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(54) Title: SINGLE WIRE SERIAL COMMUNICATION USING PULSE WIDTH MODULATION IN A DAISY CHAIN ARCHITECTURE

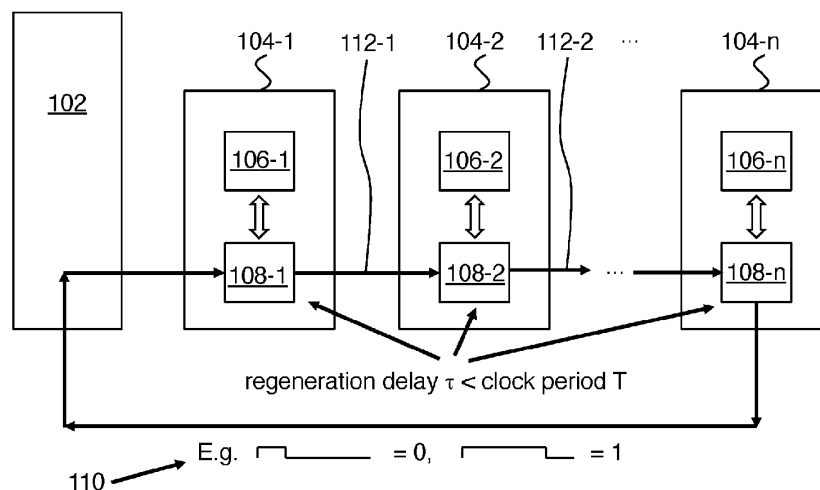


FIG. 1

(57) Abstract: Improved serial communication is provided in a system where each node regenerates data and transmits it to at least one other node in the system. Pulse width modulation (PWM) is used to encode the data. Preferably, all pulse shapes of the PWM start with a synchronization feature. It is also preferred that the regeneration delay in each node be less than the system clock period.

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