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DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
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ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
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LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

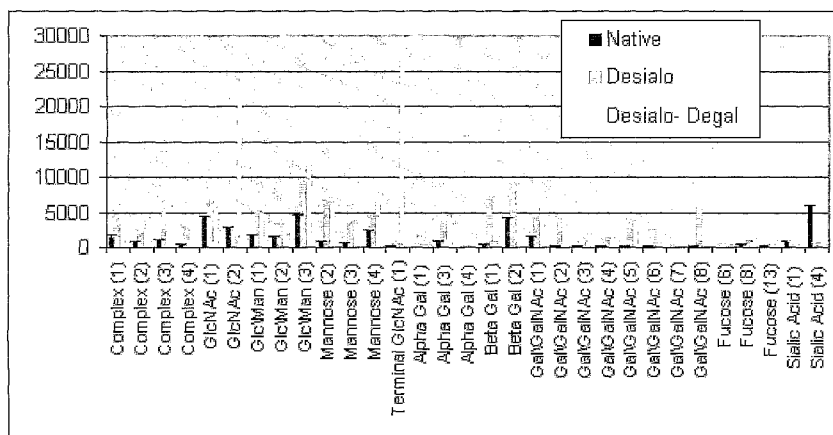
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(54) Title: DIAGNOSIS OF GASTROINTESTINAL CANCERS THROUGH GLYCOME ANALYSIS

Figure 1



(57) Abstract: Markers and methods of diagnosis and monitoring of cancer through global glycome analysis.

INTERNATIONAL SEARCH REPORT

International application No

PCT/IL2010/000739

A. CLASSIFICATION OF SUBJECT MATTER

INV. G01N33/574

ADD.

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)

G01N

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 practical, search terms used)

EPO-Internal, BIOSIS, CHEM ABS Data, EMBASE, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SHAO CHANGXIA ET AL: "Antibody microarray analysis of serum glycans in esophageal squamous cell carcinoma cases and controls", PROTEOMICS CLINICAL APPLICATIONS, vol. 3, no. 8, August 2009 (2009-08), pages 923-931, XP002625558, ISSN: 1862-8346	6,7,15, 16,20,21
Y	abstract page 928 - page 929 paragraph [2.2.1] ----- -/--	18



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

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Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IL2010/000739

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MATSUDA A ET AL: "Development of an all-in-one technology for glycan profiling targeting formalin-embedded tissue sections", BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, ACADEMIC PRESS INC. ORLANDO, FL, US, vol. 370, no. 2, 30 May 2008 (2008-05-30), pages 259-263, XP022618888, ISSN: 0006-291X, DOI: DOI:10.1016/J.BBRC.2008.03.090 [retrieved on 2008-03-28]	1-3,5-7, 15-17, 19-21
Y	abstract figure 1 page 259 page 263	4,18
X	----- GREM J: "The prognostic importance of tumor markers in adenocarcinomas of the gastrointestinal tract.", CURRENT OPINION IN ONCOLOGY JUL 1997 LNKD-PUBMED:9251889, vol. 9, no. 4, July 1997 (1997-07), pages 380-387, XP009145112, ISSN: 1040-8746 page 384	1,3,6,7
X	----- ROSENFELD ET AL: "A lectin array-based methodology for the analysis of protein glycosylation", JOURNAL OF BIOCHEMICAL AND BIOPHYSICAL METHODS, AMSTERDAM, NL, vol. 70, no. 3, 8 March 2007 (2007-03-08), pages 415-426, XP005917452, ISSN: 0165-022X, DOI: DOI:10.1016/J.JBBM.2006.09.008 page 417	8
X	----- WO 2008/007373 A1 (PROCOGNIA ISRAEL LTD [IL]; ROSENFELD RAKEFET [IL]; SAMOKOVLISKY ALBENA) 17 January 2008 (2008-01-17) claim 48	8
Y	----- VENABLE ALISON ET AL: "Lectin binding profiles of SSEA-4 enriched, pluripotent human embryonic stem cell surfaces", BMC DEVELOPMENTAL BIOLOGY, BIOMED CENTRAL LTD., LONDON, GB, vol. 5, no. 1, 21 July 2005 (2005-07-21), page 15, XP021001351, ISSN: 1471-213X, DOI: DOI:10.1186/1471-213X-5-15 table 1 -----	4

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL2010/000739

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-8, 15-21(all partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8, 15-21(all partially)

combination of HHA and Anti-sLeA and corresponding glycan motif for detection of stomach cancers

2. claims: 1-8, 15-21(all partially)

combination of PSA and bi3 and corresponding glycan motif for detection of stomach cancers

3. claims: 1-8, 15-21(all partially)

combination of bi2 and bi4 and corresponding glycan motif for detection of stomach cancers

4. claims: 1-8, 15-21(all partially)

combination of DSA and HPA and corresponding glycan motif for detection of stomach cancers

5. claims: 1-8, 15-21(all partially)

combination of STL, ALAA, and Sialic acid group and corresponding glycan motif for detection of stomach cancers

6. claims: 1-8, 15-21(all partially)

combination of ECL, ALAA, and DC-SIGN and corresponding glycan motif for detection of stomach cancers

7. claims: 1-8, 15-21(all partially)

combination of DSA, ALAA, and DC-SIGN and corresponding glycan motif for detection of stomach cancers

8. claims: 1-8, 15-21(all partially)

combination of ALAA, DC-SIGN, and Siglec-5 and corresponding glycan motif for detection of stomach cancers

9. claims: 1-8, 15-21(all partially)

ALAA, Siglec-5, and Fucose group and corresponding glycan motif for detection of stomach cancers

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

10. claims: 1-8, 15-21(all partially)

combination of PVL, PSA, and Anti-sLeA and corresponding
glycan motif for detection of stomach cancers

11. claims: 9-14(completely); 6-8, 15-21(partially)

combinations of saccharide binding agents for detection of
pancreatic cancers

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IL2010/000739

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2008007373	A1	17-01-2008	
		AU 2007273815 A1	17-01-2008
		CA 2657458 A1	17-01-2008
		EP 2041564 A1	01-04-2009
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