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The Generation of Acoustic Waves and Cavitation Processes in
Regime of Phase Synchronization During Multichannel Discharges
in Electrolyte

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In the paper the problems of acoustic waves generation of required frequency, amplitude and profile by the phase synchronization of multichannel discharges are considered. The phase synchronization of discharges is supplied by the implementation in the discharge circuit of additional inductance which acts as a dynamic feedback and ensures the selfsynchronization of N generated bubbles and acoustic wave's radiation [1]. The devices of such types may be used to form acoustic fields with required frequency and shape.

References:

1. V. S. Teslenko, R. N. Medvedev, and A. P. Drozhzhin, Self-Synchronization of Electrohydrodynamic Autooscillations during Multichannel Discharges in Electrolyte // ISSN 1063-7850, Technical Physics Letters, 2007, Vol. 33, No. 10, pp. 833-836. <http://www.swsl.newmail.ru/publ/TEPL833.pdf>