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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

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(h))*

— *with sequence listing part of description (Rule 5.2(a))*

[Continued on next page]

(54) Title: MONOCLONAL ANTIBODIES FOR USE IN DIAGNOSIS AND THERAPY OF CANCERS AND AUTOMIMMUNE DISEASE

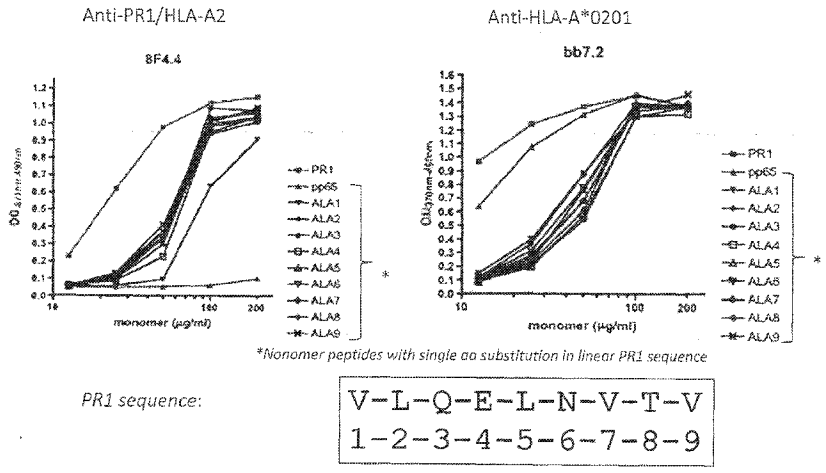


FIG. 1

(57) Abstract: The specification describes the sequences for antibodies that recognize the HLA-A2- restricted peptide PR-1 in the context of HLA presentation on the surface of cancer cells. Use of these antibodies in the diagnosis and treatment of cancer and immune-related diseases are also provided.

WO 2014/011489 A3

WO 2014/011489 A3

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13 March 2014

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US13/49368

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A61K 39/395, 39/00 (2013.01)
USPC - 424/141.1, 130.1; 435/6.14
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(8): A61K 39/395, 39/00 (2013.01)
USPC: 424/141.1, 130.1; 435/6.14, 6.1, 4, 91.1, 89, 85, 84, 72, 41; 530/387.1, 386, 380, 350

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)
MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); Proquest Dialog (Pharmaceutical & Biomedical); Google/Google Scholar; Pubmed/Pubmed central/NCBI Blast; UniProt; Search Terms Used: antibody, immunoglobulin, Human Leukocyte Antigen, HLA-A2, HLA-A*02

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2011/0293620 A1 (MOLLDREM, JJ et al.) December 01, 2011; paragraph [0010]; Claim 1	1-61
A	US 2010/0003254 A1 (HATTORI, K et al.) January 07, 2010; abstract; paragraphs [0017], [0251], [0254]	1-61
A	US 2006/0167230 A1 (KOGA, T et al.) July 27, 2006; abstract; paragraphs [0011], [0044], [0067]	1-61
A	WO 2009/073163 A1 (GELBER, C et al.) June 11, 2009; page 67, line 17 to page 68, line 4	1-61

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

* 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	Date of mailing of the international search report
26 December 2013 (26.12.2013)	13 JAN 2014
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US13/49368

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.c of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of a sequence listing filed or furnished:

   a. (means)

   ☐ on paper

   ☒ in electronic form

   b. (time)

   ☒ in the international application as filed

   ☐ together with the international application in electronic form

   ☐ subsequently to this Authority for the purposes of search

2. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments: