United States Patent [19] [11] Patent Number: 4,823,070 Nelson [45] Date of Patent: Apr. 18, 1989

[54]	SWITCHII CIRCUIT	NG VOLTAGE REGULATOR
[75]	Inventor:	Carl T. Nelson, San Jose, Calif.
[73]	Assignee:	Linear Technology Corporation, Milpitas, Calif.
[21]	Appl. No.:	82,989
[22]	Filed:	Aug. 3, 1987
Related U.S. Application Data		
[63]	Continuatio doned.	n of Ser. No. 932,158, Nov. 18, 1986, aban-
[51] [52]	[31] Int. Cl. ⁴	
[58]	Field of Sea	arch 363/20, 21, 97, 131; 323/282, 284, 285, 299, 267
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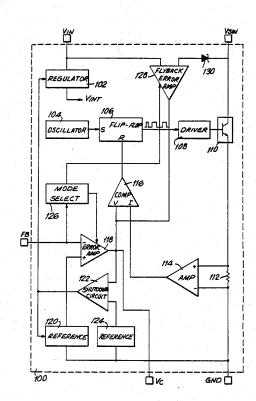
Documents relating to the Linear Technology Corporation LT-1070 integrated circuit.

Primary Examiner—Patrick R. Salce Assistant Examiner—Kristine Peckman Attorney, Agent, or Firm—Laurence S. Rogers

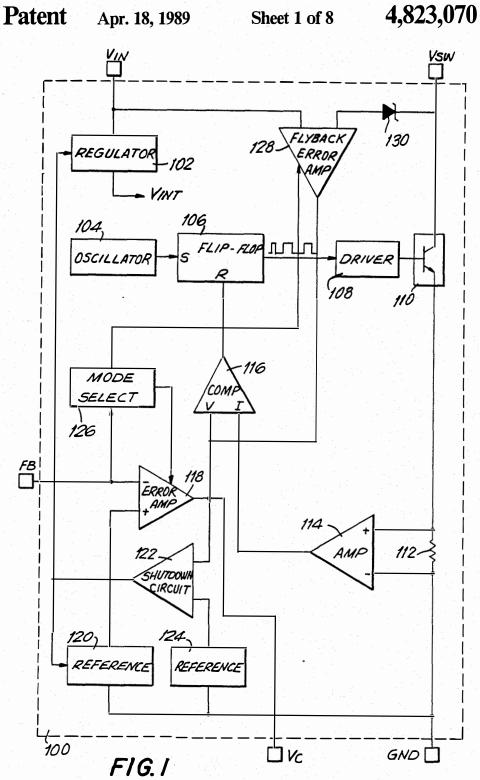
[57] ABSTRACT

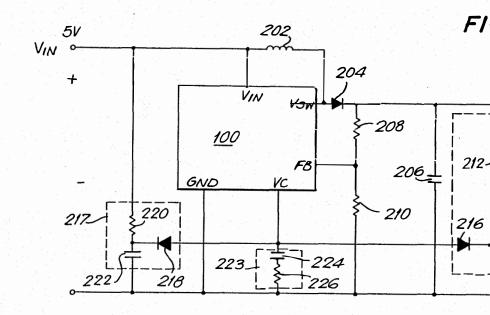
An integrated circuit for use in implementing a switching voltage regulator, the integrated circuit including a power switching transistor, driver circuitry and control circuitry, which is operable in a normal feedback mode or an isolated flyback mode. The integrated circuit includes shutdown circuitry for placing the regulator in a micro-power sleep mode, and can be packaged in a five-pin conventional power transistor package. The terminals of the integrated circuit regulator perform multiple functions. A compensation terminal is used for frequency compensation, current limiting, soft-start operation and shutdown. A feedback terminal is used as a feedback input when the integrated circuit is in feedback mode, and as a logic pin to program the regulator for isolated flyback operation. The feedback terminal is also used to trim the flyback reference voltage.

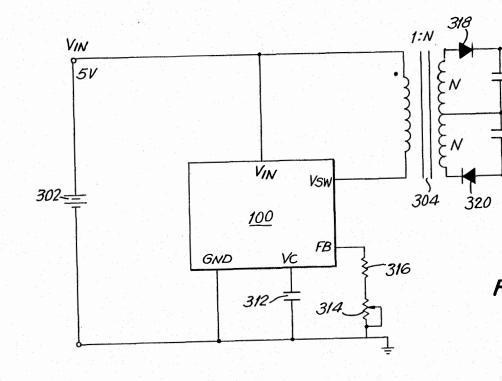
81 Claims, 8 Drawing Sheets



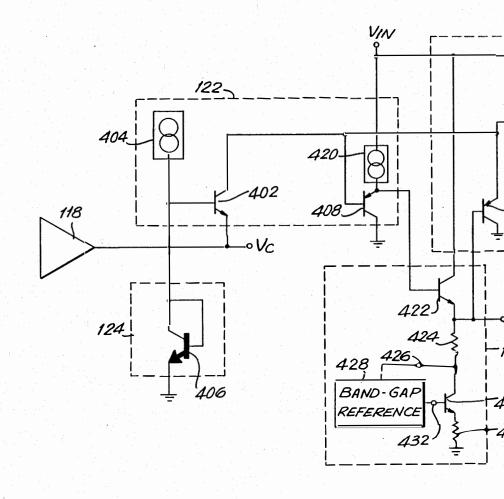














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