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(54) **AUTONOMOUS METHOD TO PREVENT BROWNOUT OF SUBSEA ELECTRONIC MODULES**

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(57) **ABSTRACT**

A method is for controlling a subsea system including at least one slave subsea electronic module installed in a subsea device, to prevent brownout of the subsea system. The system includes a master subsea electronic module, configured to provide power to the at least one slave subsea electronic module. The subsea device is configured to execute several operations. The method includes measuring the voltage or the current provided from the subsea electronic module to the slave subsea electronic module, and comparing the measured voltage or current value with a threshold value. When the measured voltage is lower than the threshold value or the measured current is higher than the threshold value, the method powers off or limits a power of at least one of several components of the subsea device which is used to execute one of the several operations using the slave subsea electronic module.