

Coating Composition, Process for Producing the
Composition, and Laminate having a Hard Coat Layer

Abstract

[Abstract] To provide a coating composition capable of forming a hard coat layer having excellent transparency and scratch resistance on the surface of an optical resin substrate such as a plastic lens, and exhibiting long-term storage stability.

[Means for Solution] The coating composition comprises (A) a fine particulate composite metal oxide, (B') a hydrolyzed product obtained by the hydrolysis of (B) a hydrolyzable organosilicon compound containing (B1) an organosilicon compound that has an epoxy group, such as

γ -glycidoxypropyltrimethoxysilane, (C) water, (D1) a low-boiling lowly viscous alcohol having not more than 3 carbon atoms, such as methanol or ethanol, (D2) a low-boiling highly viscous alcohol such as t-butanol, (D3) a high-boiling organic solvent having a boiling point of 150°C to 200°C, such as diacetone alcohol, and (E) a curing catalyst such as tris(2,4-pentanedionato)aluminum(III), the mass ratio (D1/C) of the component (D1) and the component (C) being in a range of 1.80 to 7.00, the mass ratio (D2/C) of the component (D2) and the component (C) being in a range of 0.24 to 2.50, and the mass ratio (D3/C) of the component (D3) and the component (C) being in a range of 1.10 to 4.40.

[Selected Drawing] None