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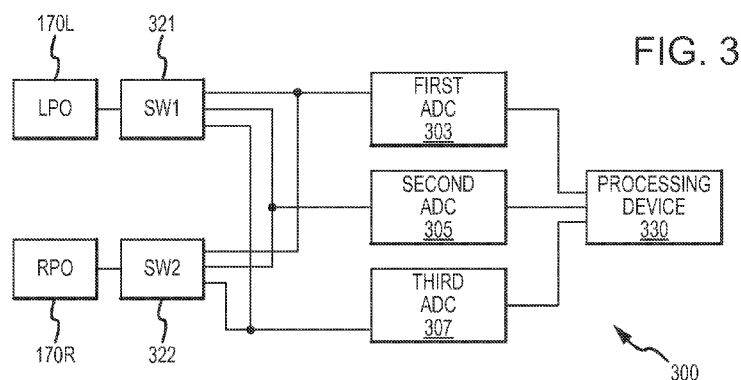
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(54) Title: ANALOG-TO-DIGITAL CONVERSION STAGE AND PHASE SYNCHRONIZATION METHOD FOR DIGITIZING TWO OR MORE ANALOG SIGNALS



(57) Abstract: An analog-to-digital conversion stage (300) includes three or more ADCs (303, 305, 307) that receive two or more analog signals, generate a first digitized signal from a first analog signal, generate at least a second digitized signal from at least a second analog signal to create two or more digitized signals, and generate one or more redundant digitized signals from the two or more analog signals. The one or more redundant digitized signals are generated substantially in parallel with the two or more digitized signals. A processing device (330) generates a phase drift value from a phase difference between a redundant digitized signal of the one or more redundant digitized signals and a corresponding digitized signal of the two or more digitized signals and compensates the corresponding digitized signal using the one or more phase drift values.