Title (en)
   Operating lamp

Title (de)
   Operationsleuchte

Title (fr)
   Lampe chirurgicale

Publication
   EP 0391287 B1 19960522 (DE)

Application
   EP 90106228 A 19900331

Priority
   • DE 8903955 U 19890331
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Abstract (en)
   [origin: EP0391287A1] An operating lamp (10) having one or more spotlights (25) each with a light source (50) is specified, which is screened in the direction of emission by a counter reflector (52). The light flux is focused by the counter reflector (52) and a reflector (54) onto an optical system (60) which terminates the housing in the direction of emission. In order to guarantee homogeneous illumination even of deep surgical wounds, the optical system (60) is constructed as a Fresnel lens composed of annular prims (65), which contains a dioptric central region (64) and a catadioptric edge region (62). The edge gradient and the heights of the annular prisms (65) are dimensioned such that the light bundles emerging from the Fresnel lens (60) intersect the optical axis (67) at a distance which is larger the smaller the distance at which the light bundle emerges from the Fresnel lens (60) remote from the optical axis (67). <IMAGE>

IPC 1-7
   F21V 5/04; F21M 1/00

IPC 8 full level
   A61B 19/00 (2006.01); **F21S 8/00** (2006.01); **F21V 5/04** (2006.01)

CPC (source: EP US)
   F21S 8/043 (2013.01 - EP US); **F21V 3/02** (2013.01 - EP US); **F21V 5/02** (2013.01 - EP US); **F21V 5/045** (2013.01 - EP US);
   F21V 7/0025 (2013.01 - EP US); **F21V 7/28** (2018.01 - EP US); **F21V 14/06** (2013.01 - EP US); F21V 7/0008 (2013.01 - EP US);
   F21V 21/28 (2013.01 - EP US); F21W 2131/20 (2013.01 - EP US); F21W 2131/205 (2013.01 - EP US)

Cited by
   DE102006013856A1; CN110726125A; EP1673573A4; DE10361121A1; US5483424A; EP2042802A1; US7483220B2; WO2023052321A1

Designated contracting state (EPC)
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