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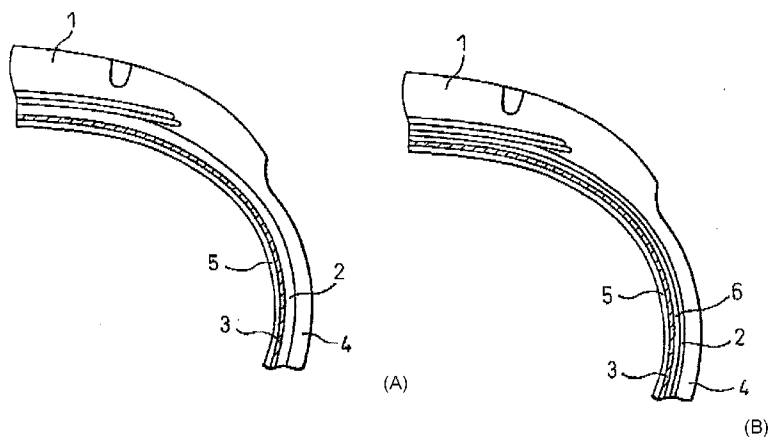
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(54) Title: LOW MOISTURE PERMEABILITY LAMINATE CONSTRUCTION



(57) Abstract: An article having a fluid permeation prevention layer, such as a pneumatic tire or hose. A tire for example includes an outer tread layer, intermediate sidewall and carcass layers and an innermost air permeation prevention layer: (i) the air permeation prevention (APP) layer having an upper and a lower surface, the layer having a polymer composition exhibiting an air permeation coefficient (APC) of about 25×10^{-12} cc cm/cm² sec cmHg (at 30° C) or less and a Young's modulus of about 1 MPa to about 500 MPa, the polymer composition comprising: (A) at least 10 wt% of at least one thermoplastic resin component having an APC of about 25×10^{-12} cc cm/cm² sec cmHg (at 30° C) or less and a Young's modulus of more than 500 MPa, which is preferably a polyamide resin or mixture, and (B) at least 10 wt% of at least one elastomer component having an APC of more than about 25×10^{-12} cc cm/cm² sec cmHg (at 30° C) and a Young's modulus of not more than 500 MPa, which elastomer component is preferably a halogen-containing rubber or mixture, the total amount (A)+(B) being not less than about 30 wt%, and the elastomer component is a dispersed vulcanized, discontinuous phase in the thermoplastic resin matrix; and (ii) at least one thermoplastic laminate layer bonded to at least said lower surface of the APP layer, the thermoplastic layer comprising a film-forming, serai-crystalline, substantially hydrophobic carbon chain polymer having a glass transition temperature, T_g, of less than about -200C.



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