

Title (en)

DEVICE AND METHOD FOR PRODUCING HIGH-PRESSURE ULTRASONIC PULSES

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ERZEUGUNG VON HOCHDRUCKULTRASCHALLIMPULSEN

Title (fr)

DISPOSITIF ET PROCEDE DE PRODUCTION D'IMPULSIONS ULTRASONORES DE FORTE PRESSION

Publication

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Application

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Abstract (en)

[origin: WO03028904A1] The invention concerns a device for producing high-pressure ultrasonic pulses comprising an ultrasound source including a piezoelectric transducer (2) provided with electrodes (3) and having a polarizing direction (f1), and means (4) for applying an electric voltage on the electrodes (3) of the ultrasonic transducer (2), providing for producing an ultrasonic emission: application of an electric field with direction (f2) opposite to the polarizing direction (f1), then application of a transitory electric field in the same direction as that of the polarizing direction (f1). The invention is characterized in that the means (4) apply a gradual electric voltage with a build-up time to create an electric field with direction (f2) opposite to that of the polarizing direction (f1), for a duration less than that resulting in depolarization of the piezoelectric transducer.

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