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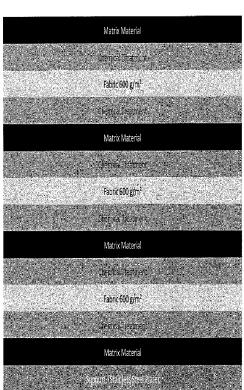
(74) Agent: RAULERSON, Billy, C.; Calfee, Halter & Gris-

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[Continued on next page]

US

(54) Title: POSTPONED DIFFERENTIATION OF REINFORCED COMPOSITES



(57) Abstract: A reinforced composite is provided that includes at least one planar fiber reinforcement or fabric formed from a plurality of fibers. The fiber reinforcement or fabric has a first side and a second side. The reinforced composite further includes a chemical treatment coated on at least one of said first side and second side and a matrix material

FIGURE 2

- 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, 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.
- (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, ST, 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).

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26 November 2015

INTERNATIONAL SEARCH REPORT

International application No PCT/US2015/014350

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)

B29C D03D C03C C08J D04H

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. DOCUME	ENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 804 313 A (SCHELL PHILIP L [US]) 8 September 1998 (1998-09-08) abstract column 12, line 63 - column 13, line 48 column 15, lines 20-48 column 15, line 66 - column 18, line 65 tables 1-2 claims 1-17	1-25
X	US 2008/299852 A1 (LEE JERRY H C [US] ET AL) 4 December 2008 (2008-12-04) abstract paragraphs [0024], [0031] - [0045] examples 1-2 tables 2-3	1-25

Further documents are listed in the continuation of Box C.	X See patent family annex.		
* Special categories of cited documents :	"T" later document published after the international filing date or priority		
"A" document defining the general state of the art which is not considered to be of particular relevance	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		
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"P" document published prior to the international filing date but later than the priority date claimed	"&" 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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Authorized officer

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2015/014350

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	ntion). DOCUMENTS CONSIDERED TO BE RELEVANT	Delevent to eleim Ne
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/005263 A1 (SMITH HENRY DALL [US] SMITH JR HENRY DALL [US]) 17 January 2002 (2002-01-17)	1-10, 12-25
А	abstract paragraphs [0001] - [0022] example 1 claims 1-22	11
X		1-25

International application No. PCT/US2015/014350

INTERNATIONAL SEARCH REPORT

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
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.
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.: 11(completely); 1-10, 12-25(partially)
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.:
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. X 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, 12-25(all partially)

A reinforced composite comprising at least one fiber reinforcement or fabric treated with a chemical treatment comprising a surfactant. Method for its production.

2. claims: 1-10, 12-25(all partially)

A reinforced composite comprising at least one fiber reinforcement or fabric treated with a chemical treatment comprising a low melting point polyamide. Method for its production.

3. claims: 11(completely); 1-10, 12-25(partially)

A reinforced composite comprising at least one fiber reinforcement or fabric treated with a chemical treatment comprising a reactive compound. Method for its production.

4. claims: 1-10, 12-25(all partially)

A reinforced composite comprising at least one fiber reinforcement or fabric treated with a chemical treatment including a plasma. Method for its production.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2015/014350

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