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(54) Title: COMMUNICATIONS SYSTEMS AND METHODS FOR SUBSEA PROCESSORS

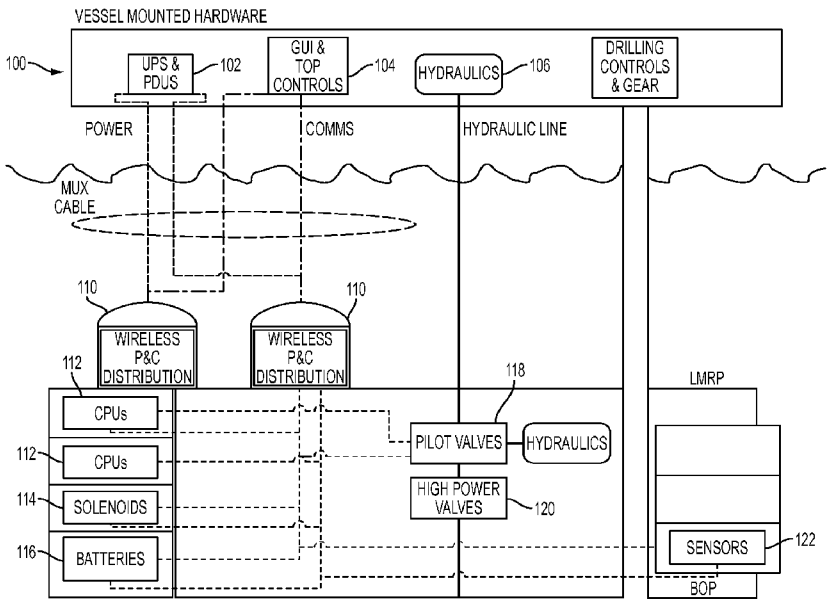

FIG. 3

(57) Abstract: A subsea processor may be located near the seabed of a drilling site and used to coordinate operations of underwater drilling components. The subsea processor may be enclosed in a single interchangeable unit that fits a receptor on an underwater drilling component, such as a blow-out preventer (BOP). The subsea processor may issue commands to control the BOP and receive measurements from sensors located throughout the BOP. A shared communications bus may interconnect the subsea processor and underwater components and the subsea processor and a surface or onshore network. The shared communications bus may be operated according to a time division multiple access (TDMA) scheme.

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