



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	WEIGL B H ET AL: "Microfluidic diffusion based separation and detection" SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,, US, vol. 283, 15 January 1999 (1999-01-15), pages 346-347, XP002197214 ISSN: 0036-8075 * page 347, last paragraph; figures 1,2 *	1-10	G01N33/558 G01N33/557 G01N33/543 G01N15/06 G01N33/00 G01N33/48 G01N21/00 G01N21/29 G01N21/41
X	WO 97/39338 A (BRODY JAMES P ; HOLL MARK R (US); SCHUTTE DAVID (US); WU CAICAI (US);) 23 October 1997 (1997-10-23) * page 21, lines 10-14; figure 1 * * page 25, lines 10-15 *	1-10	G01N21/47 B01D11/00
P,X	KAMHOLZ A E ET AL: "QUANTITATIVE ANALYSIS OF MOLECULAR INTERACTION IN A MICROFLUIDIC CHANNEL: THE T-SENSOR" ANALYTICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. COLUMBUS, US, vol. 71, no. 23, 1 December 1999 (1999-12-01), pages 5340-5347, XP000902371 ISSN: 0003-2700 * figures 1,5,6 *	1-10	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G01N
T	HATCH ANSON ET AL: "A rapid diffusion immunoassay in a T-sensor" NATURE BIOTECHNOLOGY, vol. 19, no. 5, May 2001 (2001-05), pages 461-465, XP002303538 ISSN: 1087-0156 * the whole document *		
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search Munich		Date of completion of the search 3 November 2004	Examiner Lanzrein, M
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	

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

EP 00 93 2644

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.

03-11-2004

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9739338 A	23-10-1997	US 5716852 A	10-02-1998
		AU 3877797 A	07-11-1997
		DE 69724943 D1	23-10-2003
		DE 69724943 T2	15-07-2004
		EP 0890094 A1	13-01-1999
		JP 2001504936 T	10-04-2001
		WO 9739338 A1	23-10-1997
		US 2003211507 A1	13-11-2003
		US 6171865 B1	09-01-2001
		US 6541213 B1	01-04-2003
		US 6582963 B1	24-06-2003
		US 6454945 B1	24-09-2002
		US 5972710 A	26-10-1999
-----			

专利名称(译)	微尺度扩散免疫分析		
公开(公告)号	<a href="#">EP1179181A4</a>	公开(公告)日	2004-12-29
申请号	EP2000932644	申请日	2000-05-19
[标]申请(专利权)人(译)	华盛顿大学		
申请(专利权)人(译)	华盛顿大学		
当前申请(专利权)人(译)	华盛顿大学		
[标]发明人	WEIGL BERNHARD H YAGER PAUL KAMHOLZ ANDREW HATCH ANSON		
发明人	WEIGL, BERNHARD, H. YAGER, PAUL KAMHOLZ, ANDREW HATCH, ANSON		
IPC分类号	G01N30/00 G01N33/532 G01N33/558 B01D11/00 B01D11/04 G01N15/06 G01N21/00 G01N21/29 G01N21/41 G01N21/47 G01N33/00 G01N33/48 G01N33/543 G01N33/557		
CPC分类号	G01N33/558 G01N30/0005		
代理机构(译)	FISHER , ADRIAN JOHN		
优先权	60/135417 1999-05-21 US 09/503563 2000-02-14 US		
其他公开文献	EP1179181A1		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

提供了通过利用分子结合反应和差异扩散速率来确定分析物的存在和浓度的方法和装置。允许分析物颗粒和结合颗粒彼此扩散，并且当它们相遇时检测到扩散前沿的减慢。从扩散前沿的位置，可以确定分析物颗粒的存在和浓度。一个实施方案提供微流体形式的竞争性免疫测定。该扩散免疫测定 (DIA) 依赖于在微通道的一个维度上测量标记抗原的浓度，使其在短时间内扩散到含有特异性抗体的区域中。使用简单的微流体装置T-Sensor来实施DIA以测量苯妥英 (一种小药物分子) 的浓度。可以在不到一分钟的时间内测量50至1600nM范围内的分析物浓度。该测定是同质的，快速的，仅需要微升体积的试剂和样品，并且适用于多种分析物，包括治疗药物，分子生物学标记物和环境污染物。还提供了在扩散分离器中分离相似尺寸的颗粒的方法。

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl. 7)
X	WEIGL B H ET AL: "Microfluidic diffusion based separation and detection" SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, US, vol. 283, 15 January 1999 (1999-01-15), pages 346-347, XP00219714 ISSN: 0036-8075 * page 347, last paragraph; figures 1,2 *	1-10	G01N33/558 G01N33/557 G01N33/543 G01N15/06 G01N33/00 G01N33/48 G01N21/00 G01N21/29 G01N21/41 G01N21/47 B01D11/00
X	WO 97/39338 A (BRODY JAMES P ; HOLL MARK R (US); SCHUTTE DAVID (US); WU CAICAI (US);) 23 October 1997 (1997-10-23) * page 21, lines 10-14; figure 1 * * page 25, lines 10-15 *	1-10	
P.X	KAMHOLZ A E ET AL: "QUANTITATIVE ANALYSIS OF MOLECULAR INTERACTION IN A MICROFLUIDIC CHANNEL: THE T-SENSOR" ANALYTICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, COLUMBUS, US, vol. 71, no. 23, 1 December 1999 (1999-12-01), pages 5340-5347, XP006962371 ISSN: 0003-2700 * figures 1,5,6 *	1-10	TECHNICAL FIELD OR SEARCHED (Int.Cl. 7) G01N
T	HATCH ANSON ET AL: "A rapid diffusion immunoassay in a T-sensor" NATURE BIOTECHNOLOGY, vol. 19, no. 5, May 2001 (2001-05), pages 461-465, XP002305338 ISSN: 1087-0156 * the whole document *		
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Munich		3 November 2004	Lanzrein, M
CATEGORY OF CITED DOCUMENTS X: substantially relevant if taken alone Y: substantially relevant if combined with another document of the same category A: technological background D: non-written document P: intermediate document T: theory or principle underlying the invention E: earlier patent documents, first published on, or after, the filing date D: document cited in the application L: document cited for other reasons & members of the same patent family, corresponding document			