

## AN ELECTRICAL METHOD TO KILL WEEDS

### CLAIM:

Electric Charge is toxic to plants. When properly applied, even hard-to-kill trees can be selectively Knocked Out by a properly designed electric signal. The process is not instantaneous, but takes days or weeks to effectively and permanently kill trees through the roots. No chemicals such as herbicides are used. We know that it's not a heating process because of the low power level used. Based on the tests we've run so far, we believe the toxicity is proportional to accumulated charge. We don't know exactly how it works, we just know that it does.

### NOVELTIES:

This process was only recently discovered in 2017. An environmentally friendly way to kill weeds without introducing chemical compounds into the soil or water, it has the distinct advantage over conventional herbicides of being highly selective, with no potential for collateral damage to adjoining plants, even with the roots intermingled.

### FEATURES:

A Tree-Knock-Out machine is low power, and can be operated from a household electrical outlet. A solar-powered TKO machine costs slightly more but is very portable and doesn't need a long extension cord to kill trees that are a long way from a power outlet. TKO is Safe. It does not rely on dangerous high voltage nor does it kill a plant with heat. By design, a TKO device can automatically shut off if it becomes disconnected from the tree or ground connection, and it cannot be used to electrocute a pet or person. It only works on plants.

### POTENTIAL APPLICATIONS:

One TKO is completely reusable. It can be used to Knock-Out hundreds of weedy trees and shrubs. It can be used by homeowners to remove problem trees whose roots have grown under foundations where they are inaccessible. Weed-Knock-Out kills area weeds by using a conductive screen. Hard-to-kill Bermuda grass is one example.

### MARKET SIZE:

**Global Weed Control market** is accounted for \$28.08 billion in 2017 and is expected to reach \$44.90 billion by 2026 growing at a CAGR of 5.35% during the forecast period.



Photo 1. Siberian Elm is an invasive species in Southwest. On right, 25 feet tall, 6" diameter trunk.



Photo 2. This area was completely riddled with Bermuda grass.



### POTENTIAL MARKETS:

#### **Tree trimmer & homeowners market:**

Selectively kill plants via an environmentally benign alternative to chemical herbicides.

#### **Watershed/land managers and administrators:**

Protect environmentally sensitive resources while still killing undesirable plants.

### INVENTOR(S) EXPERTISE

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