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(54) Title: METHOD FOR MAKING FIBER REINFORCED POLYPROPYLENE COMPOSITES

(57) Abstract: The present invention is directed generally to processes for making fiber reinforced polypropylene resins including at least 25 wt% polypropylene based polymer, from 5 to 60 wt% organic fiber, and from 0 to 60 wt% inorganic filler. The process includes extrusion compounding the polypropylene based polymer, the organic fiber, and the inorganic filler to form a fiber reinforced polypropylene resin, which is subsequently molded to form an article with a flexural modulus of at least 300,000 psi, that exhibits ductility during instrumented impact testing (15 mph, -29°C, 25 lbs). Twin screw extruder compounding processes where the organic fiber is continuously fed to the extruder hopper by unwinding from one or more spools, and uniformly dispersed in the fiber reinforced polypropylene resin by twin screws having a combination of conveying and kneading elements are also disclosed.



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