

**MODULES HAVING MULTIPLE OPTICAL CHANNELS INCLUDING
OPTICAL ELEMENTS AT DIFFERENT HEIGHTS ABOVE THE
OPTOELECTRONIC DEVICES**

ABSTRACT OF THE DISCLOSURE

An optoelectronic module has multiple optical channels each of which includes a respective optical element at a different height within the module. The modules can include channels arranged side-by-side where each channel is covered by a respective cover that is optically transmissive to one or more wavelengths of light emitted by or detectable by the optoelectronic devices in the module. The transmissive covers, which respectively can include one or more passive optical elements on their surfaces, are disposed at different heights within the module.

Figure 1