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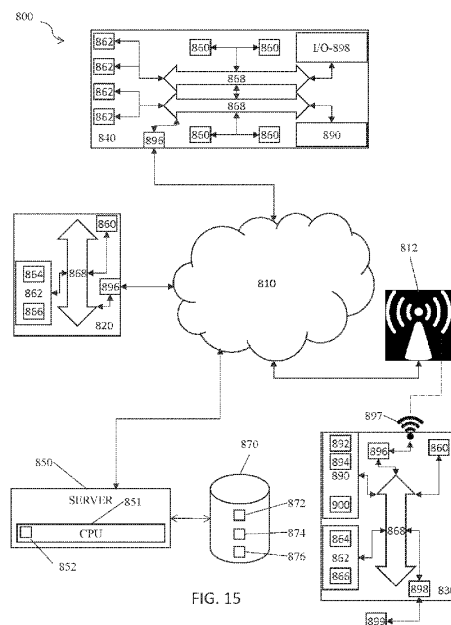
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(54) Title: SYSTEM AND METHOD FOR ANALYZING SPECTRAL DATA USING ARTIFICIAL INTELLIGENCE



(57) Abstract: A system provides for an ability to automatically identify one or more chemical components of a sample, especially a biological fluid sample, based on analysis of spectral data by at least one artificial intelligence module. The artificial intelligence module is able to be trained on a plurality of spectral data samples having known concentrations of individual chemicals and elements. The system is preferably used for spectral techniques such as UV/vis and near-infrared (NIR) spectrophotometry, but is also able to be used for other forms of spectroscopic techniques, including mass spectrometry, infrared (IR) spectrometry, X-ray spectroscopy, Raman spectrometry, or nuclear magnetic resonance (NMR) spectrometry.

WO 2025/071913 A1

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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