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- (74) **Agent:** J A KEMP; 14 South Square, Gray's Inn, London Greater London WC1R 5JJ (GB).
- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,

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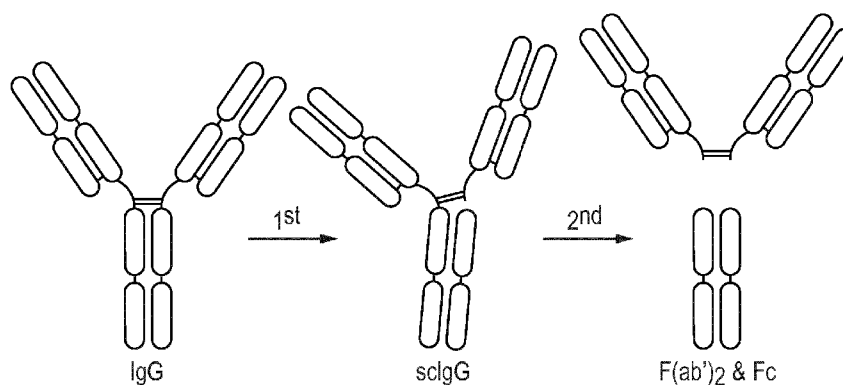
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- with sequence listing part of description (Rule 5.2(a))

(88) **Date of publication of the international search report:**
14 April 2016

(54) **Title:** METHOD

Fig. 1



(57) **Abstract:** The invention relates to a method for improving the benefit of a therapy or a therapeutic agent to a subject. The method comprises administering to the subject an agent which reduces Fc receptor binding of serum IgG molecules in the subject; and subsequently administering said therapy or said therapeutic agent to the subject. The invention also relates to a method for reducing the effect of pathogenic autoantibodies in a subject, the method comprising (a) administering to the subject an agent which reduces Fc receptor binding of serum IgG molecules in the subject and optionally (b) subsequently subjecting the subject to a treatment which removes endogenous autoantibodies. The invention also relates to a kit for carrying out a method of the invention.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2015/065895

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61K39/395 C12N9/24
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 C12N C07K

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, BIOSIS, EMBASE, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2013/110946 A1 (CRISPIN MATTHEW DAVID MAX [GB]; SCANLAN CHRISTOPHER NEIL [GB]) 1 August 2013 (2013-08-01)	1-9, 13-18
Y	example 3; claims 1-20	10-12
X	----- KAVITHA BARUAH ET AL: "Selective Deactivation of Serum IgG: A General Strategy for the Enhancement of Monoclonal Antibody Receptor Interactions", JOURNAL OF MOLECULAR BIOLOGY, ACADEMIC PRESS, UNITED KINGDOM, vol. 420, no. 1, 3 April 2012 (2012-04-03) , pages 1-7, XP028514772, ISSN: 0022-2836, DOI: 10.1016/J.JMB.2012.04.002 [retrieved on 2012-04-05]	1-9, 13-18
Y	abstract ----- -/-	10-12



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

15 February 2016

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01/03/2016

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2015/065895

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2008/071418 A2 (HANSA MEDICAL AB; BJORCK LARS [SE]; COLLIN MATTIAS [SE]; OLSEN ARNE [S] 19 June 2008 (2008-06-19) page 36, last paragraph -----	10-12
X	KUTTY SELVA NANDAKUMAR ET AL: "Blocking of experimental arthritis by cleavage of IgG antibodies in vivo", ARTHRITIS & RHEUMATISM, vol. 56, no. 10, 1 January 2007 (2007-01-01), pages 3253-3260, XP055107646, ISSN: 0004-3591, DOI: 10.1002/art.22930 -----	1-9, 13-18
Y	page 3258 - page 3259; figures 1-6 abstract -----	10-12, 22,23
A	ALBERT HEIKE ET AL: "In vivo enzymatic modulation of IgG glycosylation inhibits autoimmune disease in an IgG subclass-dependent manner", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, NATIONAL ACADEMY OF SCIENCES, US, vol. 105, no. 39, 30 September 2008 (2008-09-30), pages 15005-15009, XP002569095, ISSN: 0027-8424, DOI: 10.1073/PNAS.0808248105 [retrieved on 2008-09-24] abstract -----	1-18
X	Jenny Johansson Söderberg: "The streptococcal IgG degrading enzyme IdeS -studies on host-pathogen interactions", 1 January 2012 (2012-01-01), XP055248265, Retrieved from the Internet: URL:https://www.diva-portal.org/smash/get/ diva2:513947/FULLTEXT01.pdf [retrieved on 2016-02-08] figure 4 -----	19-23
X	WO 2013/037824 A1 (GENOVIS AB [SE]; NIZET VICTOR [US]; HOLLANDS ANDREW [US]; COLLIN MATTI) 21 March 2013 (2013-03-21) page 27, [2], pages 30-34; claim 22 -----	19-23
X	WO 2009/033670 A2 (GENOVIS AB [SE]; ALLHORN MARIA [SE]; OLIN ANDERS [SE]; NIMMERJAHN FALK) 19 March 2009 (2009-03-19) claims 16, 18, 20 -----	19-23
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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2015/065895

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Anonymous: "Structural Biochemistry/Proteins/Enzyme-Linked Immunoabsorbent Assay (ELISA) - Wikibooks, open books for an open world", 29 October 2012 (2012-10-29), XP055248514, Retrieved from the Internet: URL: https://en.wikibooks.org/wiki/Structural_Biochemistry/Proteins/Enzyme-Linked_Immunoabsorbent_Assay_(ELISA) [retrieved on 2016-02-09]	19-21
Y	the whole document -----	22,23

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2015/065895

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2013110946	A1	01-08-2013	CN 104519911 A 15-04-2015
		EP 2806892 A1 03-12-2014	
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		WO 2009033670 A2 19-03-2009	

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2015/065895

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:
- a. ☐ forming part of the international application as filed:
- ☐ in the form of an Annex C/ST.25 text file.
- ☐ on paper or in the form of an image file.
- b. ☐ furnished together with the international application under PCT Rule 13~~ter~~.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
- c. ☒ furnished subsequent to the international filing date for the purposes of international search only:
- ☒ in the form of an Annex C/ST.25 text file (Rule 13~~ter~~.1(a)).
- ☐ on paper or in the form of an image file (Rule 13~~ter~~.1(b) and Administrative Instructions, Section 713).
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 forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2015/065895

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.:

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: 1-18

Method for improving the benefit to a subject of a therapy or therapeutic agent.

2. claims: 19-23

Method for assessing the quantity of intact IgG.
