

Novel Broadband Infrared Light Emitting Device

Background:

Generally, broadband light sources such as halogen lamps are used for medical devices or for spectroscopic analysis. But they are disadvantageous due to large size and the short life span, and are greatly affected by heat ray. In contrast, LED are advantageous due to smaller size and longer life span compared to halogen lamps. However, the emitted light by LED has a short half width, about 50nm.

Technology Overview:

Nagoya University researchers have invented a broadband infrared light emitting device that radiates infrared, and whose band is broader than conventional LEDs. The inventors have proposed a light source for an optical coherence tomography device including an infrared glass phosphor and a semiconductor light emitting device. The invented broadband Infrared LED has a relatively longer half width, namely 72nm, 84nm, and 88nm.

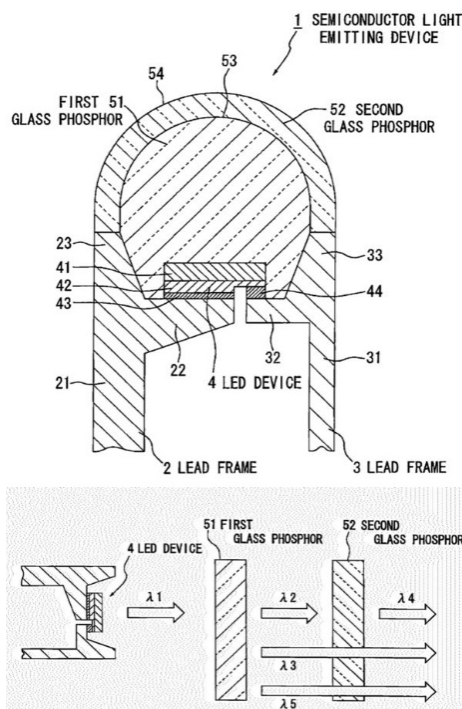


Figure 1: A novel broadband infrared light emitting device

Further Details:

Phys. Status Solidi, S. Fuchi *et al*: Wideband near-infrared phosphor, 2011

IP Status:

US and JP patents have been granted.
EP application under review.

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