Please find below and/or attached an Office communication concerning this application or proceeding.
**Office Action Summary**

**Application No.** 09/848,616  
**Applicant(s)** Sebbel et al  
**Examiner** Mosher  
**Art Unit** 1648

--- The MAILING DATE of this communication appears on the cover sheet with the correspondence address ---

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _one_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) [ ] Responsive to communication(s) filed on ____________________________

2a) [ ] This action is FINAL.  
   2b) [x] This action is non-final.

3) [ ] Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4) [x] Claim(s) 1–85 is/are pending in the application.

4a) Of the above, claim(s) ______________________________________ is/are withdrawn from consideration.

5) [ ] Claim(s) ______________________________________ is/are allowed.

6) [ ] Claim(s) ______________________________________ is/are rejected.

7) [ ] Claim(s) ______________________________________ is/are objected to.

8) [x] Claims 1–85 ______________________________________ are subject to restriction and/or election requirement.

**Application Papers**

9) [ ] The specification is objected to by the Examiner.

10) [ ] The drawing(s) filed on ____________________________ is/are a) [ ] accepted or b) [ ] objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) [ ] The proposed drawing correction filed on ____________________________ is: a) [ ] approved b) [ ] disapproved by the Examiner.

   If approved, corrected drawings are required in reply to this Office action.

12) [ ] The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) [ ] Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) [ ] All  b) [ ] Some*  c) [ ] None of:

   1. [ ] Certified copies of the priority documents have been received.

   2. [ ] Certified copies of the priority documents have been received in Application No. ____________________________.

   3. [ ] Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   *See the attached detailed Office action for a list of the certified copies not received.

14) [ ] Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

   a) [ ] The translation of the foreign language provisional application has been received.

15) [ ] Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) [ ] Notice of References Cited (PTO-892)  
2) [ ] Notice of Draftsperson’s Patent Drawing Review (PTO-948)  
3) [ ] Information Disclosure Statement(s) (PTO-1449) Paper No(s). __________

4) [ ] Interview Summary (PTO-413) Paper No(s). __________

5) [ ] Notice of Informal Patent Application (PTO-152)

6) [ ] Other:

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DETAILED ACTION

Applicant may wish to amend improper multiple dependent claims 48-56, 79, 80, 83-85; all of these claims depend from another multiple dependent claim.

Election/Restriction

This application contains claims directed to the following patently distinct species of the claimed invention:

1. Pilus or pilin with covalently associated antigen
2. Pilus or pilin with non-covalently associated antigen.
3. Hepatitis B particle with covalently associated antigen.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

In addition, if a Hepatitis B particle is elected, applicant is directed to elect one species hepatitis B protein sequence from those listed in claim 34 or 28. Since alteration of amino acids can have unpredictable effects upon the function of a polypeptide, each sequence is seen as potentially patently distinct.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon,
including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary E. Mosher, Ph.D. whose telephone number is (703) 308-2926. The examiner can normally be reached on Monday -Thursday and alternate Fridays from 6:30 AM to 4:00 PM.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel, can be reached on (703) 308-4027. The fax phone number for this Group is now (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

August 29, 2002