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The invention relates to a binuclear coordination compound of europium(III) with mixed ligands, which has luminescent properties and can be used in optoelectronics.

According to the invention, a binuclear coordination compound of europium(III) with the formula $[\text{Eu}(\mu\text{-OC}_2\text{H}_5)(\text{btfa})(\text{NO}_3)(\text{phen})]_2 \cdot \text{phen}$ is claimed, where btfa is the monoanion of benzoyltrifluoroacetone and phen – 1,10-phenanthroline. The compound is a binuclear complex of europium(III) with three different bidentate ligands. To each europium(III) ion is coordinated one monoanion of benzoyltrifluoroacetone, one molecule of 1,10-phenanthroline and one nitrate anion, and two ethoxy groups, in the role of bridge ligands, connect metal ions to each other. The binuclear compound molecule further comprises one crystallization molecule of 1,10-phenanthroline.

The coordination compound has luminescent properties with a maximum photoluminescence at 612 nm.

Claims: 1

Fig.: 1