Title (en)

CLAY ENCLOSED TRANSITION AND RARE EARTH METAL IONS AS CONTRAST AGENTS FOR THE GASTROINTESTINAL TRACT.

Title (de)

ÜBERGANGS- UND SELTENERD-METALLIONEN EINGEBUNDEN IN TON ALS KONTRASTMITTEL FÜR DEN MAGEN-DARM-TRAKT.

Title (fr)

IONS DE METAUX DE TRANSITION ET DE TERRE RARE ENFERMES DANS UNE ARGILE ET UTILISES COMME AGENTS DE CONTRASTE POUR LES VOIES GASTRO-INTESTINALES.

Publication

EP 0646237 A1 19950405 (EN)

Application

EP 93915212 A 19930604

Priority

- US 9305350 W 19930604
- US 89890692 A 19920615
- US 7035193 A 19930527

Abstract (en)

[origin: WO9325895A1] The invention relates to compositions and methods of using clay-enclosed paramagnetic ions as image brightening or image contrast agents. In particular, T1 relaxivity measurements on Hectorite and mortmorillonite clay-enclosed trivalent gadolinium suggest improved imaging over zeolite-enclosed paramagnetic species. Clay-enclosed gadolinium complexes are amenable to convenient administration in oral preparations and are readily formulated in stable aqueous suspensions. Other transition metal ions, including divalent manganese, may be enclosed in the clay structures, either as free metals or in the forms of chelated complexes. Alternatively, improved relaxivities are envisioned for clays incorporating a paramagnetic metal ion as part of the frameword structure.

IPC 1-7

G01N 24/08

IPC 8 full level

G01R 33/28 (2006.01); **A61B 5/055** (2006.01); **A61K 49/00** (2006.01); **A61K 49/18** (2006.01)

CPC (source: EP)

A61K 49/189 (2013.01); **B82Y 5/00** (2013.01)

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9325895 A1 19931223; AU 4528093 A 19940104; EP 0646237 A1 19950405; EP 0646237 A4 19951108; JP H07507800 A 19950831

DOCDB simple family (application)

US 9305350 W 19930604; AU 4528093 A 19930604; EP 93915212 A 19930604; JP 50160793 A 19930604