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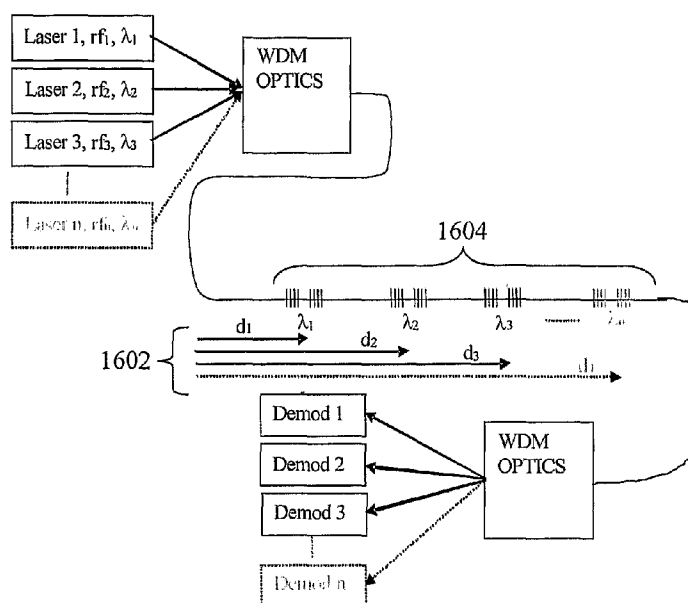
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(54) Title: APPARATUS FOR INTERFEROMETRIC SENSING



(57) Abstract: An apparatus for interferometric sensing, comprising a plurality of single-longitudinal mode laser sources to each provide radiation at a corresponding plurality of selected wavelengths, and at least one modulator to frequency or phase modulate the radiation from each laser; a plurality of Fabry-Perot interferometers formed by Bragg Gratings written into optical fibre, each interferometer being responsive to one of the said plurality of wavelengths to each produce a reflected or transmitted optical output signal dependent on the corresponding interferometer path length; and one or more demodulators to demodulate the optical output signals and produce a corresponding plurality of measurement signals indicative of optical path lengths of the respective interferometers.

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