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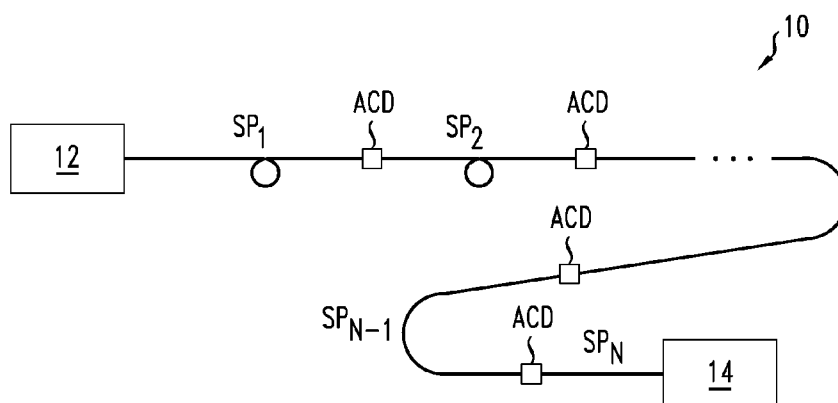
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(54) Title: MULTIMODE OPTICAL COMMUNICATION

FIG. 1



(57) Abstract: An optical transmitter includes a set of optical waveguides and first, second, and third optical modulators. Output ends of the optical waveguides of the set form a two-dimensional array capable of end-coupling the optical waveguides of the set to a multimode optical fiber in response to the array being located to optically face one end of the multimode optical waveguide. The first optical modulator is optically connected to a first of the optical waveguides of the set, and each of the second and third optical modulators is optically connected to the second and third of the optical waveguides of the set. The set of optical waveguides is configured to provide a coupling matrix of rank three or more between the optical modulators and optical propagation modes in the multimode optical fiber.

