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

LONGHORN HD LLC.,	§	Case No.
Plaintiff,	§	**JURY TRIAL DEMANDED**
v.	§	
JUNIPER NETWORKS, INC.,	§	
Defendant.	§	

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Longhorn HD LLC. ("LHD" or "Plaintiff") for its Complaint against Defendant Juniper Networks, Inc. ("Juniper" or "Defendant") alleges as follows:

THE PARTIES

1. LHD is a limited liability company organized and existing under the laws of the State of Texas, with its principal place of business located at 203 East Travis Street, Marshall, Texas 75670.

2. Upon information and belief, Juniper is a corporation organized under the laws of the State of Delaware with a regular and established place of business in this Judicial District at 5830 Granite Parkway, Suite 850, Plano, Texas 75024. Upon information and belief, Juniper does business in Texas and in the Eastern District of Texas, directly or through intermediaries.

JURISDICTION

3. 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).

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

5. Venue is proper in this Judicial District pursuant to 28 U.S.C. §§ 1391 and 1400(b). Juniper has a regular and established place of business in this Judicial District, including in Collin County, and is deemed to reside in this Judicial District. On information and belief, Juniper has committed acts of infringement in this Judicial District, and/or has purposely transacted business involving the accused devices in this Judicial District including providing sales and technical support for the products accused of infringement herein.

6. This Court has personal jurisdiction over Juniper. On information and belief, Juniper conducts business and has committed acts of patent infringement and/or has induced acts of patent infringement by others in this Judicial District and/or has contributed to patent infringement by others in this Judicial District, the State of Texas, and elsewhere in the United States.

PATENTS-IN-SUIT

7. On July 16, 2002, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 6,421,732 (the "'732 Patent") entitled "IPNet Gateway." A true and correct copy of the '732 Patent is attached hereto as Exhibit A.

8. On November 4, 2003, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 6,643,778 (the "'778 Patent") entitled "Network System Using A Firewall Dynamic Control Method." A true and correct copy of the '778 Patent is attached hereto as Exhibit B.

9. On October 11, 2005, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 6,954,790 (the "'790 Patent") entitled "Network-Based Mobile Workgroup System." A true and correct copy of the '790 Patent is attached hereto as Exhibit C.

10. On August 21, 2007, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,260,846 (the "'846 Patent") entitled "Intrusion Detection System." A true and correct copy of the '846 Patent is attached hereto as Exhibit D.

11. On March 11, 2008, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,343,421 (the "'421 Patent") entitled "Restricting Communication of Selected Processes to a Set of Specific Network Addresses." A true and correct copy of the '421 Patent is attached hereto as Exhibit E.

12. LHD is the sole and exclusive owner of all right, title, and interest in the '732 Patent, the '778 Patent, the '790 Patent, the '846 Patent, and the '421 Patent (collectively, the "Patents-in-Suit"), and holds the exclusive right to take all actions necessary to enforce its rights to the Patents-in-Suit, including the filing of this patent infringement lawsuit. LHD 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

13. The Patents-in-Suit generally cover systems and methods for computer and network security.

14. The '732 Patent generally relates to technology for mapping resources on private networks to public facing domain names. The technology described by the '732 Patent generally relates to technology that maps multiple resources and/or addresses on a private network to addresses for external use, such as mapping multiple internal resources to a single IP address to

work with a Domain Name Service ("DNS") lookup. The technology further implements these mappings as the basis for a secure firewall. The technology described in the '732 Patent was developed by Hasan S. Alkhatib and Bruce C. Wootton at IP Dynamics, Inc. By way of example, this technology is implemented today in network firewalls and gateways that allow remote users to access multiple resources with shared domains/IP addresses.

15. The '778 Patent generally relates to technology for remotely connecting to a first Intranet and accessing information on a second Intranet. The technology further implements these mappings as the basis for secure gateways. The technology described in the '778 Patent was developed by Osamu Nakazawa at Oki Electric Industry Co., Ltd. By way of example, this technology is implemented today in network firewalls and gateways that allow IP Security ("IPSec") over virtual private networks ("VPN") for sharing of resources among intranets.

16. The '790 Patent generally relates to technology for mobile workgroups' VPN and firewall systems. The technology further implements these mappings as the basis for secure gateways. The technology described in the '790 Patent was developed by Jan Forslöw at Interactive People Unplugged AB. By way of example, this technology is implemented today in VPNs that allow for mobile participation, further implementing network firewalls and gateways that allow for the VPNs to share resources with mobile devices.

17. The '846 Patent generally relates to technology for intrusion detection systems. The technology described in the '846 Patent was developed by Christopher W. Day at Steelcloud, Inc. By way of example, this technology is implemented today in intrusion detection systems ("IDS") and intrusion prevention systems ("IPS") that utilize machine-learning techniques to detect and prevent intrusions.

18. The ’421 Patent generally relates to technology that solves problems endemic to the computer server and networking fields. More specifically, the inventions disclosed in the ’421 Patent provide advancements in the field of computer server virtualization and resource sharing. The technology described in the ’421 Patent was developed by Pawan Goyal at Digital Asset Enterprises LLC. By way of example, this technology is implemented today in gateway and firewall devices to allow or disallow resources for computer processes on ports so as to provide advancements in computer security and resource management.

19. Juniper has infringed and is continuing to infringe one or more of the Patents-in-Suit by making, using, selling, offering to sell, and/or importing, and by actively inducing others to make, use, sell, offer to sell, and/or importing, products that include security gateways and WANs that provide firewall, VPN, IPSec, DNS, and/or IDS/IPS functionality that infringes the Patents-in-Suit (“Accused Products”) including, but not limited to, SRX Series Services Gateways including, for example, SRX300, SRX550, SRX1500, SRX4100, SRX4200, SRX4600, SRX5400, SRX5600, SRX5800, Junos operating system, utilities, and software.

COUNT I
(Infringement of the ’732 Patent)

20. Paragraphs 1 through 19 are incorporated by reference as if fully set forth herein.

21. LHD has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’732 Patent.

22. Defendant has directly infringed the ’732 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 meet each and every limitation of one or more claims of the ’732 Patent, including by performing the methods claimed by the ’732 Patent. Such products include routers, firewalls, and wide area network utilities that

utilize DNS and IP address translation and forwarding. On information and belief, such Juniper products include at least the SRX products and services that implement DNS and IP address translation and forwarding. On information and belief, the accused products receive requests from outside a network based on a domain name request.

23. For example, Defendant has directly infringed at least claim 1 of the '732 Patent by making, using, offering to sell, selling, and/or importing into the United States products that practice the methods of the '732 Patent including DNS with network translation and IP failover.

24. On information and belief, the SRX products perform a method for establishing communication with a first entity inside a network. The SRX products receive a first address request originating from outside the network. The first address request includes a request of an address of a first entity, identifying the first entity with a domain name for said first entity.[1]

25. The SRX responds to the first address request by providing a first address that is not unique to said first entity within the network, *i.e.*, the address of the SRX unit. This address is not unique to the first entity in the network. The SRX unit receives requests for communication with the server from entities originating outside the network and establishes communication between the two entities as a forwarder of information.

26. Additionally, the SRX unit performs the method of the claims at least during the process of Internet Service Provider ("ISP") failover and load balancing where a DNS request is intercepted by the SRX and a different IP address corresponding to a second ISP is returned in response to the DNS request.

27. LHD has suffered damages as a result of Defendant's infringement of the '732 Patent in an amount to be proved at trial.

[1] *See e.g.*, https://rtodto.net/dual-isp-failover-with-rpm-ip-monitoring/

COUNT II
(Infringement of the '778 Patent)

28. Paragraphs 1 through 19 are incorporated by reference as if fully set forth herein.

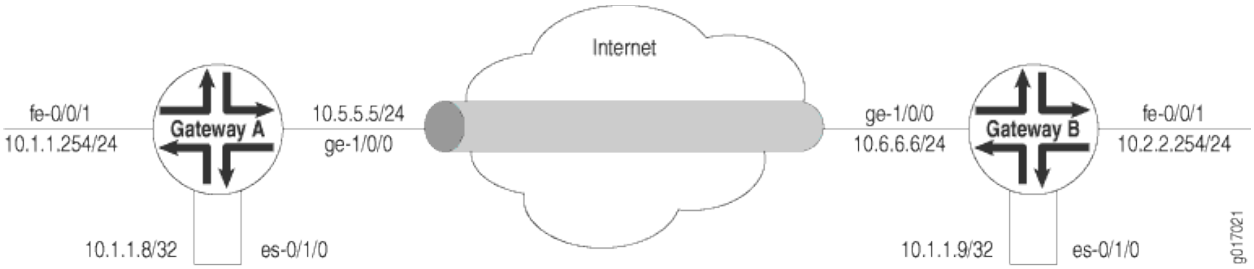
29. LHD has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '778 Patent.

30. Defendant has directly infringed the '778 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 meet each and every limitation of one or more claims of the '778 Patent, including by performing the methods claimed by the '778 Patent. Such products include routers, firewalls, and wide area network utilities that utilize DNS and IP address translation and forwarding. On information and belief, such Juniper products include at least the SRX and Junos products and services that implement IPSec and VPN to connect two gateways.

31. For example, Defendant has directly infringed at least claim 1 of the '778 Patent by making, using, offering to sell, selling, and/or importing into the United States products that meet each limitation of claim 1 of the '778 Patent.

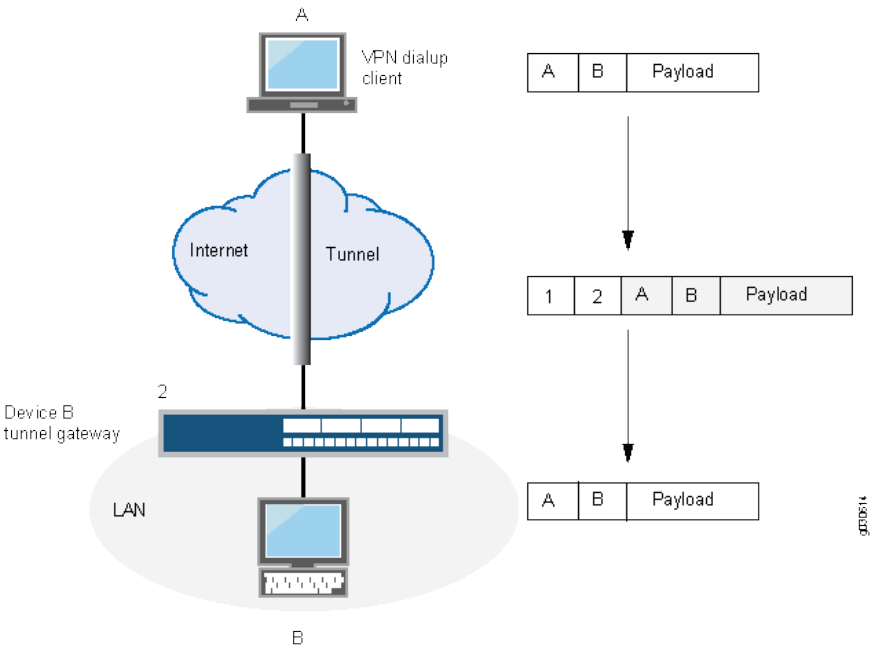
32. For example, Defendant has directly infringed at least claim 1 of the '778 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include a network system and/or software using a firewall dynamic control method. The Accused Products include a first Intranet connected to a SRX unit and a second Intranet connected to a second SRX unit with the Internet as a base, as depicted in the figure below.[2]

[2] https://www.juniper.net/documentation/en_US/junos/topics/topic-map/ipsec-tunnel-traffic-configuration.html



33. The Accused Products include a first dynamic proxy server (*e.g.*, the SRX unit at the "Gateway A" depicted in the figure above) for forming a firewall to protect said first Intranet. The Accused Products further include a second dynamic proxy server (*e.g.*, the SRX unit at the "Gateway B" depicted in the figure above) for forming a firewall to protect the second Intranet. SRX units are described as "next generation firewalls."[3]

34. The Accused Products further include a remote access terminal connected to said first Intranet, *e.g.*, the SSL VPN user depicted in the figure below.[4]



[3] https://www.juniper.net/documentation/en_US/junos/topics/topic-map/security-ipsec-vpn-overview.html
[4] *Id.*

35. The Accused Products include a first object directory server provided within the first Intranet for judging whether a service requested by said remote access terminal is provided in said first Intranet or is provided in said second Intranet. For example, the SRX in the figure above includes a directory of resources including policies and objects available on the Intranets. The Accused Products further include a second object directory server provided in the second Intranet to dynamically install a service proxy in said second dynamic proxy server when said service is provided in said second Intranet. For example, the SRX in the figure above includes a second object directory server to dynamically install a service proxy. The services and objects provided by the SRX can be dynamic.[5] Furthermore, on information and belief, the first object directory server includes references to services stored in the first Intranet and makes requests for searches of services provided in said second Intranet to said second dynamic proxy server.

36. LHD has suffered damages as a result of Defendant's direct infringement of the '778 Patent in an amount to be proved at trial.

COUNT III
(Infringement of the '790 Patent)

37. Paragraphs 1 through 19 are incorporated by reference as if fully set forth herein.

38. LHD has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '790 Patent.

39. Defendant has and continues to directly infringe the '790 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 '790 Patent. Such products include SRX units which provide a mobile user workgroup.

[5] *e.g.*, https://www.juniper.net/documentation/en_US/junos/topics/concept/policy-dynamic-understanding.html

40. For example, Defendant has and continues to directly infringe at least claim 1 of the '790 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include gateway devices and/or software that provide mobile user workgroups. The infringing systems include a network-based mobile workgroup system comprising a plurality of mobile client nodes, each mobile client node providing an interface for user interaction by a mobile user, for example, Juniper Pulse running on mobile devices including, but not limited to, Android devices.

41. The Accused Products include a plurality of mobile service router nodes, each mobile service router node providing a mobile Virtual Private Network (VPN) to the mobile client nodes spanning multiple router hops and sites, for example, a SRX in connection with access points. The Accused Products further include a network address identifier (NAI) with which a user of a mobile client is uniquely identified to the mobile VPN system, for example, a device Media Access Control ("MAC") address or other unique identifier.

42. Additionally, the Accused Products include a set of firewall filters and route policies with which the workgroup is protected, such as, for example, firewalls and rules enforced by the SRX units. Additionally, the mobile VPN provides each mobile client secure data access to the VPN and provides secure data access to each mobile client from within the mobile VPN, wherein a point of attachment of any mobile client node to the mobile VPN may change without affecting that mobile client node's participation in the mobile VPN.

43. Defendant has and continues to indirectly infringe one or more claims of the '790 Patent by knowingly and intentionally inducing others, including Juniper 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 Juniper SRX and Pulse and SRX for mobile devices.

44. Defendant, with knowledge that these products, or the use thereof, infringes the '790 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 '790 Patent by providing these products to end- users for use in an infringing manner.

45. Defendant 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 '790 Patent, but while remaining willfully blind to the infringement.

46. LHD has suffered damages as a result of Defendant's direct and indirect infringement of the '790 Patent in an amount to be proved at trial.

47. LHD has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '790 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

COUNT IV
(Infringement of the '846 Patent)

48. Paragraphs 1 through 19 are incorporated by reference as if fully set forth herein.

49. LHD has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '846 Patent.

50. Defendant has and continues to directly infringe the '846 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 '846 Patent. Such products include intrusion detection systems and intrusion prevention systems including the SRX, IDP, and IPS devices.

51. For example, Defendant has and continues to directly infringe at least claim 7 of the '846 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include IDS and/or IPS systems and/or software that practice the claimed method alone, or in combination with other Juniper products or services.

52. The Accused Products are systems that perform an intrusion detection method comprising the steps of monitoring network traffic passing across a network communications path. For example, the SRX IPS monitors network traffic. Additionally, Juniper performs network traffic parsing.[6]

53. Additionally, the Accused Products store individual components of said network packets in a database and construct multi-dimensional vectors from at least two of said stored individual components and applying at least one multi-variate analysis to said constructed multi-dimensional vectors, said at least one multi-variate analysis producing a corresponding output set. For example, machine learning techniques are applied to captured packets, such as with Juniper Smart Core Technology.[7] Additionally, the Accused Products establish a correlation between individual output sets based upon a selected metric to identify anomalous behavior.

54. The Accused Products classify the anomalous behavior as an event selected from the group consisting of a network fault, a change in network performance, and a network attack.

55. Defendant has and continues to indirectly infringe one or more claims of the '846 Patent by knowingly and intentionally inducing others, including Juniper customers and end-users,

[6] https://www.juniper.net/documentation/en_US/release-independent/jatp/topics/topic-map/jatp-operators-guide-introduction.html
[7] *Id*.

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 IDS and IPS systems.

56. Defendant, with knowledge that these products, or the use thereof, infringes the '846 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 '846 Patent by providing these products to end-users for use in an infringing manner.

57. Defendant 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 '846 Patent, but while remaining willfully blind to the infringement.

58. LHD has suffered damages as a result of Defendant's direct and indirect infringement of the '846 Patent in an amount to be proved at trial.

59. LHD has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '846 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

COUNT V
(Infringement of the '421 Patent)

60. Paragraphs 1 through 19 are incorporated by reference as if fully set forth herein.

61. LHD has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '421 Patent.

62. Defendant has and continues to directly infringe the '421 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 '421 Patent. Such products include utilities, such as the SRX units, that control network traffic by limiting and/or assigning processes and addresses. On information and belief, infringing products include at least the SRX product line and/or associated software.

63. For example, Defendant has and continues to directly infringe at least claim 90 of the '421 Patent by making, using, offering to sell, selling, and/or importing into the United States products that perform the method for restricting network address-based communication by selected processes to a set of specific network addresses. The Accused Products associate at least one selected process, such as, for example, HTTP or FTP, with at least one network address, such as, for example, a MAC address. The Accused Products detect when a selected process attempts to communicate via an unassociated address, such as when a process, such as HTTP is disallowed for a specific address. The Accused Products then prevent the communication from proceeding. [8]

64. Defendant has and continues to indirectly infringe one or more claims of the '421 Patent by knowingly and intentionally inducing others, including SRX 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 and by directing their customers to utilize the Accused Products in an infringing matter through marketing and support materials. [9]

65. Defendant, with knowledge that these products, or the use thereof, infringes the '421 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 '421 Patent by providing these products to end-users for use in an infringing manner.

[8] *See, e.g.*, https://www.juniper.net/documentation/en_US/junos/topics/example/permitted-ip-configuring.html
[9] *See, Id.*

66. Defendant 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 '421 Patent, but while remaining willfully blind to the infringement.

67. LHD has suffered damages as a result of Defendant's direct and indirect infringement of the '421 Patent in an amount to be proved at trial.

68. LHD has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '421 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a jury for all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, LHD prays for relief against Defendant as follows:

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

b. An order pursuant to 35 U.S.C. § 283 permanently enjoining Defendant, its officers, agents, servants, employees, attorneys, and those persons in active concert or participation with them, from further acts of infringement of the Patents-in-Suit;

c. An order awarding damages sufficient to compensate LHD for Defendant's 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 LHD 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: March 19, 2021

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

John Andrew Rubino
NY Bar No. 5020797
Email: jarubino@rubinoip.com
RUBINO LAW LLC
830 Morris Turnpike
Short Hills, NJ, 07078
Telephone: (973) 535-0920
Facsimile: (973) 535-0921

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, LONGHORN HD LLC.