

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
10 October 2024 (10.10.2024)



(10) International Publication Number
WO 2024/211571 A1

(51) International Patent Classification:

H05K 1/03 (2006.01) *H05K 3/34* (2006.01)
H05K 3/46 (2006.01) *H05K 3/00* (2006.01)

(21) International Application Number:

PCT/US2024/023076

(22) International Filing Date:

04 April 2024 (04.04.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

18/130,768 04 April 2023 (04.04.2023) US

(71) Applicant: **AVISHTECH, INC.** [US/US]; 5225 Hellyer Ave, Suite 260A, San Jose, CA 95138 (US).

(72) Inventors: **AMLA, Tarun**; 5225 Hellyer Ave, Suite 260A, San Jose, CA 95138 (US). **AMLA, Keshav**; 5225 Hellyer Ave, Suite 260A, San Jose, CA 95138 (US). **AMLA, Jyoti**; 5225 Hellyer Ave, Suite 260A, San Jose, CA 95138 (US).

(74) Agent: **PALMER, Nicole, A.** et al.; Lando & Anastasi, LLP, 60 State Street, 23rd Floor, Boston, MA 02109 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))



WO 2024/211571 A1

(54) Title: USE OF INORGANIC THIN NON-WOVEN DIELECTRICS IN PRINTED CIRCUIT BOARDS

(57) Abstract: Dielectric materials including non-woven inorganic fabrics impregnated with a low- density resin are disclosed. The dielectric materials may have a thickness in a range of about 5 to about 125 microns for use in printed circuit boards.