

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

ENTROPIC COMMUNICATIONS, LLC,

Plaintiff,

v.

DIRECTV, LLC, AT&T, INC., AT&T
SERVICES, INC., and AT&T
COMMUNICATIONS, LLC.

Defendants.

Case No. 2:22-cv-75

**COMPLAINT FOR PATENT
INFRINGEMENT**

DEMAND FOR JURY TRIAL

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff, Entropic Communications, LLC (“Entropic”), files this complaint for patent infringement against DirecTV, LLC, AT&T, Inc., AT&T Services, Inc., and AT&T Communications, LLC (collectively, “Defendants”) and in support thereof alleges and avers as follows:

NATURE OF THE ACTION

1. This is a civil action arising under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, including, specifically, 35 U.S.C. § 271, based on infringement of U.S. Patent Nos. 7,130,576 (“the ’576 Patent”), 7,542,715 (“the ’715 Patent”), and 8,792,008 (“the ’008 Patent”) (collectively “the Patents-in-Suit”).

THE PARTIES

2. Entropic is a Delaware limited liability company with an office address of 7150 Preston Rd. Suite 300, Plano, Texas 75024.

3. DirecTV, LLC (“DirecTV”) is a limited liability company organized and existing under the laws of California with a principal place of business at 2260 E. Imperial Hwy., El Segundo, California 90245.

4. AT&T Services, Inc. and AT&T Communications, LLC are wholly owned by AT&T, Inc. (collectively “AT&T”).

5. AT&T, Inc. is a corporation organized and existing under the laws of the State of Delaware with a principal place of business at 208 S. Akard St., Dallas, Texas 75202.

6. AT&T Services, Inc. is a Delaware corporation with a place of business at 208 South Akard Street, Dallas, Texas 75202.

7. AT&T Communications, LLC is a Delaware limited liability company with a place of business at 208 South Akard Street, Dallas, Texas 75202.

8. DirecTV maintains locations in Texas, including at least in the following towns: Arlington, Longview, and Dallas.

9. DirecTV maintains facilities in Texas, including in the following towns: Abilene, Amarillo, Austin, Vidor, Corpus Christi, Richardson, El Paso, McAllen, Marshall, Houston, Laredo, Lubbock, Midland, San Antonio, Denison, Tyler, Waco, and Wichita Falls, among others.

10. DirecTV may be served through its registered agent CT Corp. System at 1999 Bryan St. Suite 900, Dallas, Texas 75201.

11. AT&T maintains physical locations in at least the following towns in the district: Anna, Athens, Beaumont, Bonham, Canton, Carthage, Center, Crockett, Gun Barrel City, Denison, Frisco, Gainesville, Henderson, Jackson, Kilgore, Liberty, Lindale, Longview, Lufkin, Lumberton, Marshall, McKinney, Mount Pleasant, Nacogdoches, Palestine, Port Arthur, Princeton, Propser, Sherman, Sulphur Springs, Texarkana, Tyler and West Orange, among others.

12. AT&T may be served through its registered agent CT Corporation System at 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

13. DirecTV, through its related entity, DirecTV Enterprises LLC, also maintains a regional headquarters at 1010 N Saint Mary's St. Rm. 9-Y01, San Antonio, Texas 78215.

14. DirecTV offers its products via storefronts, including at 1712 E Grand Ave, Marshall, Texas 75670.

15. DirecTV maintains a physical, regular and established place of business at 3111 S US Hwy 75, Sherman, Texas 75090.

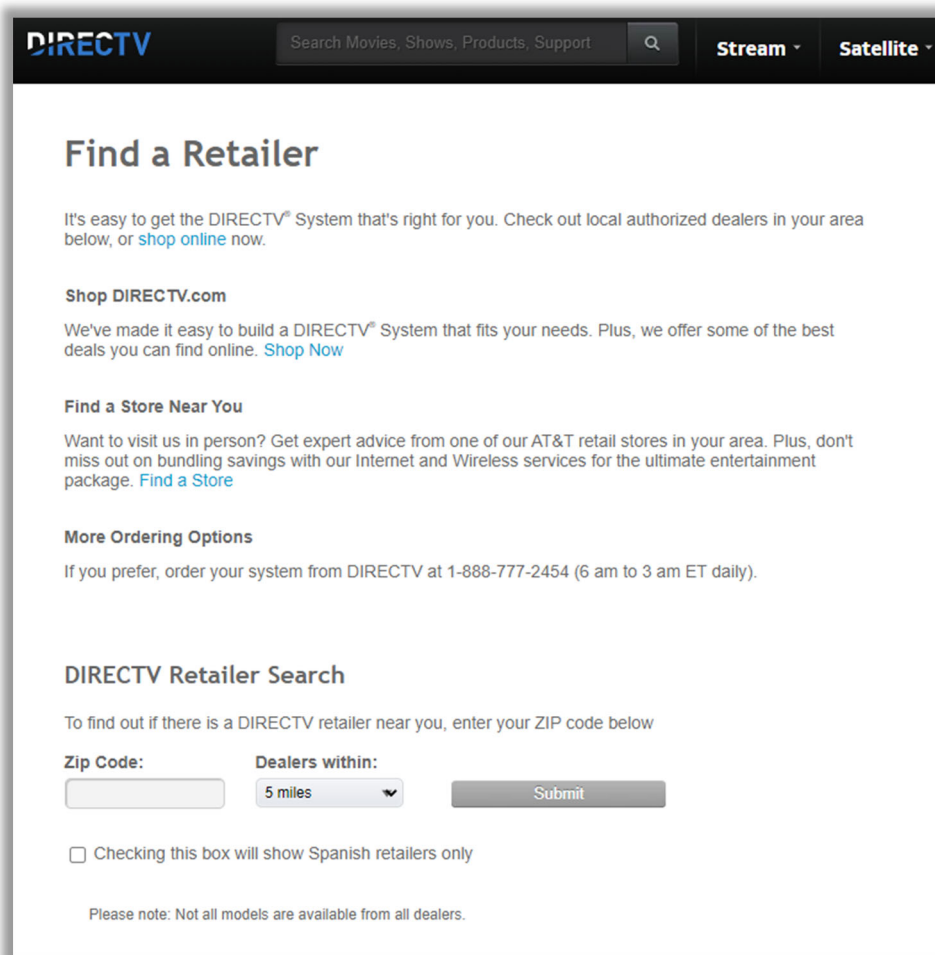
16. DirecTV sells, leases, and distributes its infringing technology in this district.

17. On information and belief, DirecTV employees work in this district, including but not limited to a Senior Area Sales Manager in Richardson, Texas, as well as other employees working in Allen, Texas.

18. On information and belief, these employees work both at DirecTV offices and AT&T offices, as well as under the control of DirecTV and AT&T at the employees' homes in this district.

19. On information and belief, both when working remotely in this district and at offices in this district, DirecTV and AT&T supply these employees with equipment, for example, a virtual office, computer equipment, and VPN access, to allow these employees to perform their duties.

20. DirecTV instructs potential customers that, if a potential customer wishes to consider DirecTV products in person, the potential customers should come to one of "our AT&T retail stores" (emphasis added):



https://www.directv.com/DTVAPP/global/findRetailer.jsp?assetId=cms_find_retailer.

21. There are numerous AT&T stores marketing DirecTV products in this district including, but not limited to, in: Anna, Athens, Beaumont, Bonham, Canton, Carthage, Center, Crockett, Gun Barrel City, Denison, Frisco, Gainesville, Henderson, Jackson, Kilgore, Liberty, Lindale, Longview, Lufkin, Lumberton, Marshall, McKinney, Mount Pleasant, Nacogdoches, Palestine, Port Arthur, Princeton, Proposer, Sherman, Sulphur Springs, Texarkana, Tyler, and West Orange.

22. DirecTV has authorized dealers in this district including, but not limited to, in: Texarkana, Mount Pleasant, Port Arthur, Beaumont, Frisco, Greenville, Point, and Sulphur Springs.

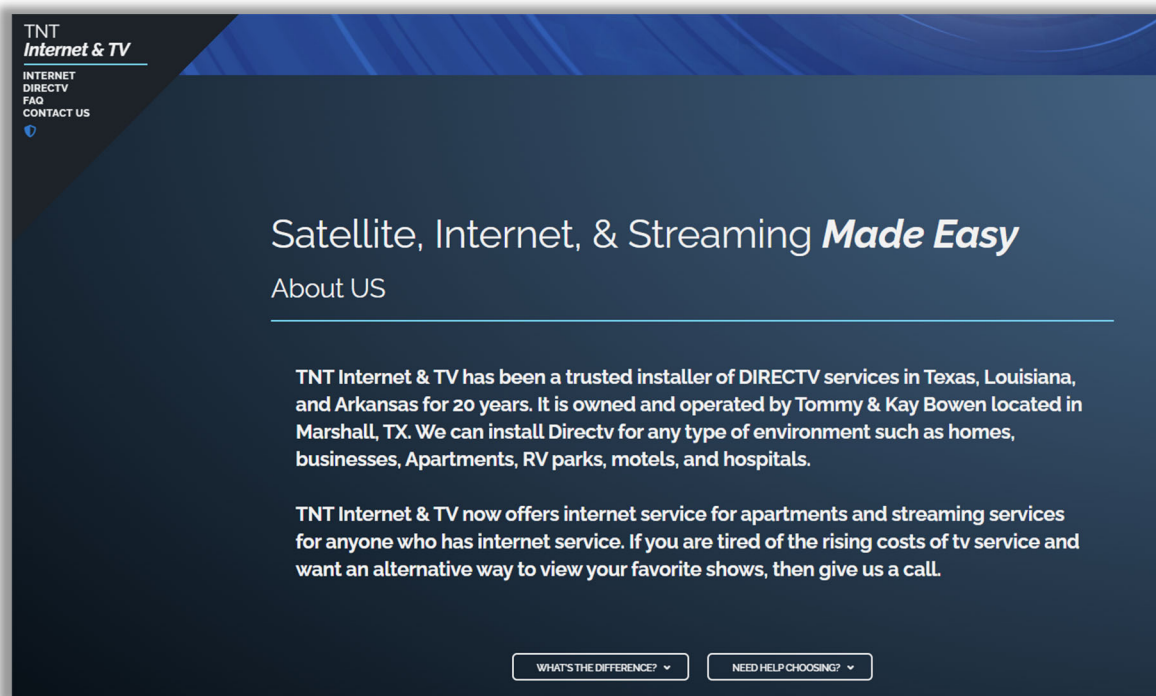
23. DirecTV, on information and belief, controls the aforementioned authorized dealers.

24. In order to become an authorized dealer, such dealers must go through an online application process and be qualified to properly represent the DirecTV brand.

25. An authorized dealer must regularly reapply and show that it continues to be an appropriate representative of the DirecTV and AT&T brands.

26. DirecTV regularly and consistently provides instruction concerning its products and services to authorized dealers in the district and send DirecTV employees including technicians and sales personnel to authorized dealers in this district, for example, to assist with marketing new products, to address technical issues, etc.

27. One of the many such dealers includes TNT Internet & TV, located in Marshall, Texas:





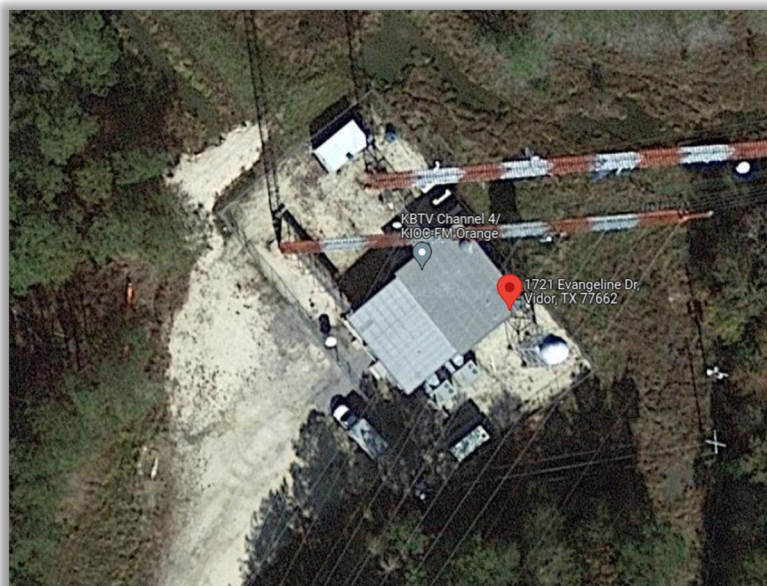
<https://tntsatelites.us/>.

28. DirecTV owns or leases, and maintains and operates several Local Receive Facilities (LRFs) in this district:

https://www.directv.com/DTVAPP/content/contact_us/local_receive_facilities

29. On information and belief, in each of those LRFs, DirecTV owns and stores equipment such as receivers and servers. Each of these LRFs are used to acquire and transmit local television channels over the DirecTV spectrum to DirecTV customers.

30. DirecTV operates LRFs at facilities located in this district at, at least, 1721 Evangeline Drive, Vidor, TX 77662; 10 High Point Circle, Denison, TX 75020; and 110 N. College Avenue, Tyler, TX 75702:



<https://www.google.com/maps/place/1721+Evangeline+Dr,+Vidor,+TX+77662/>



<https://www.google.com/maps/place/10+High+Point+Cir,+Denison,+TX+75020/>



<https://www.google.com/maps/place/110+N+College+Ave,+Tyler,+TX+75702/>

31. On information and belief, DirecTV employs personnel that service, repair and/or replace equipment associated with the LRFs, as appropriate, in this district.

32. AT&T offers its products via storefronts, for example, the AT&T Store at 8922 S Broadway Ave Ste. 112, Tyler, Texas 75703.

33. AT&T offers for sale and sells DirecTV products and services at the AT&T Store at 8922 S Broadway Ave Ste. 112, Tyler, Texas 75703.

34. AT&T personnel at stores in this district sign up prospective customers for DirecTV service and schedule home installation for those customers in AT&T stores.

35. A prospective DirecTV customer can sign up for two types of DirecTV products, the “standard satellite service and the new streaming service,” at the AT&T Store at 8922 S Broadway Ave Ste. 112, Tyler, Texas 75703.

36. A prospective DirecTV customer can sign up for service, schedule install, and complete the entire onboarding process right in the AT&T store at 8922 S Broadway Ave Ste. 112, Tyler, Texas 75703.

37. The following DirecTV literature is available to prospective DirecTV customers at the AT&T store in Tyler, Texas:

DIRECTV

PACKAGES & CHANNEL LINEUP

Effective 8/24/21

Package	Channel	ENTERTAINMENT	CHOICE*	ULTIMATE	PREMIER*
A Wealth of Entertainment	387	•	•	•	•
	A&E	•	•	•	•
	AAC Network	•	•	•	•
	AccuWeather	•	•	•	•
	ActionMAX HD	•	•	•	•
	A&C	•	•	•	•
	American Heroes Channel	•	•	•	•
	Animal Planet	•	•	•	•
	ASAP	•	•	•	•
	A&S TV	•	•	•	•
AutoFirst TV	•	•	•	•	
BBC America	•	•	•	•	
BBC World News HD	•	•	•	•	
BET	•	•	•	•	
BET HER	•	•	•	•	
BET West HD	•	•	•	•	
Big Ten Network	•	•	•	•	
Black News Channel HD	•	•	•	•	
Bloomberg TV	•	•	•	•	
Boomerang	•	•	•	•	
Bravo	•	•	•	•	
Bravo	•	•	•	•	
C-SPAN2	•	•	•	•	
Cartoon Network East	•	•	•	•	
Cartoon Network West	•	•	•	•	
CBS Sports Network	•	•	•	•	
Chadler News	•	•	•	•	
Cinemax	•	•	•	•	
Cinemax East	•	•	•	•	
Cinemax West	•	•	•	•	
Cine TV	•	•	•	•	
CMV	•	•	•	•	
CNBC	•	•	•	•	
CNBC World	•	•	•	•	
CNN	•	•	•	•	
CNN En Español	•	•	•	•	
CNN International	•	•	•	•	
Comedy Central	•	•	•	•	
Comedy Central West HD	•	•	•	•	
Cosmo TV	•	•	•	•	
Cooking Channel	•	•	•	•	
Cosmo Channel	•	•	•	•	
CSI	•	•	•	•	
Dastar	•	•	•	•	
Destination America	•	•	•	•	
DIRECTV HD SPORTSMIX	•	•	•	•	
Discovery	•	•	•	•	
Discovery Family Channel	•	•	•	•	
Discovery Life	•	•	•	•	
Discovery Science	•	•	•	•	
Discovery Wild	•	•	•	•	
Disney Junior	•	•	•	•	
Disney XD	•	•	•	•	
DT Network	•	•	•	•	
E!	•	•	•	•	
Entertainment	•	•	•	•	
ESPN	•	•	•	•	
ESPN2	•	•	•	•	
ESPN3	•	•	•	•	
ESPN4	•	•	•	•	
ESPN5	•	•	•	•	
ESPN6	•	•	•	•	
ESPN7	•	•	•	•	
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ESPN100	•	•	•	•	

DIRECTV

PACKAGES & CHANNEL LINEUP (CONTINUED)

Effective 8/24/21

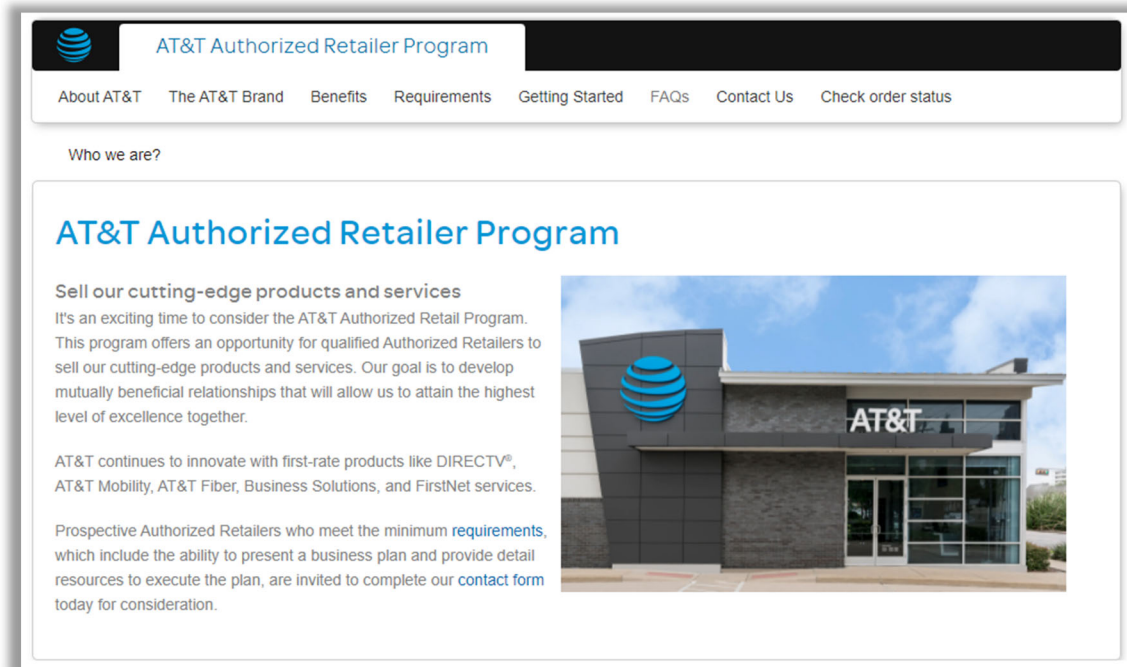
Package	Channel	ENTERTAINMENT	CHOICE*	ULTIMATE	PREMIER*
MOVIES	336	•	•	•	•
	337	•	•	•	•
	338	•	•	•	•
	339	•	•	•	•
	340	•	•	•	•
	341	•	•	•	•
	342	•	•	•	•
	343	•	•	•	•
	344	•	•	•	•
	345	•	•	•	•
MOVIES EXTRA PACK	371	•	•	•	•
	372	•	•	•	•
	373	•	•	•	•
	374	•	•	•	•
	375	•	•	•	•
	376	•	•	•	•
	377	•	•	•	•
	378	•	•	•	•
	379	•	•	•	•
	380	•	•	•	•
MOVIES EXTRA PACK (CONTINUED)	381	•	•	•	•
	382	•	•	•	•
	383	•	•	•	•
	384	•	•	•	•
	385	•	•	•	•
	386	•	•	•	•
	387	•	•	•	•
	388	•	•	•	•
	389	•	•	•	•
	390	•	•	•	•

39. On information and belief, AT&T has in the past offered for sale, sold, used, and distributed, as well as does offer for sale, sells, uses and distributes its infringing technology in this district, including DirecTV branded products, services, and systems.

40. On information and belief, AT&T has in the past leased, and does lease, the infringing technology, including in connection with product bundles of fiber internet products and satellite television equipment.

41. On information and belief, AT&T has in the past received, evaluated, and approved, and does receive, evaluate, and approve, applications to become an authorized dealer for DirecTV.

42. On information and belief, DirecTV does not have a separate web portal for authorized dealer applications and instead offers the application for authorized dealers through a web portal maintained by AT&T:



<https://www.att.com/att/newdealer/>.

43. The AT&T Authorized Retailer Program web portal touts AT&T’s “first-rate products like DIRECTV®.”

44. On information and belief, AT&T is responsible for evaluating and approving employment applications for employees of DirecTV:



AT&T will consider for employment qualified applicants in a manner consistent with the requirements of federal, state and local laws

<https://jobs.directv.com/job/dallas/principal-system-engineer/390/22390566240>.

45. On information and belief, AT&T owns all substantial rights, interest, and title in and to certain DirecTV trademarks.

46. For example, Trademark Registration No. 5835109 is a DirecTV trademark covering goods and services related to satellite dishes and installation for satellite dishes and lists the owner as AT&T Intellectual Property II, L.P.

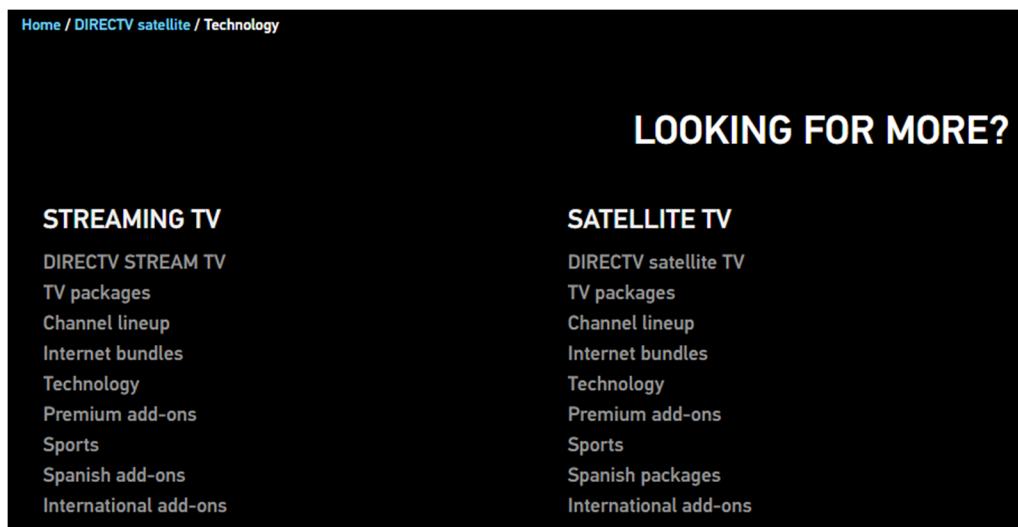
47. On information and belief, DirecTV and AT&T commingle leadership, office space, employees, products, and other operational resources and assets all within this district.

48. For example, numerous AT&T employees are on the Board of Directors for DirecTV.

49. On information and belief, various employees have shared responsibilities for both AT&T and DirecTV.

50. Moreover, on information and belief, DirecTV employees occupy offices at office spaces including in this district ostensibly owned or leased by AT&T.

51. In addition, AT&T and DirecTV bundle together services (e.g., satellite TV and internet) via DirecTV websites:



<https://www.directv.com/satellite/technology/>.

52. Clicking the “Internet bundles” link under “SATELLITE TV” on the <https://www.directv.com/satellite/technology/> website redirects customers to the following AT&T website: <https://www.att.com/bundles/directv-internet/>.

JURISDICTION AND VENUE

53. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because the claims herein arise under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, including 35 U.S.C. § 271.

54. This Court has personal jurisdiction over AT&T and DirecTV in this action because AT&T and DirecTV have committed acts of infringement within the State of Texas and within this district through, for example, the provision of satellite television services by both AT&T and DirecTV, utilizing devices provided by AT&T and DirecTV, as described in the counts herein (“Accused Satellite Television Services”).

55. The Accused Satellite Television Services are available for subscription online from the respective websites of both AT&T and DirecTV.

56. The Accused Satellite Television Services are also available for subscription from various physical stores, including AT&T Stores offering DirecTV branded products, services, and systems in this district, including at 1712 E Grand Ave, Marshall, Texas 75670.

57. The devices provided by AT&T and DirecTV to supply the Accused Satellite Television Services are provided to customers in this district and may be obtained by customers from physical locations in this district, including the AT&T Store at 1712 E Grand Ave, Marshall, Texas 75670.

58. DirecTV regularly transacts business in the State of Texas and within this district.

59. DirecTV engages in other persistent courses of conduct and derives substantial revenue from products and/or services provided in this district and in Texas, and has purposefully established substantial, systematic, and continuous contacts within this district and should reasonably expect to be sued in a court in this district.

60. For example, DirecTV regularly transacts business out of a store in this district and has a Texas registered agent for service.

61. DirecTV operates a website and various advertising campaigns that solicit customers to lease, buy, and use the Accused Satellite Television Services in this district and in Texas.

62. Given these contacts, the Court's exercise of jurisdiction over DirecTV will not offend traditional notions of fair play and substantial justice.

63. With respect to DirecTV, venue in the Eastern district of Texas is proper pursuant to 28 U.S.C. § 1400(b).

64. DirecTV has a regular and established place of business at the AT&T location located at 1712 E Grand Ave, Marshall, Texas 75670.

65. At the AT&T location at 1712 E Grand Ave, Marshall, Texas 75670, DirecTV sells and markets the Accused Satellite Television Services to customers in this district.

66. On information and belief, at the location at 1712 E Grand Ave, Marshall, Texas 75670, DirecTV provides pick-up service for the Accused Satellite Television Services to customers who have ordered the Accused Satellite Television Services online or over the phone.

67. DirecTV has additional regular and established places of business in this district, including in Tyler, Marshall, Longview, and Atlanta, Texas, where DirecTV sells and markets the Accused Satellite Television Services to customers in this district.

68. DirecTV has committed acts within this judicial district giving rise to this action at the stores in Tyler, Marshall, Longview, and Atlanta, Texas.

69. DirecTV targets its advertisements towards residents of this district.

70. DirecTV continues to conduct business in this judicial district, including one or more acts of making, selling, using, importing and/or offering for sale the Accused Satellite Television Services and providing support service to customers in this district.

71. AT&T is headquartered in the State of Texas and regularly transacts business within this district.

72. AT&T engages in other persistent courses of conduct and derives substantial revenue from products and/or services provided in this district and in Texas, and has purposefully established substantial, systematic, and continuous contacts within this district and should reasonably expect to be sued in a court in this district.

73. For example, AT&T regularly transacts business out of several stores in this district and has a Texas registered agent for service.

74. AT&T has numerous storefronts and corporate offices in this district.

75. AT&T operates a website and various advertising campaigns that solicit customers to lease, buy, and use the Accused Satellite Television Services in this district and in Texas.

76. Given these contacts, the Court's exercise of jurisdiction over AT&T will not offend traditional notions of fair play and substantial justice.

77. With respect to AT&T, venue in this district is proper pursuant to 28 U.S.C. § 1400(b).

78. AT&T has a regular and established place of business at 8922 S Broadway Ave Ste. 112, Tyler, Texas 75703.

79. AT&T also maintains locations in the following towns in this district: Anna, Athens, Beaumont, Bonham, Canton, Carthage, Center, Crockett, Gun Barrel City, Denison, Frisco, Gainesville, Henderson, Jackson, Kilgore, Liberty, Lindale, Longview, Lufkin, Lumberton, Marshall, McKinney, Mount Pleasant, Nacogdoches, Palestine, Port Arthur, Princeton, Propser, Sherman, Sulphur Springs, Texarkana, Tyler and West Orange, among others.

80. At the location at 8922 S Broadway Ave Ste. 112, Tyler, Texas 75703, AT&T sells and markets the Accused Satellite Television Services, as defined herein, to customers in this district.

81. At 8922 S Broadway Ave Ste. 112, Tyler, Texas 75703, and others in this district, AT&T has leased and leases the Accused Satellite Television Services bundled with its fiber internet products.

82. AT&T targets DirecTV advertisements towards residents of this district.

83. On information and belief, at the location at 8922 S Broadway Ave Ste. 112, Tyler, Texas 75703, AT&T provides pick-up service for the Accused Satellite Television Services to customers who have ordered their Accused Satellite Television Services online or over the phone.

84. AT&T has additional regular and established places of business in this district, including in Anna, Athens, Beaumont, Bonham, Canton, Carthage, Center, Crockett, Gun Barrel City, Denison, Frisco, Gainesville, Henderson, Jackson, Kilgore, Liberty, Lindale, Longview, Lufkin, Lumberton, Marshall, McKinney, Mount Pleasant, Nacogdoches, Palestine, Port Arthur, Princeton, Propser, Sherman, Sulphur Springs, Texarkana, Tyler and West Orange where AT&T offers to sell and sells the Accused Satellite Television Services to customers in this district.

85. AT&T continues to conduct business in this judicial district, including one or more acts of making, selling, using, importing or offering for sale Accused Satellite Television Services and providing support service to customers in this district.

THE PATENTS-IN-SUIT

86. On October 31, 2006, the '576 Patent, entitled "Signal Selector and Combiner for Broadband Content Distribution," was duly and legally issued by the United States Patent and Trademark Office.

87. On August 11, 2009, the United States Patent and Trademark Office issued a Reexamination Certification of the '576 Patent.

88. The '576 Patent was duly assigned to Entropic. A true and accurate copy of the '576 Patent is attached hereto as Exhibit A.

89. On June 2, 2009, the '715 Patent, entitled "Signal Selector and Combiner for Broadband Content Distribution," was duly and legally issued by the United States Patent and

Trademark Office. The '715 Patent was duly assigned to Entropic. A true and accurate copy of the '715 Patent is attached hereto as Exhibit B.

90. On July 29, 2014, the '008 Patent, entitled "Method and Apparatus for Spectrum Monitoring," was duly and legally issued by the United States Patent and Trademark Office. The '008 Patent was duly assigned to Entropic. A true and accurate copy of the '008 Patent is attached hereto as Exhibit C.

91. Entropic is the owner by assignment of all rights, title, and interest in the Patents-in-Suit.

ENTROPIC'S LEGACY AS A SATELLITE INNOVATOR

92. Entropic Communications Inc., the predecessor-in-interest to Entropic, was founded in San Diego, California in 2001 by Dr. Anton Monk, Itzhak Gurantz, Ladd El Wardani and others. Entropic Communications Inc. was instrumental in the development of the Multimedia over Coax Alliance ("MoCA") standard, Direct Broadcast Satellite ("DBS") Outdoor Unit ("ODU") single wire technology, and System-on-Chip ("SoC") solutions for set-top boxes ("STBs") in the home television and home video markets.

93. Dr. Monk received his Bachelor of Science degree and Doctorate in Electrical Engineering from the University of California San Diego and a Master of Science in Electrical Engineering from the California Institute of Technology.

94. Under the guidance of Dr. Monk, Entropic Communications Inc. grew to an eventual public listing on the NASDAQ in 2007. After the public listing, the company acquired RF Magic, Inc. in 2007, a company specializing in DBS ODU technology and hardware.

95. Additional growth between 2007 and 2015 bolstered the technical expertise of Entropic Communications Inc., including satellite signal acquisition, digital signal stacking, and signal distribution.

96. For years, Entropic Communications Inc. pioneered cutting edge DBS ODU technology. This technology simplified the installation required to support simultaneous reception of multiple channels from multiple satellites over a single cable. The company's DBS ODU products include various integrated circuits and SoCs for band translation switches, channel stacking switches, and digital channel stacking switches. The DBS ODU technology was deployed as an industry leading solution in global DBS operators, including AT&T and DirecTV.

97. In 2015, MaxLinear, Inc.—a leading provider of radio-frequency (RF), analog, digital, and mixed-signal semiconductor solutions—acquired Entropic Communications Inc. and the pioneering intellectual property developed by Dr. Monk and his team.

98. For years, satellite providers such as AT&T and DirecTV relied upon products produced in whole or in part by Entropic Communications Inc. (and later MaxLinear, Inc.) to enable their services for customers.

99. The Patents-in-Suit are the result of years of research and development in satellite and cable technology. These innovations have enabled AT&T and DirecTV to provide enhanced and expanded services to customers, which in turn has increased revenues for AT&T and DirecTV while at the same time reducing the costs.

FIRST CAUSE OF ACTION

(Infringement of the '576 Patent by AT&T and DirecTV)

100. Entropic incorporates by reference and realleges each and every allegation of Paragraphs 1 through 99 as if set forth herein.

101. Entropic owns all substantial rights, interest, and title in and to the '576 Patent, including the sole and exclusive right to prosecute this action and enforce the '576 Patent against infringers, and to collect damages for all relevant times.

102. An outdoor unit or "ODU" is typically located, as the name suggests, outside of a customer's home. For example, an ODU often includes a dish antenna, one or more feed horns, one or more low-noise block converters ("LNB" or "LNBF"), and one or more processing units. The processing units can be located within the ODU itself or in a multi-switch unit located between the ODU and devices within the customer's home. An ODU is generally responsible for receiving satellite broadband signals from one or more satellites, processing the received signals, and providing the processed signals to one or more devices, such as an integrated receiver decoder unit, located within the customer's home. These in-home devices can decode (or otherwise process) the signals received from the ODU. The in-home devices can output television programming to a customer's television and provide video recording functionality.

103. The '576 Patent generally describes the process of an ODU receiving satellite broadband signals, combining certain extracted signals into a composite signal, and transmitting that composite signal from the ODU to an integrated receiver decoder unit, without changing the modulation of the signal. This transmission historically required separate wires running from the ODU to each integrated receiver decoder unit. The '576 Patent provides the benefit of single wire transmission from the ODU to interior integrated receiver decoder units. AT&T and DirecTV implement this single wire transmission to provide the Accused Satellite Television Services by supplying and using, for example, signal selector and combiner ("SSC") products.

104. AT&T and DirecTV have used, sold, and offered for sale the Accused Satellite Television Services that utilize SSC devices, which include SSC-enabled LNBs (for example, SWM5-21 LNB and SWM-13 LNB) and switches (for example, SWM8, SWM16, and SWM30).

105. AT&T and DirecTV further have made, used, imported, supplied, distributed, sold, offered for sale, and leased SSC devices that perform the Accused Satellite Television Services.

106. AT&T and DirecTV directly infringe the method of at least Claim 14 of the '576 Patent during provision of the Accused Satellite Television Services by utilizing, for example, the SSC devices provided by AT&T and DirecTV.

107. The SSC devices remain the property of AT&T and DirecTV even when deployed at the property of a customer.

108. The Accused Satellite Television Services operate in a manner controlled and intended by AT&T and DirecTV.

109. AT&T and DirecTV have been and are aware of the '576 Patent.

110. As set forth in the attached non-limiting claim chart (Exhibit D), AT&T and DirecTV have directly infringed and are infringing at least Claim 14 of the '576 Patent by using, selling, and offering for sale the Accused Satellite Television Services.

111. Additionally, the use of the Accused Satellite Television Services by AT&T and DirecTV to, for example, demonstrate products in brick-and-mortar stores in Marshall, Texas or to, for example, test those products, constitute acts of direct infringement of at least Claim 14 of the '576 Patent.

112. These actions arise out of the same transaction, occurrence, or series of transactions or occurrences.

113. The '576 Patent is cited on the face of a number of DirecTV patents. These include U.S. Patent Nos. 8,997,157, 8,238,813, and 8,024,759. In U.S. Patent No. 8,024,759, the '576 Patent was explicitly used by the examiner in the first non-final office action rejecting the then-pending claims of DirecTV's patent application that led to U.S. Patent No. 8,024,759.

114. Entropic has been damaged as a result of the infringing conduct alleged above. AT&T and DirecTV are liable to Entropic in an amount that compensates Entropic for AT&T and DirecTV's infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

115. Entropic has complied with 35 U.S.C. § 287 with respect to the '576 Patent.

SECOND CAUSE OF ACTION

(Infringement of the '715 Patent by AT&T and DirecTV)

116. Entropic incorporates by reference and realleges each and every allegation of Paragraphs 1 through 115 as if set forth herein.

117. Entropic owns all substantial rights, interest, and title in and to the '715 Patent, including the sole and exclusive right to prosecute this action and enforce the '715 Patent against infringers, and to collect damages for all relevant times.

118. The '715 Patent generally describes a system that receives a plurality of channels from an LNB, a frequency translator that shifts channels to new carrier frequencies, a signal combiner capable of combining at least two signals to produce a composite signal having the same modulation as the LNB channels, where the composite signal is transmitted on a coax cable to a gateway (for example, HR54/Genie and HS17/Genie 2).

119. AT&T and DirecTV have used, sold, and offered for sale the Accused Satellite Television Services that utilize gateway systems, which include SSC-enabled LNBs (for example,

SWM5-21 LNB and SWM-13 LNB) and switches (for example, SWM8, SWM16, and SWM30) used with gateways such as the HR54/Genie and HS17/Genie 2.

120. AT&T and DirecTV further have made, used, imported, supplied, distributed, sold, offered for sale, and leased gateway systems that perform the Accused Satellite Television Services.

121. AT&T and DirecTV directly infringe at least Claim 9 of the '715 Patent during provision of the Accused Satellite Television Services by utilizing, for example, the gateway devices provided by AT&T and DirecTV.

122. The gateway systems remain the property of AT&T and DirecTV even when deployed at the property of a customer.

123. The Accused Satellite Television Services operate in a manner controlled and intended by AT&T and DirecTV.

124. AT&T and DirecTV have been and are aware of the '715 Patent.

125. As set forth in the attached non-limiting claim chart (Exhibit E), AT&T and DirecTV have directly infringed and are infringing at least Claim 9 of the '715 Patent by using, importing, selling, leasing, and offering for sale the Accused Satellite Television Services.

126. Additionally, the use of the Accused Satellite Television Services by AT&T and DirecTV to, for example, demonstrate products in brick-and-mortar stores in Marshall, Texas or to, for example, test those products, constitute acts of direct infringement of at least Claim 9 of the '715 Patent.

127. These actions arise out of the same transaction, occurrence, or series of transactions or occurrences.

128. The '715 Patent is cited on the face of a number of DirecTV patents. These patents include U.S. Patent Nos. 7,987,486, 8,238,813, and 8,789,115. In U.S. Patent No. 8,238,813, the '715 Patent was explicitly used by the examiner in the first non-final office action rejecting the then-pending claims of DirecTV's patent application that led to U.S. Patent No. 8,238,813.

129. Entropic has been damaged as a result of the infringing conduct alleged above. AT&T and DirecTV are liable to Entropic in an amount that compensates Entropic for AT&T and DirecTV's infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

130. Entropic has complied with 35 U.S.C. § 287 with respect to the '715 Patent.

THIRD CAUSE OF ACTION

(Infringement of the '008 Patent by AT&T and DirecTV)

131. Entropic incorporates by reference and realleges each and every allegation of Paragraphs 1 through 130 as if set forth herein.

132. Entropic owns all substantial rights, interest, and title in and to the '008 Patent, including the sole and exclusive right to prosecute this action and enforce the '008 Patent against infringers, and to collect damages for all relevant times.

133. The '008 Patent generally describes a system that receives a signal having a range of frequencies, the digitization of the received signal, and reporting of certain signal characteristics to the source of the received signal.

134. AT&T and DirecTV have used, sold, and offered for sale the Accused Satellite Television Services that utilize monitoring equipment, which include certain monitoring devices (for example, HR54/Genie and HS17/Genie 2).

135. AT&T and DirecTV further have made, used, imported, supplied, distributed, sold, offered for sale, and leased monitoring devices that perform the Accused Satellite Television Services.

136. AT&T and DirecTV directly infringe at least Claim 3 of the '008 Patent during provision of the Accused Satellite Television Services by utilizing, for example, the monitoring devices provided by AT&T and DirecTV.

137. The monitoring devices remain the property of AT&T and DirecTV even when deployed at the property of a customer.

138. The Accused Satellite Television Services operate in a manner controlled and intended by AT&T and DirecTV.

139. AT&T and DirecTV have been and are aware of the '008 Patent.

140. As set forth in the attached non-limiting claim chart (Exhibit F), AT&T and DirecTV have directly infringed and are infringing at least Claim 3 of the '008 Patent by using, importing, selling, leasing, and offering for sale the Accused Satellite Television Services.

141. Additionally, the use of the Accused Satellite Television Services by AT&T and DirecTV to, for example, demonstrate products in brick-and-mortar stores in Marshall, Texas or to, for example, test those products, constitute acts of direct infringement of at least Claim 3 of the '008 Patent.

142. These actions arise out of the same transaction, occurrence, or series of transactions or occurrences.

143. Entropic has been damaged as a result of the infringing conduct alleged above. AT&T and DirecTV are liable to Entropic in an amount that compensates Entropic for AT&T and

DirecTV's infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

144. Entropic has complied with 35 U.S.C. § 287 with respect to the '008 Patent.

JURY DEMAND

Entropic hereby requests a trial by jury on all issues so triable by right.

PRAYER FOR RELIEF

WHEREFORE, Entropic requests that:

- A. The Court find that AT&T and DirecTV have directly infringed the Patents-in-Suit and hold DirecTV liable for such infringement;
- B. The Court award damages pursuant to 35 U.S.C. § 284 adequate to compensate Entropic for past infringement by AT&T and DirecTV of the Patents-in-Suit, including both pre- and post-judgment interest and costs as fixed by the Court;
- C. The Court increase any award to Entropic by a judicially appropriate amount;
- D. The Court declare that this is an exceptional case entitling Entropic to its reasonable attorneys' fees under 35 U.S.C. § 285; and
- E. The Court award such other relief as the Court may deem just and proper.

Dated: March 8, 2022

Respectfully submitted,

/s/ James Shimota (by permission Wesley Hill)

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