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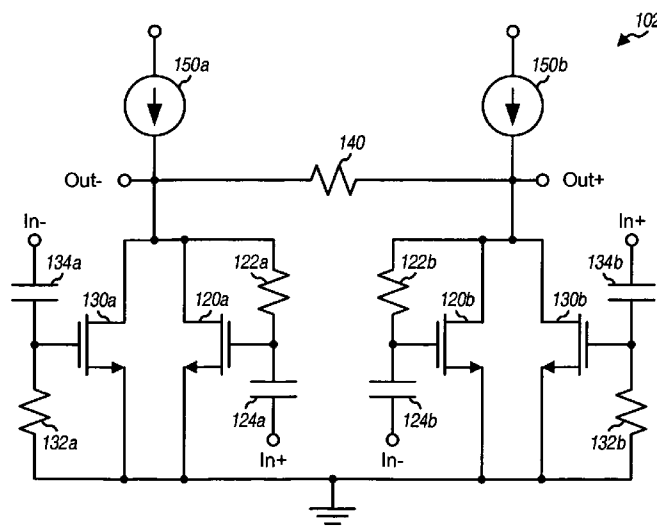
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— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,

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(54) Title: GENERAL-PURPOSE WIDEBAND AMPLIFIER



(57) Abstract: A single-stage amplifier includes (1) first and second "gain" transistors coupled in a common source configuration, (2) first and second resistors providing self-biasing for the first and second transistors, respectively, (3) first and second current sources providing bias currents for the first and second transistors, respectively, and (4) a load impedance coupled between the drains of the first and second transistors. The amplifier may further include (5) third and fourth "compensation" transistors coupled in parallel with, and used to compensate parasitic capacitances of, the first and second transistors, respectively, and (6) third and fourth resistors providing self-biasing for the third and fourth transistors, respectively. Variable gain may be achieved by varying the bias currents for the gain transistors. A two-stage amplifier may be formed with two stages coupled in cascade, with each stage including most or all of the circuit elements of the single-stage amplifier.

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