

ABSTRACT

An optical modulator, comprising: a first dielectric layer (10); a second dielectric layer (20) located on the first dielectric layer (10), a waveguide structure (210) being provided in the second dielectric layer (20); an insulating layer (30) located on the second dielectric layer (20); and a
5 signal transmission structure (40) comprising a first conductive structure (410) and a second conductive structure (420), wherein the first conductive structure (410) is located on the insulating layer (30), the second conductive structure (420) is located in the second dielectric layer (20), and the second conductive structure (420) is electrically connected to the waveguide structure (210) and the first conductive structure (410) by means of via holes (50); wherein at least one of the first
10 conductive structure (410) and the second conductive structure (420) has a target conductive structure, the target conductive structure is a periodic structure, and a path distance of an electrical signal transmitted in the extension direction of the target conductive structure is greater than a path distance of an optical signal transmitted in the extension direction of the waveguide structure (210).

15 FIG. 12