

Title: Isostatic polypropylene crosslinking in the presence of peroxide

Patent number: 6987149

Type: Grant

Filed: April 22, 2002

Date of Patent: January 17, 2006

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Abstract: This invention concerns the crosslinking of isotactic polypropylene, which has always been considered a non-crosslinkable polymer. Isotactic polypropylene crosslinking not only generates new uses but also the prospects of both economic and environmentally friendly mixing and recovery operations with other polymers. The crosslinking and interpenetrating polymer network (IPN) (as is the case with polypropylene/polyethylene mixture) provides both interesting properties and significant economic and environmentally friendly interest. The principle of the crosslinking mechanism is to create macro radicals and cause them to act immediately on sulphur before the reaction of peroxide termination. The mixing process used is extrusion; however, all other processes of transformation used for thermoplastics would be useful for subsequent industrial use.