



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/US95/16196 <b>(22) International Filing Date:</b> 14 December 1995 (14.12.95) <b>(30) Priority Data:</b> 08/356,849 15 December 1994 (15.12.94) US <b>(71) Applicant:</b> CABOT CORPORATION [US/US]; 75 State Street, Boston, MA 02109-1806 (US). <b>(72) Inventors:</b> BOES, Ralph, Ulrich; 31 Highland Street, West Concord, MA 01742 (US). BELMONT, James, A.; 8 Conant Street, Acton, MA 01720 (US). KAUL, David, J.; 13 Wyndcliff Road, Acton, MA 01720 (US). SMITH, Douglas, M.; 1412 Marquette Place, NE, Albuquerque, NM 87106 (US). ACKERMAN, William, C.; 4809 Choctaw Trail, NW, Albuquerque, NM 87120 (US). <b>(74) Agent:</b> CHALETSKY, Lawrence, A.; Cabot Corporation, 157 Concord Road, P.O. Box 7001, Billerica, MA 01821-7001 (US).	<b>(81) Designated States:</b> AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, LS, MW, SD, SZ, UG).  <b>Published</b>  <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> 29 August 1996 (29.08.96)	
<b>(54) Title: GEL COMPOSITIONS CONTAINING CARBONACEOUS COMPOUND</b>		
<b>(57) Abstract</b>  <p>New gel compositions which comprise a carbonaceous component attached to a gel component. Preferably, the carbonaceous component is selected from the group consisting of: carbon blacks, carbon fibers, activated carbons and graphitic carbons; and the gel component is selected from the group consisting of: metal oxide gels and polymeric gels. Also disclosed are new gel compositions comprising: a gel component and a carbon black product having attached at least one organic group, the organic group comprising: a) at least one aromatic group, and b) at least one ionic group, at least one ionizable group, or a mixture of an ionic group and an ionizable group, wherein at least one aromatic group of the organic group is directly attached to the carbon black. Further disclosed are new gel compositions comprising: a gel component and a carbon black product having attached at least one organic group, the organic group comprising: a) at least one C<sub>1</sub>-C<sub>12</sub>alkyl group, and b) at least one ionic group, at least one ionizable group, or a mixture of an ionic group and an ionizable group, wherein at least one alkyl group of the organic group is directly attached to the carbon black. Uses for the gel compositions are also disclosed.</p>		

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 95/16196

## A. CLASSIFICATION OF SUBJECT MATTER

IPC6: B01J 13/00, C09C 1/56, F16L 59/00

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)

IPC6: B01J, C09C, C01B

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)

QUESTEL: WPIL, IFIPAT

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP, A1, 0108813 (SUMITOMO CHEMICAL COMPANY, LIMITED), 23 May 1984 (23.05.84), page 3, paragraph 3 - page 4, paragraph 1 --	1,4,5,6
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 Further documents are listed in the continuation of Box C. See patent family annex.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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A	GB, A, 2188311 (CABOT CORPORATION), 30 Sept 1987 (30.09.87), abstract  --	15-18
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