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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
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(54) Title: SILOXANE RESINS

(57) Abstract: This invention pertains to a siloxane resin composition comprising R¹SiO_{3/2} siloxane units R²SiO_{3/2} siloxane units and (R³O)_bSiO_{(4-b)/2} siloxane units wherein R¹ is an alkyl group having 1 to 5 carbons, hydrogen, or mixtures thereof; R² is a monovalent organic group having 6 to 30 carbons; R³ is a branched alkyl group having 3 to 30 carbons, b is from 1 to 3; and the siloxane resin contains from 2.5 to 85 mole percent R¹SiO_{3/2} units, 2.5 to 50 mole percent R²SiO_{3/2} units and 5 to 95 mole percent (R³O)_bSiO_{(4-b)/2} units. The siloxane resin is useful to make insoluble porous resin and insoluble porous resin and insoluble porous coatings. Heating a substrate coated with the siloxane resin at a sufficient temperature effects removal of the R² and R³O groups to form an insoluble insoluble porous coating having a porosity of 1 to 60 volume percent and a dielectric constant in the range of 1.5 to 3.0.



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A. CLASSIFICATION OF SUBJECT MATTER
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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)
IPC 7 C09D H01L C08L C08G

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 practical, search terms used)
WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 997 497 A (ASAHI) 3 May 2000 (2000-05-03) claim 1	1
A	EP 1 095 958 A (DOW CORNING) 2 May 2001 (2001-05-02) claim 1	1
A	US 6 231 989 B1 (CHUNG ET AL) 15 May 2001 (2001-05-15) column 3, line 14 - line 18	1

Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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