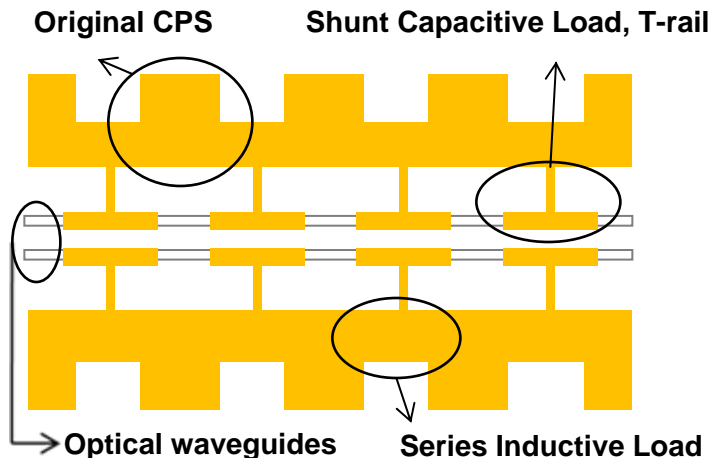


Coplanar Strip Slow Wave Structure for the Optical Directional Coupler Modulator

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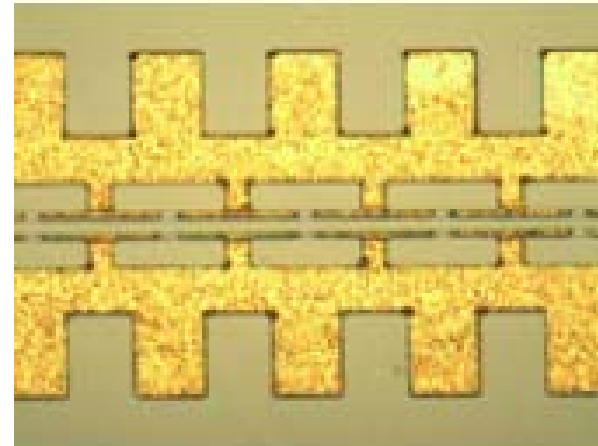
Design of Slow-wave Electrode

- ◆ Add series inductive and shunt capacitive loads in coplanar strip line
- ◆ Capacitive loads located on the top of the coupler waveguides
- ◆ Characteristic impedance of 50Ω maintained



Fabricated Slow-wave Electrodes

- ◆ $3 \mu\text{m}$ thick electrodes by electro-plating with patterned seed layer
- ◆ Capacitive loads width is $3.5 \mu\text{m}$
- ◆ Device length is 3 cm



Publications

- ◆ J. Oh and A. Gopinath, "A Coplanar Strip Slow Wave Structure for the Optical Directional Coupler Modulators," *IEEE Microwave Guided Wave Let.*, Vol.20, pp.7-9, 2010.