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(54) Title: IMPROVED FLOATING, BALANCED OUTPUT CIRCUIT

(57) Abstract: A floating, balanced output stage maintains control of the common-mode output current in both output legs even when the differential voltage output is clipped. The circuit includes a pair of transconductance amplifier sections one for providing a differential pair of output currents in response to the input voltage, the currents being substantially equal in magnitude and opposite in polarity; an intermediate section connected so as to generate an intermediate differential output voltage, across two outputs of the intermediate section, in response to the pair of output currents of the first transconductance amplifier; an output section for generating the differential output voltage in response to the pair of voltages generated by the intermediate section; a differential feedback loop configuration connected around the first transconductance amplifier and the intermediate section so as to provide differential negative feedback in response to the intermediate differential output voltage generated by the intermediate section; and a common-mode feedback loop configuration comprising a second transconductance amplifier section connected around the intermediate section so as to respectively add a pair of substantially matched output currents to the output currents of the first transconductance amplifier stage in response to the common mode current.