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(54) Title: **OPTICAL DEVICE HAVING LOW VISUAL LIGHT TRANSMISSION AND LOW VISUAL LIGHT REFLECTION**

(57) Abstract

A solar control film having low visible light transmittance and low visible light reflectance is comprised of two or more transparent substrates (14) each bearing a thin, transparent, discontinuous, incoherent film of metal (18) having low visible light reflectance and a degree of visible light blocking capacity, the substrates being so assembled and laminated into a composite (10) that the visible light blocking capacities of the metal films are effectively combined to provide a composite having low visible light transmittance as well as low visible light reflectance. Performance characteristics are enhanced by providing on one or more of the substrates a transparent coating (16) of high refractive index underlying the metal film. The material of high refractive index is preferably a synthetic high oxygen content oxide of bismuth, which facilitates efficient and economical production of the solar control film.

