(51) International Patent Classification:
A61K 9/32 (2006.01)  A61K 38/22 (2006.01)
A61K 9/20 (2006.01)  A61K 31/195 (2006.01)
A61K 47/30 (2006.01)  A61P 35/00 (2006.01)

(21) International Application Number:
PCT/US2010/038700

(22) International Filing Date:
15 June 2010 (15.06.2010)

(25) Filing Language:
English

(26) Publication Language:
English

(30) Priority Data:
61/187,799  17 June 2009 (17.06.2009) US
61/219,993  24 June 2009 (24.06.2009) US
61/222,289  1 July 2009 (01.07.2009) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:
US 61/222,289 (CON)
Filed on 1 July 2009 (01.07.2009) US
US 61/187,799 (CON)
Filed on 17 June 2009 (17.06.2009) US
US 61/237,178 (CON)
Filed on 26 August 2009 (26.08.2009) US
US 61/219,993 (CON)
Filed on 24 June 2009 (24.06.2009) US
US 61/327,909 (CON)
Filed on 26 April 2010 (26.04.2010) US

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(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,

[Continued on next page]

(54) Title: NANOPARTICLE AND POLYMER FORMULATIONS FOR THYROID HORMONE, ANALOGS, ANTAGONISTS, AND FORMULATIONS AND USES THEREOF

(57) Abstract: Disclosed are methods of treating subjects having conditions related to angiogenesis including administering an effective amount of a polymeric nanoparticle form of thyroid hormone agonist, partial agonist or an antagonist thereof, to promote or inhibit angiogenesis in the subject. Nanoparticle forms of thyroid hormone or thyroid hormone analogs as well as uses thereof are also disclosed.
Published:
— with international search report (Art. 21(3))
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(b))

(88) Date of publication of the international search report: 5 May 2011

(15) Information about Correction:
Previous Correction:
see Notice of 24 March 2011
A. CLASSIFICATION OF SUBJECT MATTER

A61K 9/32(2006.01)i, A61K 9/20(2006.01)i, A61K 47/30(2006.01)i, A61K 38/22(2006.01)i, A61K 31/195(2006.01)i, A61P 35/00(2006.01)i

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 9/32; A61P 35/00; A61K 31/192; A61K 31/198; A61K 47/48

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal), GOOGLE, PUBMED
Keywords: thyroid hormone, nanoparticle, alpha-v-beta3, Tetrac, PVA, PEG

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<td>A</td>
<td>BERGH, J.J. et al., “Integrin alpha-v-beta3 contains a cell surface receptor site for thyroid hormone that is linked to activation of mitogen-activated protein kinase and induction of angiogenesis” 2005 Endocrinology 146(7): 2864-2871. See the whole document.</td>
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Further documents are listed in the continuation of Box C. See patent family annex.

Date of the actual completion of the international search
21 MARCH 2011 (21.03.2011)

Name and mailing address of the ISA/KR
Korean Intellectual Property Office Government Complex-Daejeon, 139 Seouns-ro, Seogu, Daejeon 302-701, Republic of Korea
Facsimile No. 82-42-472-7140

Date of mailing of the international search report
21 MARCH 2011 (21.03.2011)

Authorized officer
HAN, Jung Hee
Telephone No. 82-42-481-5604

Form PCT/ISA/210 (second sheet) (July 2009)
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.: 25-41
   because they relate to subject matter not required to be searched by this Authority, namely:
   The subject-matter of claims 25-41 pertain to the method for treatment of the human body by therapy, as well as diagnostic methods, and thus relate to a subject matter which this International Searching Authority is not required to search under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT.

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).

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 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.
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