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(54) **ENCAPSULATED RGB OLEDS HAVING ENHANCED OPTICAL OUTPUT**

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See application file for complete search history.

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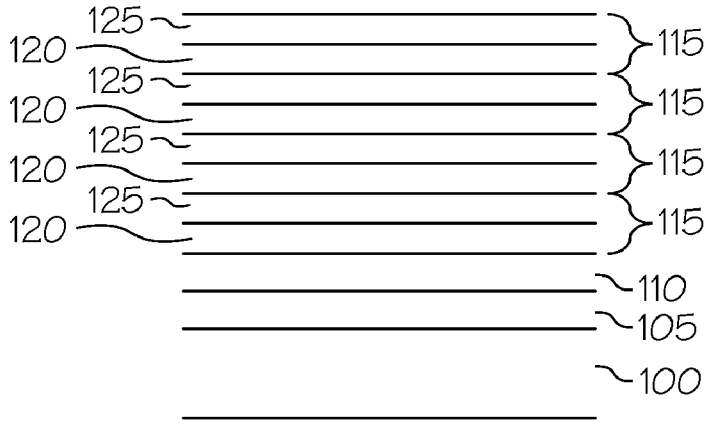
(57) **ABSTRACT**

Methods of making an integrated barrier stack and optical enhancement layer for protecting and improving the light out coupling of an encapsulated OLED are described. The method includes optimizing the thickness of various layers including the initial inorganic barrier layer and the inorganic barrier layer and polymeric decoupling layer for the barrier stack. The thickness is optimized for at least one of maximum efficiency, minimum dispersion, or minimum spectral shift so that the encapsulated OLED has enhanced light outcoupling compared to the bare OLED.

22 Claims, 22 Drawing Sheets