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

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Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

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30 July 2020 (30.07.2020)

(54) Title: COATED AEROGELS

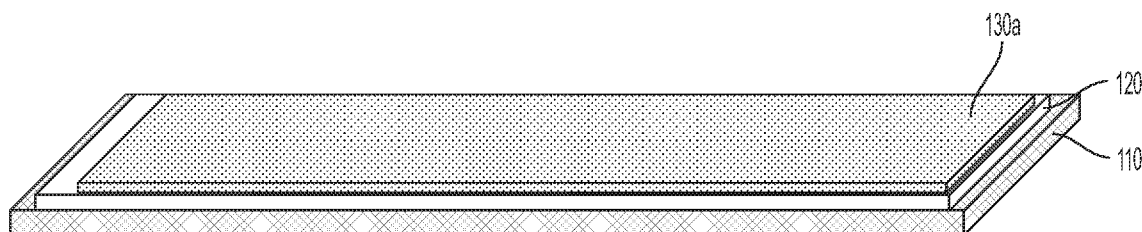


FIG. 3A

(57) Abstract: Aerogel can be coated with a polymerizable resin, which cures to form a polymer-coated aerogel. The coated aerogels can be used structural or thermal insulating component, such as in analytical and scientific devices. Coated aerogels can be further coated with conductive material, a semi-conductive material, a non-conductive material, a resistive material, or a combination thereof.



INTERNATIONAL SEARCH REPORT

International application No
PCT/US2019/060572

A. CLASSIFICATION OF SUBJECT MATTER
 INV. C08J9/00 C08J9/32 C08K3/36 C08K7/26 C09D127/16
 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)
 C08J C09J C08K C09D

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 2009/082479 A1 (CHO MYUNG DONG [KR]) 26 March 2009 (2009-03-26) paragraphs [0020] - [0023] paragraphs [0031] - [0041] claims 13-17 -----	1-5, 7-13,15
X	US 2006/269734 A1 (KRAJEWSKI MARK T [US] ET AL) 30 November 2006 (2006-11-30) Section: Summary of the invention; page 1, paragraph 3 paragraphs [0014], [0015] paragraphs [0017], [0018] -----	1-5, 7-13,15
X	KR 2010 0036104 A (CHEIL IND INC [KR]) 7 April 2010 (2010-04-07) paragraphs [0025] - [0028] paragraphs [0039] - [0044] paragraphs [0051] - [0055] -----	1-5, 7-13,15
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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	"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
"E" earlier application or patent but published on or after the international filing date	"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
"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)	"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
"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 19 February 2020	Date of mailing of the international search report 03/07/2020
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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 Michalitsch, Richard
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INTERNATIONAL SEARCH REPORT

International application No
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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	WO 2007/047970 A2 (CABOT CORP [US]; MENASHI JAMEEL [US] ET AL.) 26 April 2007 (2007-04-26) paragraphs [0029] - [0034] paragraphs [0063] - [0064] paragraphs [0073] - [0074] -----	1-5, 7-13,15

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2019/060572

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.:
3-5, 7, 11-13, 15(completely); 1, 2, 8-10(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: 3-5, 7, 11-13, 15(completely); 1, 2, 8-10(partially)

Aerogels with an electrically resistive coating and method for making the coated aerogel

2. claims: 6, 14(completely); 1, 2, 8-10(partially)

Aerogels with an electrically conductive coating and method for making the coated aerogel

3. claims: 16-23

An ion mobility spectrometer

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2019/060572

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009082479 A1	26-03-2009	JP 5544074 B2 JP 2009073731 A KR 20090030635 A US 2009082479 A1	09-07-2014 09-04-2009 25-03-2009 26-03-2009

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