#9998-3048805

ORIGINAL

IN THE UNITED STATES COURT OF FEDERAL CLAIMS

NOV 2 2015 U.S. COURT OF FEDERAL CLAIMS

CELLCAST TECHNOLOGIES, LLC and ENVISIONIT, LLC,

Plaintiffs,

Case No. <u>15-1307</u> C

v.

THE UNITED STATES OF AMERICA,

Defendant.

COMPLAINT

Plaintiffs CellCast Technologies, LLC ("CellCast") and EnvisionIT, LLC ("EnvisionIT") (collectively, CellCast and EnvisionIT referred to as "Plaintiffs") by their undersigned attorney, bring this action against Defendant United States of America, and for their complaint allege as follows:

NATURE OF ACTION

1. This is an action to recover reasonable and entire compensation for the unlicensed use and manufacture by and for the United States of inventions described in and covered by U.S. patents 7,693,938; 8,103,719; 8,438,221; 8,438,212; and 9,136,954.

JURISDICTION

2. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1491(a) and 1498(a).

PARTIES

- 3. Plaintiff CellCast is a limited liability company organized and existing pursuant to the laws of Delaware.
- 4. Plaintiff EnvisionIT limited liability company organized and existing pursuant to the laws of Delaware.
- 5. Defendant is the United States of America ("United States"), based upon the actions of its departments and agencies including but not limited to the Federal Emergency

Management Agency ("FEMA"); the United States Department of Homeland Security ("DHS"); and the National Oceanic and Atmospheric Administration ("NOAA").

ASSERTED PATENTS

- 6. From time to time, governmental agencies need to notify members of the public of emergencies and other events. The goal is to provide trusted alerts to the members of the public in the affected geographic area quickly and efficiently. Governmental agencies have used various channels for alerts, such as television and radio. But dramatic increases in the availability and functionality of cellular telephones, including for telephone calls, access to the internet, access to online television and radio, and text messaging, have changed how these alerts can best be communicated. Indeed, the average member of the public is more likely to have his or her cellular phone nearby and in operation than to be watching television or listening to a radio.
- 7. In addition, in an emergency, it is desirable to deliver textual messages to members of the public in the geographic area that may be affected by the emergency. One benefit of textual messages is that they can be read more than once. However, traditional Short Message Service ("SMS") text messaging has a significant limitation. SMS text messaging involves a two-way communication between a cellular network and each message recipient. Each communication utilizes critical bandwidth and other resources. The more recipients, the greater the burden on the cellular network's resources. If the SMS demand on a network is too great, the cellular network can become overloaded, and it can even crash as a result. A network overload in the case of an emergency further impedes communications and exacerbates the situation.
- 8. Often, emergencies are localized (for example, a tornado headed for a specific zip code). Other times they are broader in scope—such as national emergencies concerning acts of terror. Regardless of scope, the inventors at EnvisionIT recognized two things. First, messages concerning emergencies should be delivered to those who may be impacted by those emergencies and should not be over-distributed or under-distributed—that is, that the messages

should be "geo-targeted." Second, recognizing that traditional SMS messaging faced the limitations described above, the inventors knew that a much more efficient manner of emergency messaging could be accomplished through one-way "broadcast" messaging to the proper recipients. As a result, the inventors developed a novel solution to provide authorized, geo-targeted emergency alerts to users, whether over traditional media, cell phones, or other emerging media such as IP broadcast. In the United States, tens of thousands of emergency message originators in town, city, county, state and Federal agencies may be authorized to create and send emergency messages to their respective geo-political jurisdictions. In most cases, these messages are time sensitive. They must be delivered to the relevant public as quickly as possible to minimize the loss of life and property.

- 9. At the heart of the system is the processing technology necessary to both validate senders and their authority to geo-target messages to specific areas as well as to package and route those messages to the proper networks for ultimate delivery to the geo-targeted recipients. The inventors also developed the technology necessary to enable multiple alert originators (such as emergency management organizations from different governmental entities) to request the delivery of particular alerts, and they invented technology to verify, centralize, aggregate, and deliver geo-targeted broadcast messages.
- 10. After applying for the initial patent on their geo-targeted messaging system, the inventors assigned their full rights and interests in the patented invention to EnvisionIT.
- 11. EnvisionIT disclosed and claimed these and other inventions in a series of patent applications resulting in the issuance of nine United States patents and various other patents worldwide already. EnvisionIT also has additional patent applications pending. The United States has, without license, used or manufactured products and services covered by at least the following five U.S. patents: 7,693,938; 8,103,719; 8,438,221; 8,438,212; and 9,136,954 (collectively, the "Asserted Patents").
- 12. On April 6, 2010, the U.S. Patent and Trademark Office duly and lawfully issued U.S. Patent number 7,693,938 ("the '938 patent") entitled "Message broadcasting admission

control system and method." A true and correct copy of the '938 patent is attached as Exhibit A.

- 13. On January 24, 2012, the U.S. Patent and Trademark Office duly and lawfully issued U.S. Patent number 8,103,719 ("the '719 patent") entitled "Message broadcasting control system and method." A true and correct copy of the '719 patent is attached as Exhibit B.
- 14. On May 7, 2013, the U.S. Patent and Trademark Office duly and lawfully issued U.S. Patent number 8,438,221 ("the '221 patent") entitled "Broadcast alerting message aggregator/gateway system and method." A true and correct copy of the '221 patent is attached as Exhibit C.
- 15. On May 7, 2013, the U.S. Patent and Trademark Office duly and lawfully issued U.S. Patent number 8,438,212 ("the '212 patent") entitled "Message broadcasting control system and method." A true and correct copy of the '212 patent is attached as Exhibit D.
- 16. On September 15, 2015, the U.S. Patent and Trademark Office duly and lawfully issued U.S. Patent number 9,136,954 ("the '954 patent") entitled "Broadcast alerting message aggregator/gateway system and method." A true and correct copy of the '954 patent is attached as Exhibit E.
- 17. Each of the Asserted Patents is a valid and enforceable United States Patent, issued after a full and fair examination.
- 18. EnvisionIT is the assignee of the entire right, title, and interest in and to each of the Asserted Patents.
- 19. CellCast holds an exclusive license to each of the Asserted Patents, with the right to sublicense them.

SUMMARY OF GROUNDS FOR RELIEF

20. After years of working with and giving presentations to FEMA and DHS regarding their geo-targeted messaging system, the CellCast Aggregator/Gateway ("CAG"), the Plaintiffs began to suffer substantial financial harm when FEMA and DHS launched the Integrated Public Alert Warning System ("IPAWS") to deliver emergency messages throughout the United States. IPAWS utilizes the inventions claimed in the Asserted Patents. Because the

United States has not compensated Plaintiffs for a license to the Asserted Patents, such as a lump sum license, for example, Plaintiffs have suffered and will continue to suffer substantial financial harm.

- 21. Moreover, after working side by side with CellCast and soliciting numerous presentations and other information from CellCast, the United States took Plaintiffs' technology when it built IPAWS, despite CellCast's significant investment of time and money to innovate the technology and to create an innovative, patented system for delivering emergency alerts. FEMA knew of both CellCast's investments and its patents, but FEMA acted without regard for that knowledge. Two examples demonstrate FEMA's knowledge and taking: (a) numerous meetings between FEMA and CellCast predated FEMA's purported development of IPAWS, and (b) DHS issued requests for information related to its broadcast alert system in 2008 and 2009, to which CellCast responded and gave notice of its intellectual property rights in the system described by the RFIs.
- 22. The United States' unlicensed manufacture or use of inventions disclosed and claimed in CellCast's patents entitles CellCast to reasonable and entire compensation for the unlicensed use and manufacture by and for the United States.

KNOWLEDGE OF THE PATENTS-IN-SUIT BY THE UNITED STATES

CellCast gave the United States notice of the Asserted Patents.

23. From at least 2006 through 2014, CellCast representatives consistently and unambiguously informed FEMA officials of the Asserted Patents during their numerous presentations to and meetings with FEMA representatives.

FACTUAL ALLEGATIONS

CellCast developed a geo-targeted messaging system.

- 24. At least as early as 2003, CellCast began developing a geo-targeted messaging system ("GMS") to enable national or localized emergency messages to be created, targeted, and sent through a variety of channels, including efficient broadcast to all enabled mobile devices within the specified area.
- 25. As part of its GMS, CellCast developed technologies including EAGLE Alerts, a community notifications system that enables the creation, geo-targeting, and sending of emergency and public messages. CellCast also developed the CAG, a message processing system designed to accept, validate, and forward messages from multiple input sources to multiple output sources.
- 26. In addition to traditional media outlets such as radio, television, and other message delivery systems, CellCast's GMS can be used to broadcast messages to all enabled mobile devices in a geo-targeted area without having to identify specific mobile device numbers, as would be required by standard SMS text messages. Furthermore, CellCast's GMS can reach millions of mobile users in a matter of seconds and works even when the cellular networks are congested. CellCast's GMS also allows travelers present in an intended geo-targeted area to receive vital alerts, even if their registered home addresses are outside of the geo-targeted area.

FEMA began working on IPAWS.

- 27. FEMA initiated its IPAWS program in 2004 with the intention of integrating new and existing alert systems into a "system of systems." In developing IPAWS, FEMA served as the executive agency and worked in partnership with NOAA, the FCC, and other public and private stakeholders.
- 28. In 2006, Congress passed the Warning Alert and Response Network Act (the "WARN Act"), which required updates to the country's emergency alert system. In doing so, Congress recognized that the ability to deliver accurate, timely warnings through cellphones and

other mobile services is an important step to delivering public warnings during disasters and other emergencies.

29. Following the passage of the WARN Act, President George W. Bush signed Executive Order 13407 directing the Department of Homeland Security (DHS) to create "an effective, reliable, integrated, flexible, and comprehensive" public alert and warning system for the United States. The Order directed FEMA to lead the effort and adopt a set of standards and protocols to support the system, which was intended to integrate federal, state, territorial, tribal, and local government alert and warning systems to enable various messaging options and communications in the event of an emergency.

CellCast repeatedly demonstrated its technology to FEMA.

- 30. CellCast began its initial geo-targeted emergency broadcast trials in 2006. During those live-implementation trials, CellCast successfully demonstrated its capability to send geo-targeted NOAA weather alerts to mobile phone customers via Cell Broadcast technology.
- 31. David Webb, then the Program Support Branch Chief of IPAWS, attended a live demonstration of this technology in Appleton, Wisconsin in July 2006. There, CellCast successfully demonstrated its CAG on the Einstein Wireless network. Using CellCast's Eagle Alerts system, CellCast sent geo-targeted messages to the CAG for processing before they were delivered to headsets via carriers' networks using Cell Broadcast.
- 32. At a May 2007 demonstration in Houston, CellCast representatives met with David Webb of DHS and two Sandia Labs representatives, Jeff Jortner and Ronald Glaser. At the demonstration, CellCast detailed the workings of the aggregator gateway and discussed potential work for FEMA.
- 33. In 2008, following the demonstrations, the Federal Communications Commission ("FCC") issued a notice of proposed rulemaking concerning a Commercial Mobile Alert System ("CMAS"), and DHS issued a Request for Information for purposes of collecting information as a step in developing its IPAWS system. CellCast responded to the RFI to state that it had

already developed and patented a system to provide the functionality required by the request. CellCast's response provided clear notice to FEMA of CellCast's intellectual property rights in the system described in FEMA's RFI. A copy of CellCast's Response is attached hereto as Exhibit F.

- 34. After responding to DHS's RFI, CellCast received an invitation to conduct a demonstration at the Joint Interoperability Test Command ("JITC") in Indian Head, Maryland for DHS and FEMA officials. CellCast conducted that demonstration and discussion on March 11, 2009, in front of many FEMA and DHS employees and consultants as part of the Digital Alert Warning System training.
- 35. After CellCast's presentation to JITC, FEMA issued an RFI on August 4, 2009, seeking information on potential improvements to the FEMA-administered CMAS system. CellCast responded to that RFI on September 4, 2009. In its response, CellCast both detailed its capabilities and stated that it had patented the supporting technologies. A copy of CellCast's Response is attached hereto as Exhibit G.
- 36. Also in September 2009, CellCast representatives presented at the National Information Exchange Market (NIEM) National Training Conference. CellCast participated in the OASIS Emergency Interoperability Summit, which was held in coordination with DHS. Dennis Gusty of DHS Science and Technology ("S&T") encouraged CellCast to attend the NIEM event, which was attended by Bill Kalin, a DHS consultant who reported to Dennis Gusty. At the NIEM Conference, CellCast demonstrated the CAG's message processing capability and interoperability and fielded numerous questions from attendees for several DHS divisions.
- 37. In November 2009, CellCast demonstrated its solutions and capabilities at the OASIS Interoperability Demonstration in coordination with DHS S&T. IPAWS staff participated in this demonstration, and again CellCast representatives talked extensively with them about CellCast's system.
- CellCast continued to make presentations to FEMA staff through 2011. 38. February 2010, CellCast demonstrated its CAG's capabilities and interoperability by processing

Common Alert Protocol ("CAP") messages from various venders. Tom Ferrentino, then a Senior Homeland Security Consultant for FEMA who was working on IPAWS, and Wade Witmer, the Deputy Director of IPAWS, both attended this presentation.

- 39. In November 2010, CellCast again demonstrated its CAG's capabilities to FEMA staff at the International Association of Emergency Managers ("IAEM") Trade Show in San Antonio. FEMA staff also attended a similar demonstration at the November 2011 IAEM Trade Show in Las Vegas.
- 40. At the September 2011 Emergency Interoperability Consortium Webinar, CellCast demonstrated its polygon-based CAP Emergency Message & State-wide Warning Aggregation to FEMA representatives and FEMA's private-sector partners.

FEMA announced IPAWS components that utilize CellCast's patented technologies without a license.

41. After CellCast's repeated demonstrations and disclosures of its technology to FEMA, FEMA deployed the IPAWS system, which utilizes inventions disclosed in and covered by CellCast's Asserted Patents, without a license from CellCast or EnvisionIT.

CellCast offered to license its technology to the United States.

- 42. About November 2011, CellCast discussed with FEMA the unauthorized use of the patents-in-suit. Shortly thereafter, FEMA officials terminated discussions with CellCast.
- 43. CellCast continued to attempt to license the Asserted Patents to FEMA, even after the initial discussions broke down.
- 44. On January 6, 2014, FEMA officials, including Ms. Lavanya Ratnam, the Assistant General Counsel for Intellectual Property at DHS, met with CellCast representatives. At the meeting, the FEMA officials requested additional information about CellCast's technologies, its contacts at DHS, and the basis for its belief that IPAWS practiced inventions covered by CellCast's patents.
 - 45. CellCast provided the requested information to FEMA on May 20, 2014 and July

- 30, 2014. This information included documents detailing FEMA's unlicensed use of the invention of the Asserted Patents. FEMA responded by requesting a monetary demand, which CellCast provided on August 13, 2014.
- 46. FEMA rejected CellCast's demand and denied CellCast's unlicensed use claims on December 15, 2014.

UNLICENSED USE BY THE UNITED STATES

47. CellCast and EnvisionIT allege the following unlicensed use of its Asserted Patents by the United States under 35 U.S.C. § 1498(a).

Count 1: Unlicensed Use of the Invention of U.S. Patent No. 7,693,938

- 48. EnvisionIT is the assignee of all right, title, and interest to the '938 patent.
- 49. CellCast is the exclusive licensee of the '938 patent.
- The IPAWS system implemented and/or operated by the United States through its 50. agents including at least FEMA, DHS, and NOAA, includes the invention described in the '938 patent and covered by at least claim 1 of the '938 patent. Specifically, based on publicly available information from FEMA, the IPAWS-Open alert aggregator includes a broadcast request interface configured to receive broadcast messages in a defined form, a broadcast control module configured to verify the broadcast messages based on defined parameters, and a broadcast message distributor module configured for transmitting the broadcast message and a geographic target area to an output interface.
- 51. The United States does not have a license from EnvisionIT or CellCast to practice the invention of the '938 patent.
- 52. Accordingly, EnvisionIT and CellCast seek their reasonable and entire compensation for this unlicensed use of the invention of the '938 patent pursuant to 35 U.S.C. § 1498(a).

Count 2: Unlicensed Use of the Invention of U.S. Patent No. 8,103,719

53. EnvisionIT is the assignee of all right, title, and interest to the '719 patent.

- 54. CellCast is the exclusive licensee of the '719 patent.
- 55. The IPAWS system implemented and/or operated by the United States through its agents including at least FEMA, DHS, and NOAA, includes the invention described in the '719 patent and covered by at least claim 23 of the '719 patent. Specifically, based on publicly available information from FEMA, the IPAWS-Open alert aggregator performs the method of validating the authority of broadcast message originators based on specific parameters, identifying and validating a broadcast network based on specific parameters, and forwarding the broadcast message to an output interface associated with the broadcast network.
- 56. The United States does not have a license from EnvisionIT or CellCast to practice the invention of the '719 patent.
- 57. Accordingly, EnvisionIT and CellCast seek their reasonable and entire compensation for this unlicensed use of the invention of the '719 patent pursuant to 35 U.S.C. § 1498(a).

Count 3: Unlicensed Use of the Invention of U.S. Patent No. 8,438,221

- 58. EnvisionIT is the assignee of all right, title, and interest to the '221 patent.
- 59. CellCast is the exclusive licensee of the '221 patent.
- 60. The IPAWS system implemented and/or operated by the United States through its agents including at least FEMA, DHS, and NOAA, includes the invention described in the '221 patent and covered by at least claim 1 of the '221 patent. Specifically, based on publicly available information from FEMA, the IPAWS-Open alert aggregator is a broadcast broker system comprising a broadcast service bureau communicatively coupled for receiving broadcast messages from agent access systems, configured for verifying broadcast requests as a function of the broadcast agent identification and geographic message jurisdictions, and processing the verified requests for transmission to broadcast message networks.
- 61. The United States does not have a license from EnvisionIT or CellCast to practice the invention of the '221 patent.
 - 62. Accordingly, EnvisionIT and CellCast seek their reasonable and entire

compensation for this unlicensed use of the invention of the '221 patent pursuant to 35 U.S.C. § 1498(a).

Count 4: Unlicensed Use of the Invention of U.S. Patent No. 8,438,212

- 63. EnvisionIT is the assignee of all right, title, and interest to the '212 patent.
- 64. CellCast is the exclusive licensee of the '212 patent.
- 65. The IPAWS system implemented and/or operated by the United States through its agents including at least FEMA, DHS, and NOAA, includes the invention described in the '212 patent and covered by at least claim 13 of the '212 patent. Specifically, based on publicly available information from FEMA, the IPAWS-Open alert aggregator performs the method of receiving over a data interface a plurality of broadcast message records having a broadcast message and target area and associated with different originators, validating the message records as a function of the originator identification and the target area, generating a validated broadcast message for each validated message, determining which transmission networks provide service to the geographically defined target area, and transmitting the message to an output interface to the broadcast network.
- 66. The United States does not have a license from EnvisionIT or CellCast to practice the invention of the '212 patent.
- 67. Accordingly, EnvisionIT and CellCast seek their reasonable and entire compensation for this unlicensed use of the invention of the '212 patent pursuant to 35 U.S.C. § 1498(a).

Count 5: Unlicensed Use of the Invention of U.S. Patent No. 9,136,954

- 68. EnvisionIT is the assignee of all right, title, and interest to the '954 patent.
- 69. CellCast is the exclusive licensee of the '954 patent.
- 70. The IPAWS system implemented and/or operated by the United States through its agents including at least FEMA, DHS, and NOAA, includes the invention described in the '954 patent and covered by at least claim 17 of the '954 patent. Specifically, based on publicly available information from FEMA, the IPAWS-Open alert aggregator performs the method of

receiving over an input interface a plurality of broadcast message requests in the specified format, storing a jurisdiction authority for each message originator, verifying each message request by at least ensuring that the message target is within the jurisdiction of the originator, determining two or more message broadcast systems that cover at least a portion of the target area, and transmitting the verified message to the transmission systems over an output interface.

- 71. The United States does not have a license from EnvisionIT or CellCast to practice the invention of the '954 patent.
- 72. Accordingly, EnvisionIT and CellCast seek their reasonable and entire compensation for this unlicensed use of the invention of the '954 patent pursuant to 35 U.S.C. § 1498(a).

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs CellCast and EnvisionIT respectfully request judgment in their favor and against the United States granting CellCast and EnvisionIT the following relief:

- A. Entry of judgment in favor of Plaintiffs CellCast and EnvisionIT against the United States on all counts;
- B. Reasonable and entire compensation pursuant to 28 U.S.C. § 1498 in an amount to be determined at trial;
 - C. Plaintiffs' reasonable fees for expert witnesses and attorneys;
 - D. Plaintiffs' costs;
 - E. Pre-judgment and post-judgment interest on Plaintiffs' award; and.
 - F. All such other and further relief as the Court deems just or equitable.

Dated: October 30, 2015

By: /s/ Peter J. Chassman

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