

Title (en)  
SUBSTRATE, IN PARTICULAR GLASS SUBSTRATE, SUPPORTING AT LEAST ONE STACK OF A PHOTOCATALYTIC LAYER AND A  
SUBLAYER FOR THE HETEROEPITAXIAL GROWTH OF SAID LAYER

Title (de)  
SUBSTRAT, INSBESONDERE GLASSUBSTRAT, DAS MINDESTENS EINEN STAPEL AUS EINER PHOTOKATALYTISCHEN SCHICHT UND  
EINER UNTERSCHICHT FÜR DAS HETEROEPITAKTISCHE AUFWACHSEN DER SCHICHT TRÄGT

Title (fr)  
SUBSTRAT, NOTAMMENT SUBSTRAT VERRIER, PORTANT AU MOINS UN EMPILEMENT COUCHE A PROPRIETE PHOTOCATALYTIQUE /  
SOUS-COUCHE DE CROISSANCE HETEROEPITAXIALE DE LADITE COUCHE

Publication  
**EP 1678095 A1 20060712 (FR)**

Application  
**EP 04805775 A 20041022**

Priority  
• FR 2004050532 W 20041022  
• FR 0350729 A 20031023

Abstract (en)  
[origin: FR2861385A1] A structure comprises a substrate carrying, on at least a part of its surface, a titanium oxide (TiO<sub>2</sub>) based layer with anti-stain photocatalytic properties. The TiO<sub>2</sub> is at least in part crystallised in the form of anatase. It incorporates, immediately beneath the TiO<sub>2</sub> layer, a sub-layer with a crystallographic structure allowing an assistance to crystallisation by hetero-epitaxial growth in the form of anatase of the upper layer of the TiO<sub>2</sub> base, the photocatalytic property having been acquired without any heating stage. Independent claims are also included for: (a) the fabrication of this structure; (b) a single or multiple glazing incorporating this structure.

IPC 1-7  
**C03C 25/52**; **C04B 41/52**

IPC 8 full level  
**C03C 17/34** (2006.01); **C03C 25/52** (2006.01); **C04B 41/52** (2006.01)

CPC (source: EP KR US)  
**B32B 18/00** (2013.01 - KR); **B32B 33/00** (2013.01 - KR); **C03C 17/23** (2013.01 - KR); **C03C 17/3417** (2013.01 - EP US);  
**C03C 17/3435** (2013.01 - EP US); **C03C 25/52** (2013.01 - EP KR US); **C03C 2217/71** (2013.01 - EP US)

Citation (search report)  
See references of WO 2005040058A1

Citation (examination)  
HSIEH C C ET AL: "Monophasic TiO<sub>2</sub> films deposited on SrTiO<sub>3</sub>(100) by pulsed laser ablation", JOURNAL OF APPLIED PHYSICS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US, vol. 92, no. 5, 1 September 2002 (2002-09-01), pages 2518 - 2523, XP012057150, ISSN: 0021-8979

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