

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
18 April 2002 (18.04.2002)

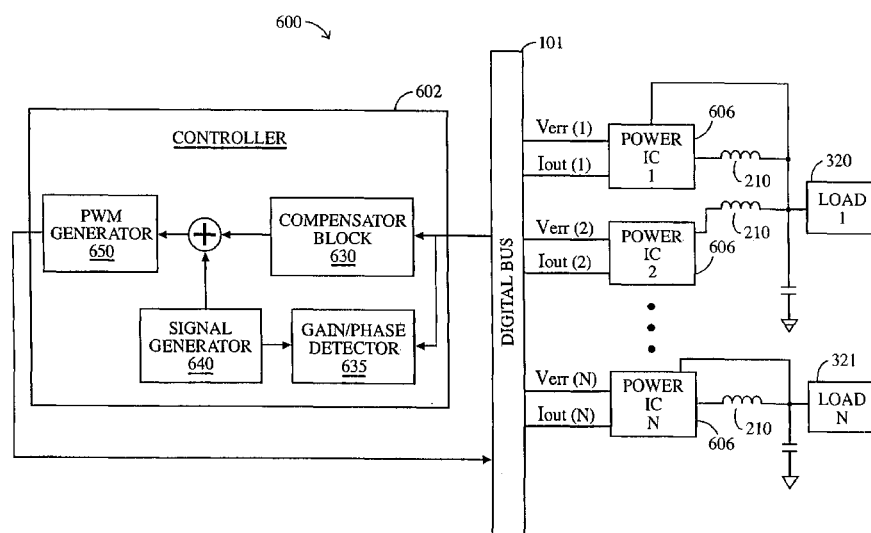
PCT

(10) International Publication Number  
**WO 02/31951 A2**

- (51) International Patent Classification<sup>7</sup>: **H02M**
- (21) International Application Number: PCT/US01/32263
- (22) International Filing Date: 15 October 2001 (15.10.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/240,337 13 October 2000 (13.10.2000) US  
09/975,195 10 October 2001 (10.10.2001) US
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(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.



**Published:**

— without international search report and to be republished  
upon receipt of that report

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