

Title (en)  
COMBINATION SPLITTING DEVICE COMPOSED OF STRIP WAVEGUIDES AND USES THEREOF

Title (de)  
VERBINDUNGSAUFSPLALTER AUS STREIFEN-WELLENLEITERN UND VERWENDUNGEN

Title (fr)  
DIVISEUR COMBINE COMPOSE DE GUIDES D'ONDES A RUBANS ET SES UTILISATIONS

Publication  
**EP 0754310 A1 19970122 (DE)**

Application  
**EP 96904002 A 19960206**

Priority  
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Abstract (en)  
[origin: WO9624869A1] An integrated optical combination splitting device, in particular for applications in the wavelength range of visible light, which ensures a spatial, broadband concentration of light in a wavelength range  $\Delta\lambda$  greater than approximately 75 nm (valid for short-wave visible light). For a useful wavelength range comprising all visible light, a white-light splitting device is provided. The combination splitting device consists of at least three strip waveguides, at least one of which being a single-mode integrated optical broadband strip waveguide (EOBSW). Two strip waveguides (2, 3) each have an entry point (E1, E2) and are joined at their exit points (A1, A2) in a coupling point (6) to become a joint EOBSW (5) having a common light exit (AM) at its end. This broadband combination splitting device can be used as a wavelength-selective or wavelength-independent switch or modulator in interferometric and photometric arrangements, sensors and microsystem solutions.

IPC 1-7  
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IPC 8 full level  
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