Title (en)

OPTICAL ARTICLE WITH ANTI-REFLECTING COATING, CORRESPONDING COATING MATERIAL AND COATING METHOD

Title (de)

OPTISCHER ARTIKEL MIT REFLEXFREIER BESCHICHTUNG, ENTSPRECHENDES BESCHICHTUNGSMATERIAL UND BESCHICHTUNGSVERFAHREN

Title (fr)

ARTICLE OPTIQUE TRAITE ANTI-REFLET, MATERIAU ET PROCEDE CORRESPONDANTS

Publication

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Application

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Abstract (en)

[origin: WO9845113A1] The invention relates to an optical article which comprises a mineral substrate and an anti-reflecting coating on at least one surface of said mineral substrate. In a characteristic way, said mineral substrate has a refractive index between 1.5 and 1.9 and said anti-reflecting coating is a single layer, nanoporous/nanograin structured coating, obtained by heat-treating a sol-gel film, constituted of strongly interconnected, inorganic polymers, also linked with inorganic particles, said polymers forming a tri-dimensional network which has the general formula M-OH/M-O-M, in which M represents a metal or a metalloid, advantageously selected from silicon, aluminium, zirconium, titanium and mixtures thereof. The invention also relates to a sol-gel material which is precursor of said anti-reflecting coating, and to a coating method for obtaining said optical article. Said device is advantageously an ophthalmic lens.

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