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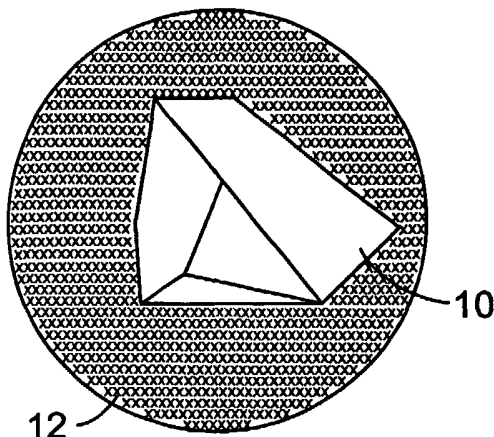
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(54) Title: SPRAY DRYING OF AN ALCOHOLIC AQUEOUS SOLUTION FOR THE MANUFACTURE OF A WATER-INSOLUBLE ACTIVE AGENT MICROPARTICLE WITH A PARTIAL OR COMPLETE AMINO ACID AND/OR PHOSPHOLIPID COAT



(57) Abstract: A method of preparing a pharmaceutical formulation comprises providing a solution comprising a first solvent, a second solvent, an active agent, and an excipient. The second solvent is less polar than the first solvent and the excipient is more soluble in water than the active agent. The first and second solvents are removed from the solution to produce particles comprising the active agent and the excipient. In one version, the excipient comprises an amino acid and/or a phospholipid. A pharmaceutical formulation made by a version of the invention comprises particles comprising an active agent and an excipient which at least partially encapsulates the active agent, wherein the excipient is more soluble in water than the active agent. An alcoholic aqueous solution containing a drug, which is preferably water insoluble, an amino acid and/or a phospholipid is spray dried.

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# INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 A61K9/00 A61K9/50 A61K31/00 A61K9/16

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)  
 IPC 7 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, PAJ, WPI Data, BIOSIS, EMBASE, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Further documents are listed in the continuation of box C.  Patent family members are listed in annex.

\* Special categories of cited documents:

<p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*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)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p>	<p>*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</p> <p>*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</p> <p>*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.</p> <p>*&amp;* document member of the same patent family</p>
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Date of the actual completion of the international search	Date of mailing of the international search report
10 December 2004	22/12/2004

Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Luangkhot, N
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