



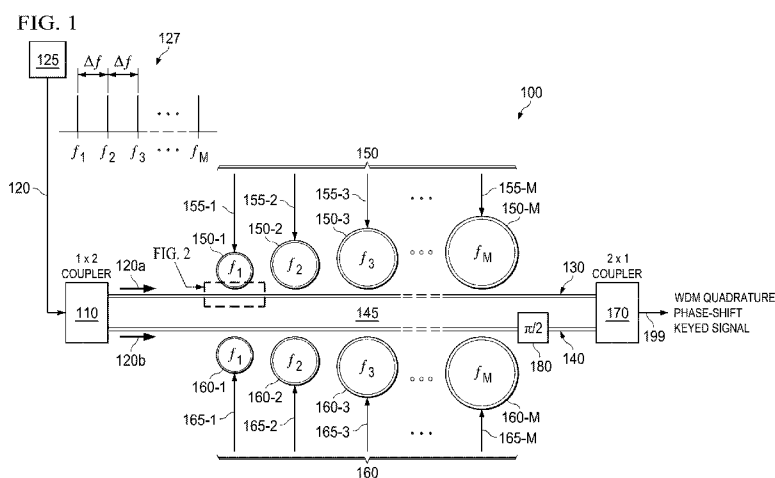
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(54) **Title:** ADVANCED MODULATION FORMATS USING OPTICAL MODULATORS

- (57) **Abstract:** A system, e.g. an optical modulator, includes an optical waveguide and a plurality of optical resonators. The optical waveguide is located along a surface of a planar substrate. The plurality of optical resonators is also located along the surface and coupled to the optical waveguide. Each of said optical resonators is configured to resonantly couple to the optical waveguide at a different optical frequency.