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(71) Applicant (for all designated States except US): **HY-DREXIA PTY LTD** [AU/AU]; Building 54, Sir William Macgregor Drive, University of Queensland, St Lucia, Queensland 4072 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PIERCE, Jordan, Christopher** [AU/AU]; 127 Goodwin Tce, Moorooka, Queensland 4105 (AU). **GREAVES, Matthew, Campbell** [AU/AU]; 89 Irwin Tce, Oxley, Queensland 4075 (AU). **MOROZ, Stephanie, Maya** [CA/AU]; 48 Bradley Street, Spring Hill, Queensland 4000 (AU). **DUGUID, Andrew, Charles** [AU/AU]; 50 Blackwood Street, Deagon, Queensland 4001 (AU). **KNIGHT, Alexander, Warner** [AU/AU]; 8/40 Armagh St, Clayfield, Queensland 4011 (AU).

(74) Agent: **FREEHILLS PATENT & TRADE MARK ATTORNEYS**; Level 43, 101 Collins Street, Melbourne, Victoria 3000 (AU).

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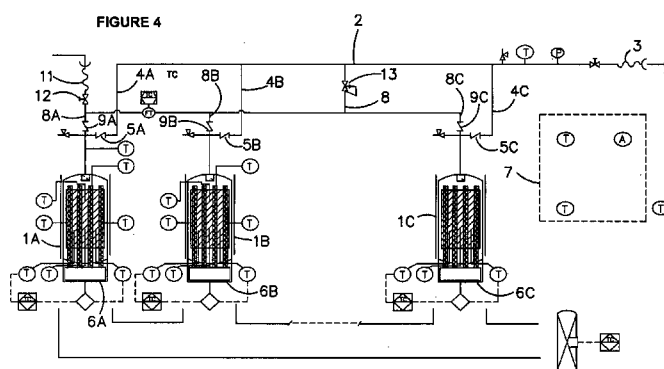
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(54) Title: HYDROGEN RELEASE SYSTEM



(57) Abstract: A system for discharging hydrogen from two or more hydrogen storage vessels (1A, 1B, 1C) containing solid hydrogen storage material. The system includes at least one hydrogen supply line for connecting the hydrogen storage vessels to a hydrogen demand (3), an energy delivery system (6A, 6B, 6C) to provide heat to the hydrogen storage material in each hydrogen storage vessel to desorb hydrogen from the solid hydrogen storage material, and one or more supply connection conduits (4A, 4B, 4C) for connecting the supply line or lines to the hydrogen storage vessels (1A, 1B, 1C). Each supply connection conduit has a backflow prevention device (5A, 5B, 5C) to prevent hydrogen in the supply line from flowing back into the hydrogen storage vessels (1A, 1B, 1C). Also disclosed is a system for delivering a supply of hydrogen to a hydrogen supply line including a control system (7) to determine the timing of activation of an energy delivery system based (6A, 6B, 6C) on the hydrogen demand in the hydrogen supply line. The control system (7) activates the energy delivery system (6A, 6B, 6C) in the next hydrogen storage unit to provide a sufficient period of time for the material in the next hydrogen storage vessel to heat to the temperature at which hydrogen is provided at the supply pressure for the hydrogen supply line.