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- (71) **Applicants:** **ETP ION DETECT PTY LTD** [AU/AU]; 2-8 Martha St, Clyde, New South Wales 2142 (AU). **HUNTER, Kevin** [AU/AU]; 2-8 Martha St, Clyde, New South Wales 2142 (AU).
- (72) **Inventors:** **JUREK, Russel**; 2-8 Martha St, Clyde, New South Wales 2142 (AU). **DELLAGIACOMA, David**; 2-8 Martha St, Clyde, New South Wales 2142 (AU).
- (74) **Agent:** **BOROVEC, Steven**; Churchill Attorneys, St. Kilda Road Towers, 1 Queens Road, Suite 702, Melbourne, Victoria 3004 (AU).

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- (54) **Title:** DETECTOR HAVING IMPROVED CONSTRUCTION

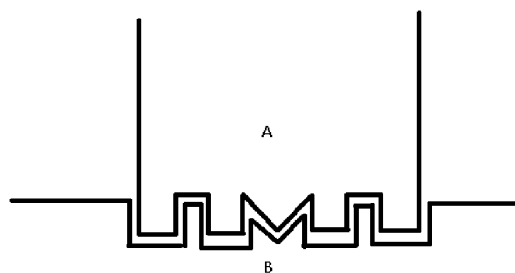


FIG. 5

- (57) **Abstract:** The present invention relates generally to components of scientific analytical equipment. More particularly, but not exclusively, the invention relates to electron multipliers and modifications thereto for extending the operational lifetime or otherwise improving performance by way of improved construction. The invention may be embodied in the form of a detector comprising one or more electron emissive surfaces, the detector comprising one or more detector elements configured to define on one side an environment internal the detector and on the other side an environment external the detector, wherein the one or more detector elements are configured to inhibit or prevent flow of a gas from the environment external the detector to the environment internal the detector. Such detectors may be used in a mass spectrometry instrument.



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