

Title (en)  
Spotlight with variable illumination output angle

Title (de)  
Scheinwerfer mit veränderlichem Abstrahlwinkel

Title (fr)  
Projecteur à angle d'émission de lumière variable

Publication  
**EP 0846913 B1 20040707 (DE)**

Application  
**EP 97105686 A 19970407**

Priority  
• EP 97105686 A 19970407  
• EP 96119479 A 19961204  
• US 98519297 A 19971204

Abstract (en)  
[origin: EP0846913A1] The headlamp has a variable radiation angle. There is a bulb (4), a reflector(5) assigned to it, and a first and a second collection lens (2,6) in the radiation path. The reflector, the bulb and the second lens are mounted as an optical unit that can move relative to the first lens along the optic axis of the headlamp. Inside this unit, the distance between the bulb and the second lens can be changed. The distance between the bulb and the reflector can also be changed. With a movement of the unit away from the first lens, the distance between the bulb and the reflector remains constant until the reflector has reached a distance from the first lens corresponding to the headlamp dimensions.

IPC 1-7  
**F21V 13/02; F21V 14/00**

IPC 8 full level  
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CPC (source: EP US)  
**F21V 13/04** (2013.01 - EP US); **F21V 14/06** (2013.01 - EP US); **F21V 19/02** (2013.01 - EP US); **F21W 2131/406** (2013.01 - EP US)

Cited by  
US6499862B1; EP1215437A3; DE19939126A1; EP1020681A3; WO2013016923A1; WO0111286A1; EP1020681A2; EP1241399B1; EP2151622A1; DE102008037054A1; EP1610055A1

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