

Title (en)

OPTICALLY VARIABLE SEE-THROUGH SECURITY ELEMENT AND DATA CARRIER

Title (de)

OPTISCH VARIABLES DURCHSICHTSSICHERHEITSELEMENT UND DATENTRÄGER

Title (fr)

ÉLÉMENT DE SÉCURITÉ TRANSPARENT OPTIQUEMENT VARIABLE ET SUPPORT DE DONNÉES

Publication

EP 3691911 B1 20211124 (DE)

Application

EP 18782305 A 20180927

Priority

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Abstract (en)

[origin: WO2019068362A1] The invention relates to an optically variable see-through security element for safeguarding valuable objects, having a planar, optically variable surface pattern, which exhibits a different color in a view through it compared with a plan view and has almost no color shift effect in a view through it, wherein the optically variable surface pattern contains a multiplicity of facets which have an effect substantially in terms of geometric optics and the orientation of which is characterized in each case by an angle α of inclination relative to the plane of the surface pattern which is in a range of 0° to 30° , wherein the facets are provided with a semitransparent functional layer, which appears in a different color in a view through it compared with a plan view and has almost no color shift effect in a view through it, and the optically variable surface pattern contains at least two partial regions each having a multiplicity of similarly oriented facets, wherein the facets of one partial region have a small angle α of inclination and the facets of the further partial region have a high angle α of inclination, such that the optically variable surface pattern, in a view through it, appears with a high color variegation or chroma in the partial region in which the facets have a small angle α of inclination, and appears with a low color variegation or chroma in the partial region in which the facets have a high angle α of inclination.

IPC 8 full level

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Citation (opposition)

Opponent : Hueck Folien Gesellschaft m.b.H.

- WO 2016096094 A1 20160623 - GIESECKE & DEVRIENT GMBH [DE]
- EP 1966769 B1 20141112 - GIESECKE & DEVRIENT GMBH [DE]
- EP 2219168 A2 20100818 - GIESECKE & DEVRIENT GMBH [DE]
- WO 2006069663 A2 20060706 - ECKART GMBH & CO KG [DE], et al
- WO 2011082761 A1 20110714 - GIESECKE & DEVRIENT GMBH [DE], et al

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