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(54) **BEAMLINE ISOLATION WINDOW FOR A PARTICLE ACCELERATOR**

(71) Applicant: **ISOSOLUTIONS MARKETING & MANAGEMENT INC.**, Vancouver (CA)

(72) Inventor: **William Zeev GELBART**, Vancouver (CA)

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(57) **ABSTRACT**

An apparatus and method for accelerator beam line isolation from targets and solid target irradiation chamber in the production of medical radioisotopes by the irradiation of solid targets is provided. The isolation consists of a single, thin material window placed in front of the target in such a way as not to be subjected to any pressure differences when the target irradiation chamber is evacuated or vented and not requiring window surface cooling, relying only on the heat removal by conduction.

