

**Mono-noble metal dithiolates, preparations containing them
and use thereof**

5 Abstract

This invention relates to mono-noble metal dithiolates, in particular water soluble monogold(I) dithiolates, to the production thereof and to the use thereof for the
10 production of decoration containing noble metal on storable substrates.

The mono-noble metal dithiolates constitute a novel class of thiolates, which are suitable for use in organic/aqueous
15 and purely aqueous noble metal preparations for decorative purposes.

The mono-noble metal dithiolates are of the formula



25 in which

Em: means Au(I), Ag(I), an equivalent of Pd(II), Pt(II) or Rh(III)

Q: means a tetravalent organic residue with 2 to 10 C atoms

30 Y: means a hydrophilic group from the series -COOH, -COO⁻cat⁺, or -COO-(CHR¹-CHR²-O)_mR³

Z: equals Y or H or a group from the series -OR', -SR', -SO₃R', -NR'₂, -NR'₃⁺X⁻