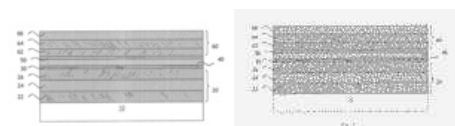
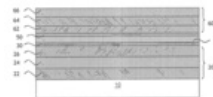
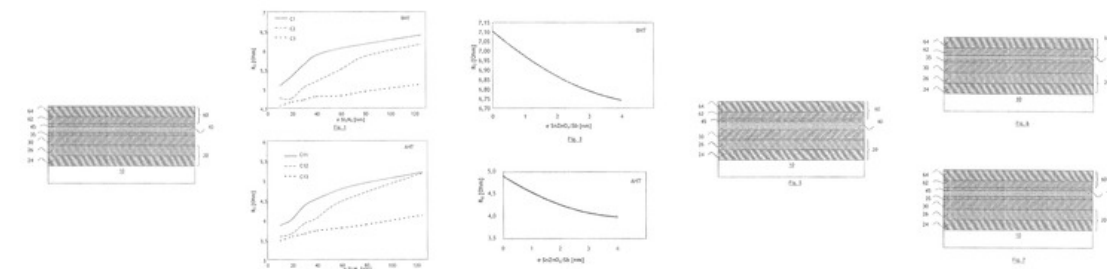
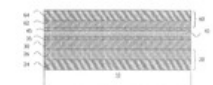


The invention relates to a glass substrate (10) having, on a main side, a stack of thin layers comprising a functional metallic layer (40) with reflective properties in infrared and/or solar radiation, particularly silver-based or based on a metallic alloy containing silver, and two anti-reflective coatings (20, 60), said coatings each comprising at least one dielectric layer (22, 64) silicon-nitride based, possibly doped with at least one other element, such as aluminum, said functional layer (40) being placed between the two antireflective coatings (20, 60), characterized in that the optical thickness $e60$ in nm of the underlying antireflective coating (60) is: $e60 = 5 \times e40 + a$, where $e40$ is the geometric thickness in nm of the functional layer (40) such as $13\,4040 < 18$, and where a is a number $= 25 \pm 15$.



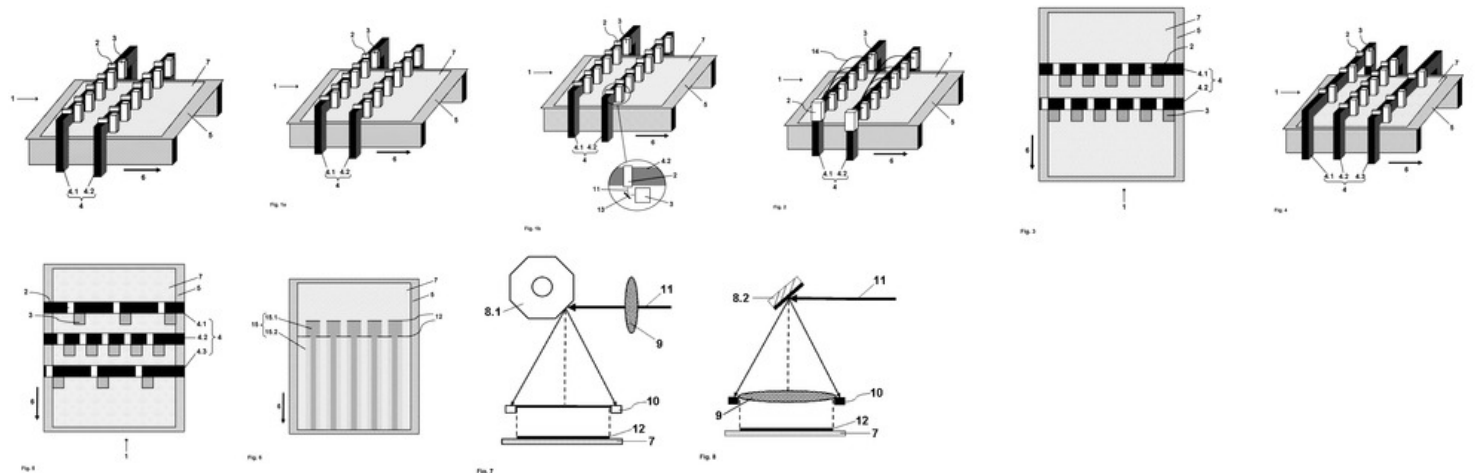
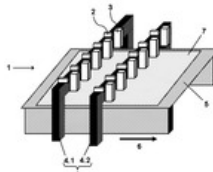
The invention relates to a substrate (10), especially a transparent glass substrate, provided with a stack of thin layers comprising a functional layer (40) which has infrared reflectance and/or solar radiation reflectance properties and is especially metallic based on silver or a metallic alloy containing silver, and two coatings (20, 60), said coatings consisting of a plurality of dielectric layers (24, 26; 64) such that the functional layer (40) is arranged between the two coatings (20, 60), the functional layer (40) being arranged on a wetting layer (30) which is arranged in turn directly on a subjacent coating (20). The inventive substrate is characterised in that the subjacent coating (20) comprises at least one dielectric layer (24) based on nitride, especially silicon nitride and/or aluminium nitride, and at least one non-crystallised mixed oxide smoothing layer (26), said smoothing layer (26) being in contact with the subjacent wetting layer (30).



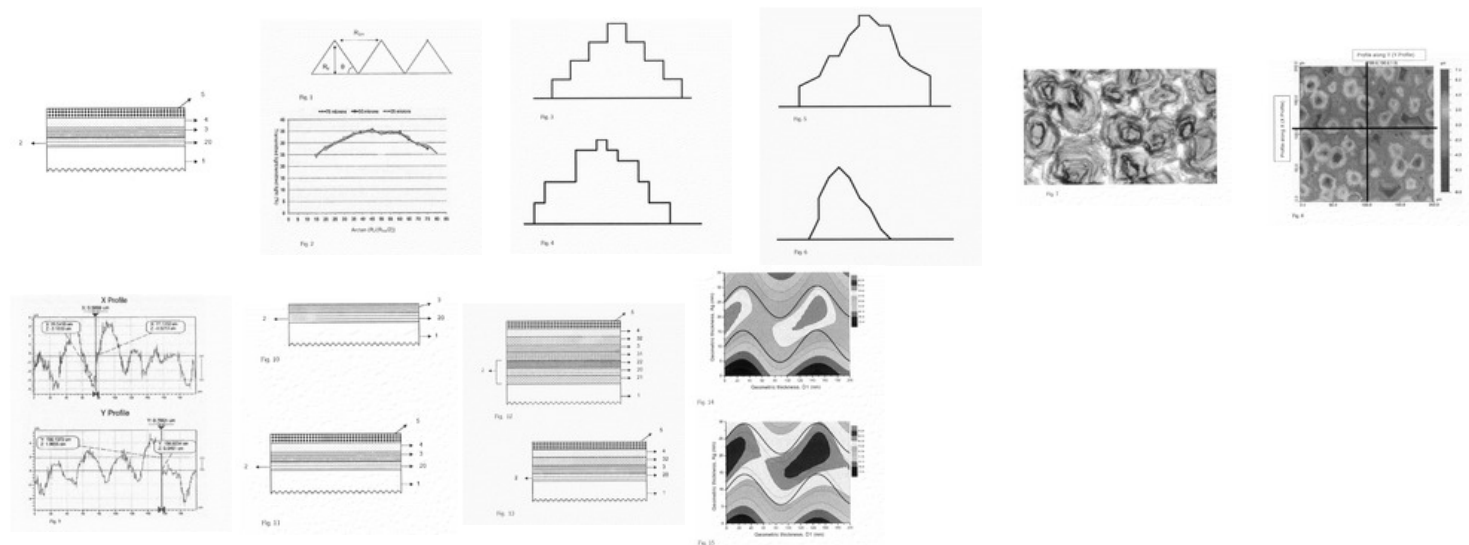
The invention relates to a method for obtaining a substrate coated on at least one face thereof with a low-emittance stack of thin films, said method comprising the following steps consisting in: depositing on at least one face of the substrate a stack of thin films including at least one thin silver film between two thin dielectric films; and heat treating the at least one coated face with at least one laser radiation emitted at at least one wavelength of between 500 and 2000 nm, such that the emissivity and/or square resistance of the stack is reduced by at least 5 %. According to the invention, prior to treatment, the stack includes at least one thin film that at least partially absorbs laser radiation and, consequently, the absorption of the stack at at least one laser radiation wavelength is such that the absorption of a 4 mm-thick clear glass substrate coated with this stack at the at least one laser radiation wavelength is greater than or equal to 10 %.

$$\Delta E^* = \sqrt{(\Delta L^*)^2 + (\Delta a^*)^2 + (\Delta b^*)^2}$$

The invention relates to a laser device (1) for tempering coatings containing metal or metal oxide on large-area glass substrates (7), at least comprising: a) at least one laser source (2); b) at least two bridges (4) spanning a conveyor belt (5) that carries a glass substrate (7); wherein each bridge (4) contains a plurality of optical arrangements (3) which are disposed alternately on the bridges (4); each optical arrangement (3) generates a laser line (12) and the laser lines (12) of all optical arrangements (3) together cover the entire width of the glass substrate (7).



The invention relates to a glass substrate having enhanced optical properties for optoelectronic devices, wherein said substrate is totally or partially textured, by means of a chemical attack, on at least one of the surfaces thereof with a set of geometric patterns such that the arctangent of the ratio of the mean height of the patterns, R_z , to half the mean distance between the peaks of two contiguous patterns, R_{Sm} , is at least equal to an angle of 35° and at most equal to an angle of 80° .



The invention relates to a substrate bearing an OLED electrode, having a sheet resistance of less than $25 \Omega/\square$, comprising: an electrically conductive coating; a thin essentially inorganic electrically conductive film that acts as a work function matching layer, having a sheet resistance at least 20 times higher than the sheet resistance of the electrically conductive coating and a thickness of at most 60 nm; and, between the electrically conductive coating and the work function matching layer, an essentially inorganic thin film, called a buffer film, having a contact resistivity lying in the range from 1×10^{-6} to $1 \Omega \cdot \text{cm}^2$.

