

Title (en)

SECURITY ELEMENT FOR USE AS PHOTOCOPY PROTECTION

Title (de)

SICHERHEITSELEMENT ALS PHOTOKOPIERSCHUTZ

Title (fr)

ELEMENT DE SECURITE SERVANT DE PROTECTION CONTRE LA PHOTOCOPIE

Publication

**EP 1492677 A2 20050105 (DE)**

Application

**EP 03720417 A 20030403**

Priority

- DE 10216563 A 20020405
- EP 0303481 W 20030403

Abstract (en)

[origin: WO03084765A2] The invention relates to a security element (2) which is cut out from a plastic composite structure (1) and is suitable to be glued onto a substrate (9). A reflection layer (10) is embedded between a molding layer (4) and a protective layer (7) of the composite structure (1), into which reflection layer optically effective structures (5; 6) are molded. The security element (2) comprises at least one security feature whose surface has a macrostructure in the reflection layer (10) and/or is subdivided into at least one first and one second subarea (32; 33). The first subarea (32) has a first structure (5). An achromatic second structure (6) is molded into the second subarea (33). The optically effective structures (5; 6) deviate the incident light (11) by the direction of reflection within a predetermined angular range ( epsilon ) and comprise a visually perceptible but not photocopiable information since the copiers are blind in the angular range ( epsilon ).

IPC 1-7

**B42D 15/00**

IPC 8 full level

**B42D 15/00** (2006.01); **B42D 15/10** (2006.01); **B44F 1/12** (2006.01)

CPC (source: EP)

**B42D 25/328** (2014.10)

Citation (search report)

See references of WO 03084765A2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**WO 03084765 A2 20031016**; **WO 03084765 A3 20040212**; AU 2003224033 A1 20031020; AU 2003224033 A8 20031020; CN 100551717 C 20091021; CN 1655953 A 20050817; DE 10216563 A1 20031023; DE 10216563 B4 20160804; EP 1492677 A2 20050105; EP 1492677 B1 20140514; RU 2004132235 A 20050927; RU 2286887 C2 20061110

DOCDB simple family (application)

**EP 0303481 W 20030403**; AU 2003224033 A 20030403; CN 03812197 A 20030403; DE 10216563 A 20020405; EP 03720417 A 20030403; RU 2004132235 A 20030403