

FIG. 1
(PRIOR ART)

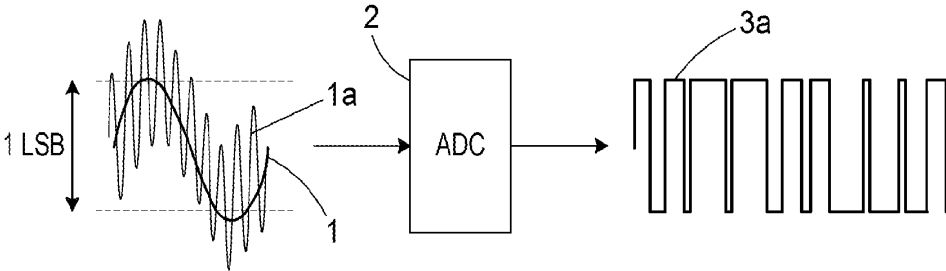


FIG. 2
(PRIOR ART)

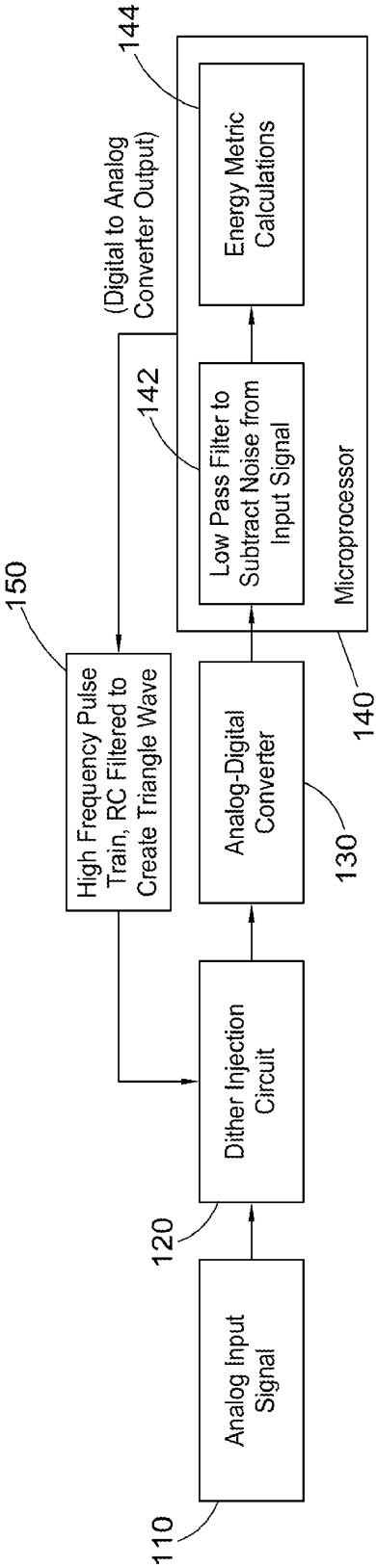


FIG. 3

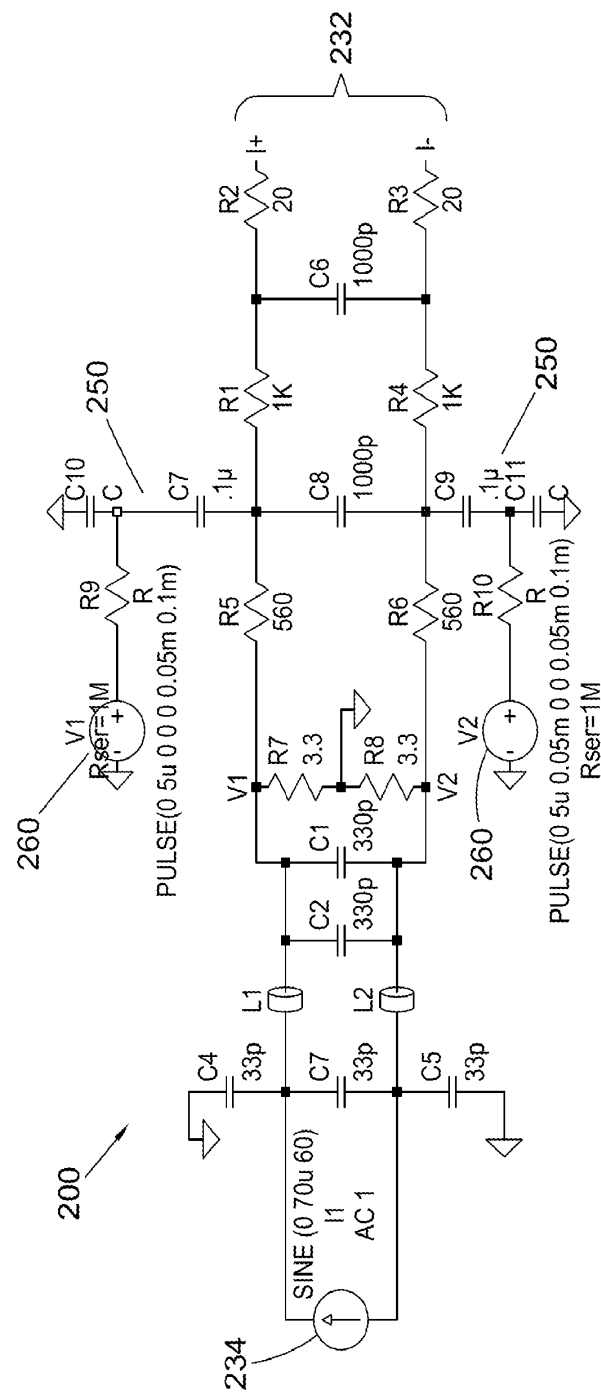


FIG. 4

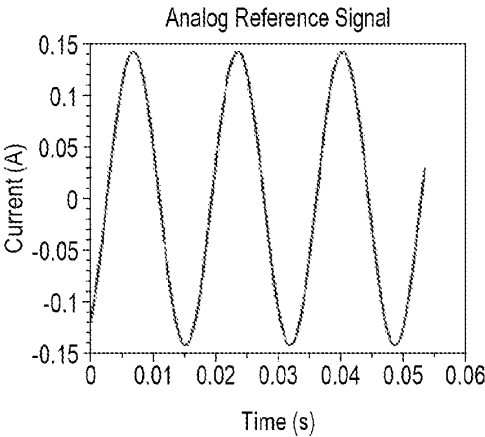


FIG. 5a

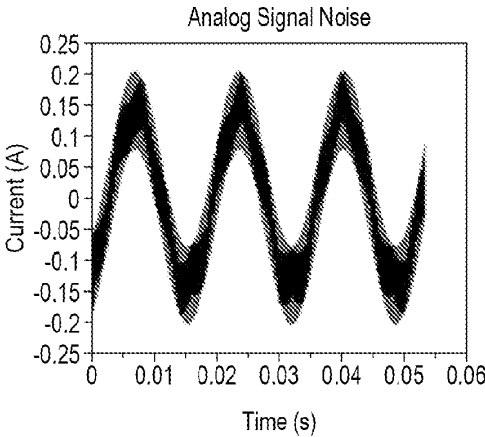


FIG. 5d

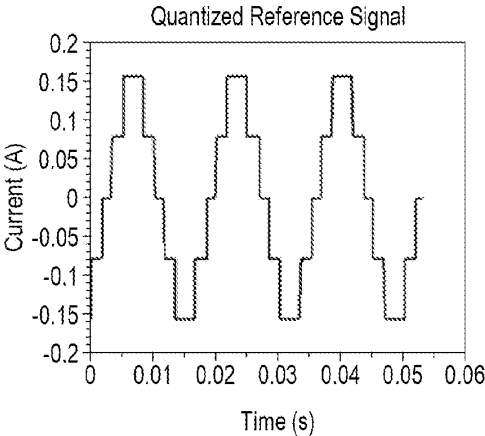


FIG. 5b

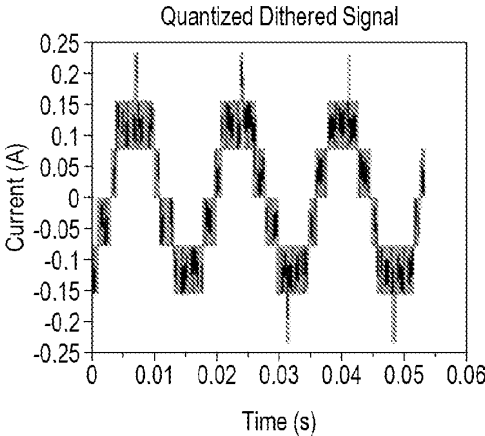


FIG. 5e

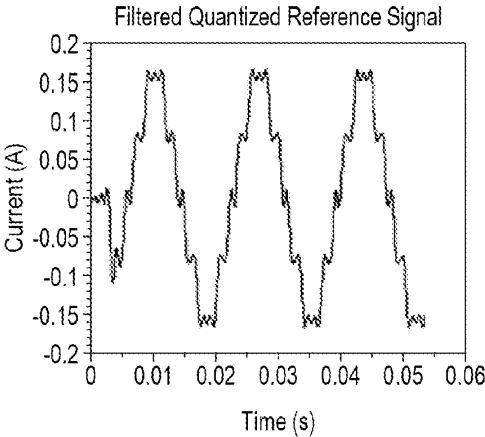


FIG. 5c

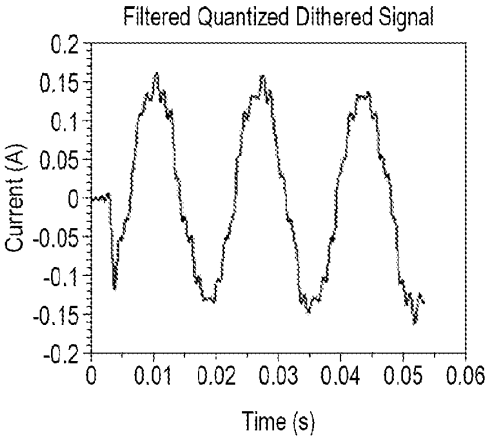


FIG. 5f

		I _{max} (rms) = 225 A					
ADC Resolution (# of bits)	Current (Arms)	Dither Amplitude (A)	Dither Frequency (Hz)	SNR Dithered Signal (dB)	SNR Reference Signal (dB)	SNR Dithered Signal (dB)	SNR Dithered Signal (dB)
12	0.1	0.063	5000	30.20	9.42	20.78	119.67
	0.5	0.063	5000	41.10	24.10	17.00	50.12
	1	0.063	5000	33.60	24.60	9.00	7.94
	3	0.063	5000	32.70	29.90	2.80	1.91
	30	0.063	5000	31.90	31.90	0.00	1.00
	200	0.063	5000	32.00	31.90	0.10	1.02
16	0.1	0.0039	6000	36.30	30.40	5.90	3.89
	0.5	0.0039	6000	34.00	32.30	1.70	1.48
	1	0.0039	6000	32.70	32.10	0.60	1.15
	3	0.0039	6000	31.90	31.90	0.10	1.02
	30	0.0039	6000	31.90	31.90	0.00	1.00
	200	0.0039	6000	31.90	31.90	0.00	1.00
24	0.1	1.52E-05	5000	31.90	31.90	0.00	1.00
	0.5	1.52E-05	5000	31.90	31.90	0.00	1.00
	1	1.52E-05	5000	31.90	31.90	0.00	1.00
	3	1.52E-05	5000	31.90	31.90	0.00	1.00
	30	1.52E-05	5000	31.90	31.90	0.00	1.00
	200	1.52E-05	5000	31.90	31.90	0.00	1.00

FIG. 6

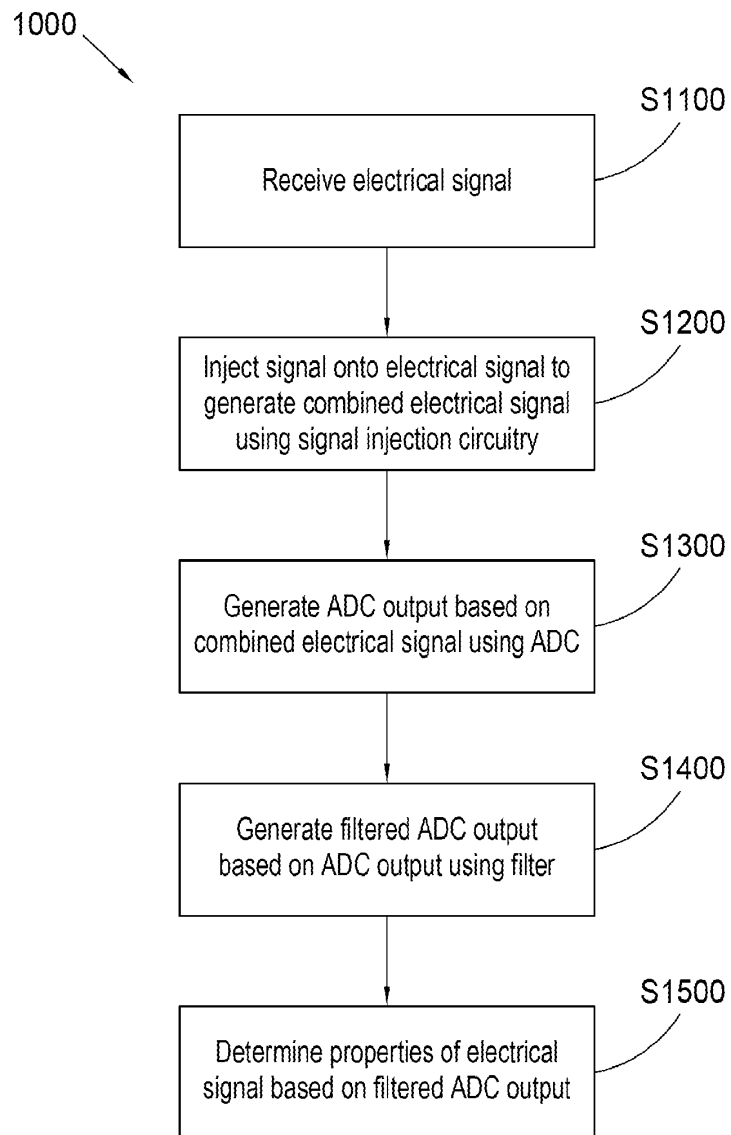


FIG. 7