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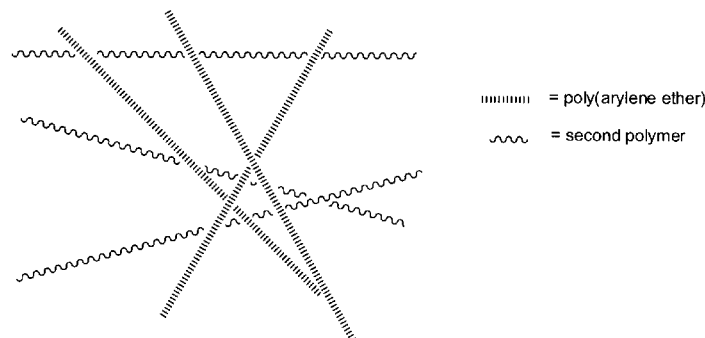
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(54) Title: POLYMERIC COMPOSITIONS COMPRISING PER(PHENYLETHYNYL) ARENE DERIVATIVES

Figure 1. Semipenetrating Polymer Network with Poly(arylene ether)



(57) Abstract: A polymeric composition comprising a first polymer chosen from a poly(arylene ether) polymer including polymer repeat units of the following structure: $-(O - Ar_1 - O - Ar_2 - O)_m - (-O - Ar_3 - O - Ar_4 - O)_n$ - where Ar_1 , Ar_2 , Ar_3 , and Ar_4 are identical or different aryl radicals, m is 0 to 1, n is 1 m ; a polysulfone, a polyimide, a poly(etherketone), a polyurea, a polyurethane, and combinations thereof and a second polymer comprising a per(phenylethynyl) arene polymer derivative. Cured films containing the polymer can exhibit at least one of the following properties: T_g from 160°C to 180°C, a dielectric constant below 2.7 with frequency independence, and a maximum moisture absorption of less than 0.17 wt%. Accordingly, the polymer is especially useful, for example, in interlayer dielectrics and in die-attach adhesives.