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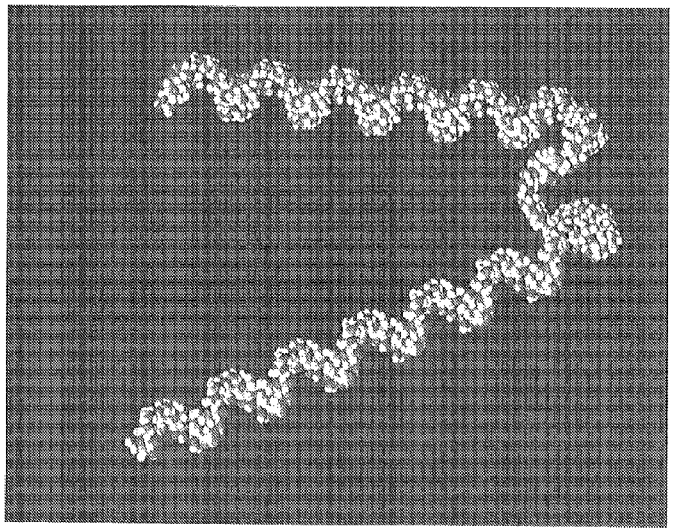
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(54) Title: SELF-ASSEMBLED NANO-STRUCTURE PARTICLE AND METHOD FOR PREPARING

(57) Abstract: Novel, nano-structured particles are formed by introducing a selected solid of interest into a structured fluid matrix formed by a dispersion of a small molecule host vessel, such as a native or modified polysaccharide, cavitand, simple sugar, simple polyol or other similarly structured molecule known to be useful as a host vessel, in an acidic medium or other solvent, whereby the particle size of the introduced solid is reduced and or limited by incorporation into the host vessel. The simple, one-step mixing process results in stabilized colloidal dispersions of the nanoparticles useful in a wide variety of applications.

Figure 1: Helical structure of Amylose from starch. Starch is composed of amylose and amylopectin, and maltodextrins are the product of partial hydrolysis of starch. Regions within the amylose helix are known to be relatively hydrophobic and can host inclusions.



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