



Global Wireless Technology (GWT) Wireless-Device Grip-Guide (WDGG)

Inventors: Arthur J. Nghiem & David Nghiem, Ph.D.

Patent Number: [US 9,698,847 B2](#)

Date of Patent: July 4th, 2017



My First Smart Phone - HTC



**Antenna Efficiency of Mid Channel
(836.60 MHz)
GSM 850 MHz - TRP Measurement**

Free-Space Configuration

Antenna Efficiency = 78.35%



Cell Phone
Antenna Location



Hand-not-covered-Antenna Configuration

Antenna Efficiency = 34.91%



Hand-covered-Antenna Configuration

Antenna Efficiency = 3.16%



Normal Way to Hold a Cell Phone

Antenna Efficiency = 0.29%



GWT Way to Hold a Cell Phone

Antenna Efficiency = 16.06%



GWT Wireless-Device Grip-Guide Concept

Wi-Fi/Bluetooth Antenna
Location



Cell-phone Antenna
Location



GWT wireless-device grip-guide helps you hold your cell phone in the right way. By not holding the antennas, you can improve system performance and reduce radiation significantly.

GWT Cell-phone Case



GWT Cell-phone Housing



GWT Wireless-Device Grip-Guide Designs

