

Title (en)  
REFLECTOR EMITTER

Title (de)  
REFLEKTORSTRAHLER

Title (fr)  
PROJECTEUR À RÉFLECTEUR

Publication  
**EP 2812629 B1 20151230 (DE)**

Application  
**EP 13706910 A 20130119**

Priority  
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Abstract (en)  
[origin: WO2013117178A1] The known reflector emitter combines beams from a plurality of weaker emission sources over reflected rotational ellipsoid sections and a central concave mirror, the focal points thereof coinciding to form a common powerful beam. Occurring edge rays are not optimally utilised. An increase in efficiency is achieved for the reflector emitter (01) according to the invention by tilting the rotational ellipsoid sections (10) towards the central concave mirror (12) and by providing a first annular reflector (15) in the aperture (08) and a second annular reflector (16) directly above the concave mirror (12), said reflectors both reflecting in the main emission direction (07) or the concave mirror (12). Improved radiation, in particular as a function of the radiation characteristics of the emission sources (40) used, such as LEDs, can be achieved by means of the tilting. No beam leaves the reflector emitter (01) on a direct path through the aperture (08), but instead, as a rule, according to an angle-dependent reflection (41, 42, 43) in the concave mirror (12) or in the first or second annular reflector (15, 16). The reflector emitter (01) can be used for applications such as signalling systems, medical lamps or UV lamps, as headlights for vehicles or off-shore systems, as well as for underwater use in particular.

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