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(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
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(54) **Method and compositions for specifically detecting physiologically acceptable polymer molecules**

(57) The present invention relates to a method for determining the amount of a physiologically acceptable polymer molecule bound to a protein, an antibody or other composition being capable of specifically binding to a

physiologically acceptable polymer molecule, and a kit containing said antibody or composition.

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PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of subsequent proceedings, as the European search report

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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	CHENG TIAN-LU ET AL: "Monoclonal antibody-based quantitation of poly(ethylene glycol-derivatized proteins, liposomes, and nanoparticles", BIOCONJUGATE CHEMISTRY, vol. 16, no. 5, September 2005 (2005-09), pages 1225-1231, XP002522360, ISSN: 1043-1802 * abstract * * pages 1226-28 *	1-25	INV. G01N33/53 G01N33/68
X	WUNDERLICH DAVID A ET AL: "Generation and characterization of a monoclonal IgG antibody to polyethylene glycol", HYBRIDOMA, vol. 26, no. 3, June 2007 (2007-06), pages 168-172, XP002522361, ISSN: 1554-0014 * abstract * * figure 1a *	1-25	
			TECHNICAL FIELDS SEARCHED (IPC)
			G01N
INCOMPLETE SEARCH			
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.			
Claims searched completely :			
Claims searched incompletely :			
Claims not searched :			
Reason for the limitation of the search: see sheet C			
Place of search The Hague		Date of completion of the search 21 February 2012	Examiner Lunter, Pim
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 (P04E07)



PARTIAL EUROPEAN SEARCH REPORT

Application Number
EP 11 17 7227

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)	
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim		
X	<p>TSAI NU-MAN ET AL: "Sensitive measurement of polyethylene glycol-modified proteins", BIOTECHNIQUES, vol. 30, no. 2, February 2001 (2001-02), pages 396-402, XP002522362, ISSN: 0736-6205 * abstract * * page 398 *</p> <p style="text-align: center;">-----</p>	1-25		
X	<p>US 2004/014156 A1 (ROFFLER STEVE [TW] ET AL) 22 January 2004 (2004-01-22) * page 2, paragraphs 116,117; claim 13 * * figures 2a,b *</p> <p style="text-align: center;">-----</p>	1-25		
X	<p>WO 02/094853 A (SHEARWATER CORP [US]; ROBERTS MICHAEL JAMES [US]; GREEN MARY ELIZABETH) 28 November 2002 (2002-11-28) * pages 11-12 *</p> <p style="text-align: center;">-----</p>	23-25		TECHNICAL FIELDS SEARCHED (IPC)
X	<p>RICHTER A W ET AL: "ANTIBODIES AGAINST POLYETHYLENE GLYCOL PRODUCED IN ANIMALS BY IMMUNIZATION WITH MONOMETHOXY POLYETHYLENE GLYCOL MODIFIED PROTEINS", INTERNATIONAL ARCHIVES OF ALLERGY AND APPLIED IMMUNOLOGY, BASEL, CH, vol. 70, no. 2, 1 January 1983 (1983-01-01), pages 124-131, XP008030198, ISSN: 0020-5915 * page 128 *</p> <p style="text-align: center;">-----</p>	23-25		

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EPO FORM 1503 03.02 (P04C10)

**INCOMPLETE SEARCH
SHEET C**Application Number
EP 11 17 7227

Claim(s) completely searchable:
1-25(partially)

Claim(s) not searched:
1-25(partially)

Reason for the limitation of the search:

Independent claim 1 is unclear due to the phrase "physiologically acceptable polymer molecules". This formulation, even when limited by the interpretation given on par. 65 could cover almost any biological or synthetic macromolecule. However, the body of the description only provides support and disclosure for polyethylene oxide, as the generation of specific reagents for other compounds is not disclosed. Provision of reagents for other compounds mentioned in the description is not obvious to the skilled person since some of said compounds are known to be non-immunogenic. Generation of said reagents would thus require experimentation beyond routine skills, which would place the skilled person before an undue burden. Thus, the subject-matter of claims 1-25 lacks clarity, disclosure and support.

The term "physiologically acceptable polymer molecule" in present claims 1-25 covers an extremely large number of possible compounds. Support and disclosure in the sense of Article 6 and 5 PCT is to be found however for only a very small proportion of the compounds claimed, namely polyethylene glycol (PEG), see the examples. The non-compliance with the substantive provisions is to such an extent, that the search was performed taking into consideration the non-compliance in determining the extent of the search of claims 1-25 (PCT Guidelines 9.19 and 9.23). The search of claims 1-25 was restricted to those claimed methods which appear to be supported, i.e. those directed to PEG.



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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:
- 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 11 17 7227

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: 1-25(partially)

method for determining the number of physiologically
acceptable polymer molecules bound to a protein or protein
complex

2. claims: 23-25(partially)

method for determining the number of physiologically
acceptable polymer molecules free in solution

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

EP 11 17 7227

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.

21-02-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004014156 A1	22-01-2004	NONE	

WO 02094853 A	28-11-2002	AU 2002259281 A1	03-12-2002
		WO 02094853 A2	28-11-2002


EPO FORM P0458

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	用于特异性检测生理上可接受的聚合物分子的方法和组合物		
公开(公告)号	EP2416157A3	公开(公告)日	2012-03-28
申请号	EP2011177227	申请日	2008-12-23
[标]申请(专利权)人(译)	巴克斯特国际公司 巴克斯特医疗保健股份有限公司		
申请(专利权)人(译)	百特国际有限公司. 百特医疗用品SA		
当前申请(专利权)人(译)	百特国际有限公司. 百特医疗用品SA		
[标]发明人	TURECEK PETER SIEKMANN JURGEN WEBER ALFRED GRITSCH HERBERT VARADI KATALIN VEJDA SUSANNE		
发明人	TURECEK, PETER SIEKMANN, JÜRGEN WEBER, ALFRED GRITSCH, HERBERT VARADI, KATALIN VEJDA, SUSANNE		
IPC分类号	G01N33/53 G01N33/68		
CPC分类号	G01N33/86 G01N33/5308 G01N33/564 G01N2430/60		
优先权	61/009327 2007-12-27 US		
其他公开文献	EP2416157B1 EP2416157A2		
外部链接	Espacenet		

摘要(译)

本发明涉及测定与蛋白质结合的生理学上可接受的聚合物分子的量的方法，能够特异性结合生理学上可接受的聚合物分子的抗体或其他组合物，以及含有所述抗体或组合物的试剂盒。



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PARTIAL EUROPEAN SEARCH REPORT
under Rule 62a and/or 62 of the European Patent Convention.
This report shall be considered, for the purpose of subsequent proceedings, as the European search report

Application Number: EP 11 17 7227

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)		
X	CHENG TIAN-LU ET AL: "Monoclonal antibody-based quantitation of poly(ethylene glycol)-derivatized proteins, liposomes, and nanoparticles". BIOCONJUGATE CHEMISTRY, vol. 16, no. 5, September 2005 (2005-09), pages 1225-1231. XP002522360. ISSN: 1042-1502 * abstract *	1-25	INV. G01N33/53 G01N33/68		
X	WUNDERLICH DAVID A ET AL: "Generation and characterization of a monoclonal IgG antibody to polyethylene glycol". HYBRIDOMA, vol. 26, no. 3, June 2007 (2007-06), pages 168-172. XP002522361. ISSN: 1554-0014 * abstract *	1-25			
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INCOMPLETE SEARCH					
<small>The search service considers the present application, or one or more of its claims, does not comply with the EPC so that only a partial search (R 62a, 62b) has been carried out.</small>					
Claims searched completely:					
Claims not searched:					
Reason for the limitation of the search: see sheet C					
Place of search		Date of completion of the search			
The Hague		21 February 2012			
SEARCHER		Lunter, Pim			
<table style="width: 100%; font-size: small;"> <tr> <td style="width: 50%;"> CATEGORY OF OFFER DOCUMENTS <input type="checkbox"/> particularly relevant if taken alone <input type="checkbox"/> particularly relevant if considered with another document <input type="checkbox"/> non-relevant but complementary <input type="checkbox"/> inter-mediate document </td> <td style="width: 50%;"> <input type="checkbox"/> heavy to peruse underlying the invention <input type="checkbox"/> other patent document, but published on, or after the filing date of the application <input type="checkbox"/> document cited for other reasons <input type="checkbox"/> member of the same patent family, corresponding document </td> </tr> </table>				CATEGORY OF OFFER DOCUMENTS <input type="checkbox"/> particularly relevant if taken alone <input type="checkbox"/> particularly relevant if considered with another document <input type="checkbox"/> non-relevant but complementary <input type="checkbox"/> inter-mediate document	<input type="checkbox"/> heavy to peruse underlying the invention <input type="checkbox"/> other patent document, but published on, or after the filing date of the application <input type="checkbox"/> document cited for other reasons <input type="checkbox"/> member of the same patent family, corresponding document
CATEGORY OF OFFER DOCUMENTS <input type="checkbox"/> particularly relevant if taken alone <input type="checkbox"/> particularly relevant if considered with another document <input type="checkbox"/> non-relevant but complementary <input type="checkbox"/> inter-mediate document	<input type="checkbox"/> heavy to peruse underlying the invention <input type="checkbox"/> other patent document, but published on, or after the filing date of the application <input type="checkbox"/> document cited for other reasons <input type="checkbox"/> member of the same patent family, corresponding document				