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(81) Designated States (unless otherwise indicated, for every

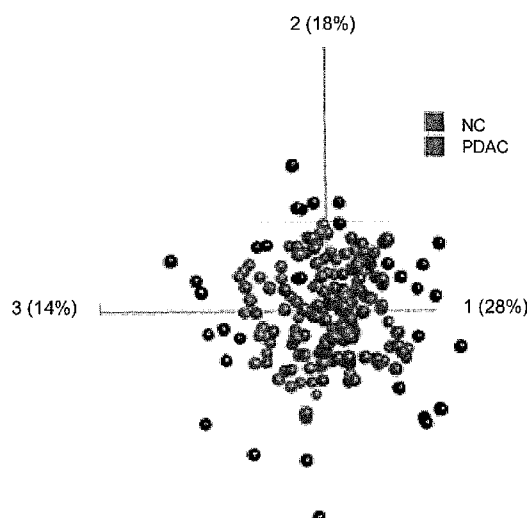
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
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HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR,
KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
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SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
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kind of regional protection available): ARIPO (BW, GH,
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TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
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MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

(54) Title: METHOD, ARRAY AND USE THEREOF

Figure 1(a)



(57) Abstract: The present invention provides a method for diagnosing or determining a pancreatic cancer-associated disease state comprising or consisting of the steps of: (a) providing a sample from an individual to be tested; and (b) determining a biomarker signature of the test sample by measuring the presence and/or amount in the test sample of one or more biomarker selected from the group defined in Table A; wherein the presence and/or amount in the test sample of the one or more biomarker selected from the group defined in Table A is indicative of the pancreatic cancer-associated disease in the individual; uses and methods of determining a pancreatic cancer-associated disease state, and methods of treating pancreatic cancer, together with arrays and kits for use in the same.

Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:

21 December 2017 (21.12.2017)

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2017/061202

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 practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2015/067969 A2 (IMMUNOVIA AB [SE]; SANDERSON ANDREW JOHN [GB]) 14 May 2015 (2015-05-14) the whole document claims 1-63	1-90
Y	----- XIANG-YI HE: "Advances in pancreatic cancer research: Moving towards early detection", WORLD JOURNAL OF GASTROENTEROLOGY, vol. 20, no. 32, 1 January 2014 (2014-01-01), page 11241, XP055398453, CN ISSN: 1007-9327, DOI: 10.3748/wjg.v20.i32.11241 the whole document page 11244, column 2 ----- -/-	1-90



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 application or patent 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

Date of the actual completion of the international search

14 August 2017

Date of mailing of the international search report

07/11/2017

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2017/061202

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	LE NHA ET AL: "Prognostic and predictive markers in pancreatic adenocarcinoma", DIGESTIVE AND LIVER DISEASE, W.B. SAUNDERS, GB, vol. 48, no. 3, 14 November 2015 (2015-11-14), pages 223-230, XP029415493, ISSN: 1590-8658, DOI: 10.1016/J.DLD.2015.11.001 the whole document section 4 page 3914, column 1 -----	1-90
X	M. YU ET AL: "Expression Profiling during Mammary Epithelial Cell Three-Dimensional Morphogenesis Identifies PTPRO as a Novel Regulator of Morphogenesis and ErbB2-Mediated Transformation", MOLECULAR AND CELLULAR BIOLOGY., vol. 32, no. 19, 1 October 2012 (2012-10-01), pages 3913-3924, XP055398457, US ISSN: 0270-7306, DOI: 10.1128/MCB.00068-12	80,81, 86,90
Y	the whole document abstract figure 6B -----	1-90
X	Anonymous: "Expression of PTPRO in cancer - Summary - The Human Protein Atlas", 3 June 2015 (2015-06-03), XP055398422, Retrieved from the Internet: URL:https://web.archive.org/web/20150603205332/http://www.proteinatlas.org/ENSG00000151490-PTPRO/cancer [retrieved on 2017-08-14] -----	80,81, 86,90
Y	the whole document -----	1-90
X,P	WO 2017/050939 A2 (IMMUNOVIA AB [SE]) 30 March 2017 (2017-03-30) the whole document claims 1-71 page 10, line 10 page 36 page 59 page 94 -----	1-90

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2017/061202

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.:

1-90(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: 1-90(partially)

The claims in so far as they relate to the first item of Table A, namely R-PTP-0.

2-85. claims: 1-90(partially)

The claims in so far as they relate to the subsequent items of Table A.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2017/061202

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2015067969	A2	14-05-2015	
		AU 2014345484 A1	30-06-2016
		CA 2930211 A1	14-05-2015
		CN 105917230 A	31-08-2016
		EP 3069143 A2	21-09-2016
		JP 2016537652 A	01-12-2016
		KR 20160085327 A	15-07-2016
		US 2016252513 A1	01-09-2016
		WO 2015067969 A2	14-05-2015

WO 2017050939	A2	30-03-2017	NONE
