



US 20240237180A9

(19) **United States**
(12) **Patent Application Publication**
Nerheim et al.

(10) **Pub. No.: US 2024/0237180 A9**
(48) **Pub. Date: Jul. 11, 2024**
CORRECTED PUBLICATION

(54) **WAVEFORM FOR LOW VOLTAGE
CONDUCTED ELECTRICAL WEAPON**

Publication Classification

(71) Applicant: **Axon Enterprise, Inc.**, Scottsdale, AZ
(US)

(51) **Int. Cl.**
H05C 1/06 (2006.01)
H05C 3/00 (2006.01)

(72) Inventors: **Magne H. Nerheim**, Paradise Valley,
AZ (US); **Varun Sathyanarayan**,
Phoenix, AZ (US); **Ryan C. Markle**,
Peoria, AZ (US)

(52) **U.S. Cl.**
CPC **H05C 1/06** (2013.01); **H05C 3/00**
(2013.01)

(21) Appl. No.: **18/362,929**

(22) Filed: **Jul. 31, 2023**

Prior Publication Data

(15) Correction of US 2024/0138045 A1 Apr. 25, 2024
See (22) Filed.

(65) US 2024/0138045 A1 Apr. 25, 2024

Related U.S. Application Data

(60) Provisional application No. 63/369,949, filed on Jul.
30, 2022.

(57) **ABSTRACT**

A duration of a stimulus signal delivered to a target by a conducted electrical weapon may be selected in accordance with a current of the stimulus signal delivered to the target. The current may be measured by the conducted electrical weapon. The current may comprise a measured current of a pulse of the stimulus signal. The duration may be selected while the pulse is delivered to the target. The duration may be selected from a range of durations for which the stimulus signal may be applied. The range of durations may comprise a range of increasing pulse durations associated with a range of increasing charges provided by the stimulus signal in accordance with combinations of respective measured currents of a range of measured currents and respective pulse durations of the increasing pulse durations. A charge delivered by a measured current and a selected duration may increase as the measured current decreases.

300

