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(54) Title: METHOD AND ARRANGEMENT FOR READING OUT THE STATE OF A QUBIT

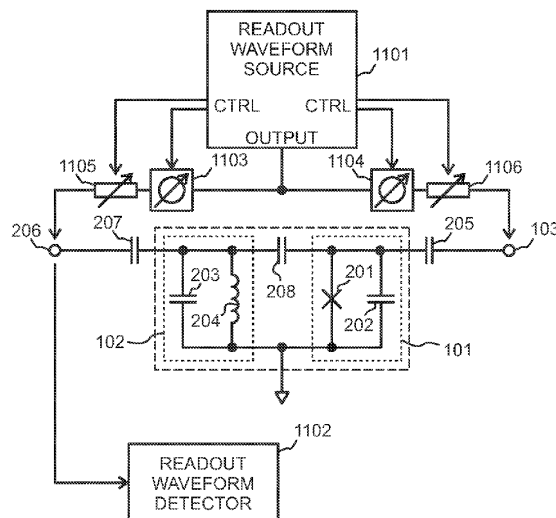


Fig. 11

(57) Abstract: For reading out the state of a qubit there is injected (1602) a readout input waveform into a system that comprises an information storage element (101) for storing the state of the qubit and a readout resonator (102) that is electromagnetically coupled to said information storage element (101). A readout output waveform is extracted from said system and detected (1102). Said injecting (1602) of the readout input waveform takes place through an excitation port (103) that is also used to inject excitation waveforms to the information storage element (101) for affecting the state of the qubit. A phase of the readout input waveform is controllably shifted (1604) in the course of injecting it into the system.



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