Title: NON-IONIC NON-AQUEOUS VEHICLES FOR TOPICAL AND ORAL ADMINISTRATION OF CARRIER-COMPLEXED ACTIVE AGENTS

Abstract: An improved controlled release composition for non-parenteral administration of active agents and other therapeutics, particularly for oral or topical administration, has been developed. The composition is made by dispersing a complex formed of an active agent bound to an ion-exchange resin or to another form of resin or carrier, in a non-ionic non-aqueous ("NINA") vehicle. The complexes are optionally coated with one or more layers of coating material to provide a controlled pattern of release of active agent from the carrier. The combination of multiple active agents is possible with this system, in which one or more active agents are bound to particles and one or more active agents are dissolved or dispersed in the NINA vehicle. This allows the combination of two or more active agents, which are otherwise incompatible, into a single dosage form.
### A. CLASSIFICATION OF SUBJECT MATTER

**INV. A61K47/48 A61K9/58**

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

- A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

- EPO-Internal, WPI Data, PAJ, EMBASE, BIOSIS, MEDLINE

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

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[X] Further documents are listed in the continuation of Box C.  
[X] See patent family annex.

* Special categories of cited documents:
  - "A" document defining the general state of the art which is not considered to be of particular relevance
  - "E" earlier document but published on or after the international filing date
  - "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
  - "O" document referring to an oral disclosure, use, exhibition or other means
  - "P" document published prior to the international filing date but later than the priority date claimed

* "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

* "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

* "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

* "R" document member of the same patent family

Date of the actual completion of the international search: 18 July 2006

Date of mailing of the International search report: 04/08/2006

Name and mailing address of the ISA:
European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk
Tel. (+31-70) 940-2040, Tx. 31 651 epo nl, Fax (+31-70) 940-3016

Authorized officer: Sindel, U
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Form PCT/ISA/210 (continuation of second sheet) (April 2003)
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Continuation of Box II.1

Although claims 34–37 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the composition.

Continuation of Box II.2

Claims Nos.: 33

Claim 33 is missing.
INTERNATIONAL SEARCH REPORT

**Box II  Observations where certain claims were found unsearchable** (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. **X** Claims Nos.:  
   - although claims 34–37 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the composition.

2. **X** Claims Nos.: 33  
   - because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
     - see FURTHER INFORMATION sheet PCT/ISA/210

3.  
   - claims Nos.:  
     - because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box III  Observations where unity of invention is lacking** (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1.   
   - as all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2.   
   - as all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3.   
   - as only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4.   
   - no required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  

   
   
   **Remark on Protest**
   
   - the additional search fees were accompanied by the applicant's protest.
   - no protest accompanied the payment of additional search fees.
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