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(54) Title: ADVANCED PATTERN RECOGNITION SYSTEMS FOR SPECTRAL ANALYSIS

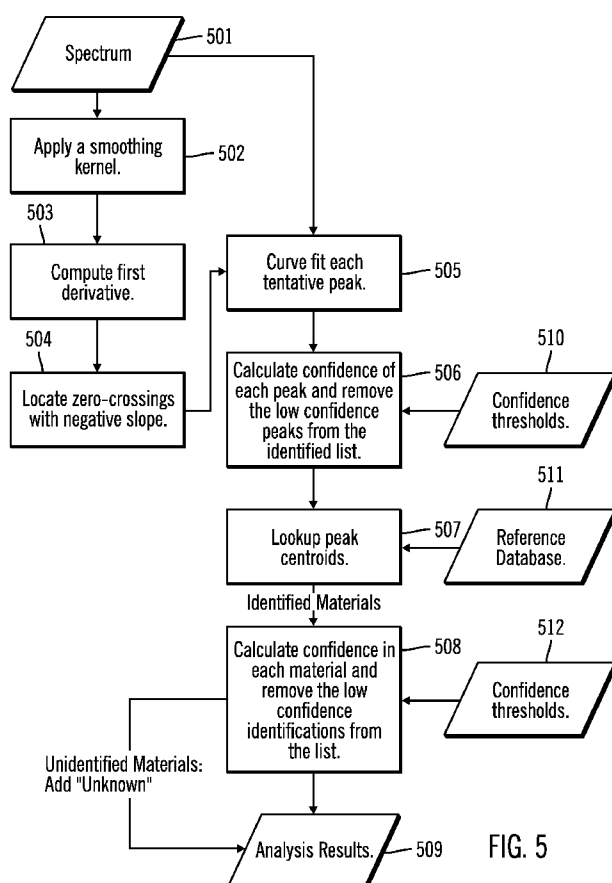


FIG. 5

(57) Abstract: A process of rapid and highly accurate analysis of spectral data, includes both a linear scanning (LIN-SCAN) method and an advanced peak detection method for pattern recognition. One or both of the methods are used to support the detection and identification of chemical, biological, radiation, nuclear and explosive materials. The spectra of various targets can be analyzed by the two spectral analysis methods. These two methods can be combined for dual confirmation, greater accuracy, and to reduced false positives and false negatives, relative to what can be accomplished by either alone.



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