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(57)

**ABSTRACT**

An optoelectronic system includes a photoelectric transducer to emit or receive optical waves and a waveguide to guide waves emitted by the transducer or to guide waves to the transducer, includes a stack successively including a porous first layer of first type doped semiconductor material, a second layer of first type doped semiconductor material doped and lightly doped, a zone including quantum wells, a third layer of semiconductor material doped according to a second doping type opposite to the first type, the photoelectric transducer including a first portion of the porous first layer, a first portion of the second layer, at least a first portion of the zone including the quantum well(s) and at least a first portion of the third layer; the waveguide including a second portion of the second layer adjacent to the first portion and disposed on a second portion of the porous first layer.

