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(54) Title: IMPACT-MODIFIED MOLDING COMPOSITION AND METHOD

(57) Abstract: A method is disclosed for preparing an acrylic-styrene-acrylonitrile (ASA) resin, which comprises the steps of: (a) polymerizing a mixture comprising at least one acrylate monomer and at least one crosslinking agent to form a rubber substrate, followed by (b) polymerizing a mixture of monomers in the presence of the rubber substrate, at least one of which monomers is selected from the group consisting of vinyl aromatic monomers and at least one of which monomers is selected from the group consisting of monoethylenically unsaturated nitrile monomers, and optionally followed by (c) polymerizing one or more monomers in at least one subsequent stage in the presence of the rubber substrate from (b), wherein the one or more monomers comprise at least one monomer selected from the group consisting of (C₁-C₁₂) alkyl- and aryl-(meth)acrylate monomers; wherein the amount of unreacted crosslinking agent remaining in the rubber substrate before step (b) is less than 5.6 micromoles per gram based on the dry weight of the rubber substrate. The invention also relates to a molding composition comprising an ASA resin comprising an elastomeric phase derived from a rubber substrate comprising structural units derived from at least one crosslinking agent; wherein the rubber substrate comprises less than 5.6 micromoles of unreacted crosslinking agent per gram of rubber substrate based on dry weight of the rubber substrate. Articles comprising said ASA resin and/or made from said molding composition are also disclosed.

WO 2006/127223 A1