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(54) Title: FULLY DIFFERENTIAL OUTPUT CMOS POWER AMPLIFIER		
(57) Abstract		
A fully differential output CMOS power amplifier suitable to be used in a non-volatile memory mixed mode chip for voice record and playback to drive a very low impedance load such as an 8-ohm speaker from a low voltage supply. This fully differential CMOS power amplifier utilizes a voltage multiplying technique for the input stage (MN2, MN3, MP6, MP7), a level shift/gain stage (MNP12, MNP13), and a common mode feedback network (MN1, MN10, MP10). It also utilizes native n-MOS having a threshold voltage $V_T = 0V$ for the folded cascode differential input and the source follower output stage (MN7), enhancement n-MOS ($V_T = 0.7V$) for the common source output, and a voltage regulator (22) using p-MOS diode connected devices (M1-M5) for simulating a resistor divider to regulate the voltage multiplier output. The amplifier also includes a mechanism for crossover distortion reduction at the output driver stage, and a scheme to set the idle current in the output driver n-MOS transistors (MN7, MN9).		