

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

WINTERSPRING DIGITAL LLC,

Plaintiff,

v.

TREND MICRO INC. and TREND MICRO
INCORPORATED,

Defendants.

§
§
§
§
§
§
§
§
§
§
§
§

Case No.

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Winterspring Digital LLC (“Winterspring” or “Plaintiff”) for its Complaint against Defendants Trend Micro Inc. and Trend Micro Incorporated (collectively, “Trend Micro” or “Defendants”) alleges as follows:

THE PARTIES

1. Winterspring is a limited liability company organized and existing under the laws of the State of Texas, with its principal place of business located at 104 East Houston Street, Marshall, Texas 75670

2. Upon information and belief, Defendant Trend Micro Inc. is corporation organized and existing under the laws of the State of Delaware with a regular and established place of business in this Judicial District. For example, the Collin County tax records indicate that Trend Micro Inc. maintains inventory at 909 Central Parkway, Plano, Texas 75075. Trend Micro Inc. also maintains an office nearby at 225 East John Carpenter Freeway, Suite 1500, Irving, Texas 75062. Upon information and belief, Trend Micro Inc. does business in Texas and in the Eastern District of Texas, directly or through intermediaries.

3. Upon information and belief, Defendant Trend Micro Incorporated is corporation organized under the laws of Japan, with its principal place of business at Shinjuku Maynds Tower, 2-1-1 Yoyogi, Shibuya-ku, Tokyo, Japan 151-0053, and may be served pursuant to the provisions of the Hague Convention. Upon information and belief, Trend Micro Incorporated does business in Texas directly or through intermediaries, and offers its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas, including in the Judicial District of the Eastern District of Texas.

JURISDICTION

4. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq.* This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

5. This Court has personal jurisdiction over Defendants. Defendants regularly conduct business and have committed acts of patent infringement and/or have induced acts of patent infringement by others in this Judicial District and/or have contributed to patent infringement by others in this Judicial District, the State of Texas, and elsewhere in the United States.

6. Venue is proper in this Judicial District with respect to Trend Micro Incorporated pursuant to 28 U.S.C. § 1391 because, among other things, Trend Micro Incorporated is not a resident in the United States, and thus may be sued in any judicial district pursuant to 28 U.S.C. § 1391(c)(3). Venue is proper in this Judicial District with respect to Trend Micro Inc. pursuant to 28 U.S.C. §§ 1391 and 1400(b) because, among other things, Trend Micro Inc. is subject to personal jurisdiction in this Judicial District, has a regular and established place of business in this Judicial District, has purposely transacted business involving the accused products in this Judicial

District, including sales to one or more customers in Texas, and certain of the acts complained of herein, including acts of patent infringement, occurred in this Judicial District.

7. Defendants are subject to this Court's jurisdiction pursuant to due process and/or the Texas Long Arm Statute due at least to their substantial business in this State and Judicial District, including (a) at least part of their past infringing activities, (b) regularly doing or soliciting business in Texas, and/or (c) engaging in persistent conduct and/or deriving substantial revenue from goods and services provided to customers in Texas.

PATENTS-IN-SUIT

8. On January 16, 2007, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,164,692 (the "'692 Patent") entitled "Apparatus and Method for Transmitting 10 Gigabit Ethernet LAN Signals Over a Transport System." A true and correct copy of the '692 Patent is available at <http://pdfpiw.uspto.gov/.piw?docid=7164692>.

9. On September 2, 2008, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,420,975 (the "'975 Patent") entitled "Method and Apparatus For High-Speed Frame Tagger." A true and correct copy of the '975 Patent is available at <http://pdfpiw.uspto.gov/.piw?docid=7420975>.

10. On October 4, 2011, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,032,646 (the "'646 Patent") entitled "Administering a Communication Network." A true and correct copy of the '646 Patent is available at <http://pdfpiw.uspto.gov/.piw?docid=8032646>.

11. Winterspring is the sole and exclusive owner of all right, title, and interest in the '692, '975, and '646, Patents (the "Patents-in-Suit") and holds the exclusive right to take all actions necessary to enforce its rights to the Patent-in-Suit, including the filing of this patent infringement

lawsuit. Winterspring also has the right to recover all damages for past, present, and future infringement of the Patents-in-Suit and to seek injunctive relief as appropriate under the law.

FACTUAL ALLEGATIONS

12. The Patents-in-Suit generally cover systems and methods for routing data over a network.

13. The '692 Patent generally discloses an apparatus and method for transmitting LAN signals over a transport system. A system sends or receives a signal to or from a transport system, converts the signal to an intermediate form, re-clocks the intermediate signal, reconverts and then transmits the signal. The technology described in the '692 Patent was developed by Jeffrey Lloyd Cox and Samir Satish Seth. By way of example, this technology is implemented today in transceivers and switches that detect and convert 10-Gigabit LAN signals.

14. The '975 Patent discloses an apparatus and methods for examining a packet, determining a protocol type and tagging the packet. The technology described in the '975 Patent was developed by Velamur Krishnamachari and Dinesh Annayya from Cypress Semiconductor Corporation. By way of example, this technology is implemented today in network switches which implement VLAN tagging.

15. The '646 Patent discloses systems and methods for routing traffic through a network with the use of a GUI. The technology described in the '646 Patent was developed by Siddhartha Nag, Alfred D'Souza, Naveed Alam, and Rakesh Patel of Prom KS Limited Liability Company. By way of example, this technology is implemented today in hardware and software which allow a user with a GUI to optimize routing decisions.

16. Trend Micro have infringed and are continuing to infringe the Patents-in-Suit by making, using, offering to sell, selling, and/or importing network switches, routers, and software which implement the technology disclosed in the above patents-in-suit.

COUNT I
(Infringement of the '692 Patent)

17. Paragraphs 1 through 15 are incorporated by reference as if fully set forth herein.

18. Winterspring has not licensed or otherwise authorized Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '692 Patent.

19. Defendants have and continue to directly infringe the '692 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '692 Patent. Such products include network switches and transceivers that receive, convert, monitor, and send 10GE LAN signals, including but not limited to the Trend Micro TippingPoint I/O and bypass modules utilized in the Intrusion Prevention System (IPS) NX-Platform and the Threat Protection System TX-Series such as the family of devices, including but not limited to the 2600NX, 5200NX, 6200NX, 7100NX, 7500NX, 1100TX, 5500TX, 8200TX, 8400TX products:

1. NX/TX Modules

1.1. Standard Modules

The devices support up to four I/O modules, which enable the user to customize the device to suit the needs of the network. Each module occupies a slot, and each slot can contain up to 12 physical ports or 6 segments, depending on the module that is installed.

Table 3-1: Standard Modules

Module	Description
	6-Segment Gig-T Ports: 12 Fixed RJ-45 copper ports Port speed: 10/100/1000 Mbps Part Number: TPNN0059
	6-Segment GbE SFP Ports: 12 SFP ports Port speed: 1 Gbps Part Number: TPNN0068
	4-Segment 10GbE SFP+ Ports: 8 Fiber SFP+ ports Port speed: 10 Gbps Part Number: TPNN0060
	1-Segment 40 GbE QSFP+ Ports: 2 Fiber QSFP+ ports Port speed: 40 Gbps Part Number: TPNN0069

1

¹ https://success.trendmicro.com/dcx/s/solution/TP000085894-Best-Practice-For-Hot-swapping-TippingPoint-I-O-modules?language=en_US&sfdcIFrameOrigin=null.

Supported Transceivers and Cables for TippingPoint I/O Modules		
I/O module & part number	Transceiver part number	Transceiver name
6-Segment GbE SFP (TPNN0068)	TPNN0054	TippingPoint X126 1G SFP RJ45 Transceivers (Copper)
	TPNN0055	TippingPoint S126 1G SFP LC SX 550m 850nm Transceiver
	TPNN0056	TippingPoint X126 1G SFP LC LX 10km 1310nm Transceiver
4-Segment 10GbE SFP+ (TPNN0060)	TPNN0057	TippingPoint S136 10G SFP+ LC SR Transceiver
	TPNN0058	TippingPoint S136 10G SFP+ LC LR Transceiver
1-Segment 40 GbE QSFP+ (TPNN0069)	TPNN0067	TippingPoint S146 40G QSFP+ SR4 850nm Transceiver
	TPNN0327	TippingPoint S146 40G QSFP+ LR4 1310nm Transceiver

2

20. For example, Defendants have and continue to directly infringe at least claim 10 of the '692 Patent by making, using, offering to sell, selling, and/or importing into the United States products that receive, convert, and monitor 10GE LAN signals.

21. For example, the Tipping Point S136 10G SFP+ Transceiver, performs a method transferring 10GE LAN client signals from a transport system to a client system comprising receiving the 10GE LAN client signal transmitted over the transport system, converting the 10GE LAN client signal to an intermediate signal, recovering clock data from the intermediate signal, recovering a data stream from the intermediate signal, reconvertng the intermediate signal to the 10GE LAN client signal; transferring the 10GE LAN client signal to a client system; and monitoring the intermediate form with a monitoring device wherein the monitoring device is a 10GE LAN media access controller.

² https://docs.trendmicro.com/all/tip/tps/v5.1.1/en-us/tps_rev6_io_modules_install.pdf.

22. Defendants have and continue to indirectly infringe one or more claims of the '692 Patent by knowingly and intentionally inducing others, including Trend Micro customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States inventory tracking systems, such as products that that receive, convert, monitor, and send 10GE LAN signals.

23. Defendants, with knowledge that these products, or the use thereof, infringe the '692 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continue to knowingly and intentionally induce, direct infringement of the '692 Patent by providing these products to end users for use in an infringing manner.

24. Defendants induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '692 Patent, but while remaining willfully blind to the infringement.

25. Winterspring has suffered damages as a result of Defendants' direct and indirect infringement of the '692 Patent in an amount to be proved at trial.

26. Winterspring has suffered, and will continue to suffer, irreparable harm as a result of Defendants' infringement of the '692 Patent, for which there is no adequate remedy at law, unless Defendants' infringement is enjoined by this Court.

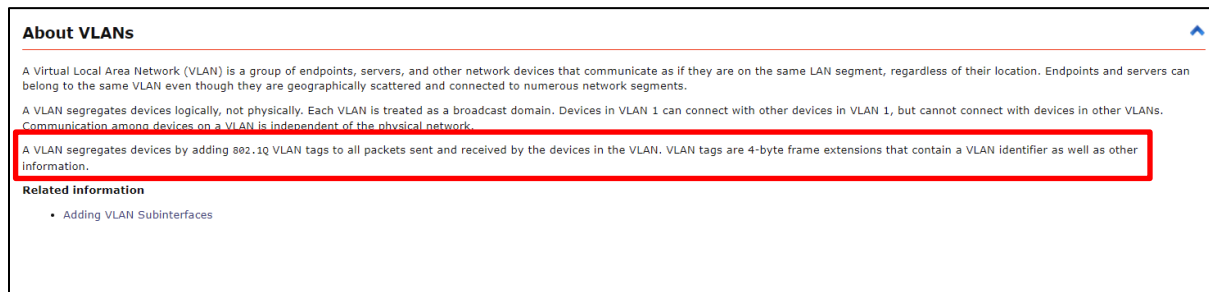
COUNT II
(Infringement of the '975 Patent)

27. Paragraphs 1 through 16 are incorporated by reference as if fully set forth herein.

28. Winterspring has not licensed or otherwise authorized Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '975 Patent.

29. Defendants have directly infringed the '975 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '975 Patent. Such products include network switches which implement VLAN tagging, including but not limited the Trend Micro Next Generation Firewall systems, such as the Edge and Deep Edge Products and Intrusion Prevention System (IPS) NX-Platform and the Threat Protection System TX-Series such as the family of devices, including but not limited to the 2600NX, 5200NX, 6200NX, 7100NX, 7500NX, 1100TX, 5500TX, 8200TX, 8400TX products.

30. For example, Defendants have directly infringed at least claim 5 of the '975 Patent by making, using, offering to sell, selling, and/or importing into the United States products that perform VLAN tagging:



31. For example, the 7500NX includes an apparatus comprising a network processor interface suitable for coupling to a network processor and a central processor interface suitable for coupling to a central processor. Upon information and belief, the 7500NX further includes a protocol determination logic block to determine a protocol type of data in a packet, wherein the protocol determination logic compares the protocol information in a first pass to predetermined

³ https://docs.trendmicro.com/all/ent/de/v2.5_SP2/en-us/webhelp/c_about_vlan.html.

values to procedure a first result and, if the first result is positive, compares the protocol information in a second pass to predetermined values to produce a second result, the first and second results forming a set of results. Upon information and belief, the 7500NX further comprises a tag select logic block to apply a tag to the packet indicating that the packet has an unknown protocol type if the first result is negative and if the first result is positive, the packet should be sent to either the central processor interface or the network processor interface based on the set of results.

3.7. VLAN Translation

TPS devices are capable of translating VLAN IDs per segment (assuming they follow the industry standard of dot1q). The translation occurs after the inspection, so incoming VLANs are used for Virtual Segments.

Table 3-1: VLAN / Virtual Segments

Setting	440T	2200T	vTPS	1100TX	5500TX	8200TX	8400TX
Virtual Segments	64	124	64	256	256	256	256
VLAN per virtual segment	4094	4094	4094	4094	4094	4094	4094
IP Address per virtual Segment	250	250	250	250	250	250	250
VLAN Translation Rules	8000	8000	Not supported	8000	8000	8000	8000

- Increase port density options by leveraging switches as a port aggregation point
- Only supports policy by VLAN as received by TPS
- All policy, security, events, etc. happen on ingress VLAN id only
 - VLAN Translation will strip all VLAN tags and inspect the traffic payload, once the inspection is completed, all VLAN tags will be reinserted except the outer most VLAN tag will be changed to VLAN specified by VLAN translation.
 - No concept of “dest VLAN” in virtual ports
- Typical usage involves symmetric translation
- Mappings must be unique - a given ingress VLAN must map to a single egress VLAN
 - Although it is valid to apply a 1: many translation, the TPS won't be able to translate the return traffic

4

https://tmc.tippingpoint.com/TMC/ShowDocuments?parentFolderId=gadocs&contentId=BPG_TPS_Series.pdf

32. Defendants have indirectly infringed one or more claims of the '975 Patent by knowingly and intentionally inducing others, including Trend Micro customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology.

33. Defendants, with knowledge that these products, or the use thereof, infringed the '975 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '975 Patent by providing these products to end users for use in an infringing manner.

34. Defendants induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '975 Patent, but while remaining willfully blind to the infringement.

35. Winterspring has suffered damages as a result of Defendants' direct and indirect infringement of the '975 Patent in an amount to be proved at trial.

36. Winterspring has suffered, and will continue to suffer, irreparable harm as a result of Defendants' infringement of the '975 Patent, for which there is no adequate remedy at law, unless Defendants' infringement is enjoined by this Court.

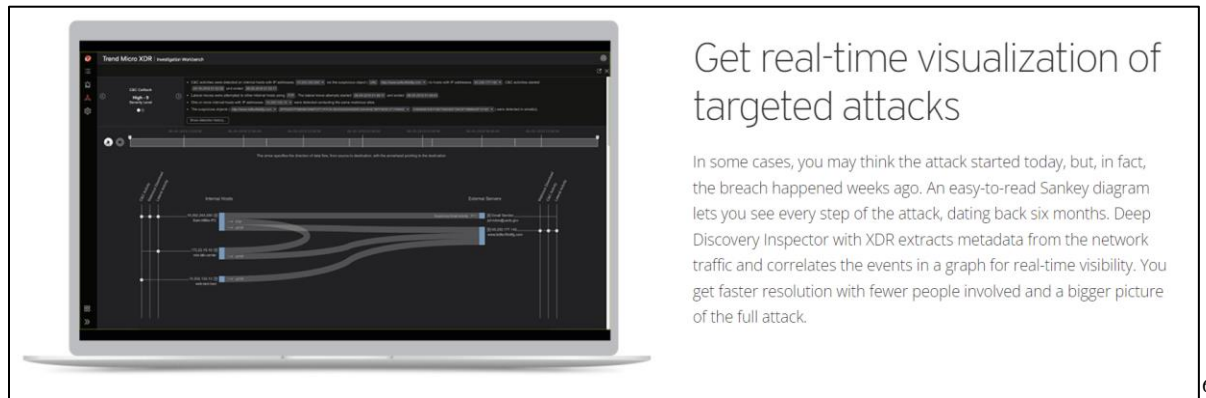
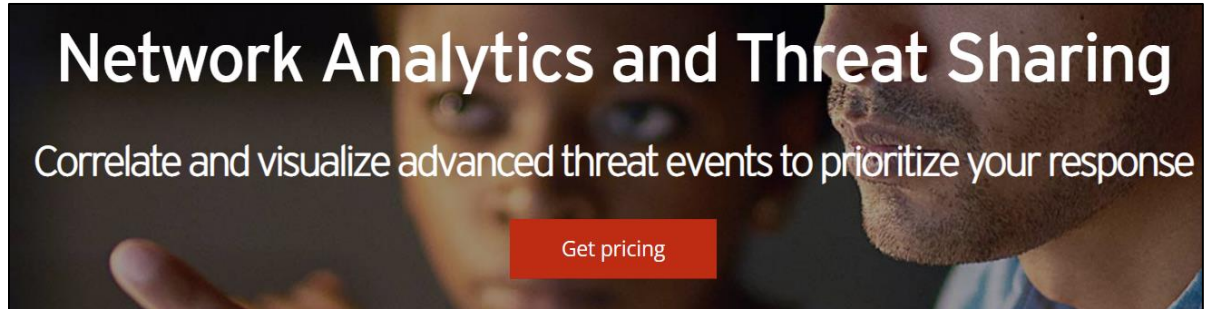
COUNT III
(Infringement of the '646 Patent)

37. Paragraphs 1 through 16 are incorporated by reference as if fully set forth herein.

38. Winterspring has not licensed or otherwise authorized Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '646 Patent.

39. Defendants have and continue to directly infringe the '646 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making,

using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '646 Patent. Such products include hardware and software which allow a user with a GUI to optimize routing decisions, including but not limited to Trend Micro Deep Discovery Inspector, alone or in combination with Trend Micro network routers, switches and NGFW, and IDS and IPS products.



40. For example, Defendants have and continue to directly infringe at least claim 1 of the '646 Patent by making, using, offering to sell, selling, and/or importing into the United States products that hardware and software which allow provide a user with a GUI to optimize routing decisions, including but not limited to the Trend Micro Deep Discovery Inspector, alone or in combination with Trend Micro network routers, switches and NGFW IDS and IPS products.

⁵ https://www.trendmicro.com/en_us/business/products/network/advanced-threat-protection/deep-discovery-threat-intelligence-network-analytics.html.

⁶ *Id.*

41. For example, the Trend Micro Deep Discovery Inspector performs the method of displaying, via a graphical user interface (GUI) on a display, a graphical representation of a plurality of nodes available in a network, wherein the plurality of nodes comprises a first edge node and a second edge node, wherein the plurality of nodes further comprises a plurality of router nodes located between the first edge node and the second edge node. Upon information and belief, the Trend Micro Deep Discovery Inspector performs the step of displaying, via a GUI, a graphical representation of a plurality of paths available on the network between the first edge node and the second edge node on the network, wherein each of the plurality of paths passes through at least a subset of the plurality of router nodes, wherein the plurality of paths are displayed in a prioritized fashion in accordance with a difference in a number of nodes in each path of the plurality of paths through which traffic between the first edge node and the second edge node will pass if selected. Upon information and belief, the Trend Micro Deep Discovery Inspector further performs the step of selecting a path from the plurality of paths in response to a first user input received via the GUI, wherein the selected path passes through two or more router nodes of the plurality of router nodes. Upon information and belief, the Trend Micro Deep Discovery Inspector performs the step of initiating configuration of the two or more router nodes for communication between the first edge node and the second edge node in response to selecting the path.

42. Defendants have and continue to indirectly infringe one or more claims of the '646 Patent by knowingly and intentionally inducing others, including Trend Micro customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology, such as a GUI to optimize routing decisions, including but not limited to Trend Micro

Deep Discovery Inspector, alone or in combination with Trend Micro network routers, switches and NGFW, and IDS and IPS products.

43. Defendants, with knowledge that these products, or the use thereof, infringe the '646 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '646 Patent by providing these products to end users for use in an infringing manner.

44. Defendants induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '646 Patent, but while remaining willfully blind to the infringement.

45. Winterspring has suffered damages as a result of Defendants' direct and indirect infringement of the '646 Patent in an amount to be proved at trial.

46. Winterspring has suffered, and will continue to suffer, irreparable harm as a result of Defendants' infringement of the '646 Patent, for which there is no adequate remedy at law, unless Defendants' infringement is enjoined by this Court.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a jury for all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Winterspring prays for relief against Defendants as follows:

a. Entry of judgment declaring that Defendants have directly and/or indirectly infringed one or more claims of the Patents-in-Suit;

b. An order pursuant to 35 U.S.C. § 283 permanently enjoining Defendants, its officers, agents, servants, employees, attorneys, and those persons in active concert or

participation with it, from further acts of infringement of one or more of the Patents-in-Suit;

c. An order awarding damages sufficient to compensate Winterspring for Defendants' infringement of the Patents-in-Suit, but in no event less than a reasonable royalty, together with interest and costs;

d. Entry of judgment declaring that this case is exceptional and awarding Winterspring its costs and reasonable attorney fees under 35 U.S.C. § 285; and,

e. Such other and further relief as the Court deems just and proper.

Dated: July 5, 2022

Respectfully submitted,

/s/ Vincent J. Rubino, III

Alfred R. Fabricant

NY Bar No. 2219392

Email: ffabricant@fabricantllp.com

Peter Lambrianakos

NY Bar No. 2894392

Email: plambrianakos@fabricantllp.com

Vincent J. Rubino, III

NY Bar No. 4557435

Email: vrubino@fabricantllp.com

FABRICANT LLP

411 Theodore Fremd Road, Suite 206 South
Rye, NY 10580

Telephone: (212) 257-5797

Facsimile: (212) 257-5796

Justin Kurt Truelove

Texas Bar No. 24013653

Email: kurt@truelovelawfirm.com

TRUELOVE LAW FIRM, PLLC

100 West Houston

Marshall, Texas 75670

Telephone: (903) 938-8321

Facsimile: (903) 215-8510

**ATTORNEYS FOR PLAINTIFF
WINTERSPRING DIGITAL LLC.**