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(54) **LIGHT EMITTING DEVICE AND MANUFACTURING METHOD THEREOF, DISPLAY SUBSTRATE AND DISPLAY APPARATUS**

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(57) **ABSTRACT**

The present disclosure provides a light emitting device, a manufacturing method thereof, a display substrate, and a display apparatus. The light emitting device includes a first carrier transport layer, a light emitting layer and a second carrier transport layer sequentially stacked on a substrate, wherein the light emitting layer includes at least two quantum dot film layers, each of which includes quantum dots; the quantum dot film layer close to the first carrier transport layer further includes carrier auxiliary ligands, each of which is configured to be attached to a surface of a body of the quantum dot, and/or the quantum dot film layer close to the second carrier transport layer further includes carrier auxiliary ligands, each of which is configured to be attached to a surface of a body of the quantum dot.

The diagram illustrates a cross-sectional view of a light emitting device. The structure consists of a substrate (21) and several layers stacked thereon: a carrier transport layer (22), a light emitting layer (23), another carrier transport layer (24), and a top layer (25). The light emitting layer (23) is composed of two quantum dot film layers, 231 and 232, which are separated by a carrier transport layer (233). The quantum dot film layers 231 and 232 contain quantum dots, represented by circular symbols with radiating lines, indicating the presence of carrier auxiliary ligands. The carrier transport layer 233 is positioned between the two quantum dot film layers. The layers are labeled 21, 22, 23, 24, 25, and 26 from bottom to top. Labels a1, a2, b1, and b2 point to specific features within the structure.