

## CTIR Spectrometer for Large Area Assessment of Greenhouse Gas Emissions

### Disclosure Number

201303136

### Technology Summary

This invention relates to sensors and more specifically to sensors and methods for measuring greenhouse gas concentration. In one configuration, the system works by producing infrared spectral information at every spatial position within a measurement area using fixed sensors. The projection data gathered by this configuration are reconstructed using techniques to recover gas concentrations at all spatial positions. A second configuration uses a sensor that is transported around the measurement area using unmanned aerial vehicles. Recovery of gas concentrations at all spatial locations is accomplished in similar fashion to the first configuration.

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