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(54) **Title: UNDERWATER CAMERA UNIT AND SURFACE CONTROLLER**

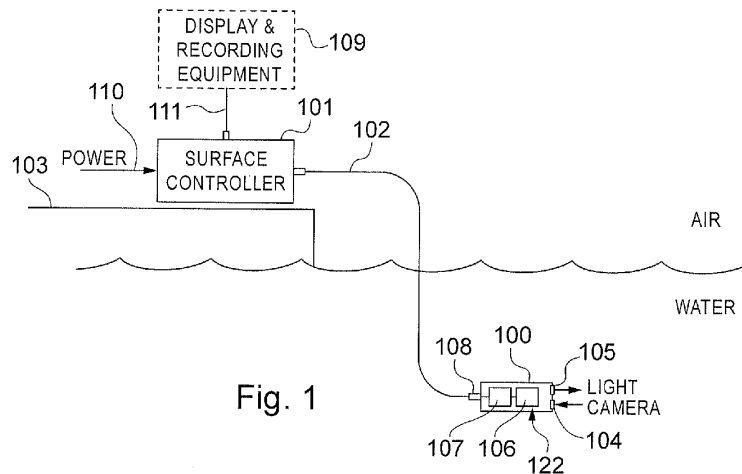


Fig. 1

(57) **Abstract:** An underwater camera unit and a surface controller for controlling the underwater camera unit via an underwater cable. The camera unit includes a pressure housing containing a modem, a command processor coupled to the modem to receive control signals from the modem, an image processor coupled to the modem to provide image data to the modem, and a camera sensor coupled to the image processor. The camera unit also includes a connector for connecting the underwater camera unit to the underwater cable. The modem is coupled to the connector. The modem is operable to multiplex image data from the image processor with control and/or monitoring signals from the command processor and transmit the multiplexed image data and control and/or monitoring signals from the underwater camera unit via the connector. The modem is also operable to receive control and/or monitoring signals via the connector and pass them to the command processor.

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