

Title (en)  
OPTICAL ANTI-COUNTERFEITING ELEMENT AND DESIGN METHOD THEREFOR, ANTI-COUNTERFEITING PRODUCT, AND DATA CARRIER

Title (de)  
FÄLSCHUNGSSICHERES OPTISCHES ELEMENT UND ENTWURFSVERFAHREN DAFÜR, FÄLSCHUNGSSICHERES PRODUKT UND DATENTRÄGER

Title (fr)  
ÉLÉMENT ANTI-CONTREFAÇON OPTIQUE ET SON PROCÉDÉ DE CONCEPTION, PRODUIT ANTI-CONTREFAÇON, ET SUPPORT DE DONNÉES

Publication  
**EP 4331858 A1 20240306 (EN)**

Application  
**EP 22794221 A 20220125**

Priority

- CN 202110449753 A 20210425
- CN 2022073788 W 20220125

Abstract (en)

Provided are an optical anti-counterfeiting element and a design method thereof, an anti-counterfeiting product, and a data carrier. The optical anti-counterfeiting element (1) has a diffuse reflection region (2); the diffuse reflection region can reflect incident light into the range of at least a preset observation angle set  $\Omega_V$ ; the diffuse reflection region comprises a plurality of reflection facets (3); the plurality of reflection facets comprise modified reflection facets that are globally or locally modified, and unmodified reflection facets, the modified reflection facets and the unmodified reflection facets have different reflection characteristics, wherein the modified reflection facets correspond to a pattern area (71, 81); and when the diffuse reflection region is illuminated by the incident light, the modified reflection facets are collectively presented as a pattern of a dynamic feature, and the unmodified reflection facets are collectively presented as a background area (72, 82) of the dynamic feature. The optical anti-counterfeiting element is simple in manufacturing process, and can flexibly implement a dynamic feature such as color and/or light-dark contrast.

IPC 8 full level  
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