

Title (en)

SELECTIVE ABSORBER FOR CONVERTING SUNLIGHT INTO HEAT, AND METHOD AND DEVICE FOR THE PRODUCTION THEREOF

Title (de)

SELEKTIVER ABSORBER ZUR UMWANDLUNG VON SONNENLICHT IN WÄRME, EIN VERFAHREN UND EINE VORRICHTUNG ZU DESSEN HERSTELLUNG

Title (fr)

ABSORBEUR SELECTIF POUR TRANSFORMER LA LUMIERE SOLAIRE EN CHALEUR, AINSI QUE PROCEDE ET DISPOSITIF POUR SA PRODUCTION

Publication

**EP 2113127 A1 20091104 (DE)**

Application

**EP 05733673 A 20050420**

Priority

- EP 2005004244 W 20050420
- DE 102004019061 A 20040420

Abstract (en)

[origin: WO2005104173A1] The invention relates to a selective absorber for converting sunlight into heat, said absorber being composed of thin layers on a substrate, preferably aluminum, copper, or steel. The thin layers are made of two layer systems. The first layer system, which borders the substrate, comprises at least one layer that is made of tight, i.e. void-free material composed of titanium, aluminum, nitrogen, carbon, and oxygen. Said material has the chemical formula  $Ti_aAl_{ss}N_xCyO_z$ . The superimposed second system comprises at least one layer that is made of a mixture of  $TiO_2$  and  $Al_2O_3$ .

IPC 8 full level

**C23C 14/00** (2006.01); **C23C 14/06** (2006.01); **C23C 14/08** (2006.01); **C23C 14/32** (2006.01); **C23C 14/56** (2006.01); **C23C 28/00** (2006.01); **F24J 2/48** (2006.01); **H01J 37/32** (2006.01)

CPC (source: EP US)

**C23C 14/0057** (2013.01 - EP); **C23C 14/06** (2013.01 - EP); **C23C 14/08** (2013.01 - EP US); **C23C 14/325** (2013.01 - EP); **C23C 14/562** (2013.01 - EP); **C23C 28/042** (2013.01 - EP); **C23C 28/044** (2013.01 - EP); **F24S 70/225** (2018.04 - EP US); **F24S 70/25** (2018.04 - EP US); **H01J 37/32055** (2013.01 - EP); **H01J 37/3277** (2013.01 - EP); **Y02E 10/40** (2013.01 - EP)

Citation (search report)

See references of WO 2005104173A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2005104173 A1 20051103**; DE 102004019061 A1 20051124; DE 102004019061 B4 20081127; EP 2113127 A1 20091104

DOCDB simple family (application)

**EP 2005004244 W 20050420**; DE 102004019061 A 20040420; EP 05733673 A 20050420