Case 2:17-cv-00513-JRG Document 226-5 Filed 12/14/18 Page 1 of 41 PageID #: 11724

EXHIBIT 5



PATENT

METHOD TO PROVIDE AD HOC AND PASSWORD PROTECTED DIGITAL AND VOICE NETWORKS

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of co-pending U.S. Patent Application Serial No.

13/751,453 filed January 28, 2013, which is a continuation-in-part of U.S. Patent Application

Serial No. 12/761,533 filed on April 16, 2010, now U.S. Patent No. 8,364,129 issued January 29,

2013, which is a continuation-in-part of U.S. Patent Application Serial No. 11/615,472 filed on

December 22, 2006, now U.S. Patent No. 8,126,441 issued on February 28, 2012, which is a

continuation-in-part of U.S. Patent Application Serial No. 11/308,648 filed April 17, 2006, now

U.S. Patent No. 7,630,724 issued on December 8, 2009, which is a continuation-in-part of U.S.

Patent Application Serial No. 10/711,490, filed on September 21, 2004, now U.S. Patent No.

7,031,728 issued on April 18, 2006.

BACKGROUND OF THE INVENTION

Field of the Invention

[0002] A communications method and system using a plurality of cellular phones each

having an integrated Personal Digital Assistant (PDA) and Global Positioning System (GPS)

receiver for the management of two or more people through the use of a communications

network. The method and system provide each user with an integrated handheld

cellular/PDA/GPS/phone that has Advanced Communication Software application programs

(hereinafter referred to as ACS) and databases used in conjunction with a remote Server that

enable a user to quickly establish a communication network of cell phone participants having a

common temporary ad hoc network using mobile wireless communication devices.

1

DOCKET A L A R M

Find authenticated court documents without watermarks at docketalarm.com.

PATENT

[0003] The invention includes a method and communication system to quickly set up and

provide ad hoc, password protected, digital and voice networks to allow a group of people to be

able to set up a network easily and rapidly, especially in an emergency situation.

Description of Related Art

[0004] The purpose of a communications system is to transmit digital messages from a

source, located at one point, to user destination(s), located at other point(s) some distance away.

A communications system is generally comprised of three basic elements: transmitter,

information channel and receiver. One form of communication in recent years is cellular phone

telephony. A network of cellular communication systems set up around an area such as the

United States allows multiple users to talk to each other, either on individual calls or on group

calls. Some cellular phone services enable a cellular phone to engage in conference calls with a

small number of users. Furthermore, cellular conference calls can be established through 800

number services. Cellular telephony also now includes systems that include GPS navigation that

utilizes satellite navigation. These devices thus unite cellular phone technology with navigation

information, computer information transmission and receipt of data.

[0005] The method and operation of communication devices used herein are described in

U.S. Patent 7,031,728 which is hereby incorporated by reference and U.S. Patent No. 7,630,724.

[0006] Military, first responder, and other public and private emergency groups need to be

able to set up ad hoc digital and voice networks easily and rapidly. These private networks may

be temporary or longer lasting in nature. The users need to be able to rapidly coordinate their

activities eliminating the need for pre-entry of data into a web and or identifying others by name,

phone numbers or email addresses so that all intended participants that enter the agreed ad hoc

DOCKET A L A R M

PATENT

network name and password are both digitally and voice interconnected. When a user or users

leave the network, no data concerning the network participants need be retained.

[0007] Coordinating different organizations at the scene of a disaster presents several

problems as there are voice and digital data (text messages) communications that need to be

constantly occurring up and down the chain of command. As an example, communications are

required from a police chief to a police captain to a police lieutenant to a police sergeant to a

policeman and then back up the same chain of command. Digital data exchange of GPS data or

other means provides the location component of the units. Digital chat, text messages, white

boards and photo video exchange provide extensive collaboration. However, during a disaster,

other first responders such as fire departments must become engaged. While the fire department

users may have voice and digital data (text messages) communications up and down their chain

of command, these individuals do not have the ability to cross communicate necessarily with

police units without a substantial degree of immediate coordination. The method and system in

accordance with the present invention described herein discloses how digital communications

along with Personal Computer (PC) and PDA devices can be used to quickly establish user

specific password protected private ad hoc voice and data networks to enable both data and voice

communications up and down their chain of command and simultaneously with different, not

pre-known, organizations responding to a disaster. The invention defines a method of

accomplishing this by providing all personnel that need to communicate with each other with a

PC or PDA which are interconnected to a Server using cellular or other communications.

DOCKET A L A R M

PATENT

SUMMARY OF THE INVENTION

[0008] Applicant's communication system and method described herein is embodied in the

Advanced Communication Software (ACS) application programs developed by applicant and

installed in the integrated PDA/GPS cell phones used herein and remote Servers.

[0009] A plurality of Internet Protocol (IP) capable PDA/GPS devices each having ACS

application programs and databases provides a communication network in conjunction with a

remote Server that provides the ability to: a) establish an ad hoc network of devices so that the

devices can either broadcast to a group or selectively transmit to each of the other; each PDA /

GPS phone starts by requesting access to the Server and identifying a mutually agreed to network

name and password and once granted, reports its GPS position and status; the Server then routes

the data to all signed on network participants so that each of the devices exchange location, status

and other information; (b) force the received information to the recipient's display and enable the

recipient to acquire additional information by touching the display screen at a remote phone's

location on the PDA display; (c) make calls to or send data to remote phones by touching their

display symbols and selecting the appropriate soft switch; (d) layer a sufficient number of soft

switches or buttons on the PDA display to perform the above functions without overlaying the

map; and (e) allow a polling mode in each cell phone that permits a user to contact other cell

phone users that have a common interest or relationship with a password and identifier for

communication and to establish quickly a temporary ad hoc network especially in an emergency.

[00010] A communication Server acts as a forwarder for IP communications between any

combination of cell phone/PDA users and/or PC based users. Network participant location,

identity and status messages are sent to the Server by each user. Network participant entered

tracks are also sent to the Server. Because this network participant location and track data is of

DOCKET A L A R M

DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

