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**METHOD FOR THE PREPARATION OF
FLUOROCARBON-CONTAINING
POLYMERIC SHELLS FOR MEDICAL
IMAGING**

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In accordance with the present invention, compositions comprising imaging agent(s) contained within polymeric shells are provided. Invention compositions are useful, for example, as contrast agents for magnetic resonance imaging (MRI), ultrasonography, and X-ray computer tomography. The polymeric shell diameter is typically approximately 2 microns in diameter. Consequently, these materials have organ specificity due to rapid scavenging by the reticuloendothelial system (RES) or the mononuclear phagocyte (MNP) system upon intravenous injection. Furthermore, polymeric shells of the invention can be used to measure and monitor local oxygen and temperature. Exemplary contrast agents contemplated for use in the practice of the present invention include fluorinated compounds. Fluorinated compounds in general are hydrophobic and as such have limited water solubility. The invention method permits preparation of such compounds in a biocompatible form suitable for ready delivery.

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**1,1,1,2-TETRAFLUOROETHANE AS A
BLOWING AGENT IN INTEGRAL SKIN
POLYURETHANE SHOE SOLES**

Valoppi Valeri L Riverview, MI, UNITED STATES assigned to BASF Corporation

It has been found that 1,1,1,2-tetrafluoroethane (HFC-134a) may be used alone or in combination with water as blowing agents in flexible integral skin foams. Foams prepared using HFC-134a alone or in combination with water exhibit physical characteristics such as resistance to abrasion and cracking on flex comparable to conventional chlorinated fluorocarbon

blown foams. The foams of the present invention are suitable for use in shoe sole applications.

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**COPOLYMER OF THE
TETRAFLUOROETHYLENE-ETHYLENE
TYPE HAVING A CORE-SHELL
PARTICLE STRUCTURE**

Muhlbauer Hans P Feldafing, GERMANY assigned to Hoechst Aktiengesellschaft

Aqueous dispersions of colloidal particles comprising a particle core and at least one particle shell are obtained by preparing a seed dispersion by copolymerization of tetrafluoroethylene, ethylene and, if desired, further fluoroolefinic comonomers and then continuing the polymerization by supplying the monomers for the particle shell, where the particle shell is a polymer having a melting point at least 20 degrees C. lower than that of the particle core, and where the volume of the particle shell is from 1 to 26% by volume of the total volume. These dispersions can be coagulated or spray dried to give powders which are suitable for the production of porous structures.

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**PROCESS FOR THE PRODUCTION OF
BIS(FLUOROMETHYL)ETHER AND
DIFLUOROMETHANE**

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A process for the production of bis(fluoromethyl)ether by contacting formaldehyde with hydrogen fluoride in a reaction/distillation vessel. The reaction/distillation vessel is preferably a reaction/distillation column through which formaldehyde and hydrogen fluoride preferably flow in counter current. The bis(fluoromethyl)ether may be converted to difluoromethane, preferably by heating the bis(fluoromethyl)ether to elevated temperature in the presence of a metal, metal oxide, metal fluoride or metal oxyfluoride catalyst.