

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HAI-QUAN MAO, KAM W. LEONG,
ZHONG ZHAO and JAMES P. ENGLISH

Appeal No. 2005-1076
Application No. 10/047,941

ON BRIEF

Before KIMLIN, PAK and KRATZ, Administrative Patent Judges.
KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 135-154. A copy of illustrative claims 134 and 147 is appended to this decision.

The examiner has not cited prior art in the rejection of the appealed claims.

Appellants' claimed invention is directed to phosphorus-containing polymers of the recited formulae that are biocompatible.

Appeal No. 2005-1076
Application No. 10/047,941

Appealed claims 134-154 stand rejected under 35 U.S.C. § 112, first paragraph, description and enablement requirements.

Appellants submit that "claims 134-146 should be treated as a group, and claims 147-154 should be treated as a separate group" (page 4 of Brief). Accordingly, claims 134-146 stand or fall together, as do claims 147-154.

We have thoroughly reviewed each of appellants' arguments for patentability. However, it is our opinion that the examiner's § 112, first paragraph rejections are well-founded. Accordingly, we will sustain the examiner's rejections for essentially those reasons expressed in the Answer.

We agree with the examiner that the original specification does not provide descriptive support for the claim 134 recitation that Q can be NR'.¹ In response to the examiner's criticism that there is no "Q" mentioned in the specification, let alone a description that such moiety can be NR', appellants simply offer the conclusory remark that "Appellants respectively [sic, respectfully?] assert that a person of ordinary skill in the art would appreciate that NR' as recited in claim 134 could be used in place of O in the claimed invention" (page 4 of Brief, last

¹ As properly noted by appellants, claim 47 and claims dependent thereon do not recite this limitation.

Appeal No. 2005-1076
Application No. 10/047,941

sentence). No further explanation is provided under the heading "Issue 1." Accordingly, appellants have failed to provide the requisite underlying factual rationale explaining how the original specification describes Q as NR'.

Regarding the examiner's § 112, non-enablement rejection of the claim recitation of Q, appellants maintain that "there is sufficient guidance, for example, in the examples of the instant disclosure, pages 38-45, to enable a person skilled in the art to make polymers where Q is O or NR'" (page 6 of Brief, first paragraph). However, we agree with the examiner that appellants' statement "is not exactly specific information" (page 5 of Answer) which identifies where, specifically, in the eight cited pages is enablement found for the claim recitation. It is not within the province of this Board to independently read appellants' specification and ferret out a particular disclosure that supports appellants' conclusory remarks. In our view, appellants have not satisfied their burden of providing a substantive response to the examiner's rejection.

We also find that appellants have not adequately rebutted the examiner's reasonable rejection that there is not descriptive and enabling support in the specification for both the claim 134 limitation that "L is a non-interfering substituent" and the

Appeal No. 2005-1076
Application No. 10/047,941

claim 147 limitation that "L is a branched or straight chain aliphatic group, a cyclic aliphatic group, a divalent aryl group, or a polymeric group." Appellants maintain that "a person of skill in the art would recognize the moiety L as recited in claim 134 is supported by the instant disclosure at, for example, pg. 10 lines 1-17" (page 5 of Brief, first paragraph). However, as properly noted by the examiner, the sentence bridging pages 9 and 10 of the specification states "L can be any divalent branched or straight chain aliphatic group having from 1-20 carbon atoms, so long as it does not interfere with the polymerization or biodegradation reactions of the polymer" (emphasis added). There is nothing that follows in the subsequent disclosure at page 10, lines 1-17, as cited by appellants, that broadens moiety L such as to include more than 20 carbon atoms, a cyclic aliphatic group, a divalent aryl group, or a polymeric group. Appellants have not explained how the cited portion of the specification supports the claim recitations, and the relevancy of the cited passage with respect to the examiner's rejections escapes us. As for appellants' argument that there is sufficient guidance in the specification, at pages 38-45, to enable a person of ordinary skill in the art to make polymers where L is as recited in claims 134 and 147, we

Appeal No. 2005-1076
Application No. 10/047,941

again emphasize that it is not for the Board to read appellants' specification to find evidence in support of their conclusory statement. Manifestly, it is appellants' burden to point to specific disclosures in the specification which enable one of ordinary skill in the art to formulate a polymer having L moieties within the scope of the appealed claims.

In conclusion, based on the foregoing, the examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (effective Sep. 13, 2004; 69 Fed. Reg. 49960 (Aug. 12, 2004); 1286 Off. Gaz. Pat. Office 21 (Sep. 7, 2004)).

AFFIRMED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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CHUNG K. PAK)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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)	
PETER F. KRATZ)	
Administrative Patent Judge)	

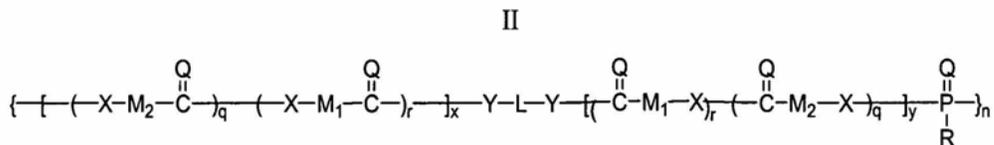
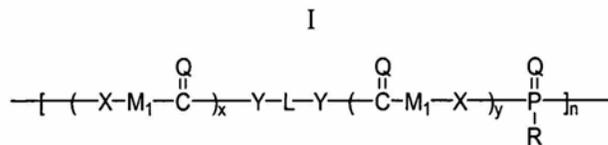
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Appeal No. 2005-1076
Application No. 10/047,941

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APPENDIX

134. A polymer composition, comprising a polymer comprising the recurring monomeric units shown in formula I or II:



wherein:

X is -O- or -NR'-, where R' is H or alkyl;

M₁ and M₂ are each independently (1) a branched or straight chain aliphatic group having from 1-20 carbon atoms; or
 (2) a branched or straight chain, oxy-, carboxy- or amino-aliphatic group having from 1-20 carbon atoms;

Y is -O-, -S- or -NR', wherein R' is H or alkyl;

Q is O or NR', wherein R' is H or alkyl;

L is a non-interfering substituent;

R is H, alkyl, alkoxy, aryl, aryloxy, heterocyclic or heterocycloxy;

the molar ration of x:y is about 1;

Appeal No. 2005-1076
 Application No. 10/047,941

the molar ratio n:(x or y) is between about 200:1 and 1:200;

and

the molar ratio q:r is between 1:99 and 99:1;

wherein said polymer is biocompatible before and upon biodegradation.

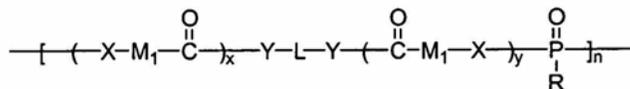
147. A polymer composition comprising:

(a) at least one biologically active substance, and

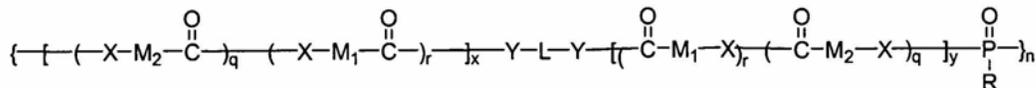
(b) a polymer having the recurring monomeric units shown

in formula I or II:

I



II



wherein:

X is -O- or -NR'-, where R' is H or alkyl;

M₁ and M₂ are each independently (1) a branched or straight chain aliphatic group having from 1-20 carbon atoms; or (2) a branched or straight chain, oxy-, carboxy- or amino-aliphatic group having from 1-20 carbon atoms;

Appeal No. 2005-1076
Application No. 10/047,941

Y is -O-, -S- or -NR'-;

L is a branched or straight chain aliphatic group, a cyclic aliphatic group, a divalent aryl group, or a polymeric group;

R is H, alkyl, alkoxy, aryl, aryloxy, heterocyclic or heterocycloxy;

the molar ratio of x:y is about 1;

the molar ratio n:(x or y) is between about 100:1 and 1:100;
and

the molar ratio q:r is between about 1:99 and 99:1;

wherein said polymer is biocompatible before and upon biodegradation.