Abstract Submitted
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Fast Rise Time and High Voltage Nanosecond Pulses at High Pulse Repetition Frequency[1] KENNETH E. MILLER, TIMOTHY ZIEMBA, JAMES PRAGER, JULIAN PICARD, AKEL HASHIM, Eagle Harbor Technologies, Inc. — Eagle Harbor Technologies (EHT), Inc. is conducting research to decrease the rise time and increase the output voltage of the EHT Nanosecond Pulser product line, which allows for independently, user-adjustable output voltage (0 – 20 kV), pulse width (20 – 500 ns), and pulse repetition frequency (0 – 100 kHz). The goals are to develop higher voltage pulses (50 – 60 kV), decrease the rise time from 20 to below 10 ns, and maintain the high pulse repetition capabilities. These new capabilities have applications to pseudospark generation, corona production, liquid discharges, and nonlinear transmission line driving for microwave production.

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