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**(54) Title (EN):** THIN OPTICAL SECURITY ELEMENT AND METHOD OF DESIGNING IT

**(54) Title (FR):** ÉLÉMENT MINCE DE SÉCURITÉ OPTIQUE ET SON PROCÉDÉ DE CONCEPTION

**(57) Abstract:**

**(EN):** The invention relates to a thin optical security element comprising a reflective or refractive light-redirecting surface having a relief pattern operable to redirect incident light from a light source and form a projected image on a projection surface, the projected image comprising a caustic pattern reproducing a reference pattern that is easily visually recognizable by a person. The invention also relates to a method for designing a relief pattern of a light-redirecting surface of a thin optical security element.

**(FR):** L'invention concerne un élément mince de sécurité optique comprenant une surface de réorientation de lumière réfléchie ou réfractée présentant un motif en relief utilisable pour réorienter la lumière incidente en provenance d'une source de lumière et former une image projetée sur une surface de projection, l'image projetée comprenant un motif caustique reproduisant un motif de référence qui est facilement reconnaissable visuellement par une personne. L'invention concerne également un procédé de conception d'un motif en relief d'une surface de réorientation de lumière d'un élément mince de sécurité optique.

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