METHODS OF FORMING PRODUCT WAFERS HAVING SEMICONDUCTOR LIGHT-EMITTING DEVICES TO IMPROVE EMISSION WAVELENGTH UNIFORMITY

ABSTRACT

Methods of forming product wafers having semiconductor light-emitting devices to improve emission wavelength uniformity include either estimating or measuring a spatial variation in the emission wavelengths of the light-emitting devices of an already formed product wafer. The methods can also include defining a corrective temperature distribution for feeding back to the upstream process to reduce variations in the emission wavelength when forming new product wafers. The method can further includes applying the corrective temperature distribution when forming the new product wafers so that the new product wafers have a higher yield in forming the light-emitting devices than the already formed product wafer.

FIG. 6B