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(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
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(54) Immune response assessment method

(57) The present invention includes compositions and methods for identifying T-cell epitopes independent of the subject's HLS type by simultaneously analyzing

the culture for multiple parameters of immune reactivity to identify at least one epitope wherein the epitopes that elicit immune reactivity of interest in the subset are identified as targeting agents for the subset.

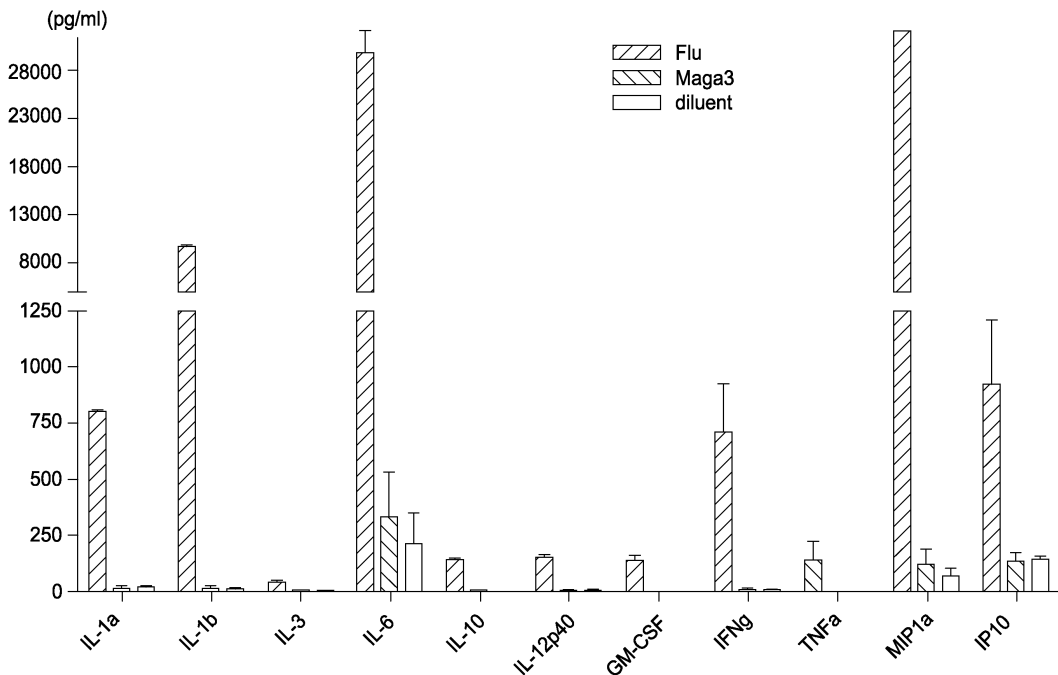


FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 10 17 7689

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X	WO 99/36568 A (KERN FLORIAN [DE]; VOLK HANS DIETER [DE]; WALDEN PETER [DE]; SCHEFFOLD) 22 July 1999 (1999-07-22) * abstract * * claim 1 * * examples 1,2 *	1,2,14	
X	HASELDEN BRIGITTE M ET AL: "Proliferation and release of IL-5 and IFN-gamma by peripheral blood mononuclear cells from cat-allergic asthmatics and rhinitics, non-cat-allergic asthmatics, and normal controls to peptides derived from Fel d 1 chain 1", JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, vol. 108, no. 3, September 2001 (2001-09), pages 349-356, XP002479547, ISSN: 0091-6749 * the whole document * * page 350 * * figure 3 *	1,2,14	
-----			TECHNICAL FIELDS SEARCHED (IPC)
-----			G01N

-/--			
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 May 2011	Examiner Jenkins, Gareth
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document	

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EPO FORM 1503 03 82 (P04/C01)



EUROPEAN SEARCH REPORT

Application Number
EP 10 17 7689

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	HOLEN E ET AL: "Novel B and T cell epitopes of chicken ovomucoid (Gal d 1) induce T cell secretion of IL-6, IL-13, and IFN-gamma", CLINICAL AND EXPERIMENTAL ALLERGY, vol. 31, no. 6, June 2001 (2001-06), pages 952-964, XP002479548, ISSN: 0954-7894 * the whole document * * figure 1 * * table 4 *	1,2,14	
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 May 2011	Examiner Jenkins, Gareth
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

EPC FORM 1503 03.82 (P04001)



EUROPEAN SEARCH REPORT

Application Number
EP 10 17 7689

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	<p>LI ET AL: "Persistent protective effect of heat-killed Escherichia coli producing 'engineered,' recombinant peanut proteins in a murine model of peanut allergy", JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, MOSBY, INC, US LNKD- DOI:10.1067/MAI.2003.1622, vol. 112, no. 1, 1 July 2003 (2003-07-01), pages 159-167, XP005687264, ISSN: 0091-6749 * the whole document * * abstract * * page 161, column 2 *</p>	1,2	
X	<p>DURINOVIC-BELLO I ET AL: "Relationship between T and B cell responses to proinsulin in human type 1 diabetes", ANNALS OF THE NEW YORK ACADEMY OF SCIENCES 2003 US LNKD- DOI:10.1196/ANNALS.1288.045, vol. 1005, 2003, pages 288-294, XP002638453, ISSN: 0077-8923 * the whole document * * pages 290, 293 *</p>	10	
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		24 May 2011	Jenkins, Gareth
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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EPO FORM 1503 03-82 (P04C01)



EUROPEAN SEARCH REPORT

Application Number
EP 10 17 7689

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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X	<p>TATSUMI TOMOHIDE ET AL: "Disease stage variation in CD4+ and CD8+ T-cell reactivity to the receptor tyrosine kinase Epha2 in patients with renal cell carcinoma", CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER REREARCH, US, vol. 63, no. 15, 1 August 2003 (2003-08-01), pages 4481-4489, XP002309750, ISSN: 0008-5472 * the whole document * * page 4482 - page 4483 * * page 4487 *</p> <p style="text-align: center;">-----</p> <p style="text-align: right;">-/--</p>	10	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 May 2011	Examiner Jenkins, Gareth
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p>		<p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>	

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EPO FORM 1505 03 82 (P04C01)



EUROPEAN SEARCH REPORT

Application Number
EP 10 17 7689

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	<p>SINGH V K ET AL: "The paradigm of Th1 and Th2 cytokines: Its relevance to autoimmunity and allergy", IMMUNOLOGIC RESEARCH, vol. 20, no. 2, November 1999 (1999-11), pages 147-161, XP002638454, ISSN: 0257-277X</p> <p>* the whole document *</p> <p>* table 1 *</p> <p>* page 150 - page 151 *</p> <p>-----</p>	1,2,10	
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 May 2011	Examiner Jenkins, Gareth
<p>3</p> <p>EPO FORM 1503 03-02 (P04C01)</p> <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p>		<p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>.....</p> <p>& : member of the same patent family, corresponding document</p>	



Application Number

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- 1, 2, 10, 14
- None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
- The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 10 17 7689

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1, 2

Independent claim 1.

2-14. claims: 3-20

The thirteen other independent claims, respectively.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 17 7689

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-05-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		AU 2003244856 A1	23-01-2004
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专利名称(译)	免疫反应评估方法		
公开(公告)号	EP2253956A3	公开(公告)日	2011-07-06
申请号	EP2010177689	申请日	2005-05-24
[标]申请(专利权)人(译)	贝勒研究协会		
申请(专利权)人(译)	BAYLOR研究所		
当前申请(专利权)人(译)	BAYLOR研究所		
[标]发明人	BANCHEREAU JACQUES CONNOLLY JOHN E PALUCKA ANNA KAROLINA UENO HIDEKI		
发明人	BANCHEREAU, JACQUES CONNOLLY, JOHN E. PALUCKA, ANNA KAROLINA UENO, HIDEKI		
IPC分类号	G01N33/53 G01N33/566 G01N33/564 G01N33/531 G01N33/00 A61K39/00 A61K38/00 G01N33/68 G01N33/50 A61K49/00 C12N15/10 C40B30/02 C40B30/04		
CPC分类号	A61P19/02 A61P29/00 C12N15/1034 C40B30/04 C40B40/10 G01N33/5023 G01N33/505 G01N33 /6863 G01N33/6878 G01N2800/24 G01N2800/52		
优先权	60/573912 2004-05-24 US		
其他公开文献	EP2253956A2		
外部链接	Espacenet		

摘要(译)

本发明包括通过同时分析免疫反应性的多个参数的培养物来鉴定独立于受试者HLS类型的T细胞表位的组合物和方法，以鉴定至少一个表位，其中识别在该子集中引发目标免疫反应性的表位。作为子集的目标代理。

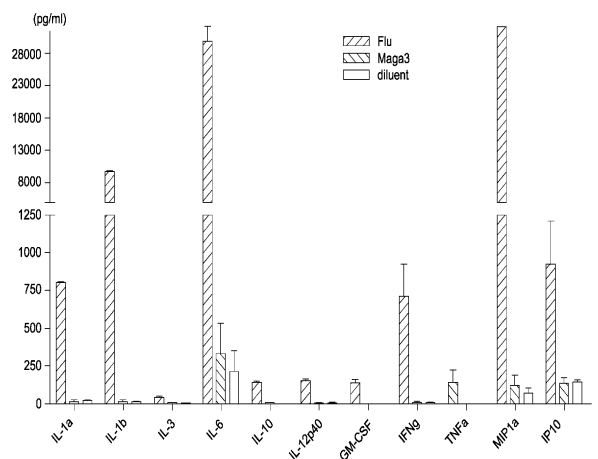


FIG. 1