

Title (en)

DIAGNOSTIC IMAGING CONTRAST AGENT WITH IMPROVED IN-SERUM-RELAXIVITY

Title (de)

DIAGNOSTISCHES BILDERZEUGUNGIS KONTRASTMITTEL MIT VERBESSERTER IN-SERUM-RELAXATION

Title (fr)

AGENT DE CONTRASTE D'IMAGERIE DIAGNOSTIQUE PRESENTANT UNE RELAXIVITE AMELIOREE DANS LE SERUM

Publication

EP 0920411 A1 19990609 (EN)

Application

EP 97938855 A 19970724

Priority

- EP 9703997 W 19970724
- IT MI961685 A 19960802

Abstract (en)

[origin: WO9805626A1] Compounds of formula (I), both in the racemic and optically active forms in which R is H, or a linear or branched, saturated or unsaturated C1-C20 alkyl, optionally interrupted by one or more -CH(OH)-, -CONH-, -NHCO-, -CO-, -CH(NH2)-, -SO-, -SO2-, SO2NH- groups and/or one or more N, O, S atoms optionally substituted with one or more -COOH groups and/or amide or ester derivatives thereof, and in which said alkyl chain is interrupted or substituted by at least 2, which are independently the same or different, isolated or fused, cyclic L residues, with the proviso that, when some L residues are fused together, the resulting polycyclic unit comprises no more than 3 cyclic group, and in which L is a carbocyclic or heterocyclic, saturated or unsaturated or aromatic cyclic unit, comprising from 5 to 6 atoms, optionally substituted by one or more X groups, which are independently the same or different, in which X is OH, halogen, NH2, NHZ, N(Z)2, -OZ-, -SZ-, COZ, where the Z groups can independently be a C1-C5 linear or branched alkyl, optionally substituted with one or more -OH, -COOH or alkoxy groups, or said X group is a -COOH group or a derivative thereof, such as an ester or an amido group, or -SOZH group or an amino derivative of the same; R1 is the same as R with the provisos that: R and R1 cannot be at the same time H; when R is different from H, R1 is H; when R1 is different from H, R is H; as well as the complexes of the compounds of fomula (I) with metal ions of atomic number from 20 to 31, 39, from 42 to 44, 49 and from 57 to 83 and the salts thereof with physiologically acceptable organic bases selected from primary, secondary or tertiary amines, or basic amino acids, or with inorganic bases the cations of which are sodium, potassium, magnesium, calcium or the mixtures thereof. Said compounds are useful as contrast agents in Magnetic Resonance Imaging and have improved relaxivity in human serum.

IPC 1-7

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