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(54) Title: RADIATION CATHETER WITH MULTILAYERED BALLOON

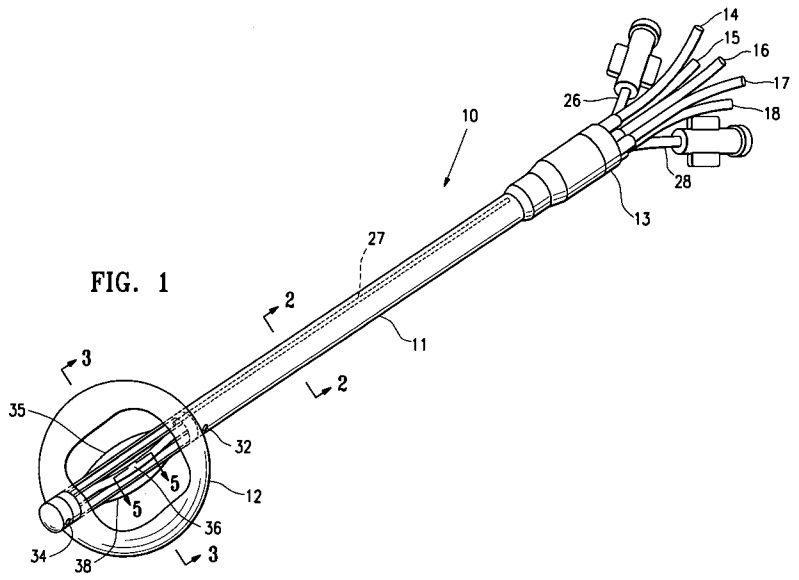


FIG. 1

(57) Abstract: The disclosure is directed to catheter devices and methods for controlled application of irradiation to tissue adjacent a body site, such as cavity after removal of tissue, e.g. cancer. The catheter device includes an inflatable balloon having at least two layers. The inflatable balloon has an expansion of more than 25% and less than 200% when inflated from the un-inflated condition to a turgid condition, preferably more than 50% and less than 150%. In the turgid condition the polymeric material(s) of the balloon layers are at or near the elastic limit of the balloon layer material. The balloon may contain or be formed of or be coated with radiopaque material to facilitate positional or symmetry verification.

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