

Title (en)
LIGNIN-COATED METAL OXIDE NANOPARTICLES AND USE THEREOF IN COSMETIC COMPOSITIONS

Title (de)
LIGNINBESCHICHTETE METALLOXIDNANOPARTIKEL UND VERWENDUNG DAVON IN KOSMETISCHEN ZUSAMMENSETZUNGEN

Title (fr)
NANOPARTICULES D'OXYDE MÉTALLIQUE REVÊTUES DE LIGNINE ET LEUR UTILISATION DANS DES COMPOSITIONS COSMÉTIQUES

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Abstract (en)
[origin: WO2017197530A1] While titanium dioxide is commonly used as a sunscreen, concerns persist regarding the catalytic activity of TiO₂ and its generation of reactive oxygen species (ROS). The present invention attempts to address these concerns by providing TiO₂ nanoparticles coated with lignin, yielding a thin-coated metal oxide nanoparticle. The lignin coating is presumed to scavenge ROS before they diffuse away from the particles and interact with the user's body or other components of a cosmetic formulation (such as organic sunscreens). Other metal oxides coated with lignin are also disclosed, as well as methods for preparing lignin coated metal oxide nanoparticles.

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