POWER MOSFET WITH OVERCURRENT AND OVER-TEMPERATURE PROTECTION

An MOS-gated device has a control section comprising a transistor (90) formed in an N-type substrate, with the substrate acting as the emitter. A P-type well (80) in the substrate is connected to the collector (92) of the transistor. The source of the MOS-gated device is connected to the base of the transistor. If the N-substrate goes negative with respect to the source of the MOS-gated device the transistor turns on, so that the potential of the P-type well is equal to the potential of the N-substrate.