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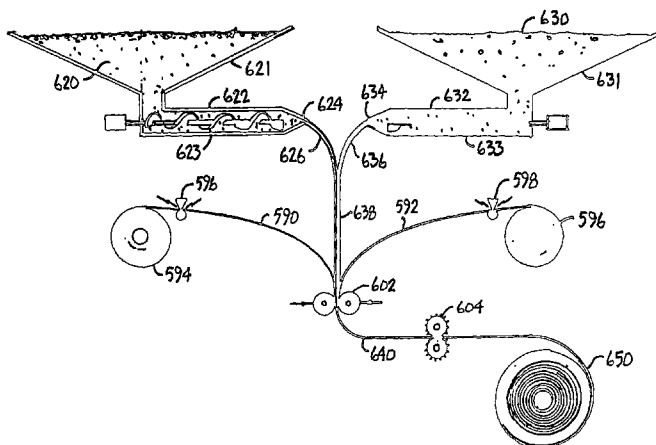
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(54) Title: MULTIPLE HAZARD PROTECTION ARTICLES AND METHODS FOR MAKING THEM



(57) Abstract: Articles, including fabrics and film layers, are disclosed which can protect against multiple hazards, including radiation, chemical, biological agents, metal projectiles and fire hazards. In some embodiments, the fabrics and films of the present invention are used to produce garments having protection against multiple hazards and superior heat dissipating properties. A radiation protective compound is preferably created by mixing a radiopaque material, such as barium, bismuth, tungsten or their compounds, with powdered polymer, pelletized polymer or a liquid solution, emulsion or suspension of a polymer in solvent or water. The liquefied polymeric films (626, 636) from the two extruders (622, 632) are preferably combined as they are sandwiched between two sheets of fabric or other material (590, 592), such as the protective polymer films or fabrics used for chemical protective garments, biological protective garments, bullet proof vests or fire retardant garments. The principles of this invention can also be applied to a broad range of other articles including surgical hoods, hospital gowns, gloves, patient drapes, partitions, coverings, jumpsuits, ponchos, uniforms, fatigues, tents, probes, envelopes, pouches, wallpaper, liners, drywall, house sidings, house foundations, house roofings etc.



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**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) 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, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, 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, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

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