Mobility Works, LLC

Patent Offering
Mobility Workx’s IP and Technology

Patented innovative technology: MobileCAD,
- Packet-based Mobile Telecommunication Systems
- Emulation of network properties
- RF Fading and Simulation
- 3G/4G Handover Emulation and Playback
- MobileCAD Specification

Combined patented technologies: MobileIP Proxy,
- Tracking your device with GPS/Location
- Handover based on Wireless Location
- Proxy mobility agents for Mobile IP-based protocols
- Faster handover and mobility UMTS to 4G to WiFi
- Dynamics Mobile IP implementation Prototype
Impact Our Patents and Our Intellectual Property

1) ETSI Specification
   1) Wireless Testing and Simulation:
   2) Mobility Protocol: ETSI 23.402, ETSI 136.331, ETSI 129.275, and ETSI 136.300
2) Test Cases
   1) Mobile originated call emulation
   2) Mobile terminated call emulation
   3) Motion and motion prediction RF performance
   4) Automated testing and conformance
   5) RF Fading and simulation support (Raleyigh, ...
3) Protocol Mobility
   1) Predictive Handover
   2) GPS-based or location-assisted handoffs
   3) UMTS to 4G to WiFi /Packet Data Handover

Mobile Emulation that includes:
- Meets ETSI Specification
- Wireless and RF Performance
- GPS Location-assisted handover
- Packet Data Updates
- UMTS to 4G to WiFi handoffs
- Predictable Mobility
MOBILECAD FEATURES

- Mobile Terminated and Imitated Calls
- RF Fading Models
- 4G Backbone available
- Conformance Testing
- Software-defined Radio Specification
MOBILEIPP FEATURES

- GPS-based Handover
- Mobile IP-based
- Proxy-based Mobility
- Intra-domain handover optimization

Diagram:

1. GPS/Location → Mobile Phone → eNodeB
2. eNodeB connected to Infrastructure
3. Infrastructure connected to WiFi and UMTS networks
Wireless Simulation using:

- RF Characterization
- Software-defined Radios
- Network Emulation
- Faraday Cage Testing
- GSM to 4G Support
- Mobile Originated and Terminated Test Cases

Mobile Testing and Wireless Simulation

Additional Patent Portfolio

- 1 Provisional Patents
- 3 Utility Patents

Licensed by two major phone manufacturers
Quick Launch from any “Connection Device” Includes:

- Mobile Handover
- ETSI Standards
- Testing for mobile phone design
- 4G Mobility/LTE
- Wireless Emulation
- Mobile protocols for 3G/UMTS

Inventors

Edwin Hernandez, PhD  10 issued US Patents, Motorola/Microsoft, Licensed technologies to major mobile phone manufacturers, and now Working on Mediamplify in use by major cable operators in LATAM.

Sumi Helal, PhD. 12 issued US patents, Professor at University of Florida, Chief Editor of IEEE Computer Magazine, 100s of publications, books and entrepreneur. Featured in Florida Trends, Discovery Channel, others.

Additional Patent Portfolio

- 1 Provisional Patents
- 2 Additional Utility Patent’s Pending
- 1 Divisional Patent Pending

Utility Patent Claims Issued
Independent Claims: 10