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(54) **LIGHT EMITTING DEVICE AND METHOD OF MANUFACTURING THE SAME**

(71) Applicants: **Jin-young Lim**, Gwacheon-si (KR); **Tan Sakong**, Seoul (KR); **Byoung-kyun Kim**, Seongnam-si (KR); **Jong-hak Kim**, Hwaseong-si (KR)

(72) Inventors: **Jin-young Lim**, Gwacheon-si (KR); **Tan Sakong**, Seoul (KR); **Byoung-kyun Kim**, Seongnam-si (KR); **Jong-hak Kim**, Hwaseong-si (KR)

(73) Assignee: **SAMSUNG ELECTRONICS CO., LTD**, Gyeonggi-do (KR)

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See application file for complete search history.

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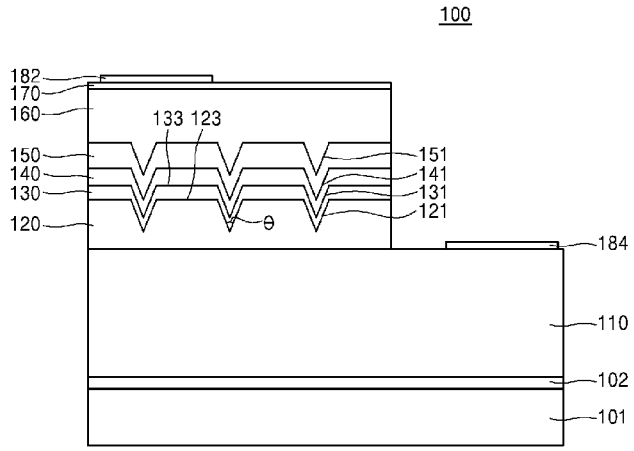
Primary Examiner — David S Blum

(74) *Attorney, Agent, or Firm* — Harness, Dickey & Pierce, PLC

(57) **ABSTRACT**

A light-emitting device includes a first conductive type semiconductor layer, a second conductive type semiconductor layer, and an active layer between the first conductive type semiconductor layer and the second conductive type semiconductor layer and having a plurality of V-pits. The light-emitting device further includes a layer-quality improvement layer between the first conductive type semiconductor layer and the second conductive type semiconductor layer and having a plurality of V-pits with substantially same size and shape as the plurality of V-pits of the active layer, wherein layer-quality improvement layer is a group III-V semiconductor layer including Al or In. Due to the improved layer quality, the luminescent quality of the light-emitting device is improved.

32 Claims, 27 Drawing Sheets