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(71) Applicant: **ULTRASOUND INNOVATION
MEDTECH S.L.** [ES/ES]; Avenida Sabino Arana, 8, 2ª
planta, 48013 Bilbao (ES).

(72) Inventors: **GARCÍA SALGUERO, Alberto**; Ultrasound
Innovation MedTech S.L., Avenida Sabino Arana, 8, 2ª
planta, 48013 Bilbao (ES). **CORBETTA, Francesco**; Ul-
trasound Innovation MedTech S.L., Avenida Sabino Arana,
8, 2ª planta, 48013 Bilbao (ES). **BORJAS MORENO, Jordi**;
Ultrasound Innovation MedTech S.L., Avenida Sabino
Arana, 8, 2ª planta, 48013 Bilbao (ES).

(74) Agent: **HOFFMANN EITLE S.L.U.**; Paseo de la Castel-
lana 140, 3ª Planta, Edificio Lima, 28046 Madrid (ES).

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(54) Title: TORSIONAL ULTRASONIC WAVES TRANSDUCER AND 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.