

Title (en)  
LIGHT UNIT FOR A MOTOR VEHICLE HEADLAMP

Title (de)  
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Title (fr)  
UNITÉ D'ÉCLAIRAGE POUR PROJECTEUR DE VÉHICULE AUTOMOBILE

Publication  
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Application  
**EP 19773113 A 20190926**

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Abstract (en)  
[origin: WO2020083601A1] The invention relates to a light unit (100) for a motor vehicle lighting system, comprising: a dipped beam light module (101), a full beam module (102), an optical imaging system (103, 503) connected downstream of the dipped beam light module (101) and the full beam light module (102) and having an optical axis (104, 204, 404, 504) and a focal surface (116) oriented normally with respect to the optical axis (104, 204, 404, 504), and a diaphragm (105, 405) which has a diaphragm edge (106, 206, 306) and extends substantially as far as the focal surface (116) of the optical imaging system (103, 503) in order to generate the horizontal bright/dark boundary in a light image generated by the light unit (100). The diaphragm (105, 405) has an opaque diaphragm area (107, 407) and on the diaphragm edge (106, 206, 306) has in the region of the focal surface (116) a transparent diaphragm area (108, 408) having a geometric structure (109, 409) made of a transparent material, the geometric structure (109, 409) comprising at least one prism body (110, 210, 310, 410, 510) having a triangular cross-sectional area which is elongated and the longitudinal extent runs transversely to the optical axis (104, 204, 404), the at least one prism body (110, 210, 310, 410, 510) has a first, a second and a third prism surface, the second prism surface (112, 212, 312, 512) encloses an internal angle  $\alpha_1 \geq \theta$  with the first prism surface (111, 211, 311), and the third prism surface (113, 213, 313, 513) encloses an internal angle  $\alpha_2 \geq \theta$  with the first prism surface (111, 211, 311),  $\theta$  being the limiting angle of the total reflection of the transparent material, the internal angles  $\alpha_1$  and  $\alpha_2$  being the same or different, and with the proviso that the internal angle  $\alpha_1$  or the internal angle  $\alpha_2$  is not  $45^\circ$ .

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