

INFORME DE BÚSQUEDA DE PATENTES				
N° de solicitud: NC2017/0003835				
CRITERIOS PARA LA BÚSQUEDA (Anexar pantallazo o reporte en PDF, junto con los boléanos utilizados*. Para el caso de secuencias, anexar alineamientos)				
PALABRAS CLAVE UTILIZADAS		((aerogel)/TI/AB/IW AND (silica)/CLMS AND (thermal conductivity)/DESC/ODES AND (reinforcement OR matrix)/DESC/ODES AND (combustion)/DESC/ODES AND (density)/DESC/ODES AND (water uptake OR adsorption)/DESC/ODES AND (decomposition)/DESC/ODES) AND PD <= 2014-10-03 aerogel AND /PD<20141003 AND silica AND (reinforcement OR matrix) AND conductivity		
CLASIFICACIONES UTILIZADAS PARA LA BÚSQUEDA		CIP: C01B 33/158, C01B 33/159, C08K3/04, C08K3/36. CPC:		
DOCUMENTOS CONSIDERADOS RELEVANTES (documentos patentes, literatura no patente, etc...)				
Informes/Base de datos	N° de solicitud/ Autor**	Fecha de Publicación/Presentación (DD/MM/AAAA)	Reiv. afectadas (Con indicación, si procede, de las partes relevantes o números de secuencias)	Categorías especiales de los documentos citados***
SIPI (Obligatoria)				
ISR	Ingale (2010)	04/09/2010		A
	Sun-Wook (2012)	01/06/2012		A
USPTO	Kang (2000)	2000		A
	Sarawade (2011)	2011		A
CIPO USPTO	US5587107	24/12/1996	1 a 5, 13 a 20 (Col. 2, Líneas 29-35; Col. 5, Líneas 50-60)	Y
CIPO JPO USPTO	US20120025127	02/02/2012	1 a 5, 13 a 20 (ejemplo 1; párr. 0038)	Y
CIPO SIPO EPO JPO	WO2014150310	25/09/2014		A
	US20100279044	04/11/2012		A
EPO	US2003099844	29/05/2003		A
	WO9823366	04/06/1998		A
JPO	JPH06345418	20/12/1994		A
	JPH08034678	06/02/1996		A
Orbit	WO2007047970	26/04/2007		A
	WO2007146945	21/12/2007		A
EPOQUENET	CN101698584	28/04/2010		A
	CN101357852	04/02/2009		A
*** Categorías especiales de documentos citados:				
“A” documento que define el estado general de la técnica no considerado como particularmente relevante. “E” solicitud de patente o patente anterior pero publicada en la fecha de presentación internacional o en fecha posterior. “P” documento publicado antes de la fecha de presentación internacional pero con posterioridad a la fecha de prioridad reivindicada.		“X” documento particularmente relevante; la invención reivindicada no puede considerarse nueva o que implique una actividad inventiva por referencia al documento aisladamente considerado. “Y” documento particularmente relevante; la invención reivindicada no puede considerarse que implique una actividad inventiva cuando el documento se asocia a otro u otros documentos de la misma naturaleza, cuya combinación resulta evidente para un experto en la materia.		
**** Indicar entre paréntesis la Autoridad que realizó la búsqueda o el informe preliminar Ejs: EPO, JP, INAPI.				

Literatura no patente

**Se incluye entre otros, toda la referencia de la literatura no patente.

Kang et al., Synthesis of low-density silica gel at ambient pressure: Effect of heat treatment, J. Mat. Sci. 35, (2000), 4971-4976.

Sarawade et al., Synthesis of sodium silicate-based hydrophilic silica aerogel beads with superior properties: Effect of heat-treatment, Journal of Non-Crystalline Solids, 357, (2011), 2156-2162.

S. V. Ingale. et al. Physico-chemical properties of silica aerogels prepared from TMOS/MTMS mixtures. Journal of Porous Materials. October 2011, Volume 18, Issue 5, pp 567-572.

Sun-Wook Hong. et al. Porous silica aerogel/honeycomb ceramic composites fabricated by an ultrasound stimulation process. Metals and Materials International. June 2012, Volume 18, Issue 3, pp 481-486.

Fecha del reporte de búsqueda:

20/11/2018

Solicitante/Titular de la patente	Número de identificación Nombre(s) Apellido(s) 830344 Aspen Aerogels, Inc. Suprimir Mostrar / Ocultar columnas Buscar	Apoderado	Buscar		
Contacto de la solicitud	Buscar	Inventor	Buscar		
Referencia					
Número de solicitud internacional PCT		Fecha de Solicitud Internacional PCT	desde hasta		
Número de Publicación Internacional PCT		Fecha de Publicación Internacional PCT	desde hasta		
Número de la gaceta		Fecha de la Gaceta	desde hasta		
Con/Sin Oposición		Número de Resolución			
Buscar - Limpiar Búsqueda sencilla					
1 Casos asociados					
Expediente No.	Título	Figura Característica	Fecha de presentación	Estado(s)	Titular
☐ NC2017/0003836	MATERIALES DE AEROGEL HIDROFOBOS MEJORADOS		20 abr 2017	Bajo Examen de Fondo	Aspen Aerogels, Inc.
Cerrar					

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
	Upon payment of search fee(s) under Rule 164(2)(a) EPC, the results of a search performed under that provision are based on the following claims: 1-20		INV. C01B33/158 C01B33/159 B01J13/00 C08K3/36
X	US 2003/099844 A1 (HANAHATA HIROYUKI [JP] ET AL) 29 May 2003 (2003-05-29)	1-3,5, 7-14, 16-19	
A	* example 1 *	4,6,15, 20	

X	WO 98/23366 A1 (HOECHST RES & TECH GMBH & CO [DE]; SCHWERTFEGER FRITZ [DE]; FRANK DIER) 4 June 1998 (1998-06-04)	1-5, 7-12,15	
A	* examples 1,9 *	6,13,14, 16-20	

E	EP 3 008 123 A1 (ASPEN AEROGELS INC [US]) 20 April 2016 (2016-04-20) * pages 12,15 *	12,15	

X	US 2010/279044 A1 (WILLIAMS MARTHA K [US] ET AL) 4 November 2010 (2010-11-04)	12	TECHNICAL FIELDS SEARCHED (IPC)
A	* example 3 *	1-11, 13-20	C01B B01J

X	WO 2014/150310 A1 (CABOT CORP [US]) 25 September 2014 (2014-09-25)	12,15	
A	* paragraph [0007] *	1-11,13, 14,16-20	

No.	Document number or Document title	publication date (or application date of the conflicting
1	WO 2014/150310A1	20140925
2	US 2010/0279044A1	20101104

Documents Cited:

D1:	US 5 587 107	Schwertfeger et al.	24 December 1996 (24-12-1996)
D2:	US20120025127	Yeo et al.	2 February 2012 (02-02-2012)
D3:	WO2014/150310	Cabot Corporation	25 September 2014 (25-09-2014)
D4:	US2010/0279044	Williams et al.	4 November 2010 (04-11-2010)

* document cited by a foreign patent office

- D1 INGALE S V ET AL: "Physico-chemical properties of silica aerogels prepared from TMOS/MTMS mixtures", JOURNAL OF POROUS MATERIALS, KLUWER ACADEMIC PUBLISHERS, BO, vol. 18, no. 5, 4 September 2010 (2010-09-04), pages 567-572, XP019947248, ISSN: 1573-4854, DOI: 10.1007/S10934-010-9410-4
- D2 SUN-WOOK HONG ET AL: "Porous silica aerogel/honeycomb ceramic composites fabricated by an ultrasound stimulation process", METALS AND MATERIALS, vol. 18, no. 3, 1 June 2012 (2012-06-01), pages 481-486, XP055240584, Korea ISSN: 1598-9623, DOI: 10.1007/s12540-012-3015-1

Easy search Save strategy

Menu Filter Explorer << 2 results for (aerogel)/TI/AB/IW AND (silica)/CLMS AND (thermal conductivity)/DESC/ODES AND (reinforc >> Preview Image

Filter options

1st application year

- After 2015 (0)
- 2011-2015 (0)
- 2006-2010 (2)
- 2001-2005 (0)
- Before 2001 (0)

Assignee

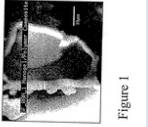
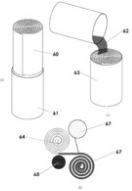
- ASPEN AEROGELS (1)
- CABOT (1)

Litigations

Oppositions

IPC classification

US classification

#	Title	Publication number	1st app. date	Applicant/Assignee	Litigation
1	Aerogel based composites	WO2007047970	2006-10-20	CABOT*	
Composites, such as syntactic foams, are described. The composite contains at least one polymer and at least one aerogel . The aerogel is coated with a coating substance to at least substantially prevent the intrusion of the polymer into the pores of the aerogel. Methods of making the composite are also described, as well as uses of the composite.					
 Figure 1					
2	Aerogel-foam composites	WO2007146945	2007-06-12	ASPEN AEROGELS*	
The invention provides reinforced aerogel monoliths as well as reinforced composites thereof for a variety of uses. Compositions and methods of preparing the monoliths and composites are also provided. Application of these materials in transparent assemblies is also discussed.					
					

Aerogel based composites

Figure 1

10µm

Figure 1

Page 1 of 1 Record 1 of 2

Displaying records 1 - 2 of 2

Internal - Current DB: EPODOC - Search Recording ON

FileEditPDBX-FileOptionsHelp

↑↓

EM

↺

↻

🔍

🔴

🔴

PA

- (A)
AEROSPACE RES INST OF MATERIAL

- (B)
AEROSPACE RES INST MATERIALS & PROC TECHNOLOGY

TI

- (A B)
Fiber-**reinforcement** silicon dioxide **aerogel** continuous felt and preparation method thereof

AB

- (A B)
The invention provides a fiber-**reinforcement** silicon dioxide **aerogel** continuous felt which con
invention also provides a method for preparing the fiber-**reinforcement** silicon dioxide **aerogel**
preparation of **silica** sol, gum dipping, aging, surface treatment, drying of supercritical fluid, and
process, low cost, high safety, high efficiency and the like. The **aerogel** continuous felt has the
high mechanical strength, extremely low coefficient of heat **conductivity**, large size and the like
spaceflight, military affairs and civil affairs, and can be used in the fields of flame resistance, so

2/2 © EPODOC / EPO

PN - [CN101357852](#) A 20090204

PR - CN2007149634 20070730

AP - CN2007149634 20070730

DT - I

PA - CHENGDU SIMO NANOMETER TECHNOL [CN]

TI - Preparation of fibrous **reinforcement** silicon dioxide **aerogel** plate

AB - The invention relates to a process for preparing a fiber **reinforcement silica aerogel** board that
hydrophobic **silica aerogel**. The process comprises the following steps: 2 to 50mm of the ceram
then the home-made hydrophobic **silica aerogel** powder is added by step, and the solvent is ad

HelpF2F3F4F5F6F7F8F9

History - Internal

Database ⓘ

SS

Status

Results

Query

EPODOC

1

8938

AEROGEL

2

92777502

/PD<20141003

3

238189

SILICA

4

1149

1 AND 2 AND 3

5

623887

REINFORCEMENT OR MATRIX

6

18

4 AND 5

7

288567

CONDUCTIVITY

8

2

6 AND 7

☒ Keep dialog open

☐ Current Database

☒ All Databases

☐ Show metadata

☐ Expand rows (Clust...

Save as preparation

Rank and View

Send to Viewer

Save as >

☐ Add to Current W...