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A Nanoparticle-based Coagulation Method for Cost-effective Microalgae Harvesting

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Description: In this invention we report a method to harvest microalgae that is both cost-effective and efficient. Current methods (centrifugation, filtration, flotation and ultrasound sedimentation) all have draw backs in either cost or interference of downstream processes. This method uses nanoparticles in a unique manner so the microalgae coagulate and are easily and efficiently harvested. The nanoparticles and other materials can be massed-produced at low cost, are reusable and require no post-harvesting processes to be removed.

Potential Areas of Application

- Energy production
- Biofuels

Main Advantages of this Invention

- Cost-effective
- Efficient
- Inert to downstream processes

Intellectual Property Status: Provisional Patent filed January 22, 2010

ID number: US Patent application 13/011,582

Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

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