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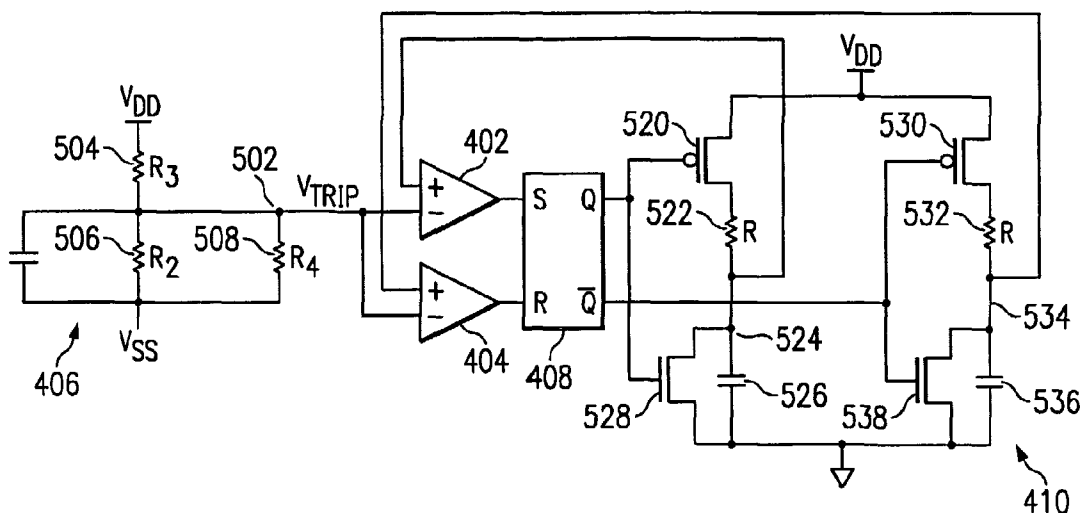
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(54) Title: **PRECISION OSCILLATOR FOR AN ASYNCHRONOUS TRANSMISSION SYSTEM**



(57) **Abstract:** A precision oscillator for an asynchronous transmission system. An integrated system on a chip with serial asynchronous communication capabilities includes processing circuitry for performing predefined digital processing functions on the chip and having an associated on chip free running clock circuit for generating a temperature compensated clock. An asynchronous on-chip communication device is provided for digitally communicating with an off-chip asynchronous communication device, which off-chip asynchronous communication device has an independent time reference, which communication between the on-chip communication device and the off-chip asynchronous communication device is effected without clock recovery. The asynchronous on-chip communication device has a time-base derived from the temperature compensated clock. The temperature compensated clock provides a time reference for both the processing circuitry and the asynchronous on-chip communication device.

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