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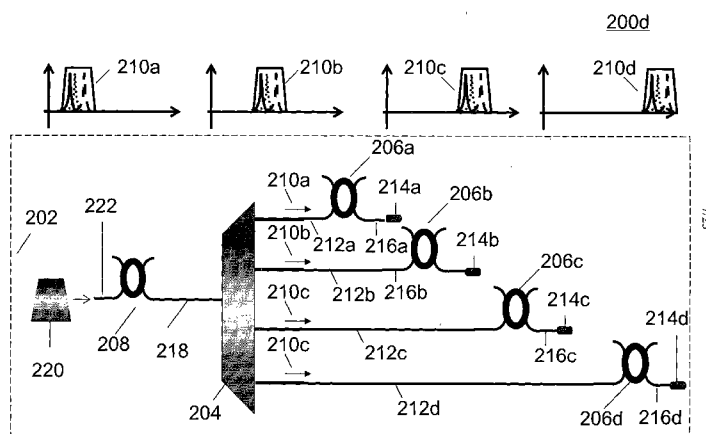
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(54) Title: OPTICAL SENSING SYSTEM AND METHOD OF DETERMINING A CHANGE IN A REFRACTIVE INDEX IN AN
OPTICAL SENSING SYSTEM

FIG. 2D



(57) Abstract: An optical sensing system may include a light separation element configured to separate an input light into a plurality of sliced lights and a first resonator configured to receive one sliced light of the plurality of sliced lights. An effective refractive index of the first resonator may be changeable in response to a change in a refractive index of a cladding of the first resonator, a second resonator coupled to the first resonator and a detector configured to measure an intensity of the sliced light, the intensity of the sliced light based on a difference between a resonant wavelength of the first resonator and a resonant wavelength of the second resonator. The difference between a resonant wavelength of the first resonator and a resonant wavelength of the second resonator may be based on the effective refractive index of the first resonator.



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