

Title (en)

GLASS SUBSTRATE COATED WITH A STACK HAVING SCATTERING REFLECTION AND SPECULAR TRANSMISSION

Title (de)

MIT EINEM STAPEL MIT STREUENDEN REFLEXION UND SPIEGELNDER TRANSMISSION BESCHICHTETES GLASSUBSTRAT

Title (fr)

SUBSTRAT VERRIER REVETU D'UN EMPILEMENT A REFLEXION DIFFUSANTE ET TRANSMISSION SPECULAIRE

Publication

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Application

EP 14790126 A 20140701

Priority

- FR 1356433 A 20130702
- FR 2014051686 W 20140701

Abstract (en)

[origin: WO2015001248A2] The invention relates to: - a non-rough glass substrate coated with a stack of thin layers which finishes with a mixed zinc tin oxide layer having a thickness of between 15 and 60 nm, then with a silicon nitride layer having a thickness of between 20 and 100 nm, detached from place to place from said mixed oxide layer so as to form delamination blisters having a size of between 1 and 20 nm; a process for manufacturing this substrate, comprising the operations that consist in - depositing by sputtering, especially magnetron sputtering, on a non-rough glass substrate optionally coated with at least one thin layer, a mixed zinc tin oxide layer, the oxygen content of which is lower than that completely saturating the oxidation process of these two metals simultaneously, and having a thickness of between 15 and 60 nm, then a silicon nitride layer having a thickness of between 20 and 100 nm and having an intrinsic compressive stress at least equal to 1 GPa, then in - subjecting the assembly to a heat treatment between 500 and 750 °C for 7 to 15 minutes; the application of this substrate, as transparent motor vehicle roof, façade or spandrel glass, anti-reflective low-emissivity motor vehicle roof, anti- reflective windscreens, low-emissivity building glazing, or projection screen.

IPC 8 full level

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