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TION WITH MATRIX-ASSISTED LASER DESORPTION

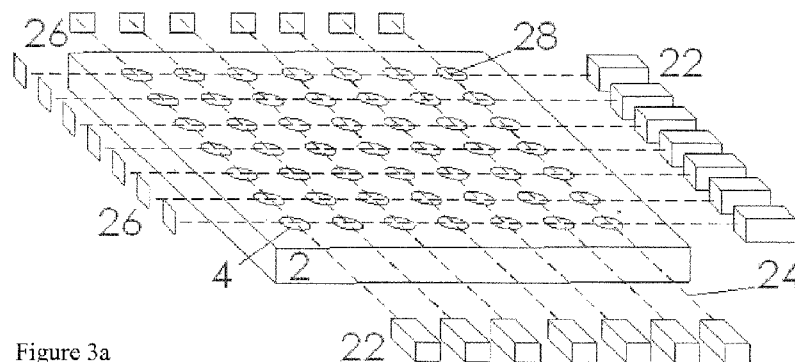


Figure 3a

(57) Abstract: The invention relates to a method to assist with the manual preparation of a sample support for ionization with mat-
rix-assisted laser desorption where a sample support with sample sites is provided, a selected sample site is highlighted in a way
which can be perceived by the human eye at least with respect to neighboring, not selected sample sites, a sample is manually depos-
ited on the selected and highlighted sample site, and the deposition state of at least the selected and highlighted sample site is deten-
mined. The method enables the sample preparation and sample analysis to be made more efficient and more certain.



WO 2012/072467 A3

INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

H01J B01L

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.
X	US 2007/072168 A1 (RYLE MATTHEW [US]) 29 March 2007 (2007-03-29) paragraph [0019] - paragraph [0044] claim 27 figure 3	1-11
X	DE 10 2005 036326 A1 (PALM MICROLASER TECH GMBH [DE]) 1 February 2007 (2007-02-01) claim 1	12,13
X	WO 2004/083811 A2 (ADVANCED RES & TECH INST [US]; REILLY JAMES P [US]; BORAAS KIRK S [US]) 30 September 2004 (2004-09-30) page 4, line 2 - line 6 page 5, line 7 - line 9	12,13
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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

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"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

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"&" document member of the same patent family

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 10 2007 006933 A1 (BRUKER DALTONIK GMBH [DE]) 14 August 2008 (2008-08-14) cited in the application claims 1,4 -----	12,13
X	EP 1 136 819 A2 (DAIKIN IND LTD [JP]) 26 September 2001 (2001-09-26) claim 1 paragraph [0057] - paragraph [0059] figures 18-22 -----	14-16
X	US 2003/026891 A1 (QIU JEAN [US] ET AL) 6 February 2003 (2003-02-06) paragraphs [0061] - [0078], [0095] figure 3 -----	14-16
A	US 2005/189225 A1 (LIU SHAORONG [US] ET AL) 1 September 2005 (2005-09-01) figure 7a paragraph [0053] -----	14-16
A	WO 2005/019875 A2 (STRATOS BIOSYSTEMS LLC [US]; STOLOWITZ MARK L [US]) 3 March 2005 (2005-03-03) abstract -----	14-16

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2011/070838

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.:

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: 1-10

Method to assist with the manual preparation of a sample support.

1.1. claim: 11

Method for determining a deposition state of a sample site.

2. claims: 12, 13

Method for determining a sample quantity deposited on a sample site.

3. claims: 14-16

Sample support for MALDI wherein a sensor for a chemo-physical property is integrated at a sample support site.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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