GASEOUS ULTRASOUND CONTRAST MEDIA AND METHOD FOR SELECTING GASES FOR USE AS UTRASOUND CONTRAST MEDIA

ABSTRACT

Disclosed herein are agents for enhancing the contrast in an ultrasound image. These agents are extremely small bubbles, or "microbubbles," comprised of specially selected gases. The microbubbles described herein exhibit long life spans in solution and may be produced at a size small enough to traverse the lungs, thus enabling improved ultrasound imaging of the cardiovascular system and other vital organs. Also disclosed herein is a method for selecting gases from which contrast agents may be produced. The method is based on calculations using inherent physical properties of gases and describes a means to associate the properties of a gas with the time for dissolution of microbubbles comprised of the gas.