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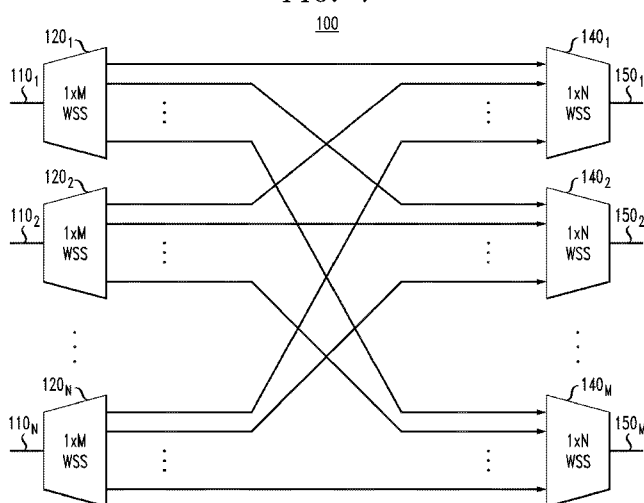
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(54) Title: COMPACT WAVELENGTH-SELECTIVE CROSS-CONNECT DEVICE HAVING MULTIPLE INPUT PORTS AND MULTIPLE OUTPUT PORTS

FIG. 1



(57) Abstract: A wavelength-selective cross-connect (WSXC) device having N input ports and M output ports and configured to route any set of one or more carrier wavelengths from a corresponding input port to any selected output port. In one embodiment, the WSXC device includes a diffraction grating and a beam-steering device optically coupled to each other and to the input/output ports so that each of the carrier wavelengths traverses the diffraction grating and the beam-steering device two or more times en route from the respective input port to a designated output port. Various unfolded configurations of the WSXC device are also disclosed.