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(54) **LIGHT DETECTION DEVICE**(71) Applicant: **HAMAMATSU PHOTONICS K.K.**,
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Hamamatsu-shi (JP)(21) Appl. No.: **18/120,594**(22) Filed: **Mar. 13, 2023****Related U.S. Application Data**(60) Continuation of application No. 17/375,176, filed on
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(57)

ABSTRACT

A light detection device includes: a back-illuminated light receiving element; a circuit element; a connection member; an underfill; and a light shielding mask. The light shielding mask includes a frame having an opening and a light shielding layer formed on an inner surface of the opening. A first opening edge on the side of the circuit element in the opening is located at the outside of an outer edge of the light receiving element. A second opening edge opposite to the circuit element in the opening is located at the inside of the outer edge of the light receiving element. The opening is narrowed from the first opening edge toward the second opening edge. A width of the frame increases from the first opening edge toward the second opening edge. The underfill reaches a gap between the light receiving element and the light shielding layer.

