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(54) Title: SPECTRUM RECONSTRUCTION METHOD FOR MINIATURE SPECTROMETERS

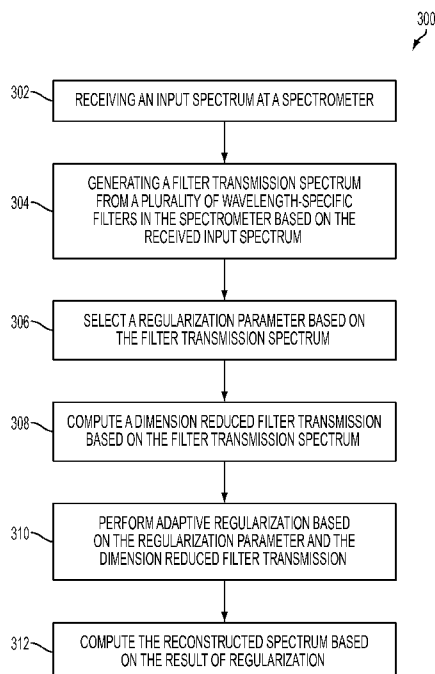


FIG. 3

(57) Abstract: Miniature spectrometers produce low resolution spectral data due to their size limitations. A method for processing these spectral data is proposed. The spectral data from a low resolution spectrometer is enhanced to a higher resolution, or processed to be in the wavelength domain. This process is called spectrum reconstruction, and can be used in low cost and miniature spectrometers with limited spectral resolution. The proposed method is noise robust, adapts to input spectrum, and can be used across many types of spectrometric devices without any manual adjustment of parameters.



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