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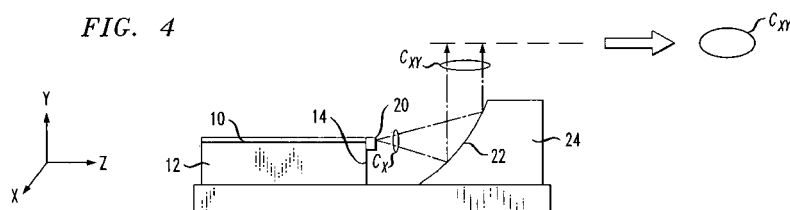
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FIG. 4



(57) Abstract: An arrangement for collimating and turning an optical beam utilizing a pair of two-dimensional lenses to separate the collimation into separate one-dimensional operations, while using one of the two-dimensional lenses to also perform the turning operation. A first two-dimensional Sensing surface is disposed at the endface of a launching waveguide. This first two-dimensional lensing surface provides collimation along one axis of the system (for example, the X axis). A second two-dimensional lensing surface is provided by introducing a defined curvature to a turning mirror in the system. The curvature of the turning mirror is designed to create collimation (or focusing, if desired) in the orthogonal beamfront (in this case, the Y axis beamfront), while also re-directing the propagating signal into the desired orientation.