

REVISED VERSION

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
1 July 2004 (01.07.2004)

PCT

(10) International Publication Number  
WO 2004/055491 A3

- (51) International Patent Classification:  
G01V 3/00 (2006.01)
- (21) International Application Number:  
PCT/US2003/015850
- (22) International Filing Date: 20 May 2003 (20.05.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/381,940 20 May 2002 (20.05.2002) US
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GI, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PI, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZW.

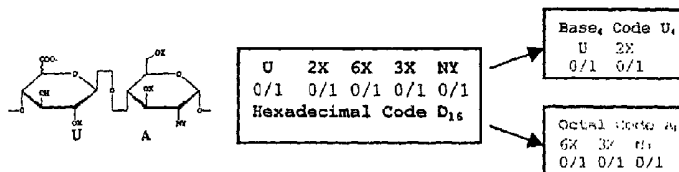
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE,

[Continued on next page]

(54) Title: NOVEL METHOD FOR SEQUENCE DETERMINATION USING NMR

Representation of monosaccharides and linkages using PEN

A



B

(i) Uronic acid (U <sub>i</sub> ) I/G 2X Code Unit							(ii) Glucosamine (A <sub>i</sub> ) 6X 3X NY Code Unit						
0	0	0 <sub>4</sub>	I	1	0	0	4 <sub>6</sub>	A <sub>NAC, 6S</sub>	1	0	1	5 <sub>6</sub>	A <sub>NS, 6S</sub>
0	1	1 <sub>4</sub>	I <sub>2S</sub>	1	0	1	5 <sub>6</sub>	A <sub>NS, 6S</sub>	1	1	1	7 <sub>6</sub>	A <sub>NS, 3S, 6S (A*)</sub>
1	0	2 <sub>4</sub>	G										
(iii) A-U linkages (D <sub>i</sub> )							(iv) ΔU-A linkages (ΔD <sub>i</sub> )						
A U							ΔU A						
6X	3X	NY	I/G	2X	Code	Unit	I/G	2X	6X	3X	NY	Code	Unit
1	1	1	0	1	-D <sub>16</sub>	A*-I <sub>2S</sub>	*	0	1	0	0	±4 <sub>16</sub>	ΔU-A <sub>NAC, 6S</sub>
1	0	1	1	0	-6 <sub>16</sub>	A <sub>NS, 6S</sub> -G	*	0	1	0	1	±5 <sub>16</sub>	ΔU-A <sub>NS, 6S</sub>
1	0	1	0	1	-5 <sub>16</sub>	A <sub>NS, 6S</sub> -I <sub>2S</sub>	*	0	1	1	1	±7 <sub>16</sub>	ΔU-A <sub>NS, 3S, 6S</sub>
1	0	1	0	0	-4 <sub>16</sub>	A <sub>NS, 6S</sub> -I	*	1	1	0	1	±D <sub>16</sub>	ΔU <sub>2S</sub> -A <sub>NS, 6S</sub>
1	0	0	1	0	-2 <sub>16</sub>	A <sub>NAC, 6S</sub> -G							

(57) Abstract: The invention relates to methods for analyzing polysaccharides. In particular, compositional and sequence information about the polysaccharides are derived (figure 1). Some methods use NMR in conjunction with another experimental method, such as, capillary electrophoretic techniques for the analysis (figures 2 & 3).

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DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL,  
PT, RO, SE, SI, SK, TR). OAPI patent (BF, BJ, CF, CG,  
CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Date of publication of the revised international search  
report:** 18 May 2007

**Published:**

— *with international search report*

**(15) Information about Correction:**

see PCT Gazette No. 20/2007 of 18 May 2007

**(88) Date of publication of the international search report:**  
5 April 2007

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**INTERNATIONAL SEARCH REPORT**

International Application No.

PCT/US03/15850

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G01V 3/00  
 US CL : 324/309, 300; 436/539

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)  
 U.S. : 324/309, 300; 436/539

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)  
 WEST

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,284,558 (Linhardt et al) 8 February 1994 (08.02.1994), entire document.	1-28
X	US 6,190,522 B1 (Haro) 20 February 2001 (20.02.2001), entire article.	3-5, 23-25

Further documents are listed in the continuation of Box C.

See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

Date of mailing of the international search report

21 January 2005 (21.01.2005)

26 JUN 2006

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