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(54) Title: ELECTROSURGICAL RESECTOR TOOL

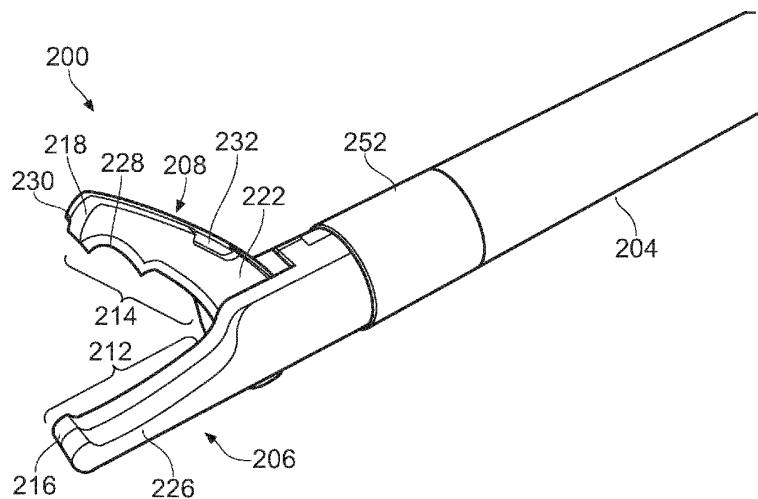


Fig. 2

(57) Abstract: Various embodiments provide an electrosurgical resector tool comprising: an energy conveying structure for carrying radiofrequency (RF) electromagnetic (EM) energy and microwave EM energy, the energy conveying structure comprising a coaxial transmission line having an inner conductor separated from an outer conductor by a dielectric material; and an instrument tip mounted at a distal end of the energy conveying structure. The instrument tip comprises a first jaw and a second jaw. The second jaw is movable relative to the first jaw between a closed position in which the first jaw and the second jaw lie alongside each other, and an open position in which the second jaw is spaced from the first jaw by a gap for receiving biological tissue. The first jaw comprises a first pair of electrodes that are electrically isolated from one another. The second jaw comprises a second pair of electrodes that are electrically isolated from one another. The first pair of electrodes is coupled to the energy conveying structure, such that the first pair of electrodes is operable as active and return electrodes for delivering RF EM energy carried by the energy conveying structure. The second pair of electrodes is coupled to the energy conveying structure, such that the second pair of electrodes is operable as active and return electrodes

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for delivering RF EM energy carried by the energy conveying structure. The first and second pairs of electrodes are operable as a microwave field emitting structure for emitting microwave EM energy carried by the energy conveying structure.