

Title (en)
OPTICAL WAVEGUIDE END FACET COUPLING

Title (de)
KOPPLUNG DER ENDFLÄCHEN VON LICHTWELLENLEITERN

Title (fr)
DISPOSITIF ET PROCEDE DE GUIDE D'ONDES COUPLE A UNE FACE D'EXTREMITE

Publication
EP 1476775 A2 20041117 (EN)

Application
EP 03736438 A 20030221

Priority
• EP 03736438 A 20030221
• EP 02290418 A 20020221
• US 0305064 W 20030221

Abstract (en)
[origin: EP1338905A1] An optical device for use with an optical signal propagating therein comprising a first waveguide having a core which is terminated at an endface, in which either (a) the endface of the waveguide is uncontrolled (for instance not being smooth, not being optically flat, and/or not being at an angle optimised to avoid deleterious back-reflection) or (b) the first waveguide is a polymer waveguide or (c) both. A second waveguide is terminated at an endface within about 50 μm of the endface of the first waveguide so that the waveguides are optically coupled. A material is situated in the gap between the first waveguide and the second waveguide and has a refractive index within about 0.03 of the refractive index of the core of the first waveguide. When the first waveguide is a polymer waveguide, its core preferably has an effective refractive index either less than about 1.4 or greater than about 1.57 (at 1550nm). <IMAGE>

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G02B 6/30; **G02B 6/12**

IPC 8 full level
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