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(54) Title: ANIONIC VINYL/DICARBOXYLIC ACID POLYMERS AND USES THEREOF

(57) Abstract: Biodegradable anionic polymers are disclosed which include recurring polymeric subunits preferably made up of vinyllic and dicarboxylic monomers such as vinyl acetate or vinyl alcohol and maleic anhydride, itaconic anhydride or citraconic anhydride, or combinations thereof. Free radical polymerization is used in the synthesis of the polymers, which are then hydrolyzed to replace ester groups with alcohol groups. The polymers may be complexed with ions and/or mixed with fertilizers or seed to yield agriculturally useful compositions. The preferred products of the invention may be applied foliarly, to seeds, to fertilizer, or to the earth adjacent growing plants in order to enhance nutrient uptake by the plants.