

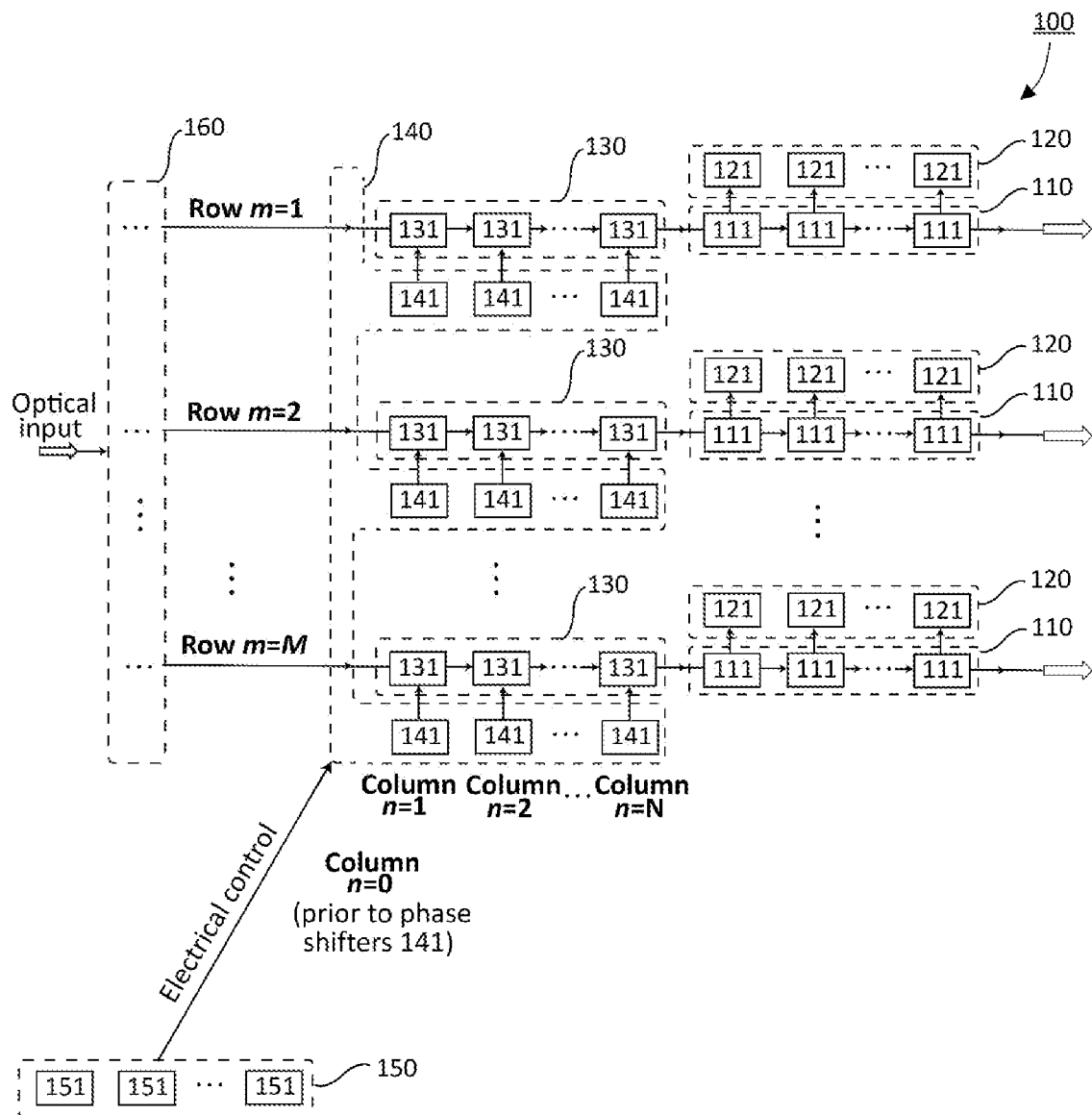


Fig. 1

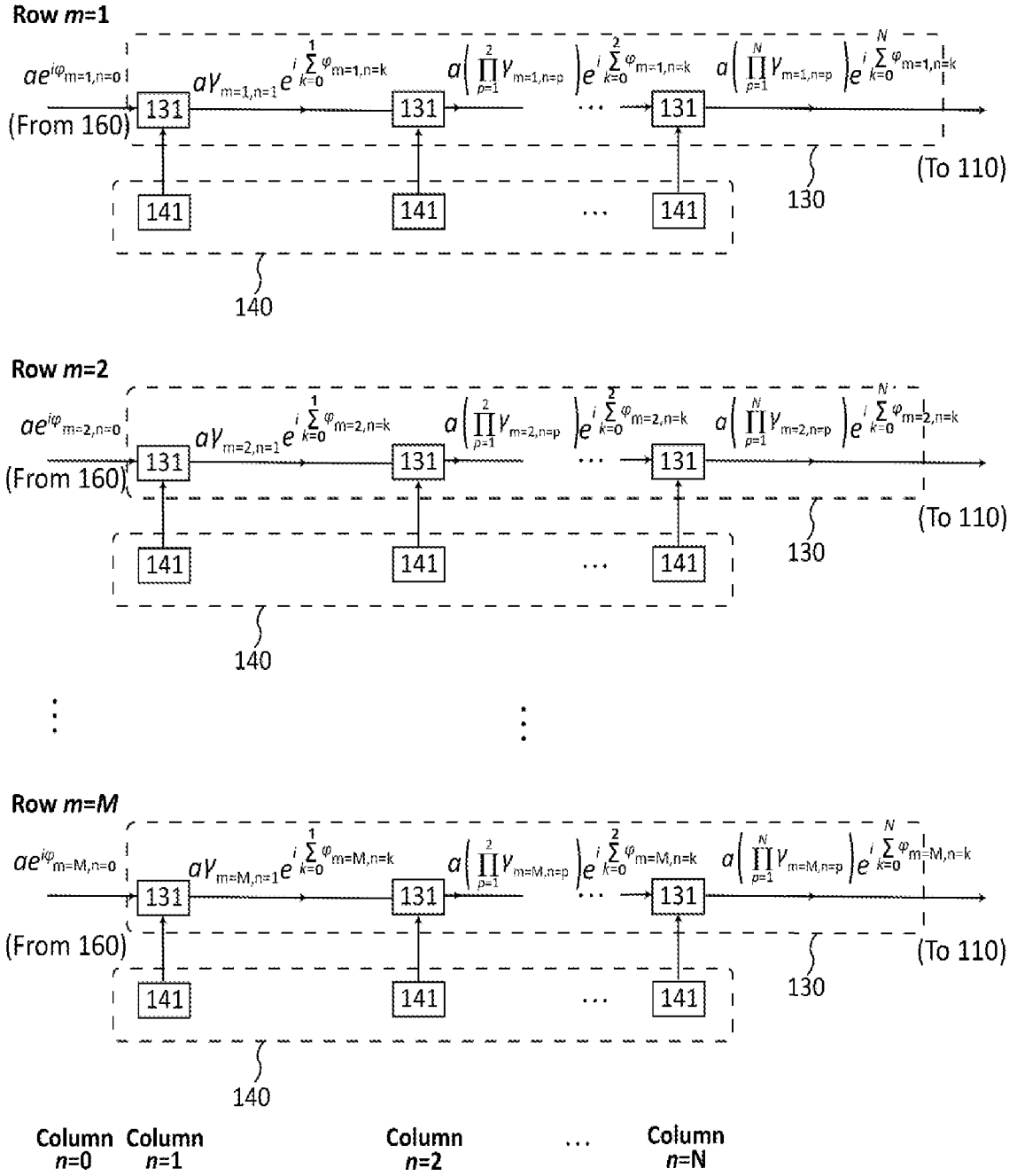


Fig. 2

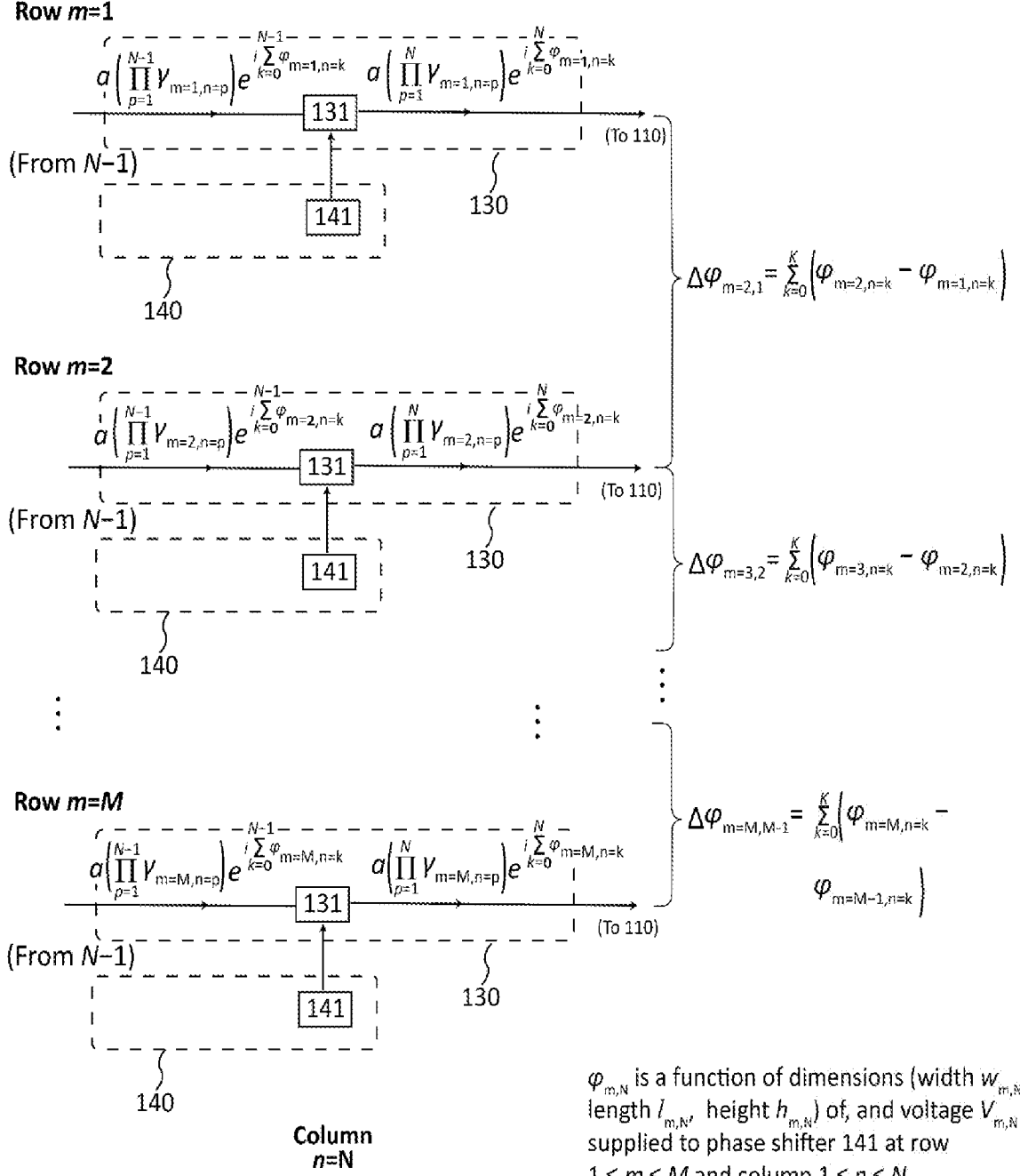


Fig. 3

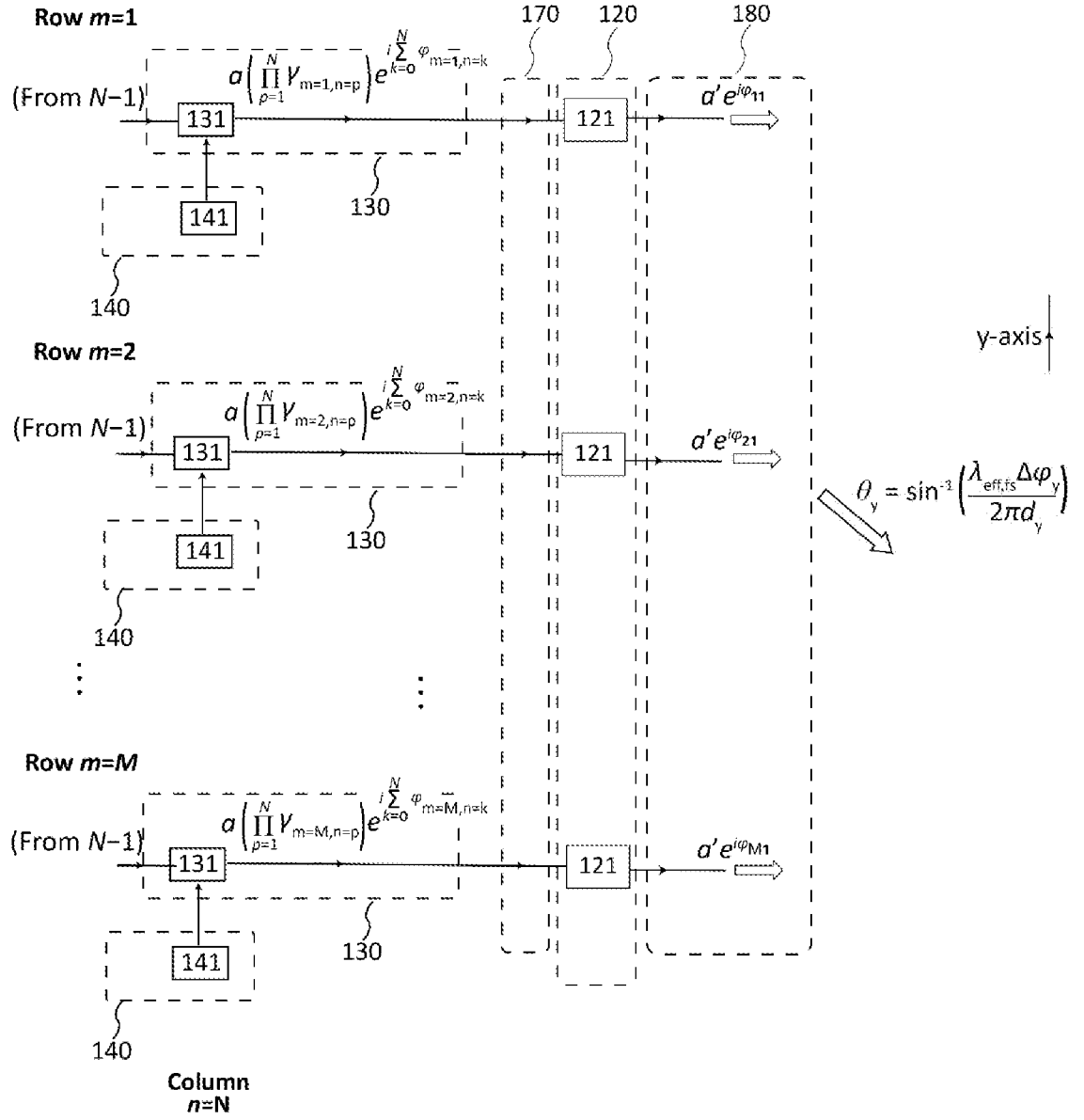


Fig. 4

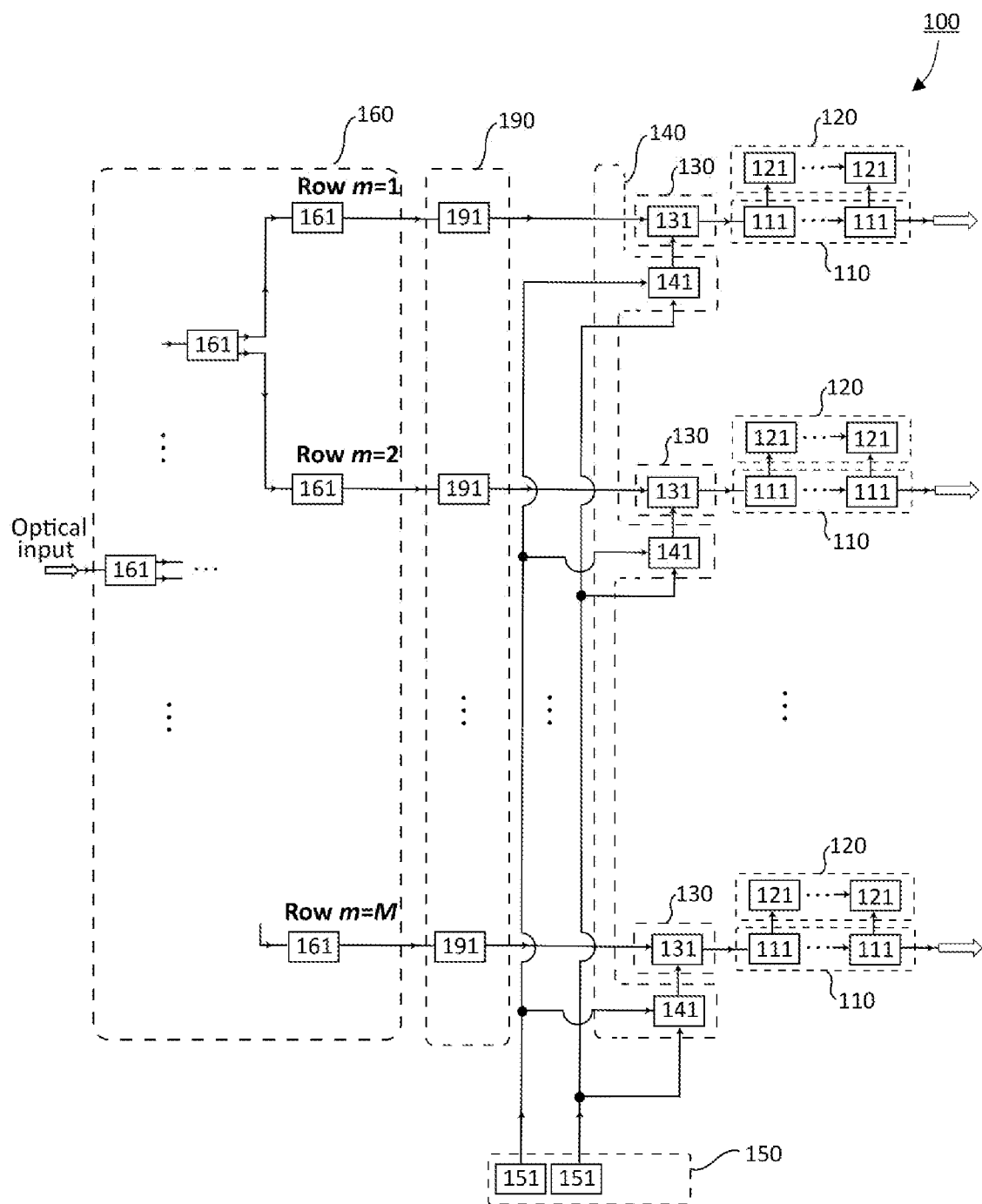


Fig. 5

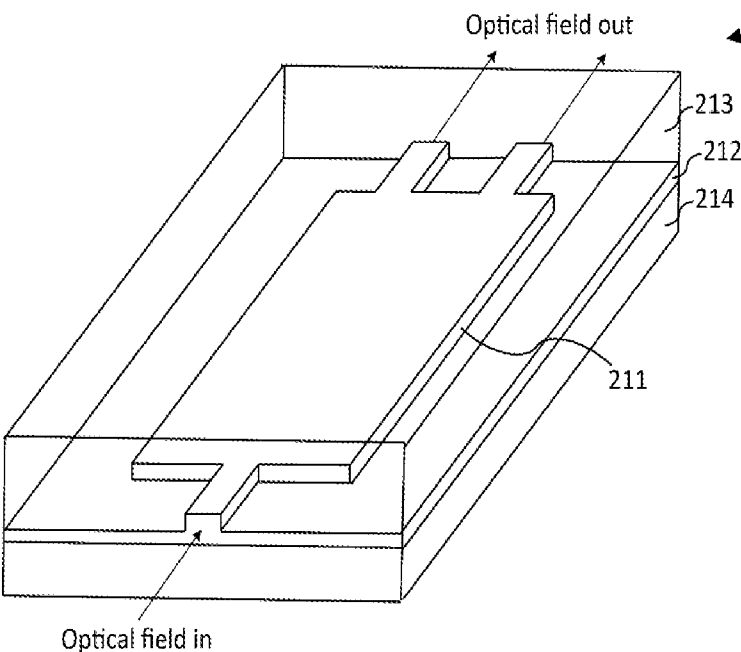
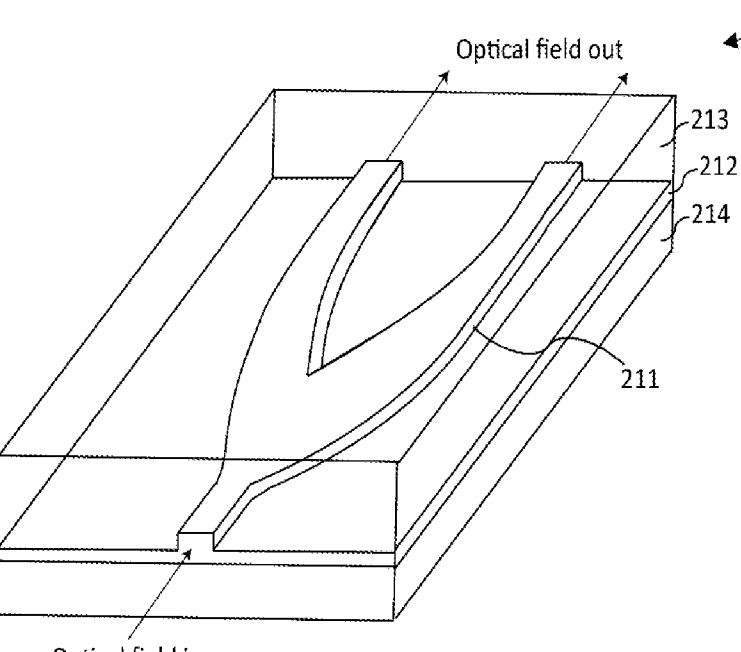
Optical splitter	Schematic
165	 A 3D perspective view of an optical splitter 165. It consists of a substrate 161 with a waveguide 211. An input optical field enters from the left, splits into two paths, and then recombines into a single output optical field exiting to the right. The waveguide 211 is defined by a top layer 213, a middle layer 212, and a bottom layer 214.
166	 A 3D perspective view of an optical splitter 166. It consists of a substrate 161 with a waveguide 211. An input optical field enters from the left, splits into two paths, and then recombines into a single output optical field exiting to the right. The waveguide 211 is defined by a top layer 213, a middle layer 212, and a bottom layer 214.

Fig. 6

Phase shifter	Schematic
135	
136	
137	
138	

Fig. 7

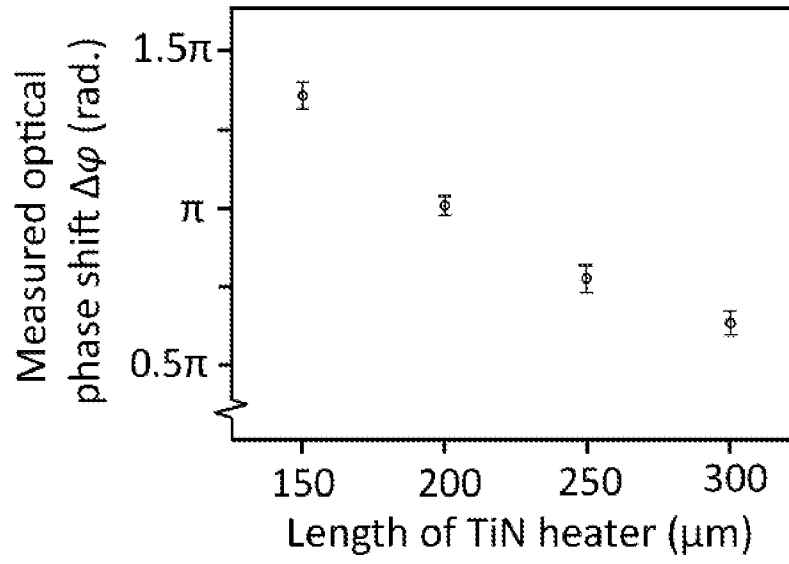


Fig. 8

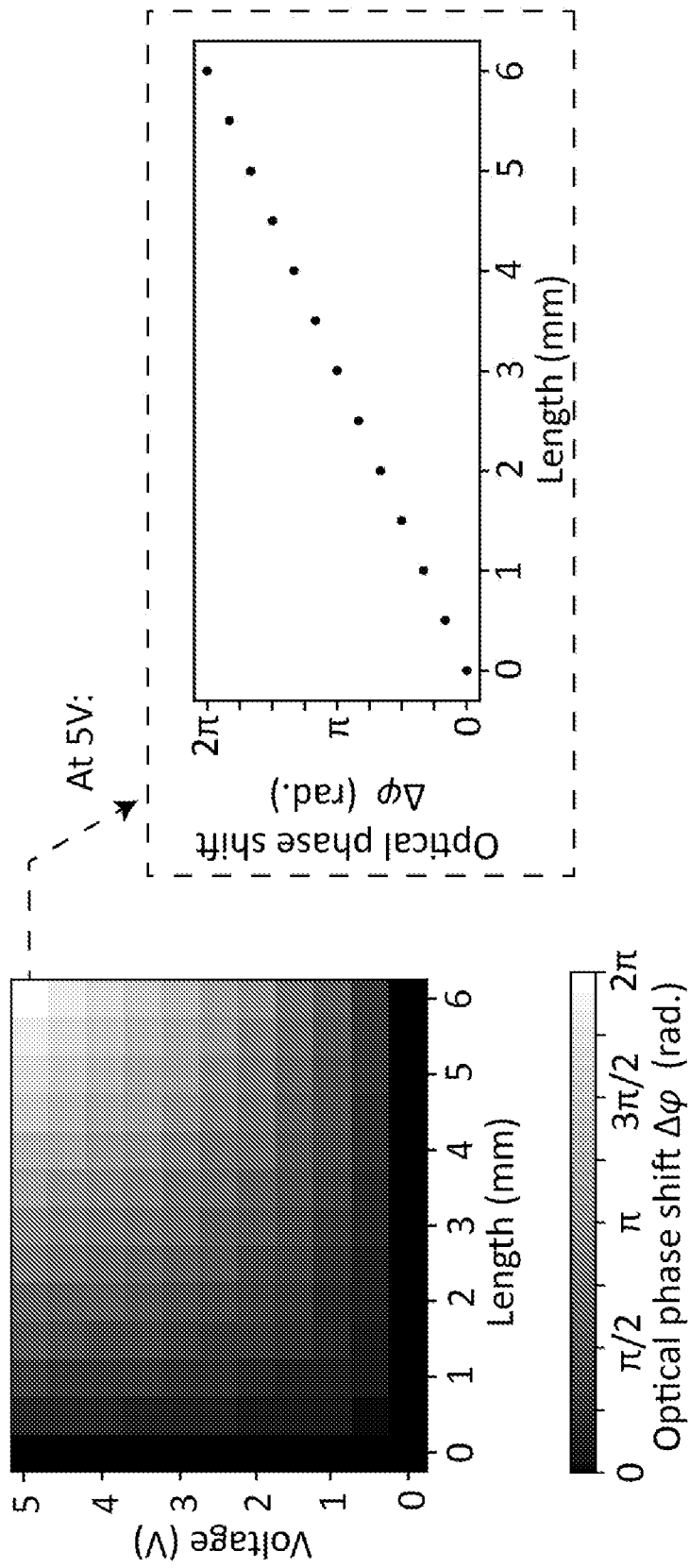


Fig. 9

Phase shifter	Schematic
Thermo-optic	
pn-doped	

Fig. 10

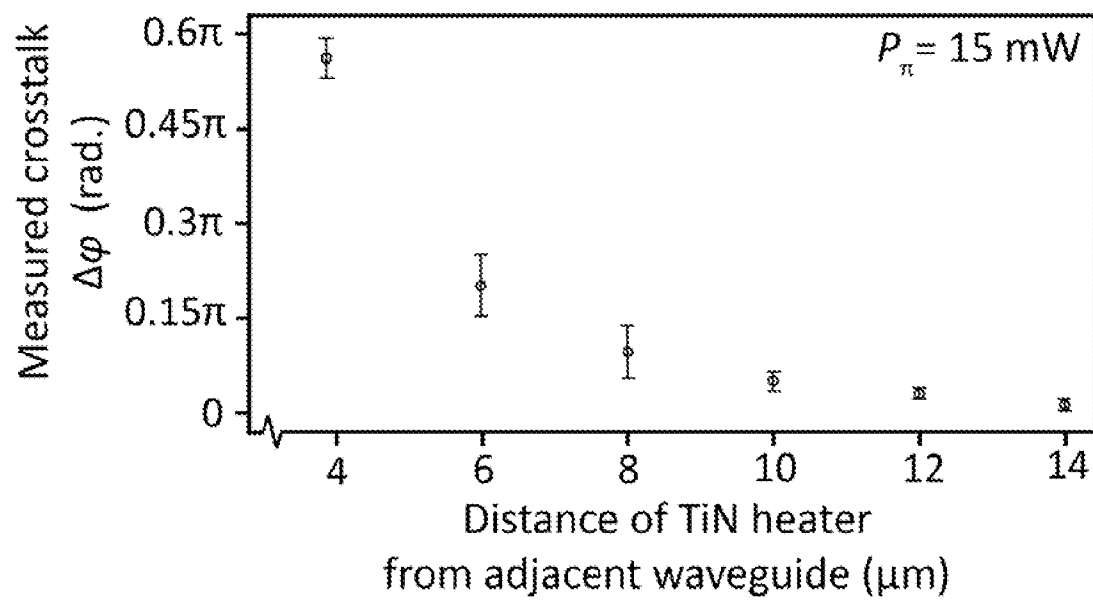


Fig. 11

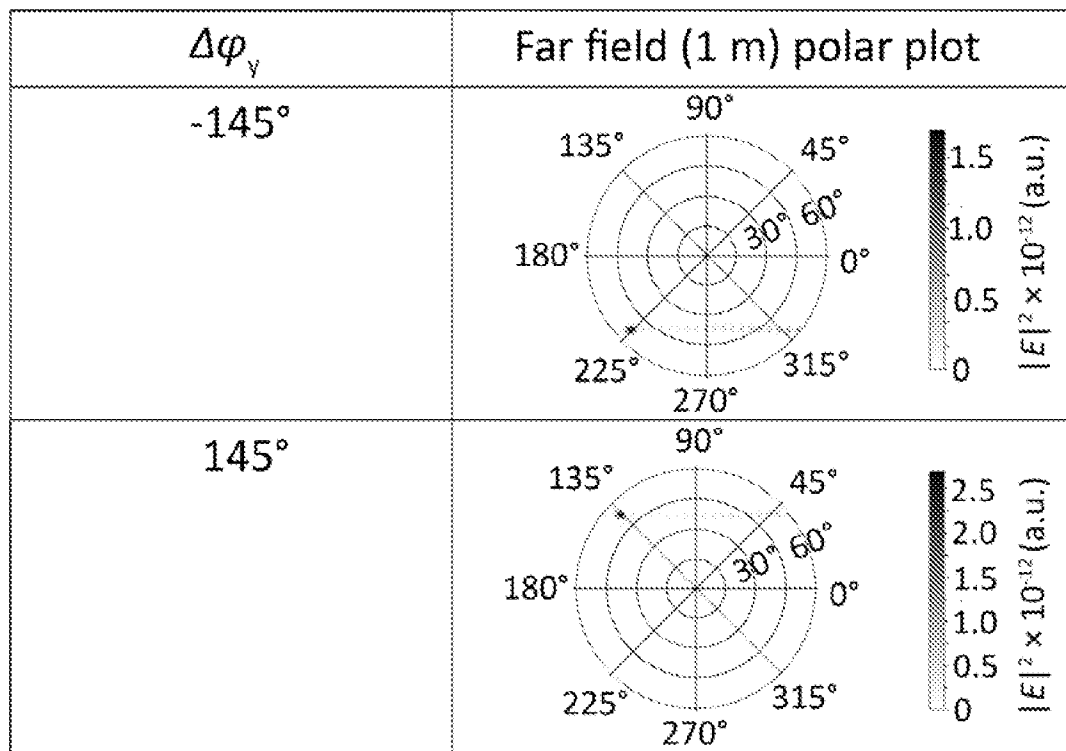


Fig. 12

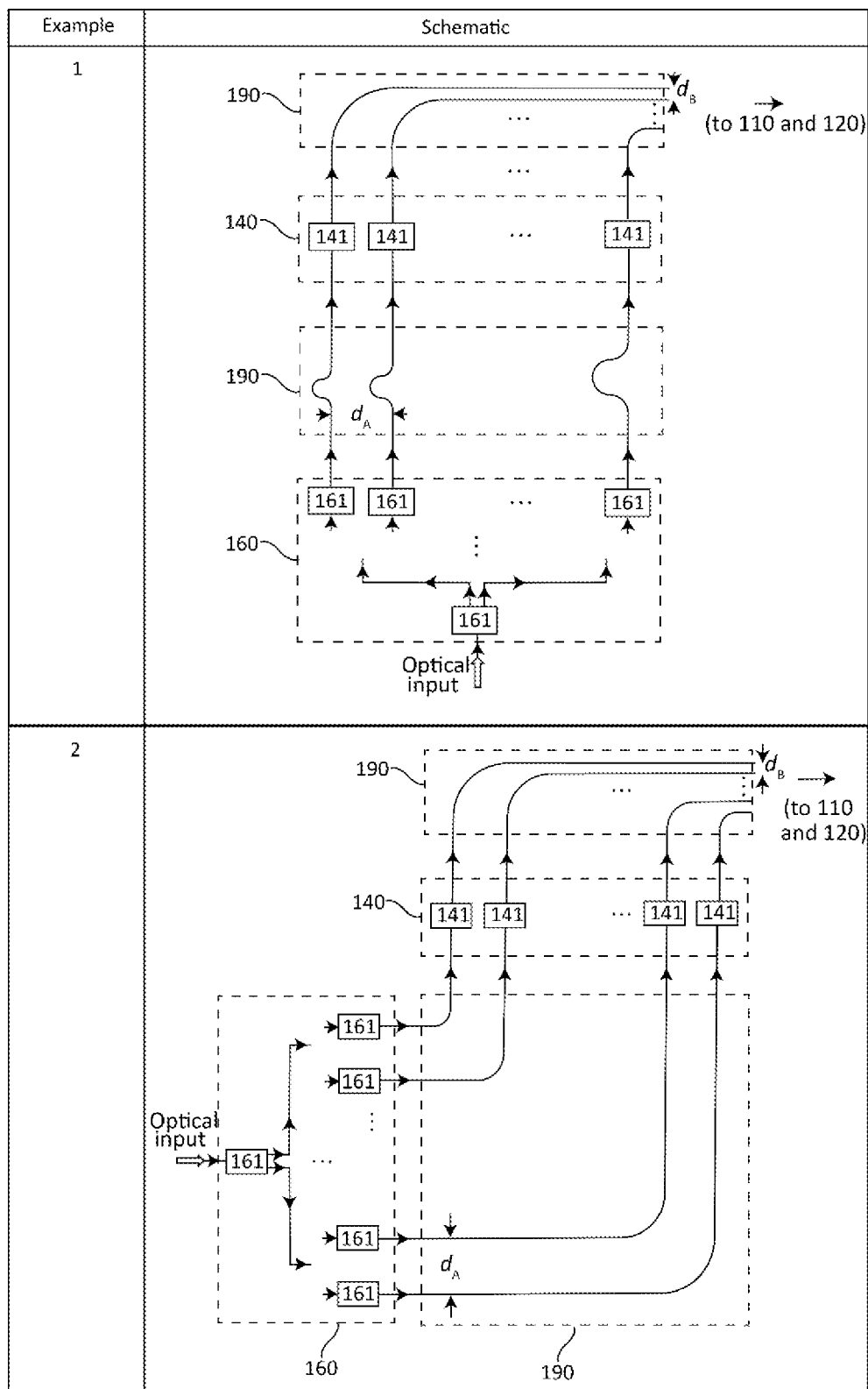


Fig. 13

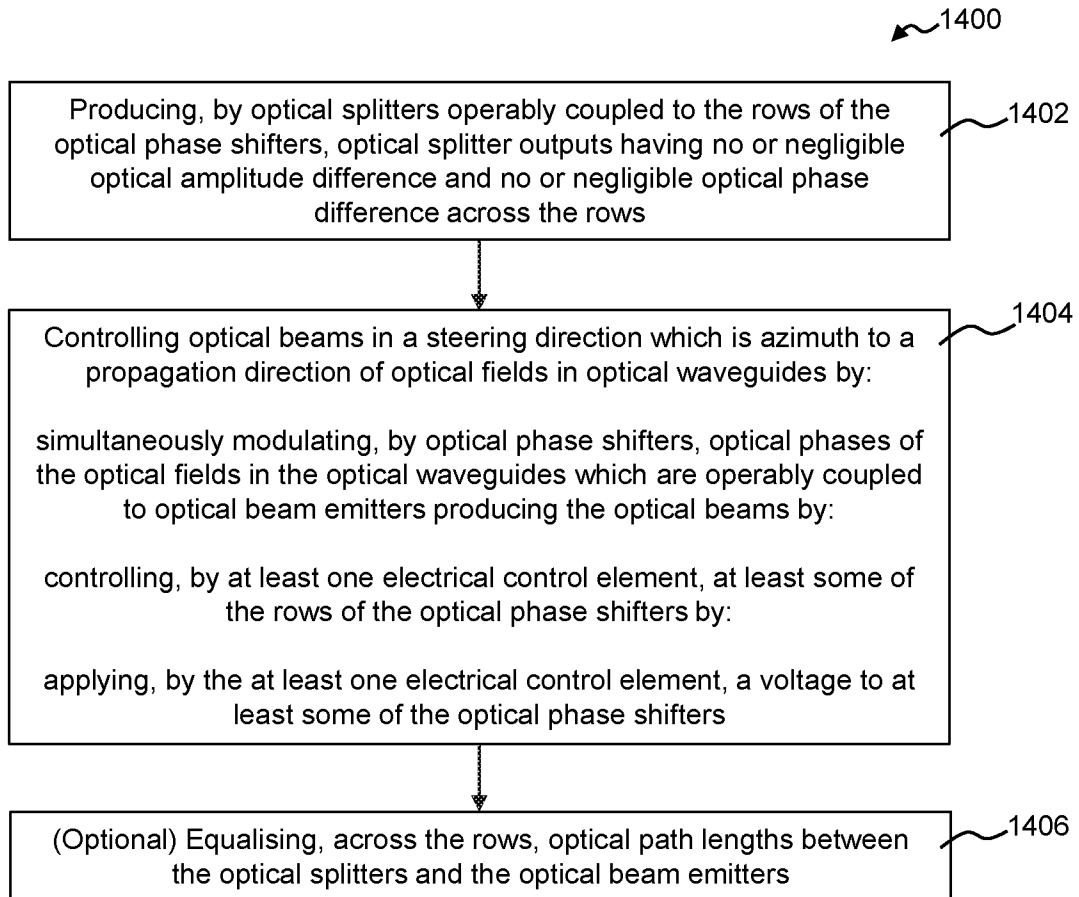


Fig. 14