

Title (en)

Security document and method for protecting a security document against forgery and for the authentication of the security document

Title (de)

Sicherheitsdokument und Verfahren zum Schützen eines Sicherheitsdokuments gegen Fälschung und zum Authentifizieren des Sicherheitsdokuments

Title (fr)

Document de sécurité et procédé de protection d'un document de sécurité contre la falsification et pour l'authentification du document de sécurité

Publication

EP 2543521 B1 20150923 (EN)

Application

EP 11005575 A 20110707

Priority

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Abstract (en)

[origin: EP2543521A1] The present invention relates to a security document comprising a substrate 1 and an optical security element 5 incorporated in the substrate and relates to a method for checking the authentication of the security document. Moreover, the invention relates to a method for protecting a security document against forgery and for the authentication of the security document. The security document according to the invention comprises a first liquid-crystal layer structure 7, the liquid-crystal molecules thereof having a first predetermined orientation pattern for storing information, a polariser 8, and a second liquid-crystal layer structure 8, the liquid-crystal molecules thereof having a second predetermined orientation pattern for storing information. The information stored in the first and second liquid-crystal layer structures 7, 8 is not visible by the naked eye without an inspection tool. The method for checking the authentication of the optical security element according to the invention is based on the use of a liquid-crystal display, for example a mobile phone or a camera, as a means for providing polarised light. Both the first information stored in the first liquid-crystal layer structure and the second information stored in the second liquid-crystal layer structure are independently visible for the public using the mobile phone or the camera. Thus, the optical security element allows authentication of the security document by observing both the first and second information which can be a text or an image or a combination of text and image.

IPC 8 full level

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Cited by

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