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### (54) VISIBLE LIGHT COMMUNICATION DEVICE, DISPLAY SUBSTRATE, DISPLAY DEVICE AND MANUFACTURING METHOD OF THE DISPLAY SUBSTRATE

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#### (57)**ABSTRACT**

The present disclosure provides a visible light communication device, a display substrate, a display device, and a manufacturing method of the display substrate. The visible light communication device includes: a protrusion structure arranged on a base substrate and protruding toward a photosensitive side of the visible light communication device; a first electrode covering the protrusion structure; a visible light sensing layer arranged at a side of the first electrode away from the protrusion structure; and a second electrode arranged at a side of the visible light sensing layer away from the first electrode. A surface of each of the first electrode, the visible light sensing layer and the second electrode away from the base substrate is provided with a protrusion facing the photosensitive side of the visible light communication device due to the protrusion structure.

