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(71) Applicant: **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk, New York 10504 (US).

(71) Applicant (for MG only): **IBM UNITED KINGDOM LIMITED** [GB/GB]; PO Box 41, North Harbour, Portsmouth Hampshire PO6 3AU (GB).

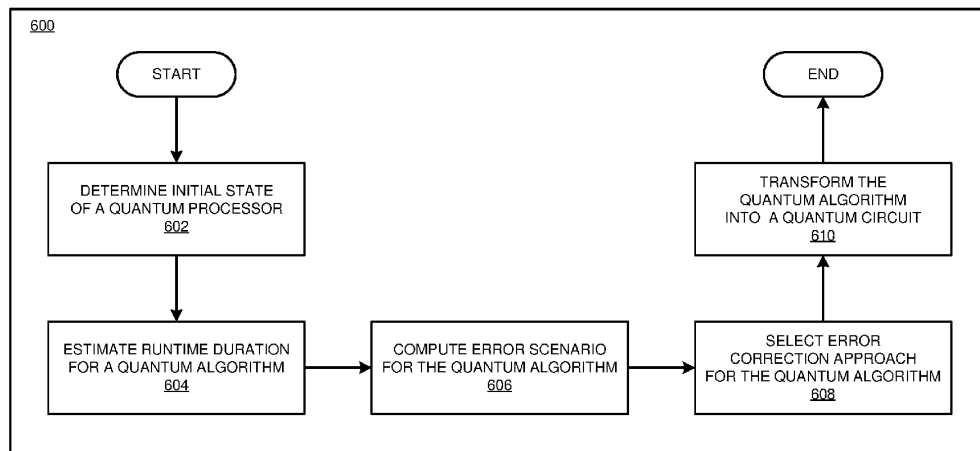
(72) Inventors: **GUNNELS, John**; IBM Corporation, PO Box 218, 1101 Kitchawan Road, Yorktown Heights, New York 10598 (US). **WEGMAN, Mark**; IBM Corporation, PO Box 218, 1101 Kitchawan Road, Yorktown Heights, New York 10598 (US). **KAMINSKY, David**; IBM Corporation, 4205 South Miami Boulevard, Durham, North Carolina 27703-9141 (US).

(74) Agent: **GASCOYNE, Belinda**; IBM United Kingdom Limited, Intellectual Property Law, Hursley Park, Winchester Hampshire SO21 2JN (GB).

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(54) Title: ADAPTIVE ERROR CORRECTION IN QUANTUM COMPUTING

FIGURE 6



(57) Abstract: A method for adaptive error correction in quantum computing includes executing a calibration operation on a set of qubits, the calibration operation determining an initial state of a quantum processor. In an embodiment, the method includes estimating, responsive to determining an initial state of the quantum processor, a runtime duration for a quantum circuit design corresponding to a quantum algorithm, the quantum processor configured to execute the quantum circuit design. In an embodiment, the method includes computing an error scenario for the quantum circuit design. In an embodiment, the method includes selecting, using the error scenario and the initial state of the quantum processor, a quantum error correction approach for the quantum circuit design. In an embodiment, the method includes transforming the quantum algorithm into the quantum circuit design, the quantum circuit design including a set of quantum logic gates.

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