

Title (en)  
OPTICALLY VARIABLE SECURITY ELEMENT

Title (de)  
OPTISCH VARIABLES SICHERHEITSELEMENT

Title (fr)  
ÉLÉMENT DE SÉCURITÉ OPTIQUEMENT VARIABLE

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Application  
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Abstract (en)  
[origin: WO2013156149A1] The invention relates to an optically variable security element (12) for security papers, documents of value and other data carriers, having a substantially transparent carrier (20) with first and second main surfaces (22, 24) located opposite one another, having an arrangement of microlenses (26) on the first main surface (22) of the carrier, having a laser-sensitive recording layer (30), which is arranged on the second main surface (24) of the carrier and contains first and second sub-layers (32, 34) arranged one above the other, wherein the first sub-layer (32) is arranged between the carrier (20) and the second sub-layer (34), and having a multiplicity of microholes (40) which are generated in the laser-sensitive recording layer by the action of laser radiation and of which each microhole (40) is assigned to a microlens (26) and, with the security elements being viewed from a certain viewing angle, can be seen through the associated microlens (26), wherein the multiplicity of microholes comprise a multiplicity of first and a multiplicity of second microholes (42, 44) wherein the first microholes (42) are present in the first sub-layer (32), and do not pass through the recording layer (30), and the second microholes (44) pass through the recording layer (30) with the first and second sub-layer (32, 34), and wherein the diameter of the first microholes (42) is larger than the diameter of the second microholes (44).

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