European Patent Office

SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT

under Rule 46, paragraph 1 of the European Patent Convention

Application Number EP 03 71 6032

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 Y	WO 98/28622 A (FODSTAD, OEYSTEIN; HOEIFOEDT, HANNE, KLEPPE) 2 July 1998 (1998-07-02) * page 2, line 23 - page 3, line 9 * * page 4, lines 31-33 * * page 5, lines 5-14 * * page 6, lines 1-3 * * page 8, lines 10-14 * -----	1-3, 6-10,13, 20-24,55 4,5, 12-17, 25-32, 34-49	G06K9/00 G01N15/14 G01N33/543
Y	US 6 251 615 B1 (OBERHARDT BRUCE J) 26 June 2001 (2001-06-26) * column 13, line 54 - column 14, line 27 * * column 16, lines 59-67 * ----- -/--	12-17, 25-32	

TECHNICAL FIELDS SEARCHED (Int.Cl.7)

G01N
B07C

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 severalinventions or groups of inventions, namely:

see sheet B

The present partial 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.

Place of search	Date of completion of the search	Examiner
Munich	27 July 2005	Müller, T

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

EPO FORM 1503 03.82 (P04C23)

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Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	VEAL D A ET AL: "Fluorescence staining and flow cytometry for monitoring microbial cells" JOURNAL OF IMMUNOLOGICAL METHODS, ELSEVIER SCIENCE PUBLISHERS B.V.,AMSTERDAM, NL, vol. 243, no. 1-2, 21 September 2000 (2000-09-21), pages 191-210, XP004210701 ISSN: 0022-1759	33	
Y	* the whole document *	5,34-38, 40-49	
X	US 4 115 535 A (GIAEVER ET AL) 19 September 1978 (1978-09-19) * column 2, line 39 - column 4, line 60; figures 1,2 *	33	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
Y	US 5 665 582 A (KAUSCH ET AL) 9 September 1997 (1997-09-09) cited by ISA * column 5, lines 53-57 *	4	
Y	US 6 316 215 B1 (ADAIR EDWIN L ET AL) 13 November 2001 (2001-11-13) * column 4, line 45 - column 6, line 26 *	14,15	
Y	EP 0 811 694 A (ROCHE DIAGNOSTICS GMBH; BOEHRINGER MANNHEIM GMBH) 10 December 1997 (1997-12-10) * the whole document *	39	

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European Patent Office

LACK OF UNITY OF INVENTION
SHEET B

Application Number
EP 03 71 6032

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: 1-50,55

method and device for detecting and counting biological particles comprising a labeling substance

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2. claims: 51-54

algorithm for image analysis

专利名称(译)	用于低成本细胞计数器中细胞计数的方法和算法		
公开(公告)号	EP1474772A4	公开(公告)日	2005-11-09
申请号	EP2003716032	申请日	2003-02-14
申请(专利权)人(译)	IMMUNIVEST CORPORATION		
当前申请(专利权)人(译)	IMMUNIVEST CORPORATION		
[标]发明人	DROOG ERIK TIBBE ARJAN GREVE JAN GOHEL DHANESH TERSTAPPEN LEON		
发明人	DROOG, ERIK TIBBE, ARJAN GREVE, JAN GOHEL, DHANESH TERSTAPPEN, LEON		
IPC分类号	G01N21/64 C12M1/34 C12Q1/06 G01N15/00 G01N15/14 G01N21/78 G01N33/53 G01N33/543 G01N33/545 G06K9/00		
CPC分类号	G01N15/1475 G01N15/1463 G01N33/5094 G01N33/54333 G01N2015/008 G01N2015/1486 Y10T436/101666 Y10T436/25375		
优先权	60/357170 2002-02-14 US		
其他公开文献	EP1474772A2		
外部链接	Espacenet		

摘要(译)

通过流式细胞术对流体中的细胞进行计数已广泛用于许多学科，例如评估不同体液中的白细胞亚群或环境样品，食品和体液中的细菌污染。 在许多应用中，这些工具的成本，规模和复杂性妨碍了其更广泛的使用，例如，资源贫乏国家的艾滋病毒监测中的CD4分析。 本文公开的新颖设备，方法和算法大大克服了这些限制。 简而言之，生物样品中的所有细胞都进行了荧光标记，但是只有靶细胞也进行了磁性标记。 将已标记的样本放在小室或小池中，放置在两个楔形磁铁之间，以将磁性标记的细胞选择性地移动到小池的观察表面。 LED照亮细胞，而CCD相机捕获目标细胞发出的荧光图像。 用新颖算法执行的图像分析提供了表面上的细胞计数，该计数可能与原始样品的目标细胞浓度有关。 紧凑型细胞仪系统提供了一种坚固耐用，价格适中且易于使用的技术，可在偏远地区使用。