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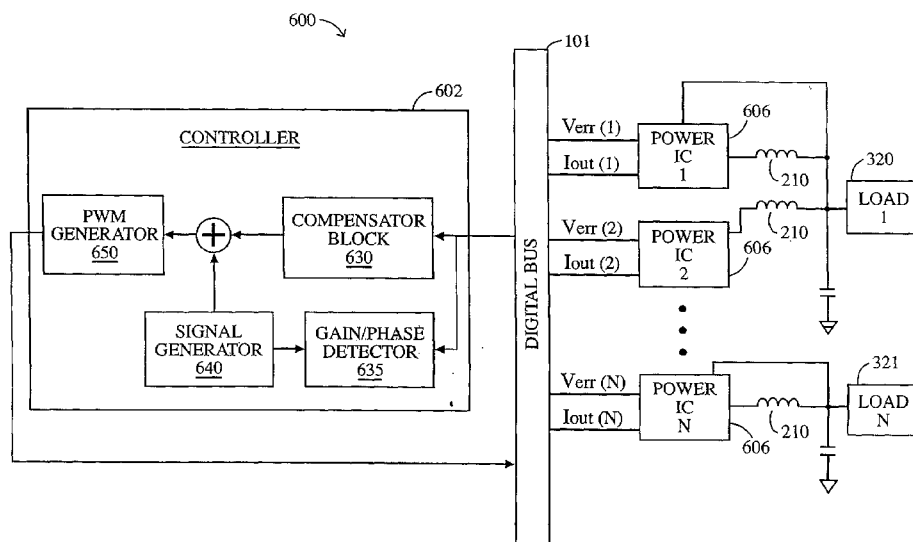
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(54) Title: SYSTEM AND METHOD FOR HIGHLY PHASED POWER REGULATION USING ADAPTIVE COMPENSATION CONTROL



(57) Abstract: A highly phased power regulation (converter) system having an improved control feature is provided. A controller, such as a digital signal processor or microprocessor, receives digital information from a plurality of power conversion blocks and transmits control commands in response to the information. The controller is able to change the mode of operation of the system and/or re-phase the power blocks to accommodate a dynamic load requirement, occasions of high transient response or detection of a fault. A compensation block within the controller is used to regulate the output voltage and provide stability to the system. In one embodiment, the controller is implemented as a PID compensator controller. In another embodiment, a microprocessor is able to receive feedback on its own operation thus providing enabling the controller to anticipate and predict conditions by analyzing precursor data.

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