

Title (en)
GLASS OR GLASS-CERAMIC PRODUCT WITH HIGH TEMPERATURE-STABLE, LOW-ENERGY LAYER

Title (de)
ERZEUGNIS AUS GLAS ODER GLASKERAMIK MIT HOCHTEMPERATURSTABILER NIEDRIGENERGIE-SCHICHT

Title (fr)
PRODUIT DE VERRE OU DE VITROCÉRAMIQUE AYANT UNE COUCHE DE FAIBLE ÉNERGIE STABLE AUX TEMPÉRATURES ÉLEVÉES

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Application
EP 11787788 A 20111109

Priority
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Abstract (en)
[origin: WO2012062467A1] The invention relates to a product which comprises a substrate made of glass or glass-ceramic, the substrate being exposable to high temperatures in the range up to 700°C and being provided at least on one side with a self-cleaning and/or dirt-repelling layer, for the purpose of enhancing cleanability, this layer being highly heat-resistant and also resistant towards mechanical stresses. The layer of the invention comprises as a base material at least one of the metal oxides of the elements Hf, Y, Zr or Ce, in an at least partly nanocrystalline structure, and at least one further metal cation of one of the elements Ca, Ce, Y, K, Li, Mg, Sr or Gd.

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Citation (search report)
See references of WO 2012062467A1

Citation (examination)
• DE 3741119 A1 19890615 - KRUPP GMBH [DE]
• DE 60130027 T2 20080508 - PURDUE RESEARCH FOUNDATION [US]
• B. BUTZ ET AL.: "Microstructure of nanocrystalline yttria-doped zirconia thin film obtained by sol-gel processing", J. AM. CERAM. SOC., vol. 97, no. 7, 2008, pages 2281 - 2289, XP055308947, DOI: 10.1111/j.1551-2916.2008.02400.x

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