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(71) Applicant (for all designated States except US): **ACUSPHERE, INC.** [US/US]; 500 Arsenal Street, Watertown, MA 02472 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WALOVITCH, Richard** [US/US]; 16 Joseph Road, Framingham, MA 01701 (US). **BERNSTEIN, Howard** [CA/US]; 33A Trowbridge Street, Cambridge, MA 02138 (US). **CHICKERING, Donald, E, III** [US/US]; 3 Holly Way, Framingham, MA 01701 (US). **STRAUB, Julie** [US/US]; 100 Cambridge Street, Winchester, MA 01890 (US).

(74) Agents: **PABST, Patrea, L.** et al.; Pabst Patent Group LLP, 400 Colony Square, Suite 1200, 1201 Peachtree Street, Atlanta, GA 30361 (US).

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(54) Title: **ULTRASOUND CONTRAST AGENT DOSAGE FORMULATION**

(57) **Abstract:** Clinical studies have been conducted and specific dosage formulations developed using polymeric microparticles having incorporated therein perfluorocarbon gases that provide significantly enhanced images of long duration. The dosage formulation includes microparticles formed of a biocompatible polymer, preferably including a lipid incorporated therein, and containing a perfluorocarbon that is a gas at body temperature. The microparticles are provided to a patient in an amount effective to enhance ultrasound imaging in the ventricular chambers for more than 5 minutes or in the myocardium for more than a minute, in a dose ranging from 0.025 to 8.0 mg microparticles/kg body weight. Preferably the dose ranges from 0.05 to 4.0 mg microparticles/kg body weight. The dosage formulation typically is provided in a vial. A typical formulation is in the form of a dry powder that is reconstituted with sterile water prior to use by adding the water to the vial or syringe of the dry powder and shaking to yield an isosmotic or isotonic suspension of microparticles.

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