

Title (en)

CONTRAST AGENTS FOR MAGNETIC RESONANCE IMAGING

Title (de)

KONTRASTMITTEL FÜR DIE MAGNETRESONANZTOMOGRAPHIE

Title (fr)

AGENTS DE CONTRASTES POUR L'IMAGERIE PAR RÉSONANCE MAGNÉTIQUE

Publication

**EP 1765162 A4 20081001 (EN)**

Application

**EP 05749298 A 20050518**

Priority

- US 2005017341 W 20050518
- US 57272604 P 20040518

Abstract (en)

[origin: WO2005112758A1] A contrast agent for magnetic resonance imaging having a plurality of nanoparticles (100, 200). Each of the nanoparticles (100, 200) has: a signal generating core (110, 210) having a diameter of up to 10 nm; at least one organic layer (120, 230) of at least one of a polymer, a monomer (122), and a surfactant; and a water soluble outer shell of at least one of a polymer, a monomer (122), and a ligand. The organic layer (120, 230) is adsorbed upon and substantially surrounds and stabilizes the signal generating core. The water soluble outer shell solubilizes and provides biocompatibility for each of the nanoparticles (100, 200). The contrast agents provide enhanced relaxivity, high signal-to-noise ratios, and targeting abilities. In addition, the contrast agents possess resistance to agglomeration, controlled particle size, blood clearance rate, and biodistribution. Methods of making such contrast agents and nanoparticles (100, 200) are also disclosed.

IPC 8 full level

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CPC (source: EP)

**A61K 49/186** (2013.01); **B82Y 5/00** (2013.01)

Citation (search report)

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- See references of WO 2005112758A1

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