## INVENTION DISCLOSURE

## 1. **Invention Title.**

# **Service Tech CMTS App**

## 2. Invention Summary.

An application from the CMTS to a smart phone, enables the user to monitor CMTS diagnostic page in real time over a smart phone app.

## 3. **Invention Description**.

Service technicians troubleshooting plant issues need a real time resource back to the CMTS to monitor packet information to locate and service internal and external noise problems on the cable plant. An added feature to the application is to use audio with the application as an indicator for the selected function; i.e. an increase from the audible signal indicates an increase in dropped packets on the CMTS. This allows for "hands free" ability, enabling the technician to use both hands while performing the troubleshooting operation.

Application within the CMTS logs onto the diagnostic menu and provides remote indication back to the phone application. Technician selects the appropriate menu item, information is provided to the phone application in real time. Application provides an audible feedback to the technician for the selected parameter.

## Briefly outline the potential commercial value and customers of the invention.

Greatly assist and improve the ability of field/service technicians to isolate noise issues that directly affect data transmissions over the HFC plant. Current process is to have one technician in the office logged onto the CMTS talking over the phone with another technician in the field to isolate the fault as the office tech relays diagnostic information over the phone, as the field tech works the plant. This application decreases the needed manpower and provides real time analysis.

#### 4. How is this invention different from existing products, processes, systems?

Some products exist with a smart phone application to transmit an RF signal along an area of the HFC plant and received by a commercially made device in the headend. This process only addresses ingress in the specific frequency range of the test setup, does not address existing noise within the plant. This idea is to use existing CMTS diagnostic abilities, primarily diagnostics relating to dropped or missing packets; relaying the information to an application on the phone, no transmission of RF signals required.