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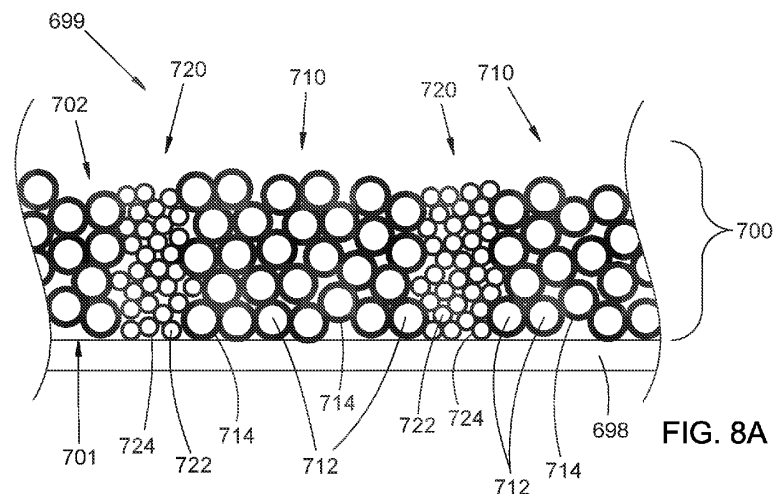
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(54) Title: Laterally heterogeneous wavelength-converting layer



(57) Abstract: A laterally heterogeneous wavelength-converting optical element includes pixel regions surrounded by border regions; each includes down-converting phosphor particles bound by a coating or solid medium. The pixel regions are aligned with LEDs of an array. The phosphor regions differ with respect to one or more of compositions, particle sizes, coating thicknesses, refractive indices, or voids (size, number density, or volume fraction). Those difference(s) can result in the border regions exhibiting larger optical scattering, which can improve contrast of down-converted light emitted by adjacent pixels of the array.

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