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(54) Title: **CROSSLINKED SILANE-MODIFIED MOLECULARLY SELF-ASSEMBLING MATERIAL**

(57) Abstract: The present invention generally relates to a crosslinked silane-modified molecularly self-assembling material, cured manufactured article comprising the crosslinked silane-modified molecularly self-assembling material, semipermeable membrane comprising the crosslinked silane-modified molecularly self-assembling material, method of using the semipermeable membrane to separate an acid gas from a separable gas mixture comprising the acid gas and a permeation-resistant gas, and method of preparing the cured manufactured article from a curable manufactured article comprising a shaped reactive silane-modified molecularly self-assembling material.



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INTERNATIONAL SEARCH REPORT

International application No PCT/US2011/066099

A. CLASSIFICATION OF SUBJECT MATTER				
INV. B01D53/22	B01D71/44	B01D71/48		
B01D71/82	B01D67/00	B01D71/54		
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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) B01D				
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	US 7 247 191 B2 (KOROS WILLIAM J [US] ET AL) 24 July 2007 (2007-07-24) cited in the application abstract the whole document column 8, line 51 - column 9, line 22 -----	1-10		
A	EP 0 545 686 A2 (EXXON RESEARCH ENGINEERING CO [US]) 9 June 1993 (1993-06-09) page 2, lines 56-57 page 5, lines 14-20 claim 1 ----- -/--	1-10		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
* Special categories of cited documents : <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> "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 </td> <td style="width: 50%; border: none; vertical-align: top;"> "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 </td> </tr> </table>			"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
"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	Date of mailing of the international search report			
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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 Lançon, Eveline			

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 2010/270234 A1 (LIU CHUNQING [US] ET AL) 28 October 2010 (2010-10-28) abstract paragraphs [0009], [0014], [0015], [0033], [0036], [0038], [0043] -----	1,6-10
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A	US 2010/126341 A1 (MATTEUCCI SCOTT T [US] ET AL) 27 May 2010 (2010-05-27) cited in the application paragraphs [0067] - [0075] -----	1-10

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