## FOR MORE INFORMATION CONTACT:



Matthew Moss C&A Associates, Inc. 1814 S. Range Road, Suite A Denham Springs, LA 70726 225.791.7797 mattmoss@caassociates.com

## **Sole-Source Provider for**



The PADtrax RFID Evidence and Accountability system from C&A Associates is the only system available that has successfully employed RFID technology to fully track and monitor items of evidence through the entire evidence management process in a Law Enforcement environment. With PADtrax agencies account for and track tagged evidence items from intake through movement into and out of an area secured with RFID detection devices. This document details reasons why this system is unique and outlines the reasons why the PADtrax system is a sole-source product with patents issued by the U.S. Patent Office (US 9,836,936 B1). PADtrax is the first structure specifically designed for the use of RFID Technology throughout the entire process of tracking evidence and evidence chain-of-custody assurance, and as such is the only product that is available for this use (i.e. it is a Sole Source product for tracking evidence in a Law Enforcement environment).

A common application for RFID integrators is to make a provision in software that allows an RFID "Smart Label" to be attached to an item so that it can be located with a handheld reader. While this does accomplish the task of making item location easier, it does not assist with any other process of item handling.

Some integrators do attempt to go beyond this by implementing "Chokepoint" or "Pinchpoint" technology into tracking. However, these attempts are often very coarse in their approach. This is because they log the status of a tagged item based on whether the mounted hardware successfully reads the tag. This process may be adequate in situations of less-critical tracking, more predictable movements (such as forklifts and conveyor belts), or situations where items can take a long time to be read, this would not be adequate for evidence room environments.

This is because of a few very important factors:

1. Evidence is transported in and out of evidence by humans. Human bodies introduce a multitude of effects in RF environments

- 2. Humans never do the same thing twice. Sometimes items are carried on the left, sometimes the right, etc.
- 3. Different quantities of items move quickly through the door each time.
- 4. Most critically, stationary items are often stored within the distance the RFID antenna can read moving objects. This means RFID chokepoint systems must be able to distinguish between moving and stationary items, which is often quite difficult to do in environments that are not tightly controlled (such as lab and testing environments). Most adjustments made to accomplish this are performed at a tradeoff (reliability, read time, etc). PADtrax utilizes proprietary phase-angle analysis and other algorithms in order to make decisions regarding tag movement, inventory, and more.
- 5. PADtrax analyzes a multitude of data in near-real-time to determine whether a RFID-tagged item is on the inside or outside of the closed door of the evidence room, because such measures are critical when tracking the movement of evidence, which is different than tracking things as they move across a loading dock, conveyor belt, etc.
- 6. PADtrax is designed to minimize the amount of physical constraint on users. The PADtrax system will accommodate the variances in the way evidence officers move items in and out.

These steps, and other procedures in the software, have allowed C&A Associates to receive award and issuance of a patent from the U.S. Patent Office for our use of RFID Technology specifically towards evidence chain-of-custody. We only use PADtrax for evidence accountability which sets us apart from other companies offering one system for all installations.

As the inventor and owner of the PADtrax product line, C&A is the sole-source provider for the PADtrax Evidence Accountability System.

Matthew L. Moss

Vice President

**C&A Associates** 

mattmoss@caassociates.com

Malthew J. Moss

800.679.7764