Abstracts

Optically controlled serially fed phased-array transmitter

Y. Chang, B. Tsap, H.R. Fetterman, D.A. Cohen, A.F.J. Levi and I.L. Newberg. "Optically controlled serially fed phased-array transmitter." 1997 Microwave and Guided Wave Letters 7.3 (Mar. 1997 [MGWL]): 69-71.

A new optically controlled phased-array system has been developed that has all the advantages of true time delay (TTD), yet only requires one tunable laser, one optical modulator, and one fiber-optic grating unit. A two-element serial-feed transmitter has been assembled and tested to demonstrate the feasibility of this novel concept. Experimental results include TTD operation from 6-12 GHz using both 10 and 1 ns pulses transmitted to five different directions.

❑ Return to main document.