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(54) Title: TORSIONAL ULTRASONIC WAVES TRANSDUCER MEDICAL DEVICE THEREOF

(57) Abstract: A medical device configured to contact a specimen through its distal end, the medical device comprising : a) a torsional ultrasonic waves transducer located at the distal end of the medical device and configured to induce a torsional wave that goes through said specimen, b) a force sensor configured to determine the force with which the medical device contacts the specimen, and c) a processing unit. The torsional ultrasonic waves transducer is configured to contact the specimen with a predetermined range of force and the processing unit is configured to determine whether the force with which the medical device contacts the specimen is within the predetermined range of force. The specimen is the cervix of a uterus and the torsional ultrasonic waves transducer is configured to contact the cervix with a range between 0 and 200 g/cm². It also relates to a device thereof configured for the arrangement of a membrane in the medical device.