IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT AND TRIAL APPEAL BOARD

ADT LLC and FrontPoint Security Solutions, LLC, Petitioners

v.

Script Security Solutions LLC, Patent Owner

Declaration of Joel Christianson in Support of Petition for *Inter Partes* Review of U.S. Patent 7,113,091

I, Joel Christianson, declare as follow:

- 1. I have been retained by Icontrol Networks, Inc to provide my opinions concerning the validity of U.S. Patent No. 7,113,091 ("the '091 patent"). I have reviewed and am familiar with the specification, the prosecution history, and the claims of this patent.
- 2. I am being compensated for my time in preparing this Declaration, but my compensation does not depend on the outcome of this matter, and my compensation is not based on the substance of the opinions rendered here.
- 3. I have reviewed and am familiar with the following prior art:

- United States Patent Application Publication No. US 2003/0020611 to
 Michael Script and Henry Script ("Script Publication," Ex 1003)
- International Application Published under the Patent Cooperation Treaty
 (PCT) No. WO 98/49663 to John Peterson and James Parker ("Peterson," Ex 1008)

I. QUALIFICATIONS

- 4. I received a BS in electrical engineering from St. Cloud State University in 1995 and an MBA from St. Thomas University in 2003.
- 5. From 1996 to 2000, I worked as Electrical Engineer and eventually as Director of Engineering at Interactive Technologies, Inc. Interactive Technologies was considered the largest home automation company at that time, producing various intrusion detection and access control products. As Director of Engineering, I pioneered the partnership with other home automation companies, and helped develop a platform called "Open Solutions," which facilitates the integration of intrusion detection and camera surveillance.
- 6. From 2000 to 2005, I held various engineering and marketing positions at GE Interlogix, GE Security and GE Homeland Protection, and was involved in a wide range of security products and services including intrusion and fire detection, video surveillance, access and building control, explosive and drug detection,

structured wiring and key management. I directed various security projects for GE and the U.S. Government, including numerous projects in post-war Iraq.

- 7. From 2005 to the present, I have been the CEO of the company I founded, Cinch Systems, Inc. Cinch Systems provides security products and services such as intrusion detection and access control to the public sector. Our projects include the design and manufacturing of high security intrusion systems used at all the U.S. State Department facilities around the world as well as at Navy and U.S. intelligence agencies. Cinch Systems also designs and manufactures state-of-theart high security control systems for vehicle barrier, gate and door systems installed at numerous U.S. Government facilities including the U.S. Supreme Court, FBI facilities, NSA facilities and military bases. These systems are also used at Major League sports facilities as well as critical infrastructure installations including the Saudi Arabian oil facilities.
- 8. I am an inventor of U.S. Patent 8,707,059, entitled "End to End Encryption for an Intrusion System;" U.S. Patent 9,245,431, entitled "Cover Mounted Circuit Board and Antenna;" and U.S. Patent 9,286,799, entitled "Vehicle Barrier Control with Performance Data." I am also listed as inventor on a number of pending U.S. patent applications including Publication number 20150193327, entitled "CONNECTION CHECKING FOR HARDWIRED MONITORING SYSTEM", Publication number 20130207776, entitled "LOGICAL CONTROLLER FOR

VEHICLE BARRIER", Publication number 20130212372, entitled "DYNAMIC INFORMATION EXCHANGE FOR REMOTE SECURITY SYSTEM," as well as 5 other pending design patents

9. More information concerning my background and qualifications can be found in my resume. Ex 1006.

II. LEGAL PRINCIPLES

10. I am not a lawyer, and I have not independently researched the law on patents or patent validity. Attorneys for the Petitioner have explained certain legal principles to me that I have relied upon in forming my opinions set forth in this declaration.

Person Having Ordinary Skill in the Art

- 11. I understand that my assessment of the claims of the '091 patent must be undertaken from the perspective of what would have been known or understood by a person of ordinary skill in the art as of priority date of the patent.
- 12. In my opinion, a person having ordinary skill in the art of the '091 patent would have at least a Bachelor's degree in computer science, electrical engineering, or a similar field, and would have at least two years industry experience in networking or security systems.
- 13. I am well acquainted with the level of ordinary skill required to implement the subject matter of the '091 patent. I have direct experience with and am capable

of rendering an informed opinion on what the level of ordinary skill in the art was for the relevant field. My analysis and opinions regarding the '909 patent will be from the perspective of a person of ordinary skill in the art.

- 14. I understand that a claim is invalid as anticipated if all of the elements of the claim are described or disclosed in a single prior art reference.
- 15. It is my understanding also that a patent claim is invalid if the claimed invention as a whole would have been obvious to a person having ordinary skill in the art at the time of the invention. I understand that a patent claim can be found invalid as obvious where the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill.
- 16. I understand that when considering the obviousness of a patent claim, I should avoid applying hindsight when considering the prior art. I understand one method of avoiding such hindsight is to find a teaching, suggestion, or motivation to combine the references. I understand that this is but one method of avoiding hindsight and need not be rigidly applied.

III. Prior Art References

A. Script Publication

17. My understanding is that the Script Publication is essentially the same as U.S. Patent No. 6,828,909 except that the claims might be different.

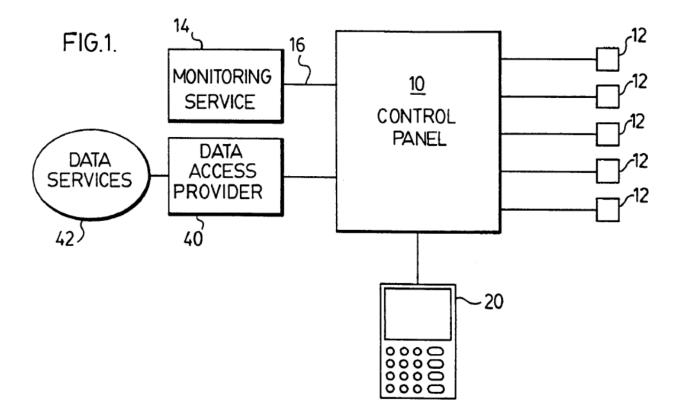
- 18. The Script Publication shows a portable security alarm system that utilizes a wireless alarm sensor that can be attached to a door or window and detects movement of the door or window. Script Publication at Abstract and [0051]-[0052]. The sensor consists of a retractable wire, a rotatable frame, and a wireless transmitter. *Id.* at [0065]-[0073]. The sensors also have an associated unique identifier. *Id.* at [0096].
- 19. The signal transmitted by the wireless alarm sensor is received by a "receiver means 30" which can be any receiver known in the art. *Id.* at [0053] and [0055]. Figure 17 shows one example of a receiver means that can be used. *Id.* at [0099]. This receiver means contains a visual display for display alarm conditions. *Id.* at [0102]. The receiver means also contains a modem for transmitting information to a remote host at a security administration system concerning an alarm condition detected by a detector. *Id.* at [0104]. The connection with the remote host can be either through the Internet, a cable interface, or radio/cellular interface. *Id.*
- 20. The remote security administration system contains a computer host and a modem pool that allows simultaneous connection with multiple alarm systems. *Id.* at [0106]. This allows the remote security administration system to monitor multiple alarm systems. *Id.* at [0108]. Besides monitoring alarm system, the remote security administration system provides other services such as a subscriber

registration service. Id. at [0108], [0114]-[0116]. In addition, the remote security administration system possesses a notification service that will notify individual of a security alert situation. *Id.* at [0109]-[0110].

The Script Publication other uses for the retractable wire sensor such as 21. "industrial process monitoring and measurements." *Id.* at [0118]. In this example, instead of using the sensor to detect movement of a door or window, Script uses the sensor to detect, for example, the expansion of an industrial tank. *Id.* A person of person of ordinary skill in the art would understand or find it obvious that the multiple sensors can be used at the industrial plant. Indeed, with the use of unique identifiers the Script system is designed to accommodate multiple sensors. Therefore, a person of ordinary skill in the art would find it obvious that one sensor can be used to measure the expansion of a tank while a different sensor can be used for traditional security purposes such as detecting the movement of a door at the facility where the tank is located. Because of the use of unique identifiers, the system will be able to distinguish between movement of a door versus expansion of the tank. No modification of the system would be needed to accomplish this.

B. Peterson

22. The invention described in the Peterson publication is a combined controller for controlling a home automation and security systems. Peterson at pg. 1, lines 4-7. Figure 1 of Peterson illustrates the "typical" security system at the time.



- 23. This typical system includes a control panel for controlling the overall operations of the security system, a number of sensors for detecting alarm conditions, labelled 12, and a remote monitoring station 14. Peterson at pg. 3-4. Peterson specifies that the alarm sensors or detectors may be wired to the control panel or may communicate wirelessly. *Id.* at pg. 3. In addition, the communication between control panel and remote monitoring station can use the local telephone system or wireless cellular telephone technology. Peterson at pg. 4.
- 24. The system also has a controller 20 that allows the user to interface with the security system and for displaying the system of the security system. Id. at pg. 4.

The controller 20 can have a graphic display, such as a LED or LCD display, to display graphical as well as alpha-numerical information. Peterson at pg. 4.

- 25. The controller and the control panel can also be used to control home automation function. Peterson at pg. 5. For example, a user may control the lights or the thermostat in the house. Peterson at pg. 5-6. The controller can also be used to monitor utility usage. Peterson at pg. 6.
- 26. In addition, controller 20 is able to display information from outside sources such as "current weather, news headlines, sports or stock market quotes, etc."

 Peterson at pg. 6. The Peterson reference discusses two ways in which information from outside sources can be obtained by the system.
- 27. The first way is to have the control panel directly interface with a data access provider. Peterson at pg. 6. This setup is shown in figure 1. The data access provider would retrieve information desired by a user, as specified in a user profile, from various source through the Internet. Peterson at pg. 6-7. This step is shown in figure 1 as a link between data service provider 40 and data services 42. Once the information is retrieved, it is repackaged for transmission to the control panel and for display on the controller. Peterson at pg. 7-8.
- 28. The second way to obtain the information from outside sources is to have the data access functions provided as an additional service by the security system monitoring service. Peterson at pg. 9. In this way, the same communication

circuitry could be used for alarm monitoring and data access. *Id.* That is, the security system monitoring service would retrieve information the outside sources and then repackage that information for transmission to the control panel. One of ordinary skill in the art would understand that this model of delivering the information to the user is advantageous to the security company providing the monitoring service since the security company could potentially charge an additional fee for providing the additional service of gathering information requested by the user. Or the security company could provide the service free of charge to increase customer loyalty. In either case, this second way of providing information to the user makes economic sense for the security company.

29. The system discussed in Peterson is also capable of transmitting weather advisories to the alarm system if the monitoring station is capable of initiating communications. Peterson at pg. 11. One of ordinary skill in the art would recognize that this is possible if the control panel were using wireless cellular telephone technology. That is, the monitoring station would be able to initiate communications with the control panel by "calling" the number associated with the control panel. Between 2000 and 2004 there was rapid growth in the security industry for cellular backup products. For example, already in 1999-2000, Telular was building a cellular backup unit for use in alarm systems and had started making a cellular based control/data product called Telguard that could be used in

intrusion, fire, and home automation systems. By 2004, due to the continued decrease in the cost of digital cellular technology, a person of ordinary skill would have found it obvious to use digital cellular technology in alarm control panels to allow for two-way communication. In practice, to deliver weather advisories, the security monitoring station would subscribe to a weather advisory service such as the service at the National Weather Service, http://www.weather.gov/alerts. Upon receiving an alert from the National Weather Service, the monitoring station would push that information via cellular link to the control panel for display on the controller.

C. Combination of Script Publication and Peterson

30. A person of ordinary skill in the art would have found it obvious to combine the features discussed in Peterson into the Script Publication alarm system. As Peterson points out home automation in the home has become more widespread, but control of such home automation systems requires the use of a fairly powerful home computer which may not be easily accessible at all times. Peterson at pg. 2, lines 28-36. The motivation behind the invention disclosed in Peterson is to use the control panel of the security system, which is a fairly powerful home computer that is accessible at all times, to also control the home automation system.

- 31. That same motivation is present in the Script Publication system. Since the Script Publication system is designed to safeguard homes, a person of ordinary skill in the art would have found it obvious to combine the Script Publication system with Peterson because the Script Publication system could potentially be installed in a home with a home automation system as well. Indeed, one of ordinary skill in the art would have been aware of Advent Navigator system by Interactive Technologies, Inc. which was commercially available in year 2000-01. Ex 1010. The Advent Navigator system combined a home security system with the home automation system. Id. Therefore, the combination of a security system like the Script Publication system and a home automation system was known in the art. 32. Also, it would have been obvious to combine the Script Publication system and Peterson because of added features present in Peterson would have obviously been desirable features to have in a security system. For example, a person of ordinary skill in the art would have known the ability to receive weather alerts or other information such as sports or news was an obvious value-added feature to a
- 33. A person of ordinary skill would have had an expectation of success in combining the Script Publication and Peterson. Peterson is designed to be used with a "typical" security system. Peterson at pg. 3, line 27. The Script Publication system is a typical security system as far as the receiver/ control panel is

security and home automation system.

concerned. While the sensor with its retractable wire may not have been typical, that sensor is adapted to look with a generic wireless receiver; the Script Publication says the receiver can be any receiver known in the art capable of receiving a signal from a wireless sensor. Script Publication at [0055]. Therefore, a person of ordinary skill in the art would have expected to succeed in adapting the detector in the Script publication with the control panel discussed in Peterson.

- 34. In addition, a person of ordinary skill would have had an expectation of success in combining the features and services of the host computer of the remote monitoring station or security administration system. For example, the host computer of security administration system could obtain information requested by the user and send that information to the control panel/controller of the user's home security system. In addition, the host computer could also push weather advisories to the control panel/controller as discussed above. These additional functions could be programmed into any host computer by a person of ordinary skill.
- 35. Once the weather advisory is pushed to the control panel, it can be displayed. If the person of ordinary skill in the art were using a receiver/control panel like the one disclosed in Peterson, then the weather advisory information could be displayed on controller 20 which at as a information display for various information including current weather. Peterson at pg. 6, lines 31-35. If the person

of ordinary skill in the art were using receiver 30 of the Script Publication system,

then the weather advisory information could be displayed on visual display 234.

Script Publication at [0102] and Figure 17. Whichever receiver/control panel the

person of ordinary skill in the art chooses to use, the information can be displayed

by that panel or receiver.

Finally, a person of ordinary skill in the art would have had expectation of 36.

success in being able to push weather advisories to the local control panel because

the Script Publication states that the connection between remote station and local

control panel is via the Internet, a cable interface, or radio/cellular interface. Script

Publication at [0104]. In each of these connections, the remote host should be able

to initiate a communication with the local control panel and be able to push the

weather advisory information to the local control panel.

I, Joel Christianson, do hereby declare and state, under penalty of perjury,

that all statements made in this declaration are true, or I believe them to be true

based on information and belief.

Date: March 9, 2016

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