delivering fluid to the instrument tip; wherein the inner conductor is electrically connected to the first conductive element and the outer conductor is electrically connected to the second conductive element to enable the instrument tip to receive the RF signal and the microwave signal, and wherein the first and second conductive elements are arranged to act: as active and return electrodes to convey RF EM radiation corresponding to the RF signal ~~by conduction~~, and as an antenna to radiate microwave EM radiation corresponding to the ~~received~~ microwave signal, wherein the fluid feed conduit is arranged to deliver liquid to the instrument tip, the fluid feed conduit having an outlet at the distal end of the instrument tip for introducing the liquid into the biological tissue, and wherein the fluid feed conduit comprises a tip section movable in a longitudinal direction relative to the instrument tip body between an extended position in which the outlet is located at the distal tip of the instrument, and a retracted position in which the outlet is set back from the distal tip of the instrument.

The instrument may be configured to provide a local return path for RF energy, i.e. a low impedance route for RF energy to be transported between the first and second conductive elements. For example, the first dielectric material separating the conductive elements may provide a local return path, or, as explained below, a gas may be delivered to the instrument tip to permit a plasma to be generated in the vicinity of the conductive elements to provide the local low impedance return path. RF tissue cutting may be produced at an edge of the instrument tip if the first dielectric material has a high dielectric constant (e.g. greater than that of air) and where the separation of the first and second conductive elements by the first dielectric material at that edge is small, i.e. less than 1 mm. This arrangement may provide the necessary preferential return path for the current to flow.

The instrument may be suitable for use with electrosurgical resection apparatus to carry out open and key-hole or laparoscopic procedures under local anaesthetic that are currently performed in an open environment under general anaesthetic.

The fluid feed conduit may be arranged to deliver liquid (e.g. saline) to the instrument tip, the fluid feed conduit having an outlet at the distal end of the instrument tip for introducing the liquid into the biological tissue. Injection of fluid (saline or the like) to plump up the biological tissue may be particularly useful where the instrument is to treat the wall of the bowel. Plumping up the tissue in this manner may help to reduce risk of bowel perforation. It is advantageous to be able to use same instrument to deliver fluid as delivers RF and/or microwave energy since deflation