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- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))

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28 March 2013

(15) Information about Correction:
see Notice of 28 March 2013

(54) Title: COMPOSITIONS AND METHODS FOR THE THERAPY AND DIAGNOSIS OF CANCER

(57) Abstract: Compositions and methods for the therapy and diagnosis of cancer are disclosed. For example, illustrative compositions comprise one or more cancer- associated antibodies, polypeptides, polynucleotides, antigen presenting cells, and the like. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly cancer.



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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2012/043080

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K38/20 A61K38/19 G01N33/50 A61K39/395
ADD.

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 G01N

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 practicable, search terms used)

EPO-Internal, WPI Data, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/187122 A1 (SIMS JOHN E [US]) 12 December 2002 (2002-12-12) page 17, left-hand column, paragraph 202 - right-hand column, paragraph 205 -----	2
X	US 5 945 310 A (YOUNG PETER RONALD [US] ET AL) 31 August 1999 (1999-08-31) column 14, last paragraph - column 15, line 20 -----	2
X	WO 02/00690 A2 (GENENTECH INC [US]; BAKER KEVIN P [US]; FERRARA NAPOLEONE [US]; GERBER) 3 January 2002 (2002-01-03) claims 20, 23, 27, 29, 30; sequence 316 ----- -/-	1-30

☒ Further documents are listed in the continuation of Box C.

☒ 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 application or patent 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

"&" document member of the same patent family

Date of the actual completion of the international search

20 July 2012

Date of mailing of the international search report

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Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2012/043080

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	A. JOHNSTON ET AL: "IL-1F5, -F6, -F8, and -F9: A Novel IL-1 Family Signaling System That Is Active in Psoriasis and Promotes Keratinocyte Antimicrobial Peptide Expression", THE JOURNAL OF IMMUNOLOGY, vol. 186, no. 4, 17 January 2011 (2011-01-17), pages 2613-2622, XP055033275, ISSN: 0022-1767, DOI: 10.4049/jimmunol.1003162 the whole document	1-30
A	MULERO J J ET AL: "Organization of the human interleukin -1 receptor antagonist gene IL1HY1", IMMUNOGENETICS, SPRINGER VERLAG, BERLIN, DE, vol. 51, 1 May 2000 (2000-05-01), pages 425-428, XP002217818, ISSN: 0093-7711, DOI: 10.1007/S002510050640 the whole document	1-30
A	WO 2007/034465 A2 (TRINITY COLLEGE DUBLIN [IE]; MILLS KINGSTON [IE]; LYNCH MARINA [IE]; C) 29 March 2007 (2007-03-29) paragraph [0188] paragraph [0219]	1-30
A,P	HAL BLUMBERG ET AL: "Opposing activities of two novel members of the IL-1 ligand family regulate skin inflammation", THE JOURNAL OF EXPERIMENTAL MEDICINE, ROCKEFELLER UNIVERSITY PRESS, US, vol. 204, no. 11, 1 January 2014 (2014-01-01), pages 20071029-2603, XP007911379, ISSN: 0022-1007	1-30

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/043080

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:

see additional sheet

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 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.:

1-30(partially)

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-30(partially)

Use of IL1F5 (=IL36RN, IL-1-delta, IL1HY1, IL-36RA, FIL1 delta, IL1RP3, PSORP, MGC29840, IL-1RP) protein (according to SeqID 1) , polynucleotides, complementary oligonucleotides or Ab thereto for use in the treatment and diagnosis of cancer

2-6. claims: 1-30(partially)

Use of CCBP2 (SeqID 2) / IL1R2 (SeqID 3) / IL1RAPL1 (SeqID 4) / IL18BP (SeqID 5) / CLEC2B (SeqID 6) protein, polynucleotides, complementary oligonucleotides or Ab thereto for use in the treatment and diagnosis of cancer.

7-9. claims: 1-30(partially)

Use of Serpin I1 (SeqID 9) / Serpin A4 (SeqID 18) / Serpin B5 (SeqID 19) protein, polynucleotides, complementary oligonucleotides or Ab thereto for use in the treatment and diagnosis of cancer.

10. claims: 1-30(partially)

Use of IL1RAP isoform 1 (SeqID 10) or 2 (SeqID 11) protein, polynucleotides, complementary oligonucleotides or Ab thereto for use in the treatment and diagnosis of cancer.

11-16. claims: 1-30(partially)

Use of GPR1 (SeqID 12) / GPR4 (SeqID 13) / GPR15 (SeqID 14) / GPR32 (SeqID 15) / GPR34 (SeqID 16) / GPR183 (SeqID 17) protein, polynucleotides, complementary oligonucleotides or Ab thereto for use in the treatment and diagnosis of cancer.

17. claims: 1-30(partially)

Use of Sema 4B (SeqID 20) or Sema 4D (SeqID 21) protein, polynucleotides, complementary oligonucleotides or Ab thereto for use in the treatment and diagnosis of cancer.

18-20. claims: 1-30(partially)

Use of CCL14 (SeqID 22) / NKTR (SeqID 23) / SFTPD (SeqID 24) protein, polynucleotides, complementary oligonucleotides or Ab thereto for use in the treatment and diagnosis of

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

cancer.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/043080

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002187122 A1	12-12-2002	US 2002187122 A1	12-12-2002
		US 2005058625 A1	17-03-2005

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WO 2007034465 A2	29-03-2007	NONE	
