

Title (en)
DIFFUSER COMBINING A MULTI-FACETED SURFACE AND A LENS-COVERED SURFACE TO PROVIDE SPECIFIC LIGHT DISTRIBUTIONS

Title (de)
DIFFUSOR MIT EINER KOMBINATION AUS EINER MEHRFACETTENFLÄCHE UND EINER LINSENBSCHICHTETEN FLÄCHE ZUR
BEREITSTELLUNG SPEZIFISCHER LICHTVERTEILUNGEN

Title (fr)
DIFFUSEUR COMBINANT UNE SURFACE À FACETTES MULTIPLES ET UNE SURFACE RECOUVERTE DE LENTILLES POUR FOURNIR DES
RÉPARTITIONS LUMINEUSES SPÉCIFIQUES

Publication
EP 4298472 A1 20240103 (EN)

Application
EP 22760243 A 20220218

Priority
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• US 2022017065 W 20220218

Abstract (en)
[origin: WO2022182597A1] Optical or light diffusers (or, simply, "diffusers") designed and manufactured to include numerous facets arranged in cells or sets in which the planar faces or outward-facing surfaces have orientations and transmission angles (as may be defined by direction cosines of normal) to redirect received light to a. region or portion of a predefined light distribution. A method of designing or defining the facets of the diffuser is also provides as are methods of manufacturing the diffusers and apparatus or products that include the new diffusers (such as microdisplays and lighting components). The diffusers are optically designed to produce a user-specified distribution of light. The diffusers can be engineered through the configuration of the facets on its front or' outer surface (light transmission surface) to produce nearly any type of light distribution or shape, and the diffuser design facilitates their manufacture using extrusion processes as well as other fabrication techniques.

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