

ABSTRACT (FIGURE 1)

A semiconductor optical device, for example a laser, has a composite optical waveguide comprising a tapered, active waveguide 1, in optical contact with a substantially planar, passive waveguide 2. The fundamental optical mode supported by the composite waveguide varies along the length of the composite waveguide so that, in a laser, the laser mode is enlarged and is a better match to single mode optical fibre. A method for making such semiconductor optical devices is also disclosed.