Optical scanning of alkane outflows from the water surface into the atmosphere with infrared gas analyzers and aerosol optocouplers

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A complex has been developed for remote and mobile monitoring of water droplets and hydrocarbon vapors in the atmosphere during large-scale liquefied-natural-gas spills on the water surface, as well as during its bubbling with methane and other alkanes due to leaktightness of fuel storage tanks at sea.

The created mobile complex for diagnostics of fuel assembly clouds using, among other things, unmanned aerial vehicles can be used in safety control systems of fuel facilities during the development of hydrocarbon resources of the ocean and in systems for environmental monitoring of the atmosphere and analysis of gas-drop emissions of hydrocarbons.

The created diagnostics blocks of fuel assembly clouds are protected by 32 patents of the Russian Federation.

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