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(71) Applicant: **SILICON QUANTUM COMPUTING PTY LIMITED** [AU/AU]; Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU).

(72) Inventors: **GORMAN, Samuel Keith**; c/o Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU). **SIMMONS, Michelle Yvonne**; c/o Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU). **KEIZER, Joris**; c/o Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU). **GENG, Helen**; c/o Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU). **CHUNG, Yousun**; c/o Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU). **DONNELLY, Matthew**; c/o Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU). **KICZYNSKI, Mitchell**; c/o Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU). **MYERS, Casey**; c/o Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU). **SUTHERLAND, Sam**; c/o Level 2, Newton Building, UNSW Sydney, Kensington, New South Wales 2052 (AU).

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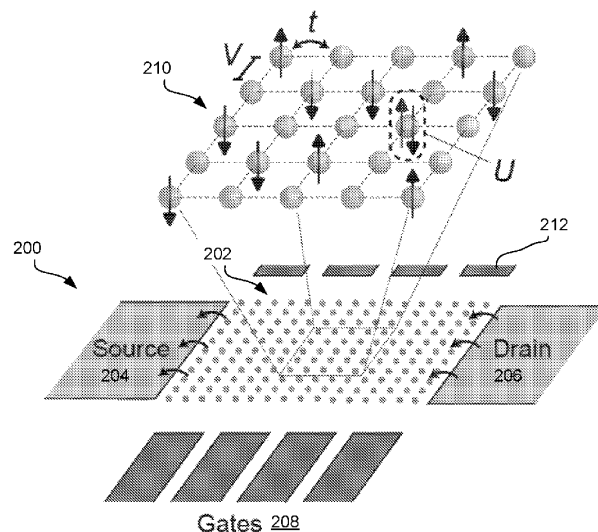


Fig. 2

(57) **Abstract:** Aspects of the present disclosure are directed to fabrication methods for analogue quantum systems (AQSs). Further aspects of the present disclosure are directed to methods for solving computational problems using an AQS. Methods for fabricating an AQS include generating a Hamiltonian based on a computational problem, which may be an optimization problem or a simulation problem. Further, the method includes identifying AQS fabrication parameters based on one or more identified measurement methods and the Hamiltonian. Lastly, an AQS can be fabricated based on the identified fabrication parameters. An AQS may be used inter alia to simulate a battery or interfaces.

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(74) **Agent: FPA PATENT ATTORNEYS PTY LTD;** ANZ
Tower, 161 Castlereagh Street, Sydney, New South Wales
2000 (AU).

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