

A method for the accelerated free radical copolymerization of acrylamide monomers and diacetone acrylamide monomers in an aqueous solution to form copolymers which may be combined with photosensitizers and utilized in the color picture tube or photoengraving industries as a polymeric component of the light sensitive photoresists comprises admixing an aqueous acrylamide and diacetone acrylamide monomer solution with an effective amount of a free radical initiator and an effective amount of a tetramethylamine catalyst to form a mixture and maintaining the mixture at ambient temperature until the polymerization is complete. A 0.1 to 15% weight solution of the two monomers having an acrylamide to diacetone acrylamide weight ratio of between about 0.4:1 to 100:1 is completely polymerized in less than an hour when the weight ratio of free radical initiator to monomers is between about 1:6 to 1:300 and the weight ratio of tetramethylamine catalyst to monomers is about 1:20 and 1:400. The preferred tetramethylamine catalyst is N,N,N',N'-tetramethylethylenediamine (TEMED) and the preferred free radical initiator is ammonium persulfate.

5552506

**ORGANOPOLYSILOXANES,
MODIFIED WITH ACRYLATE
GROUPS IN THE PRESENCE OF A
RHODIUM CATALYST**

Ebbrecht Thomas; Lersch Peter; Wewers Dietmar
Witten, GERMANY assigned to Th Goldschmidt
AG

Organopolysiloxanes, which terminally, laterally or both have at least one group of the formula (*See Patent for Chemical Structure*) $\text{SiCH}_3\text{CHOCO}$, and/or SiCHCHOCOC well as at least one acrylate group, linked over a bridge element to this group,

is obtained by hydrosilylation of organopolysiloxanes with at least one SiH group by compounds, which have at least two acrylate groups, in equimolar amounts at a temperature of 60° to 130°C in presence of rhodium catalysts. The rhodium catalysts cause a 1,2 addition to take place during the addition reaction between polyacrylates and hydrogen siloxanes.

5552514

**ACID CATALYZED PROCESS FOR
PREPARING AMINO ACID
POLYMERS**

Adler David E; Freeman Michael B; Lipovsky
James M; Paik Yi H; Shulman Jan E; Swift Graha
Dresher, PA, UNITED STATES assigned to Rohm
and Haas Company

The present invention relates to an acid catalyzed thermal polycondensation process for producing amino acid polymers. More specifically, amino acid polymers are produced by thermally condensing a mixture of one or more amino acids and optionally one or more polyfunctional monomers, using an acid catalyst, while maintaining an intimate admixture. Processing techniques useful for maintaining an intimate admixture include adding to the mixture one or more processing aids, using mechanical means, and combinations thereof. The amino acid polymers produced by this process are useful as cleaning and detergent additives; fertilizer and pesticide additives; personal care product additives; dispersants for inorganic particulates, aqueous emulsions, and drilling muds; and water treatment and oil production operation additives as corrosion and scale inhibitors.