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(54) Title: COATING COMPOSITION, PREFERABLY PRINTING INK FOR SECURITY APPLICATIONS, METHOD FOR PRODUCING A COATING COMPOSITION AND USE OF GLASS CERAMICS

(57) Abstract: The present invention relates to coating compositions, preferably printing inks for security applications comprising at least one organic resin, at least one pigment and optionally at least one organic solvent. Said pigment comprises glass ceramic composite particles, containing at least one crystalline particle embedded in a glass matrix. Said glass ceramic particles have a particle size in the range of between 0.1 µm to 50 µm. Preferably active ions selected from the group of the rare-earth elements are incorporated into the crystalline phase of the composite to provide the glass ceramics with luminescent up- and down- converting characteristics. Glass ceramic luminescents have excellent physical and chemical stability. The glass matrix permits as well the stabilisation of the photophysically interesting halide host crystals which have low phonon energies. Such materials provide unusual excitation and emission properties.