeal, reads as follows:

1. A process for producing a compound of the formula:

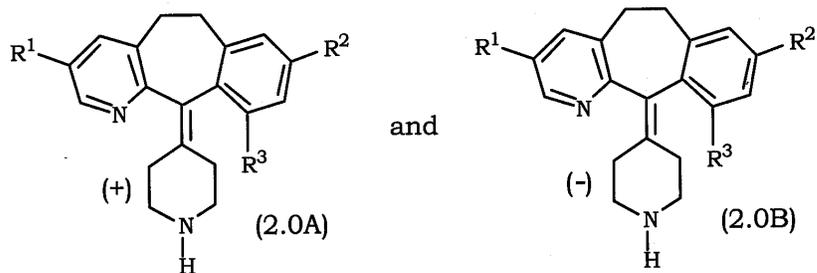


comprising:

1. (1) separating the atropisomers of

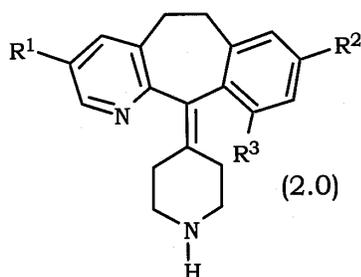


by HPLC to obtain the atropisomers

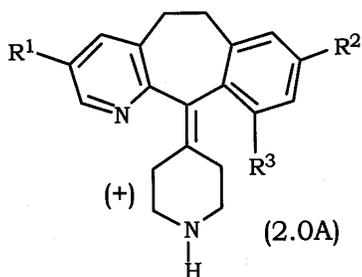


- (2) heating the atropisomer of formula 2.0B at a temperature of 100 to 200°C, in a solvent selected from dimethyl formamide, toluene or 1,2-dichlorobenzene, to obtain a mixture of atropisomers of formulas 2.0A and 2.0B;
- (3) separating the atropisomers of formulas 2.0A and 2.0B of step (2) by HPLC; and
- (4) reducing the atropisomer of formula 2.0A to obtain a compound of formula 1.0; or

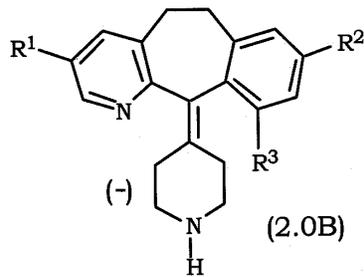
- II. (1) separating the atropisomers of



by HPLC to obtain the atropisomers



and



- (2) reducing the atropisomer of formula 2.0A to obtain a compound of formula 1.0;
- (3) heating the atropisomer of formula 2.0B at a temperature of 100 to 200°C, in a solvent selected from dimethyl formamide, toluene or 1,2-dichlorobenzene, to obtain a mixture of atropisomers of formulas 2.0A and 2.0B;
- (4) separating the atropisomers of formulas 2.0A and 2.0B of step (2) by HPLC; and
- (5) reducing the atropisomer of formula 2.0A obtained in Step (4) to obtain a compound of formula 1.0;

wherein:

R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> are independently selected from halogen, C<sub>1</sub> to C<sub>6</sub> alkyl or -OR<sup>4</sup> wherein R<sup>4</sup> is a C<sub>1</sub> to C<sub>6</sub> alkyl.

The Prior Art References

The prior art references relied on by the examiner are:

Klibanov	4,659,671	Apr. 21, 1987
Kessels	5,200,555	Apr. 6, 1993
Doll et al. (Doll) (PCT Application)	WO 97/23478	Jul. 3, 1997

The Rejection

All of the appealed claims stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combined disclosures of Doll, Klibanov, and Kessels.

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 (Paper No. 9); (3) the Examiner's Answer (Paper No. 10); and (4) the above-cited prior art references.

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

### Discussion

According to the examiner, Doll discloses a process for preparing a compound having formula (1.1).<sup>1</sup> The examiner argues that Doll's process bears close relationship to the instantly claimed process, but differs in two respects.

First, according to the examiner, "[t]he process of Doll [preparative example 8 at pages 33 and 34] involves the reduction before the resolution of the racemate whereas the instant process comprises the separation of the optical isomers before the reduction step" (Paper No. 10, page 3, paragraph 5). In an effort to bridge this difference, the examiner appears to invoke a per se rule of obviousness. The examiner simply states that "[t]o one of ordinary skill in the art, the order of these steps are optional choices [sic] and is therefore prima facie obvious in the absence of unexpected results" (Paper No. 10, page 3, paragraph 5; and paragraph bridging pages 4 and 5).

We caution, however, that reliance on per se rules of obviousness is legally incorrect. As stated in In re Ochiai, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995)

The use of per se rules, while undoubtedly less laborious than a searching comparison of the claimed invention--including all its limitations--with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. Per se rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed, they have been sanctioned by the Board as well. But reliance on per se rules of obviousness is legally incorrect and must cease.

We also note In re Cofer, 354 F.2d 664, 667, 148 USPQ 268, 271 (CCPA 1966), stating

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<sup>1</sup> This is applicants' terminology, i.e., compound (1.1) is the first listed compound in claims 2 and 12.

that "it is facts appearing in the record, rather than prior decisions in and of themselves, which must support the legal conclusion of obviousness under 35 U.S.C. § 103(a)."

On this record, the examiner has not established that the prior art would have led a person having ordinary skill to the invention recited in claims 1, 2, 6 through 12, and 16 through 21, including the order of steps set forth in those claims. Nor has the examiner applied the facts and holding of any reported case to the facts before us; or explained why any reported case should be considered controlling.

Second, according to the examiner, "[t]he instant process differs from Doll's process in having additional steps comprising racemization of the undesirable (-) isomer by heating followed by resolution of the racemate" (Paper No. 10, paragraph bridging pages 3 and 4). In an effort to bridge this difference, the examiner relies on the "secondary references" Klibanov and Kessels.

However, as correctly pointed out by applicants, neither Klibanov nor Kessels discloses or suggests the conditions of racemization recited in each independent claim on appeal. Neither Klibanov nor Kessels discloses or suggests racemization of "the undesirable (-) isomer" by heating at 100 to 200°C in a solvent selected from dimethyl formamide, toluene, or 1,2-dichlorobenzene as required by all of the appealed claims. Therefore, the "secondary references" relied on by the examiner for teaching racemization would not have led a person having ordinary skill in the art to applicants' claimed racemization step which specifically requires heating at 100 to 200°C in a solvent selected from dimethyl formamide, toluene, or 1,2-dichlorobenzene.

The examiner argues that it would have been obvious to carry out racemization

in toluene (see the Doll reference, page 33, line 14) "under the conditions described by Kessels" (Paper No. 10, page 6, paragraph 1). In referring to "the conditions described by Kessels," the examiner apparently means heating at 140°C (disclosed by Kessels at column 5, line 48) but not using tertiary butanol (disclosed by Kessels at column 5, line 46). According to the examiner, therefore, a person having ordinary skill would have arrived at applicants' claimed process including the conditions of racemization spelled out in the claims. We disagree.

In our judgment, the examiner relies on the impermissible use of hindsight in selecting toluene (Doll, page 33, line 14) and 140°C (Kessels, column 5, line 48) but excluding or ignoring the racemization solvent employed by Kessels. That solvent is an alcohol, e.g., tertiary butanol (Kessels, column 5, line 46).

The examiner's decision is reversed.

REVERSED

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Sherman D. Winters	)
Administrative Patent Judge	)
	)
	)
	) BOARD OF PATENT
Eric Grimes	)
Administrative Patent Judge	) APPEALS AND
	)
	) INTERFERENCES
Lora M. Green	)
Administrative Patent Judge	)

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