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(54) **FREQUENCY TUNING OF MULTI-QUBIT SYSTEMS**

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(57) **ABSTRACT**

The invention includes methods, and the structures formed, for multi-qubit chips. The methods may include annealing a Josephson junction of a qubit to either increase or decrease the frequency of the qubit. The conditions of the anneal may be based on historical conditions, and may be chosen to tune each qubit to a desired frequency.