

Title (en)  
DUAL GRATING LIGHT FILTERING SYSTEM

Title (de)  
SYSTEM ZUR LICHTFILTERUNG MIT ZWEI GITTERN

Title (fr)  
SYSTEME DE FILTRAGE DE LA LUMIERE A RESEAU DE DIFFRACTION DOUBLE

Publication  
**EP 1214616 A1 20020619 (EN)**

Application  
**EP 00970445 A 20000826**

Priority  
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• US 53841100 A 20000328

Abstract (en)  
[origin: WO0120381A1] A light filtering assembly comprises an input section, a filtering section, and an output section. The input section divides the input beam into a plurality of polarized monochromatic beamlets that travel along a corresponding plurality of spatially separated beam paths by means of a polarization converter and a diffraction grating. The polarized monochromatic beamlets comprise a plurality of desired beamlets corresponding to the desired wavelength components of the input beam. The filtering section passes the desired beamlets and blocks the unwanted beamlets. The output section combines the desired beamlets so as to form the output beam. Because the beamlets are linearly polarized, the input and output section are able to realize a high throughput efficiency.

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