



(51) International Patent Classification:
H03H 5/00 (2006.01)

(21) International Application Number:
PCT/US2011/054086

(22) International Filing Date:
29 September 2011 (29.09.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/387,951 29 September 2010 (29.09.2010) US

(71) Applicant (for all designated States except US): **AVIAT NETWORKS, INC.** [US/US]; Research Triangle Park, 637 Davis Drive, Morrisville, NC 27560 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **NATH, Jayesh** [IN/US]; 4511 Carlyle Court, Apt. 1422, Santa Clara, CA 95054 (US). **SHEN, Ying** [US/US]; 100 River Birch Lane, Chapel Hill, NC 27514 (US).

(74) Agents: **AHMANN, William, F.** et al.; Sheppard, Mullin, Richter & Hampton LLP, 390 Lytton Avenue, Palo Alto, CA 94301 (US).

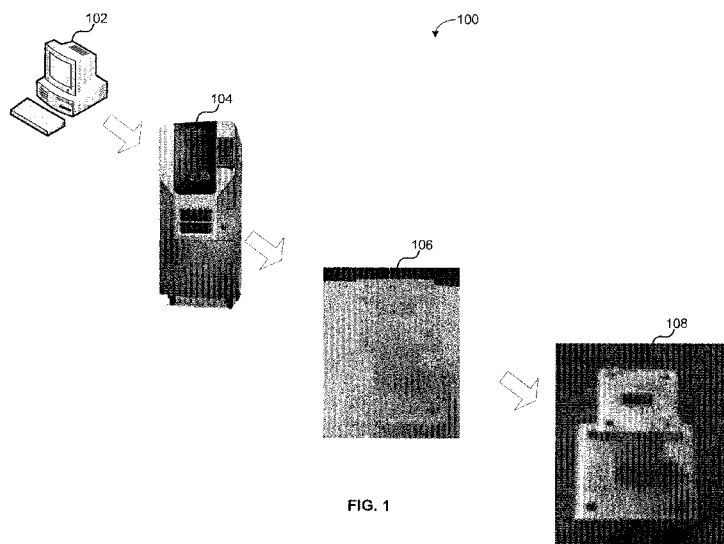
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: SYSTEMS AND METHODS FOR MANUFACTURING PASSIVE WAVEGUIDE COMPONENTS



(57) Abstract: Various embodiments are directed toward systems and method for manufacturing low cost passive waveguide components. For example, various embodiments relate to low cost manufacturing of passive waveguide components, including without limitation, waveguide filters, waveguide diplexers, waveguide multiplexers, waveguide bends, waveguide transitions, waveguide spacers, and an antenna adapter. Some embodiments comprise manufacturing a passive waveguide component by creating a non-conductive structure using a low cost fabrication technology, such as injection molding or three-dimensional (3D) printing, and then forming a conductive layer over the non-conductive structure such that the conductive layer creates an electrical feature of the passive waveguide component.