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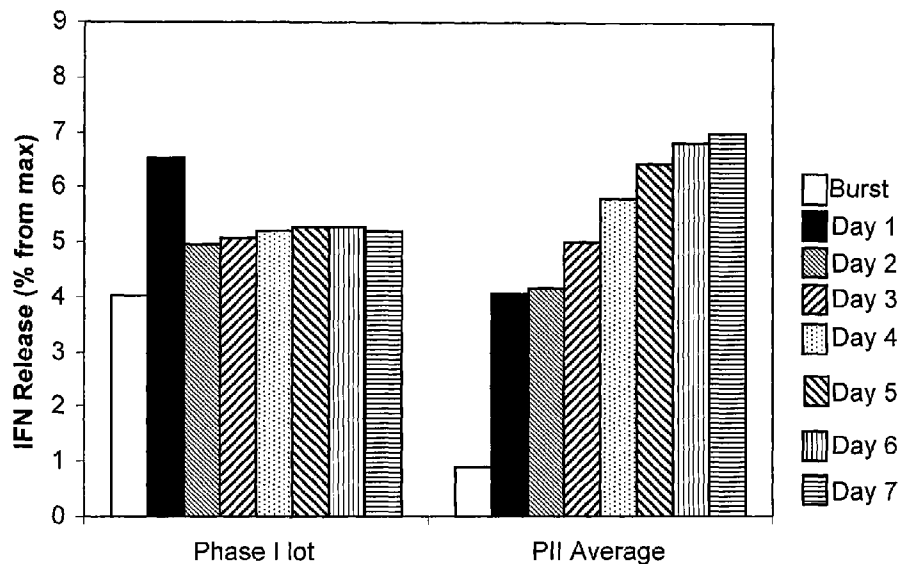
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[Continued on next page]

(54) Title: CONTROLLED RELEASE INTERFERON DRUG PRODUCTS AND TREATMENT OF HCV INFECTION USING SAME

Figure 14B



(57) Abstract: The invention relates to controlled release formulations comprising a microparticle comprising a biodegradable polymer and one or more interferon compounds and methods of using the formulations.

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - A61K 31/74; A61K 38/21; A61K 9/14 (2008.04)
 USPC - 424/78.17; 424/85.4; 424/489
 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)
 USPC - 424/78.17; 424/85.4; 424/489

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 USPC - 424/78.17, 85.4, 85.5, 85.6, 85.7, 489, 497; 514/2, 894


Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 PubWEST (PGPB,USPT,USOC,EPAB,JPAB); PubMed; Google
 Search Terms Used: microparticle, microsphere, biodegradable, polymer, interferon, ribavirin, encapsulated, dispersed, sigmoidal, PEGT, PBT, Cmax, terephthalate, polyetherester, controlled, sustained, hepatitis C, helicase inhibitor

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,980,948 A (Goedemoed et al.) 09 November 1999 (09.11.1999), abstract, Fig. 8 col 1, ln 43-47, col 2, ln 40-49, col 9, ln 50, col 13, ln 32-46, col 22, ln 65 to col 23, ln 2, col 24, ln 8-12	1-8 ----- 9-64, 87, 104
X --- Y	WO 2006/085747 A1 (Bechet et al.) 17 August 2006 (17.08.2006), pg 3, ln 7-10 and 24-25, pg 8, ln 9-13 and 27-28, pg 10, ln 15-18, pg 12, ln 28-29, pg 13, ln 27 to pg 14, ln 6, pg 16, ln 7-14, pg 21, ln 7-9	65-72, 88-93 ----- 9-64, 73-87, 94-104
Y	US 2007/0021434 A1 (Boyd et al.) 25 January 2007 (25.01.2007), para [0169]-[0177], [0190]	30-42, 53-58, 73-86, 94-104

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent but published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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	

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 08/71191

Box No. 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. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
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:

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 No. 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:

Group I: Claims 1-19, directed to a controlled release formulation comprising a microparticle comprising a biodegradable polymer and one or more interferon compounds.

Group II: Claims 20-104, directed to a method of preventing adverse events induced by or associated with administration of interferon to a subject infected with hepatitis C, or of treating acute or chronic hepatitis C, comprising administering a controlled release formulation comprising a microparticle comprising a biodegradable polymer and one or more interferon compounds.

The common technical feature is a controlled release formulation comprising a microparticle comprising a biodegradable polymer and one or more interferon compounds. However, this feature is taught by WO 2006/085747 A1 to Bechet et al. (pg 4, ln 4-13). The compositions of Group I do not include the inventive concept of administering said compositions to a subject, as required by the methods of Group II.

Thus, Groups I and II do not share a special technical feature as defined by PCT Rule 13.2.

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 additional fees, this Authority did not invite payment of additional fees.
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 and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.