

REVISED VERSION

(19) World Intellectual Property Organization
International Bureau



(10) International Publication Number
WO 2014/191359 A9

(43) International Publication Date
4 December 2014 (04.12.2014)

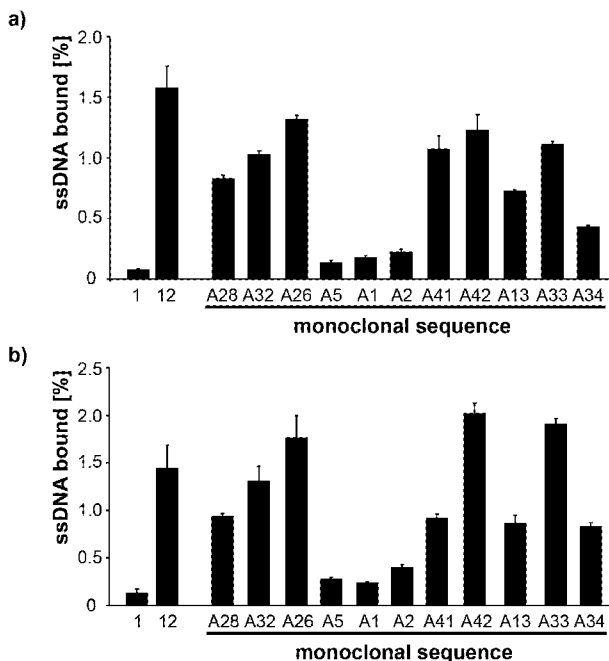
- (51) International Patent Classification:
C12N 15/115 (2010.01) G01N 33/68 (2006.01)
C12Q 1/68 (2006.01)
- (21) International Application Number:
PCT/EP2014/060846
- (22) International Filing Date:
26 May 2014 (26.05.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
13169493.7 28 May 2013 (28.05.2013) EP
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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, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM,
ZW.

[Continued on next page]

(54) Title: APTAMERS AND USE OF THE APTAMERS IN THE DIAGNOSIS AND TREATMENT OF CANCER

Figure 1



(57) Abstract: The present invention relates to an aptamer comprising a nucleotide sequence SEQ ID NO: 1, a composition comprising an aptamer, and the use of the aptamer in the diagnosis and treatment of cancer, particularly solid tumours.

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- (84) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, 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).
- 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))
- with sequence listing part of description (Rule 5.2(a))
- (88) Date of publication of the revised international search report:** 14 May 2015

Published:

- with international search report (Art. 21(3))

- (15) Information about Correction:**
see Notice of 14 May 2015

A. CLASSIFICATION OF SUBJECT MATTER
 INV. C12N15/115 C12Q1/68 G01N33/68
 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)
 C12N

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KEJING ZHANG ET AL: "A Novel Aptamer Developed for Breast Cancer Cell Internalization", CHEMMEDCHEM, vol. 7, no. 1, 2 January 2012 (2012-01-02), pages 79-84, XP055085259, ISSN: 1860-7179, DOI: 10.1002/cmdc.201100457 the whole document	1-15
A	SHOJI OHUCHI: "Cell-SELEX Technology", BIORESEARCH OPEN ACCESS, vol. 1, no. 6, 1 December 2012 (2012-12-01), pages 265-272, XP055085433, ISSN: 2164-7860, DOI: 10.1089/biores.2012.0253 the whole document	1-15

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 24 November 2014	Date of mailing of the international search report 31/03/2015
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Romano, Alper
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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2014/060846

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DASTJERDI KAZEM ET AL: "Generation of an enriched pool of DNA aptamers for an HER2-overexpressing cell line selected by Cell SELEX.", BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY 2011 JUL-AUG, vol. 58, no. 4, July 2011 (2011-07), pages 226-230, XP002715519, ISSN: 1470-8744 the whole document	1-15
A	WEI SUN ET AL: "Advances and Perspectives in Cell-Specific Aptamers", CURRENT PHARMACEUTICAL DESIGN, vol. 17, no. 1, 1 January 2011 (2011-01-01), pages 80-91, XP055085443, ISSN: 1381-6128, DOI: 10.2174/138161211795049769 the whole document	1-15
A	TAKAO KUNII ET AL: "Selection of DNA aptamers recognizing small cell lung cancer using living cell-SELEX", THE ANALYST, vol. 136, no. 7, 1 April 2011 (2011-04-01), pages 1310-1312, XP055085623, ISSN: 0003-2654, DOI: 10.1039/c0an00962h the whole document	1-15
A	DEZHI KANG ET AL: "Selection of DNA Aptamers against Glioblastoma Cells with High Affinity and Specificity", PLOS ONE, vol. 7, no. 10, 2 October 2012 (2012-10-02), page e42731, XP055085438, ISSN: 1932-6203, DOI: 10.1371/journal.pone.0042731 the whole document	1-15

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2014/060846

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.:

3, 7(completely); 1, 2, 4-6, 8-15(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: 3, 7(completely); 1, 2, 4-6, 8-15(partially)

an aptamer comprising SEQ ID NO:1 wherein N43 comprises SEQ ID NO:2 e.g an aptamer comprising SEQ ID NO:16

2-12. claims: 1, 2, 4-6, 8-15(all partially)

aptamers comprising SEQ ID NO:1 wherein N43 comprise SEQ ID NOS:3-13
