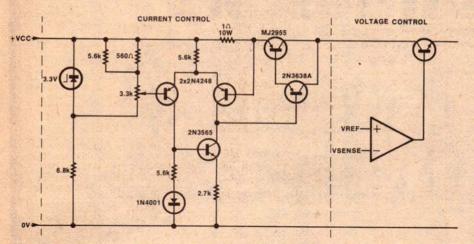
## CIRCUIT & DESIGN IDEAS

## Variable current limiter for power supplies



The variable current limiting circuit is intended to be fitted in regulated supplies between the normal voltage regulation circuitry and the output of the rectifier.

As may be seen from the circuit, it is a standard DC amplifier "upside down". It uses one transistor as a collector load driving a PNP Darlington pair, so as to compare a variable reference voltage with the voltage drop across a series resistor. It can be fitted into most 0-30V, 1A power supplies but space will have to be found for the front panel control. Also, the power transistor must be fitted with a good heat sink.

To set the current for any particular situation, wind up the voltage control so as to have 4 to 5 volts of requirement and then set the current control to the desired value. As shown, the circuit gives limiting from approximately 10mA to 1.2A. The circuit could have uses in Ni-Cd battery charging and in repair and development work.

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