

ABSTRACT

The present invention relates to a process for producing an interpenetrating polymer network structure, which comprises the steps of impregnating a polymer molding with a radical polymerizable composition containing an ethylenically unsaturated compound and a radical polymerization initiator; and polymerizing the ethylenically unsaturated compound in a swollen state of the polymer molding impregnated with the radical polymerizable composition; wherein a chain transfer agent and/or a radical polymerization inhibitor are added to the radical polymerizable composition and/or the polymer molding before impregnating the polymer molding with the radical polymerizable composition. According to the present invention, a highly uniform interpenetrating polymer network structure can be obtained. The present invention also provides a polishing pad which exhibits high in-plane uniformity of a polishing rate during polishing, and also has excellent flattening properties and improved pad lifetime during polishing, and a process for producing the same.