

ABSTRACT

A LEVEL SHIFTER FOR A POWER SUPPLY, FOR EXAMPLE
IN A TELEVISION APPARATUS

5 A level shifter (600) receives a variable input
- voltage (V_{NINI}), such as a beam current representative
voltage of a cathode ray tube in a television receiver,
and produces an output voltage (V_{NIN}) that changes when
the input voltage changes, such that the output voltage
10 (V_{NIN}) is level shifted relative to the input voltage
(V_{NINI}). The output voltage (V_{NIN}) is coupled to an
input terminal (+) of an error amplifier (610) of a
power supply voltage regulator. The level shifter
(600) includes a current mirror arrangement responsive
15 to the input voltage. A band gap type voltage source
(699) determines the amount of level shifting that is
produced by the level shifter (600).

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FIG. 1

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