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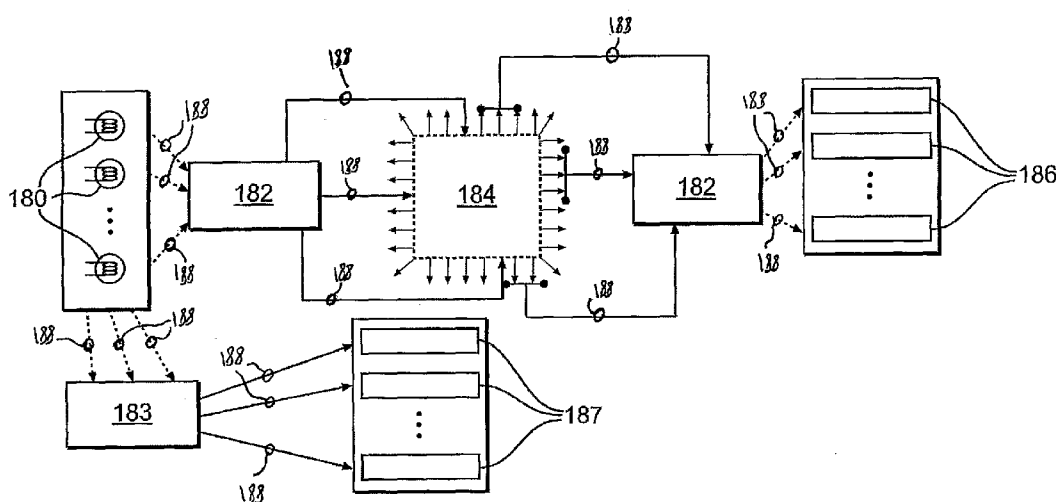
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(54) Title: METHOD AND APPARATUS FOR CALIBRATED DOWNHOLE SPECTRAL ANALYSIS OF FLUIDS



(57) Abstract: A fluid analysis system for use downhole comprises an input light signal that is directed through a fluid sample housed in a sample cell (184). The input light signal may originate from a plurality of light sources (180). An output light signal from the sample cell is then routed to one or more spectrometers (186) for measurement of the represented wavelengths in the output light signal. The output of the spectrometers is then compared to known values for hydrocarbons typically encountered downhole. This provides insight into the composition of the sample fluid. Additionally, the light from the light sources can be routed directly to the one or more spectrometers to be used in calibration of the system in the high temperature and noise environment downhole.

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