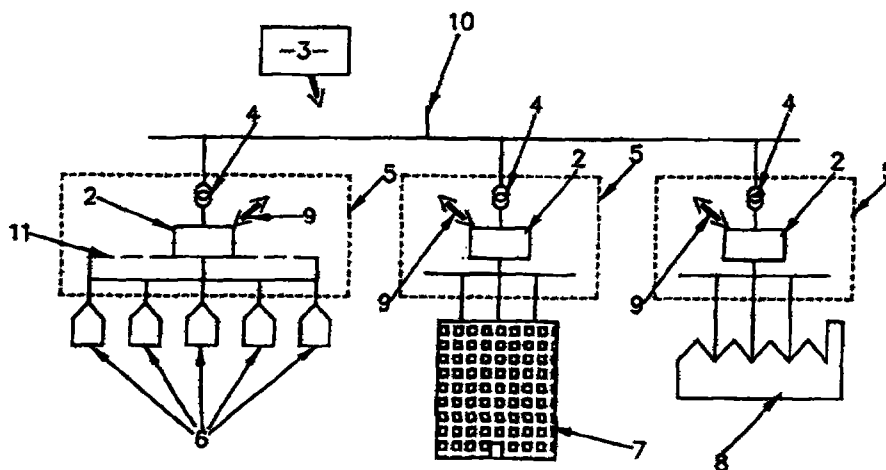




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(54) Title: **DISTRIBUTED FREQUENCY RELAY**

(57) Abstract

A method of increasing the system stability of an electricity supply network (10) including the steps of locating programmable frequency sensitive relays (2) at load shedding points (5, 6, 7, 8) within the network (10). Each relay (2) controls one or more loads (5-8) and contains programmable disconnect and reconnect conditions. One or more of the loads (5-8) are disconnected from the network (10) upon a relay (2) detecting the programmable disconnects conditions. Each relay (2) reconnects the load (5-8) to the network (10) when it detects the programmable reconnect conditions. Each relay (2) includes means for detecting the network frequency, micro-processor means including memory and software and means to disconnect and reconnect one or more of the loads (5-8). Each relay (2) is programmed from a centralised network stability manager (3) which can designate programmable conditions for each relay (2). The communications between each relay (2) and the stability manager (3) can be via broadcast or sequential point-to-point communications.