

UNITED STATES PATENT AND TRADEMARK OFFICE

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

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*Ex parte* MANFRED LEHMANN, KLAUS SCHOELLKOPF,  
PETER STREHLKE, NIKOLAUS HEINRICH, KARL-HEINRICH  
FRITZEMEIER, ROLF KRATTENMACHER, and HANS-PETER MUHN

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Appeal 2007-4357  
Application 10/358,173  
Technology Center 1600

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Decided: March 18, 2008

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Before DONALD E. ADAMS, ERIC GRIMES, and LORA M. GREEN,  
*Administrative Patent Judges.*

GRIMES, *Administrative Patent Judge.*

**DECISION ON REQUEST FOR REHEARING**

Appellants have requested rehearing of the decision entered December 6, 2007 (hereafter “Decision”). The Decision affirmed the rejection of claims 6, 12, and 37-42 for indefiniteness. The request for rehearing is denied.

**DISCUSSION**

Appellants argue that the assertion in the Decision that the claim language can be interpreted two ways “is a misapprehension. There is clearly a further interpretation, i.e., that presented by appellants” (Req. Rhg.

2). Appellants argue that “the stated interpretations of the Examiner require[ ] the assumption of an error, while appellants’ interpretation does not require such an assumption” (*id.*).

We disagree. The claim language at issue “defines substituent ‘A’ (in part) as an aromatic ring that is ‘optionally substituted by . . . (CH<sub>2</sub>)<sub>n</sub> groups wherein n=3, 4 or 5, which with 2 adjacent C atoms of A forms a ring with n+2 carbon atoms links [sic] and which may contain more than one unsaturated bond’ or the equivalent.” (Decision 2.) As explained in the Decision, the claim language necessarily contains an error because carbon atoms can only form four bonds, and therefore “a ring made up of two carbons of an aromatic ring and 3-5 CH<sub>2</sub> groups cannot have more than one unsaturated bond: it might have one unsaturated bond between the carbons that are part of the aromatic ring, but there cannot be any unsaturated bonds between CH<sub>2</sub> groups in a ring” (*id.*).

Contrary to Appellants’ assertion, there is no way to interpret the claim language without assuming some error: either (A) the claims’ “(CH<sub>2</sub>)<sub>n</sub> groups wherein n=3, 4 or 5” really means something like “(CH<sub>m</sub>)<sub>n</sub> groups wherein m=0, 1 or 2 and n=3, 4 or 5” or (B) the claims’ “more than one unsaturated bond” really means “an unsaturated bond”.

Appellants argue that those skilled in the art would recognize that, if the ring recited in the claims contained more than one unsaturated bond, some of the “(CH<sub>2</sub>)<sub>n</sub> groups” recited in the claims would be substituted by -CH=CH- groups or -C≡C- groups. In support of this position, Appellants point to Example 69 in the Specification: “In this Example, ring A is a benzene ring which is substituted by -CH=CH-CH=CH-” (Req. Rhg. 2).

We do not agree that the Specification's Example 69 shows that the rejected claims are not indefinite. First, the compounds shown in the Specification's Table 10 do not appear to be encompassed by the instant claims, since in all of the Table 10 compounds, substituent W is O or S, whereas the instant claims require the atom in the corresponding position to be C. Compare partial formula 5 recited in the instant claims with the moiety on the right-hand side of the formula in Table 10 (Spec. 61).

In any event, the compound of Example 69 does not show a ring made up of CH<sub>2</sub> groups and containing plural unsaturations, as recited in the appealed claims. Nor have Appellants pointed to any evidence to show that the Specification defines language such as that used in the appealed claims to mean substituents like that in the compound of Example 69. That is, Appellants have shown no connection between the disputed limitation and the compound of Example 69.

Appellants also argue that the analysis relied on in the Decision, "when applied to any qualifying phrase will result in a similar conclusion of an ambiguity" (Req. Rhg. 3). Appellants give the following example:

a group X may be defined in a claim as an "X is an alkyl group having 1-10 carbon atoms." One of ordinary skill in the art would have no problem understanding this description. If that language is then changed to include the qualifying phrase "wherein one or more -CH<sub>2</sub>-CH<sub>2</sub>- groups is optionally replaced in each case by -CH=CH- or -C≡C-," one of ordinary skill in the art would still have no problem understanding the overall description as clearly stating that X can also be an alkenyl or alkynyl group, in addition to being an alkyl group.

(*Id.* at 4.) Appellants argue that the “alkyl group” and unsaturations recited in the hypothetical claim might appear to be inconsistent but the claim language is clear to those skilled in the art (*id.*).

We agree that the hypothetical claim set out in the Request for Rehearing is not indefinite. As the Examiner has indicated, “such language would be clearly understood” (Answer 5). But the claims on appeal don’t say that “one or more -CH<sub>2</sub>-CH<sub>2</sub>- groups is optionally replaced in each case by -CH=CH- or -C≡C-.” The claims on appeal require the recited ring to be made up of CH<sub>2</sub> groups *whether or not it includes more than one unsaturation*, and that is chemically impossible.

Appellants have not shown that we misapprehended or overlooked any points in the Decision. The request for rehearing is denied.

REHEARING DENIED

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