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(57) **ABSTRACT**

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The present disclosure provides a display substrate and a preparation method thereof, and a display apparatus. The display substrate includes a pixel region and a stretch hole region which includes a hole region and a partition region; the display substrate includes a base substrate, a structure layer, and an encapsulation structure layer and the partition region includes at least one partition structure surrounding the hole region; the hole region includes a base substrate hole disposed on the base substrate and a structure hole penetrating through the structure layer, the base substrate hole is communicated with the structure hole, at least a portion of an inner wall of the structure hole is covered by at least one encapsulation material layer in the encapsulation structure layer, and an inner wall of the base substrate hole includes a base substrate material segment that is not covered by the encapsulation material layer.

