

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

MAXELL, LTD.,

*Plaintiff,*

v.

HISENSE CO., LTD., HISENSE  
INTERNATIONAL CO. LTD., QINGDAO  
HISENSE ELECTRONICS CO., LTD.,  
GUIYANG HISENSE ELECTRONICS CO.,  
LTD., HISENSE INTERNATIONAL (HONG  
KONG) AMERICA INVESTMENTS, CO.,  
LTD., HISENSE INTERNATIONAL (HK)  
CO., LTD., HISENSE ELECTRONICA  
MEXICO S.A. de C.V.,

*Defendant.*

Civil Action No. \_\_\_\_\_

**COMPLAINT AND DEMAND  
FOR JURY TRIAL**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Maxell, Ltd. (“Maxell”), by and through its undersigned counsel, files this complaint under 35 U.S.C. § 271 for Patent Infringement against Defendants Hisense Co., Ltd., Hisense International Co., Ltd., Qingdao Hisense Electronics Co., Ltd., Guiyang Hisense Electronics Co., Ltd., Hisense International (Hong Kong) America Investments Co., Ltd., Hisense International (HK) Co., Ltd., and Hisense Electronica Mexico S.A. de C.V. (“Hisense”) and further alleges as follows, upon actual knowledge with respect to itself and its own acts, and upon information and belief as to all other matters.

**OVERVIEW**

1. This is an action for patent infringement by Maxell. Founded in 1961 as Maxell Electric Industrial Co., Ltd., Maxell is a leading global manufacturer of information storage

media products, including magnetic tapes, optical discs, and battery products such as lithium ion rechargeable micro batteries and alkaline dry batteries, and the company has over 50 years of experience producing industry-leading recordable media and energy products for both the consumer and the professional markets. Maxell is also a leading manufacturer of projectors and lenses and additionally sells various other devices, such as Bluetooth headsets, wireless charging solutions, etc.

2. Maxell has built up an international reputation for excellence and reliability, for pioneering the power supplies and digital recording for today's mobile and multi-media devices, and leading the electronics industry in the fields of storage media and batteries.

3. Since being one of the first companies to develop alkaline batteries and Blu Ray camcorder discs, Maxell has always assured its customers of industry leading product innovation and is one of the world's foremost suppliers of memory, power, audio, and visual goods.

4. As more fully described below, in 2009 Hitachi, Ltd. assigned much of its intellectual property to Hitachi Consumer Electronics Co., Ltd., along with a significant portion of its Consumer Business Group, including manufacturing and research and development capabilities of video equipment such as TVs and projectors. Then, in 2013, Hitachi Consumer Electronics Co., Ltd. assigned the intellectual property, including many of the patents in this case, along with the related manufacturing and research and development capabilities, to Hitachi Maxell, Ltd., which later assigned the assets to Maxell as a result of a reorganization and name change. This was an effort to align the intellectual property with the licensing, business development, research and development, and manufacturing efforts of Maxell, including in the mobile and mobile-media device market. Maxell continues to sell products in the mobile device market including wireless charging solutions, wireless flash drives, multimedia players, storage

devices, and headphones. Maxell also maintains intellectual property related to televisions, computer products, tablets, digital cameras, and mobile phones. As a technology developer and industry leader, and due to its historical and continuous investment in research and development, including in this District, Maxell owns a portfolio of patents related to such technologies and actively enforces its patents through licensing and/or litigation. Maxell is forced to bring this action against Hisense as a result of Hisense's knowing and ongoing infringement of Maxell's patents as further described herein.

5. Since at least 2009, Hisense has been aware of Maxell's patents and has had correspondence and interactions with Maxell's licensing agent regarding Hisense's infringement of these patents. This correspondence included Hisense's representatives being provided with detailed information regarding Maxell's patents, the developed technology, and Hisense's ongoing use of this patented technology. Through this process, Hisense's representatives requested and received detailed explanations regarding Maxell's patents and allegations. Maxell believed that the parties could reach a mutually beneficial solution and to that end Maxell's licensing agent considered a potential business transaction and continued to answer multiple inquiries from Hisense over the course of several years, including communicating with Hisense as recently as late 2019. Throughout this period, Hisense elected, however, not to enter into an agreement and did not license Maxell's patents. Instead, Hisense continued, and continues today, to make, use, sell and offer for sale Maxell's patented technology without license.

6. Since 2014, Maxell has had regular and continuous business in the Eastern District of Texas. As a result of such business dealings and hopes to expand those and other business dealings, a Maxell affiliate, Maxell Research and Development America, LLC ("MRDA"), was founded in Marshall, Texas. Maxell and MRDA have and continue to regularly

meet and work to expand the research and development activities, business, and investments being made by Maxell, MRDA, and their business partners in this District to further the goals of these companies.

### **PARTIES**

7. Plaintiff Maxell, Ltd. is a Japanese corporation with a registered place of business at 1 Koizumi, Oyamazaki, Oyamazaki-cho, Otokuni-gun, Kyoto, Japan.

8. On information and belief, Hisense Co., Ltd., is a corporation duly organized and existing under the laws of the People's Republic of China, having an address of Hisense Tower No. 17, Donghaixi Road, Qingdao, Shandong Province, 266071, P.R. China.

9. Hisense International Co., Ltd. is a corporation duly organized and existing under the laws of the People's Republic of China, with a principal place of business at Hisense Tower, No.17 Donghaixi Road, Qingdao, Shandong Province, 266071 P.R. China,

10. On information and belief, Qingdao Hisense Electric Co., Ltd., is a corporation duly organized and existing under the laws of the People's Republic of China, having an address of No. 218, Qianwangang Road, Economic and Technological Development Zone, Qingdao, Shandong Province, 266555 P.R. China, which formerly did business under the name Hisense Electric Co., Ltd.

11. On information and belief, Guiyang Hisense Electronics Co., Ltd., is a corporation duly organized and existing under the laws of the People's Republic of China, having an address of No. 39, Honghe Road, Economic Technology Development Zone, Guiyang, Guizhou 550006.

12. On information and belief, Hisense International (Hong Kong) America Investment Co., Ltd., is a corporation duly organized and existing under the laws of Hong Kong,

having an address of Room 3101-05, Singga Commercial Centre, No. 148 Connaught Road West, Sheung Wan, Hong Kong, which formerly did business under the name Hisense International America Holdings Co., Ltd.

13. Hisense International (HK) Co., Ltd. is a corporation duly organized and existing under the laws of Hong Kong, China, with a principal place of business at Rooms 3101-3105 Singga Commercial Centre, No. 148 Connaught Road West, Hong Kong, China.

14. Hisense Electronica Mexico S.A. de C.V. is a Corporation duly organized and existing under the laws of Mexico, with a principal place of business at Blvd. Sharp S/N, Amp Lucio Blanco, 22710 Rosarito, B.C., Mexico.

15. On information and belief, the Defendants identified in paragraphs 8-14 above (collectively, “Hisense”) are an interrelated group of companies which together comprise one of the world’s largest manufacturers of televisions and one of the leading sellers of televisions in the United States.

16. On information and belief, the Hisense defendants named above are part of the same corporate structure and distribution chain for the making, importing, offering to sell, selling, and using of the accused devices in the United States, including in the State of Texas generally and this judicial district in particular.

17. On information and belief, the Hisense defendants named above share the same management, common ownership, advertising platforms, facilities, distribution chains and platforms, and accused product lines and products involving related technologies.

**NATURE OF THE ACTION, JURISDICTION, AND VENUE**

18. Maxell brings this action for patent infringement under the patent laws of the United States, 35 U.S.C. § 271 *et seq.*

19. This Court has subject matter jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because the action arises under the patent laws of the United States.

20. The Court has personal jurisdiction over the Defendants because (1) Maxell's claims arise in whole or in part from Defendants' conduct in Texas; and (2) Defendants are subject to personal jurisdiction under the provisions of the Texas Long Arm Statute, TX CIV PRAC. & REM CODE §17.041 et seq., by virtue of the fact that, upon information and belief, Defendants have availed itself of the privilege of conducting and soliciting business within this State, including engaging in at least some of the infringing acts alleged herein through the sales and marketing of infringing products in this State. The allegations and claims set forth in this action arise out of Defendants' infringing activities in this State, as well as by others acting as Defendants' agents and/or representatives, such that it would be reasonable for this Court to exercise jurisdiction consistent with the principles underlying the U.S. Constitution, and would not offend traditional notions of fair play and substantial justice.

21. Upon further information and belief, Defendants have also established minimum contacts with this District and regularly transacts and does business within this District, including advertising, promoting and selling products over the internet, through intermediaries, representatives and/or agents located within this District, that infringe Maxell's patents, which products are then sold, packaged and shipped directly to citizens residing within this State and this District. Upon further information and belief, Defendants have purposefully directed activities at citizens of this State and located within this District.

22. On information and belief, Defendants have purposefully and voluntarily placed its products into the stream of commerce with the expectation that they will be purchased and

used by customers located in the State of Texas and the Eastern District of Texas. On information and belief, Defendants' customers in the Eastern District of Texas have purchased and used and continue to purchase and use Defendants' products.

23. On information and belief, Defendants have at least a significant role in placing the accused products in the stream of commerce in Texas and elsewhere in the United States. On information and belief, Defendants direct or control the making of the accused products and their shipment to the United States, using established distribution channels, for sale in Texas and elsewhere in the United States. On information and belief, Defendants direct or control the sale of the accused products into established United States distribution channels, including sales to nationwide retailers. On information and belief, Defendants' established United States distribution channels include one or more United States based affiliates. On information and belief, Defendants direct or control the sale of accused products in nationwide retailers such as Best Buy, Target, and Wal-mart, including for sale in Texas and elsewhere in the United States, and expect and intend that the accused products will be so sold.

24. Venue in the Eastern District of Texas is proper as to Defendant Hisense Co., Ltd., which is organized under the laws of China. Pursuant to 28 U.S.C. §§ 1391(c)(3), "a defendant not a resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants." Therefore, because, among other things, Defendant is not a resident in the United States, they may be sued in any Judicial District pursuant to 28 U.S.C. § 1391(c)(3).

25. Venue in the Eastern District of Texas is proper as to Defendant Hisense International Co., Ltd., which is organized under the laws of China. Pursuant to 28 U.S.C. §§

1391(c)(3), “a defendant not a resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants.” Therefore, because, among other things, Defendant is not a resident in the United States, they may be sued in any Judicial District pursuant to 28 U.S.C. § 1391(c)(3).

26. Venue in the Eastern District of Texas is proper as to Defendant Qingdao Hisense Electronics Co., Ltd., which is organized under the laws of China. Pursuant to 28 U.S.C. §§ 1391(c)(3), “a defendant not a resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants.” Therefore, because, among other things, Defendant is not a resident in the United States, they may be sued in any Judicial District pursuant to 28 U.S.C. § 1391(c)(3).

27. Venue in the Eastern District of Texas is proper as to Defendant Guiyang Hisense Electronics Co., Ltd., which is organized under the laws of China. Pursuant to 28 U.S.C. §§ 1391(c)(3), “a defendant not a resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants.” Therefore, because, among other things, Defendant is not a resident in the United States, they may be sued in any Judicial District pursuant to 28 U.S.C. § 1391(c)(3).

28. Venue in the Eastern District of Texas is proper as to Defendant Hisense International (Hong Kong) America Investments Co., Ltd., which is organized under the laws of Hong Kong. Pursuant to 28 U.S.C. §§ 1391(c)(3), “a defendant not a resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be



disregarded in determining where the action may be brought with respect to other defendants.” Therefore, because, among other things, Defendant is not a resident in the United States, they may be sued in any Judicial District pursuant to 28 U.S.C. § 1391(c)(3).

29. Venue in the Eastern District of Texas is proper as to Defendant Hisense International (HK) Co., Ltd., which is organized under the laws of Hong Kong. Pursuant to 28 U.S.C. §§ 1391(c)(3), “a defendant not a resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants.” Therefore, because, among other things, Defendant is not a resident in the United States, they may be sued in any Judicial District pursuant to 28 U.S.C. § 1391(c)(3).

30. Venue in the Eastern District of Texas is proper as to Defendant Hisense Electronica Mexico S.A. de C.V., which is organized under the laws of Mexico. Pursuant to 28 U.S.C. §§ 1391(c)(3), “a defendant not a resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants.” Therefore, because, among other things, Defendant is not a resident in the United States, they may be sued in any Judicial District pursuant to 28 U.S.C. § 1391(c)(3).

**COUNT 1 - INFRINGEMENT OF U.S. PATENT NO. 6,388,713**

31. Maxell incorporates paragraphs 1-30 above by reference.

32. U.S. Patent No. 6,388,713 (the “’713 Patent,” attached hereto at Exhibit 1) duly issued on May 14, 2002 and is entitled *Image Display Apparatus, And Method To Prevent Or Limit User Adjustment of Displayed Image Quality*.

33. Maxell is the owner by assignment of the '713 Patent and possesses all rights under the '713 Patent, including the exclusive right to recover for past and future infringement.

34. Hisense has directly infringed one or more claims of the '713 Patent in this District and elsewhere in Texas, including at least claims 1, 6-8, 13-15, and 20-21 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its televisions, including by way of example the Hisense Smart TV 55H9D+.

35. The Hisense Smart TV 55H9D+ is a television, which can display an image. The Hisense Smart TV 55H9D+ has a processor, which can display, for example, at least a broadcast program and a broadcast program together with information about the broadcast program. This is shown in the screenshot below from the Hisense Smart TV 55H9D+.



36. The Hisense Smart TV 55H9D+ also includes a detector, which detects a portion of the displayed broadcast image including the information image and outputs a signal based on the detected portion. The Hisense Smart TV 55H9D+ also includes a circuit to allow the user to adjust the quality of the displayed image for example, the contrast and brightness of the image. In addition, the Hisense Smart TV 55H9D+ prevents the user from adjusting the information image even when, for example, the brightness and contrast of the displayed image are adjusted by the user. This is shown below in screenshots from the Hisense Smart TV 55H9D+.



37. The foregoing features and capabilities of the Hisense Smart TV 55H9D+, and Hisense's description and/or demonstration thereof, including in user manuals and advertising, reflect Hisense's direct infringement by satisfying every element of at least claims 1, 6-8, 13-15, and 20-21 of the '713 Patent, under 35 U.S.C. § 271(a).

38. On information and belief, Hisense further infringes the '713 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Hisense Smart TV 55H9D+ (collectively, "the '713 Accused Products"). On information and belief, the '713 Accused Products include, for example, Hisense 120L10E,

100L10E, 65H8E, 55H8E, 65R7E, 55R7E, 50R7E, 43R7E, 50R7050E, 75R6E, 65R6E, 60R6E, 55R6E, 50R6E, 43R6E, 65H6E, 60H6E, 55H6E, 50H6E, 43H6E, 65H9100E+, 55H9100E+, 65H9E+, 55H9E+, 65H9E, 55H9E, 65H9080E, 55H9080E, 65H9050E, 55H9050E, 65H8C, 55H8C, 50H8C, 65H6D, 55H6D, 50H6D, 43H6D, 50H5E, 43H5E, 40H5E, 32H5E, 50H4D, 40H4D, 100H10D, 75H10D, H10D series, 65H9D+, 55H9D+, HD9 series, 65H9D, 55H9D, H9D series, 65H8050D, 55H8050D, 55H7D, 50H7D, 43H7D, 55R6D, R6D series, 50H5D, 43H5D, 40H5D, 39H5D, 43H3D, 40H3D, 32H3D, 40H4C1, 58H6550E, and R8D series. For example, each of these products also include a circuit for user adjustments of the displayed picture image without adjusting the information image. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '713 Accused Products are identified to describe Hisense's infringement and in no way limit the discovery and infringement allegations against Hisense concerning other devices that incorporate the same or reasonably similar functionalities.

39. Hisense has indirectly infringed at least claims 1, 6-8, 13-15, and 20-21 of the '713 Patent in this District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '713 Accused Products. Hisense's customers who purchase devices and components thereof and operate such devices and components in accordance with Hisense's instructions directly infringe one or more claims of the '713 Patent in violation of 35 U.S.C. § 271. Hisense instructs its customers through at least user guides or websites, such as those located at: <https://www.hisense-usa.com/televisions/all-tvs/>; <https://www.hisense-usa.com/televisions/>; <https://www.hisense-usa.com/televisions/smart-choices/>. Hisense is thereby liable for infringement of the '713 Patent pursuant to 35 U.S.C. § 271 (b).

40. Hisense has indirectly infringed at least claims 1, 6-8, 13-15, and 20-21 of the '713 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '713 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '713 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

41. For example, the '713 Accused Products include a processor with software for adjusting the contrast or brightness of the displayed image without adjusting the information image. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Hisense is liable for infringement of the '713 Patent pursuant to 35 U.S.C. § 271(c).

42. Hisense has been on notice of the '713 Patent since, at least, April 28, 2009. By the time of trial, Hisense will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 1, 6-8, 13-15, and 20-21 of the '713 Patent.

43. Hisense undertook and continued its infringing actions despite an objectively high likelihood that such activities infringed the '713 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since, at least April 28, 2009, Hisense has been aware of an objectively high likelihood that its actions constituted and continue to constitute

infringement of the '713 Patent, and that the '713 Patent is valid. On information and belief, Hisense could not reasonably, subjectively believe that its actions do not constitute infringement of the '713 Patent, nor could it reasonably, subjectively believe that the patent is invalid. As noted above in paragraphs 5 and 42, Hisense became aware of the '713 Patent and its infringement of the '713 Patent in communication with Maxell's licensing agent and had discussions, correspondence, and/or meetings thereafter regarding the '713 Patent. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Hisense has continued its infringing activities. As such, Hisense willfully infringes the '713 Patent.

44. Maxell has been damaged by Hisense's infringement of the '713 Patent.

**COUNT 2 - INFRINGEMENT OF U.S. PATENT NO. 6,037,995**

45. Maxell incorporates paragraphs 1-44 above by reference.

46. U.S. Patent No. 6,037,995 (the "'995 Patent," attached hereto at Exhibit 2) duly issued on March 14, 2000 and is entitled *Broadcasting And Communication Receiver Apparatus*.

47. Maxell is the owner by assignment of the '995 Patent and possesses all rights under the '995 Patent, including the exclusive right to recover for past and future infringement.

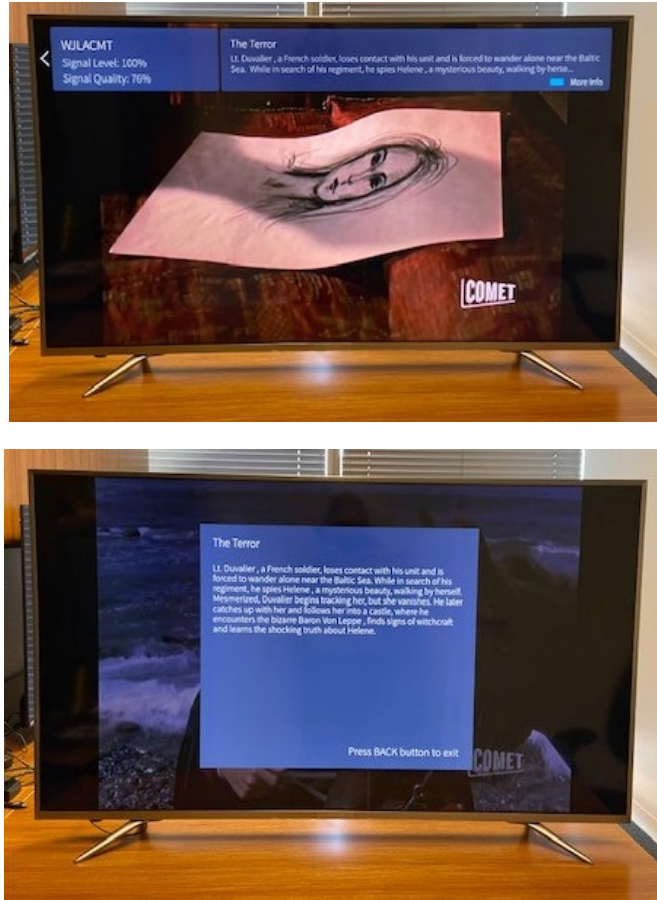
48. Hisense has directly infringed one or more claims of the '995 Patent in this District and elsewhere in Texas, including at least claims 1-3 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its televisions, including by way of example the Hisense Smart TV 55H9D+.

49. The Hisense Smart TV 55H9D+ is a television, which has a receiver for television signals transmitted in conformance with current digital broadcast standards. The Hisense Smart TV 55H9D+ has a tuner, which receives ATSC digital television signals including a title, a start

time, an end time and/or other program information of a broadcast program together with a video signal and an audio signal. The Hisense Smart TV 55H9D+ has a decoder for decoding the program information and a display for displaying the information. The Hisense Smart TV 55H9D+ includes a receiver for receiving an input signal from a remote controller and a display controller for controlling the display screen based on the input signal. The display on the Hisense Smart TV 55H9D+ has a first display zone, which displays various program information. The Hisense Smart TV 55H9D+ has a quantity comparator, which compares the size of the first display zone with the amount of data to be displayed. When the amount of data needed to contain program information cannot fit in the first display zone, the display screen shows an ellipsis symbol indicative of the omission of the data that cannot fit. This is shown below in screenshots from the Hisense Smart TV 55H9D+.







50. The foregoing features and capabilities of the Hisense Smart TV 55H9D+, and Hisense's description and/or demonstration thereof, including in user manuals and advertising, reflect Hisense's direct infringement by satisfying every element of at least claims 1-3 of the '995 Patent, under 35 U.S.C. § 271(a).

51. On information and belief, Hisense further infringes the '995 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Hisense Smart TV 55H9D+ (collectively, "the '995 Accused Products"). On information and belief, the '995 Accused Products include, for example, Hisense 65H8C, 55H8C, 50H8C, 65H6D, 55H6D, 50H6D, 43H6D, 50H4D, 40H4D, 100H10D, 75H10D, H10D series, 65H9D+, 55H9D+, H9D+ series, 65H9D, 55H9D, H9D series, 65H8050D, 55H8050D, 55H7D, 50H7D, 43H7D, 55R6D, R6D series, 50H5D, 43H5D, 40H5D, 39H5D, 43H3D,



40H3D, 32H3D, 40H4C1, 58H6550E, and R8D series. For example, each of these products also include a quantity comparator, which compares the size of the first display zone with the amount of data to be displayed. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '995 Accused Products are identified to describe Hisense's infringement and in no way limit the discovery and infringement allegations against Hisense concerning other devices that incorporate the same or reasonably similar functionalities.

52. Hisense has indirectly infringed at least claims 1-3 of the '995 Patent in this District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '995 Accused Products. Hisense's customers who purchase devices and components thereof and operate such devices and components in accordance with Hisense's instructions directly infringe one or more claims of the '995 Patent in violation of 35 U.S.C. § 271. Hisense instructs its customers through at least user guides or websites, such as those located at: <https://www.hisense-usa.com/televisions/all-tvs/>; <https://www.hisense-usa.com/televisions/>; <https://www.hisense-usa.com/televisions/smart-choices/>. Hisense is thereby liable for infringement of the '995 Patent pursuant to 35 U.S.C. § 271 (b).

53. Hisense has indirectly infringed at least claims 1-3 of the '995 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '995 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to

be especially made or especially adapted for use in infringement of the '995 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

54. For example, the '995 Accused Products include a quantity comparator, which compares the size of the first display zone with the amount of data to be displayed. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Hisense is liable for infringement of the '995 Patent pursuant to 35 U.S.C. § 271(c).

55. Hisense has been on notice of the '995 Patent since, at least, April 28, 2009. By the time of trial, Hisense will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 1-3 of the '995 Patent.

56. Hisense undertook and continued its infringing actions despite an objectively high likelihood that such activities infringed the '995 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since, at least April 28, 2009, Hisense has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '995 Patent, and that the '995 Patent is valid. On information and belief, Hisense could not reasonably, subjectively believe that its actions do not constitute infringement of the '995 Patent, nor could it reasonably, subjectively believe that the patent is invalid. As noted above in paragraphs 5 and 55, Hisense became aware of the '995 Patent and its infringement of the '995 Patent in communication with Maxell's licensing agent and had discussions, correspondence, and/or meetings thereafter regarding the '995 Patent. Despite that

knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Hisense has continued its infringing activities. As such, Hisense willfully infringes the '995 Patent.

57. Maxell has been damaged by Hisense's infringement of the '995 Patent.

**COUNT 3 - INFRINGEMENT OF U.S. PATENT NO. 9,578,369**

58. Maxell incorporates paragraphs 1-57 above by reference.

59. U.S. Patent No. 9,578,369 (the "'369 Patent," attached hereto at Exhibit 3) duly issued on February 21, 2017 and is entitled *Portable Terminal, Information Processing Apparatus, Content Display System and Content Display Method*.

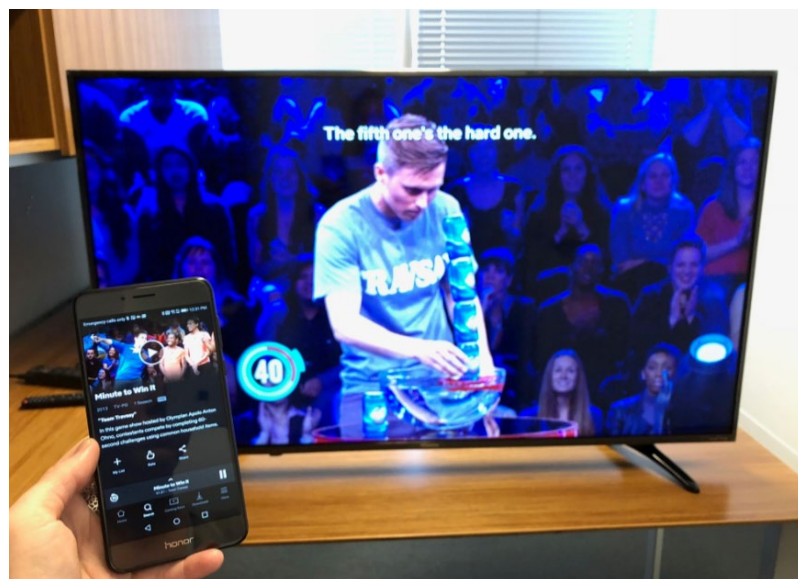
60. Maxell is the owner by assignment of the '369 Patent and possesses all rights under the '369 Patent, including the exclusive right to recover for past and future infringement.

61. Hisense has directly infringed one or more claims of the '369 Patent in this District and elsewhere in Texas, including at least claims 1, 2, 10, and 11 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its televisions, including by way of example the Hisense Smart TV 55H8E.

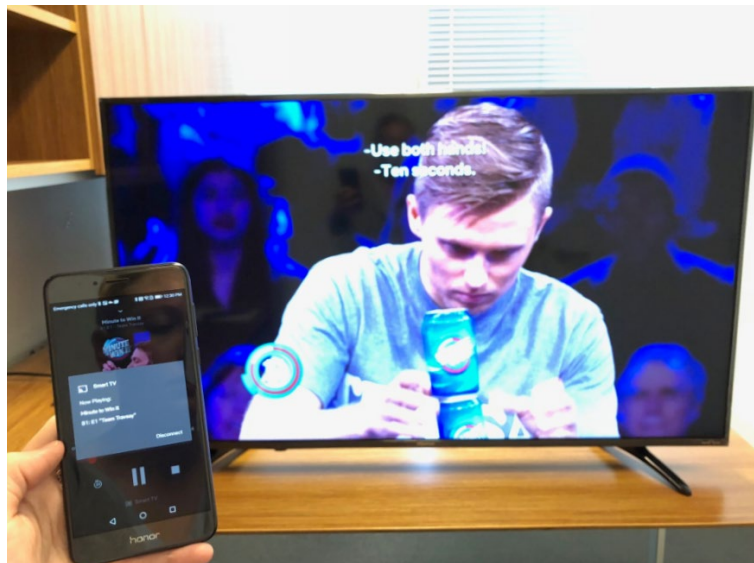
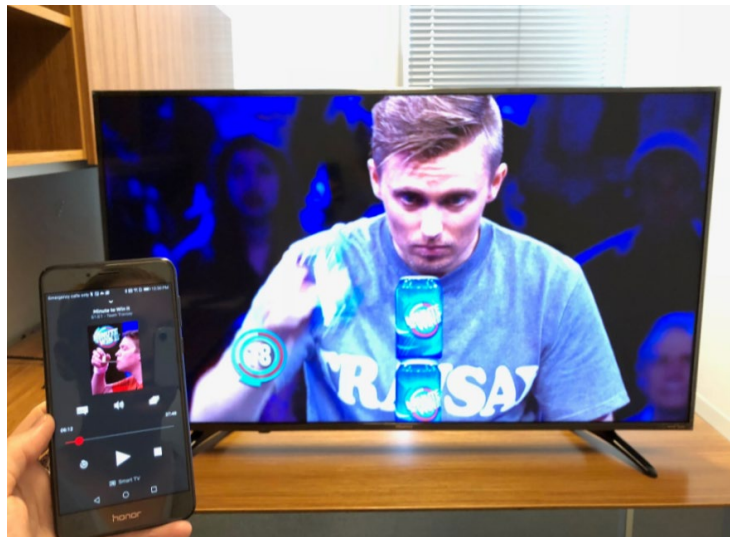
62. The Hisense Smart TV 55H8E is a television with a display, which can connect to a wireless network to access the internet through its wireless adapter and can receive content through its applications. It can also display broadcast television. The photograph below shows the Hisense Smart TV 55H8E displaying broadcast television.



63. The Hisense Smart TV 55H8E is equipped with a network interface allowing it to communicate with other devices on the same network, such as WiFi enabled mobile terminals such as smartphones. The Hisense Smart TV 55H8E has a controller for controlling the display unit to display video content, for example, broadcast television. The controller can also terminate displaying the broadcast television and start displaying content acquired from the internet when a communication is conducted between a mobile terminal playing the internet content and the Hisense Smart TV 55H8E. This is shown in the screenshots below from the Hisense Smart TV 55H8E.



64. The internet content displayed on the Hisense Smart TV 55H8E can also be controlled by the mobile terminal. The Hisense Smart TV 55H8E can also be controlled by the mobile terminal to terminate displaying the video content. This is shown in the screenshots below from the Hisense Smart TV 55H8E.



65. The foregoing features and capabilities of the Hisense Smart TV 55H8E, and Hisense's description and/or demonstration thereof, including in user manuals and advertising,

reflect Hisense's direct infringement by satisfying every element of at least claims 1, 2, 10, and 11 of the '369 Patent, under 35 U.S.C. § 271(a).

66. On information and belief, Hisense further infringes the '369 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Hisense Smart TV 55H8E (collectively, "the '369 Accused Products"). On information and belief, the '369 Accused Products include, for example, Hisense 120L10E, 100L10E, 65H9F, 55H9F, 65H6500F, 58H6550F, 55H6500F, 65H8F, 55H8F, 50H8F, 65H8E, 55H8E, 100H10D, 75H10D, H10D series, 65H9D+, 55H9D+, H9D+ series, 65H9D, 55H9D, H9D series, 65R7E, 55R7E, 50R7E, 43R7E, 50R7050E, 75R6E, 65R6E, 60R6E, 55R6E, 50R6E, 43R6E, 65H6E, 60H6E, 55H6E, 50H6E, 43H6E, 40H4F, 32H4F, 43H4030F, 40H4030F, 32H4030F, 40F3100, 32F3100, 65H9100E+, 55H9100E+, 65H9E+, 55H9E+, 65H9E, 55H9E, 65H9080E, 55H9080E, 65H9050E, 55H9050E, 65H8C, 55H8C, 50H8C, 65H6D, 55H6D, 50H6D, 43H6D, 50H5E, 43H5E, 40H5E, 32H5E, 50H4D, 40H4D, 65H8050D, 55H8050D, H8D series, 55H7D, 50H7D, 43H7D, H7D series, 55R6D, R6D series, 50H5D, 43H5D, 40H5D, 39H5D, 43H3D, 40H3D, 32H3D, 40H4C1, 58H6550E, and R8D series. For example, each of these products are also equipped with a network interface allowing it to communicate with other devices on the same network, such as WiFi enabled mobile terminals such as smartphones to cast content from the phone to the television. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '369 Accused Products are identified to describe Hisense's infringement and in no way limit the discovery and infringement allegations against Hisense concerning other devices that incorporate the same or reasonably similar functionalities.



67. Hisense has indirectly infringed at least claims 1, 2, 10, and 11 of the '369 Patent in this District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '369 Accused Products. Hisense's customers who purchase devices and components thereof and operate such devices and components in accordance with Hisense's instructions directly infringe one or more claims of the '369 Patent in violation of 35 U.S.C. § 271. Hisense instructs its customers through at least user guides or websites, such as those located at: <https://www.hisense-usa.com/televisions/all-tvs/>; <https://www.hisense-usa.com/televisions/>; <https://www.hisense-usa.com/televisions/smart-choices/>. Hisense is thereby liable for infringement of the '369 Patent pursuant to 35 U.S.C. § 271 (b).

68. Hisense has indirectly infringed at least claims 1, 2, 10, and 11 of the '369 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '369 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '369 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

69. For example, the '369 Accused Products include a processor with software for conducting communication with a mobile terminal to cast the video content from the mobile terminal to the accused product. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple



article or commodity of commerce suitable for substantial non-infringing use. Thus, Hisense is liable for infringement of the '369 Patent pursuant to 35 U.S.C. § 271(c).

70. Hisense has been on notice of the '369 Patent since, at least, October 19, 2017. By the time of trial, Hisense will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 1, 2, 10, and 11 of the '369 Patent.

71. Hisense undertook and continued its infringing actions despite an objectively high likelihood that such activities infringed the '369 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since, at least October 19, 2017, Hisense has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '369 Patent, and that the '369 Patent is valid. On information and belief, Hisense could not reasonably, subjectively believe that its actions do not constitute infringement of the '369 Patent, nor could it reasonably, subjectively believe that the patent is invalid. As noted above in paragraphs 5 and 70, Hisense became aware of the '369 Patent and its infringement of the '369 Patent in communication with Maxell's licensing agent and had discussions, correspondence, and/or meetings thereafter regarding the '369 Patent. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Hisense has continued its infringing activities. As such, Hisense willfully infringes the '369 Patent.

72. Maxell has been damaged by Hisense's infringement of the '369 Patent.

**COUNT 4 - INFRINGEMENT OF U.S. PATENT NO. 10,327,029**

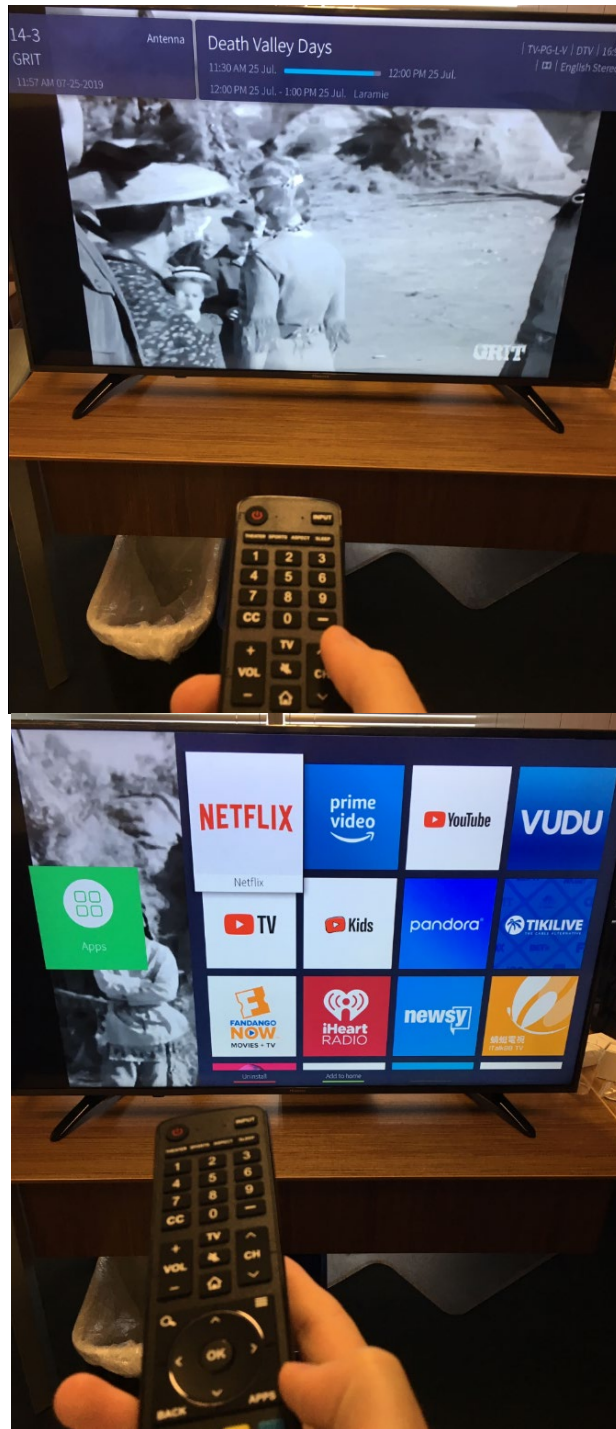
73. Maxell incorporates paragraphs 1-72 above by reference.

74. U.S. Patent No. 10,327,029 (the “’029 Patent,” attached hereto at Exhibit 4) duly issued on June 18, 2019 and is entitled *Portable Terminal, Information Processing Apparatus, Content Display System and Content Display Method*.

75. Maxell is the owner by assignment of the ’029 Patent and possesses all rights under the ’029 Patent, including the exclusive right to recover for past and future infringement.

76. Hisense has directly infringed one or more claims of the ’029 Patent in this District and elsewhere in Texas, including at least claims 1, 8, 15, and 23 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its televisions, including by way of example the Hisense Smart TV 55H8E.

77. The Hisense Smart TV 55H8E is a television that can connect to an antenna or satellite to display contents acquired via the television broadcast. It can connect to the internet through its wireless adapter to display content via the internet. The Hisense Smart TV 55H8E has a remote controller that can control the television through infrared ray or Bluetooth connection and provides a way to turn on the TV, to change channels, and to navigate the applications. This is shown in the screenshots below from the Hisense Smart TV 55H8E.



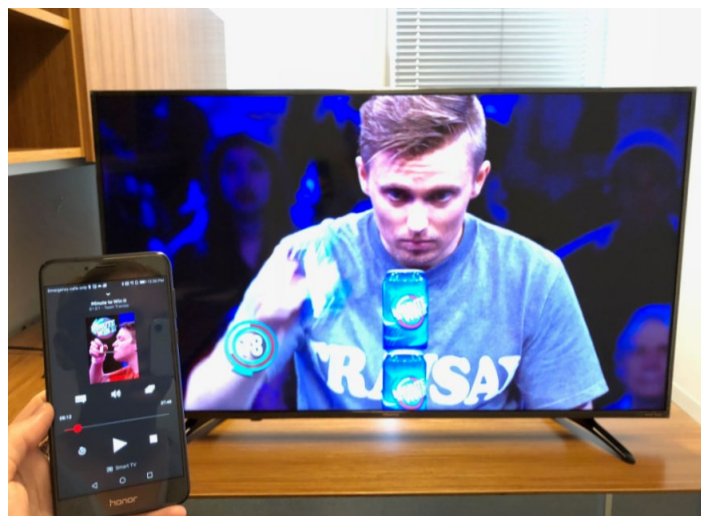
78. The Hisense Smart TV 55H8E is equipped with a network interface allowing it to communicate with other devices on the same network, such as WiFi enabled mobile terminals like a smartphone. The Hisense Smart TV 55H8E is equipped with a controller for controlling the display in response to input from the remote controller for example, to display broadcast

television. The controller can also terminate display of the broadcast television and start display of internet content from a mobile terminal such as a smartphone without input from the remote controller. This is shown in the screenshots below from the Hisense Smart TV 55H8E.

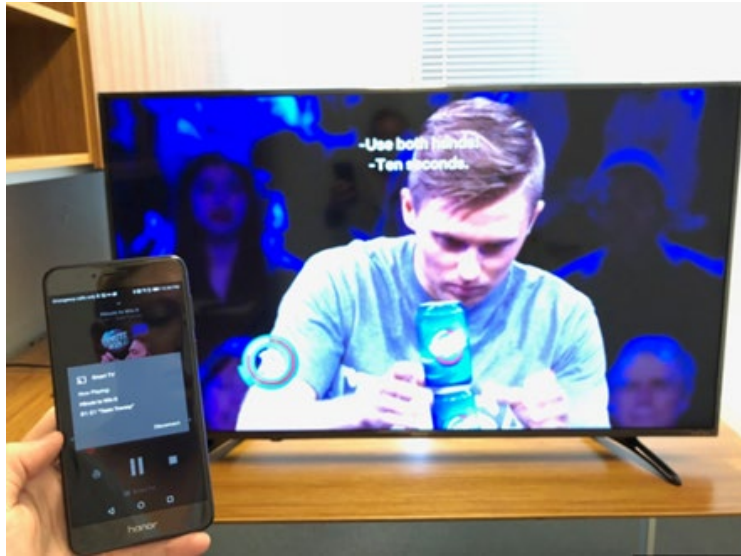




79. The internet content displayed on the Hisense Smart TV 55H8E can also be controlled by the mobile terminal. The display of the internet content can also be terminated by reception of information from the mobile terminal. The Hisense Smart TV 55H8E also has a memory configured to store a number of applications that are used to display and control casted video content. This is shown in the screenshots below from the Hisense Smart TV 55H8E.







80. The foregoing features and capabilities of the Hisense Smart TV 55H8E, and Hisense's description and/or demonstration thereof, including in user manuals and advertising, reflect Hisense's direct infringement by satisfying every element of at least claims 1, 8, 15, and 23 of the '029 Patent, under 35 U.S.C. § 271(a).

81. On information and belief, Hisense further infringes the '029 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Hisense Smart TV 55H8E (collectively, "the '029 Accused Products"). On information and belief, the '029 Accused Products include, for example, Hisense 120L10E, 100L10E, 65H9F, 55H9F, 65H6500F, 58H6550F, 55H6500F, 65H8F, 55H8F, 50H8F, 65H8E, 55H8E, 65R7E, 55R7E, 50R7E, 43R7E, 50R7050E, 75R6E, 65R6E, 60R6E, 55R6E, 50R6E, 43R6E, 65H6E, 60H6E, 55H6E, 50H6E, 43H6E, 40H4F, 32H4F, 43H4030F, 40H4030F, 32H4030F, 40F3100, 32F3100, 65H9100E+, 55H9100E+, 65H9E+, 55H9E+, 65H9E, 55H9E, 65H9080E, 55H9080E, 65H9050E, 55H9050E, 65H8C, 55H8C, 50H8C, 65H6D, 55H6D, 50H6D, 43H6D, 50H5E, 43H5E, 40H5E, 32H5E, 50H4D, 40H4D, 65H8050D, 55H8050D, H8D series, 55H7D, 50H7D, 43H7D, H7D series, 55R6D, R6D series, 50H5D, 43H5D, 40H5D, 39H5D, 43H3D, 40H3D, 32H3D, 58H6550E, 100H10D, 75H10D, H10D series, 65H9D+,

55H9D+, H9D+ series, 65H9D, 55H9D, H9D series, R8D series, and 40H4C1. For example, each of these products are also equipped with a network interface allowing it to communicate with other devices on the same network, such as WiFi enabled mobile terminals such as smartphones to cast content from the phone to the television without input from the remote controller. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '029 Accused Products are identified to describe Hisense's infringement and in no way limit the discovery and infringement allegations against Hisense concerning other devices that incorporate the same or reasonably similar functionalities.

82. Hisense has indirectly infringed at least claims 1, 8, 15, and 23 of the '029 Patent in this District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '029 Accused Products. Hisense's customers who purchase devices and components thereof and operate such devices and components in accordance with Hisense's instructions directly infringe one or more claims of the '029 Patent in violation of 35 U.S.C. § 271. Hisense instructs its customers through at least user guides or websites, such as those located at: <https://www.hisense-usa.com/televisions/all-tvs/>; <https://www.hisense-usa.com/televisions/>; <https://www.hisense-usa.com/televisions/smart-choices/>. Hisense is thereby liable for infringement of the '029 Patent pursuant to 35 U.S.C. § 271 (b).

83. Hisense has indirectly infringed at least claims 1, 8, 15, and 23 of the '029 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '029 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for

use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '029 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

84. For example, the '029 Accused Products include a processor with software for conducting communication with a mobile terminal to cast the video content from the mobile terminal to the accused products without input from the remote controller. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Hisense is liable for infringement of the '029 Patent pursuant to 35 U.S.C. § 271(c).

85. Defendant has been on notice of the '029 Patent since at the latest, the service of this complaint. By the time of trial, Defendant will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 1, 8, 15, and 23 of the '029 Patent.

86. Defendant undertook and continues its infringing actions despite an objectively high likelihood that such activities infringed the '029 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendant has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '029 Patent, and that the '029 Patent is valid. On information and belief, Defendant could not reasonably, subjectively believe that its actions do not constitute infringement of the '029 Patent, nor could it reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high



likelihood that its actions constitute infringement, Defendant has continued its infringing activities. As such, Defendant willfully infringes the '029 Patent.

87. Maxell has been damaged by Hisense's infringement of the '029 Patent.

**COUNT 5 - INFRINGEMENT OF U.S. PATENT NO. 10,375,341**

88. Maxell incorporates paragraphs 1-87 above by reference.

89. U.S. Patent No. 10,375,341 (the "'341 Patent," attached hereto at Exhibit 5) duly issued on August 6, 2019 and is entitled *Video Display Apparatus And Terminal Apparatus*.

90. Maxell is the owner by assignment of the '341 Patent and possesses all rights under the '341 Patent, including the exclusive right to recover for past and future infringement.

91. Hisense has directly infringed one or more claims of the '341 Patent in this District and elsewhere in Texas, including at least claim 3 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its televisions, including by way of example the Hisense Smart TV 55H8E.

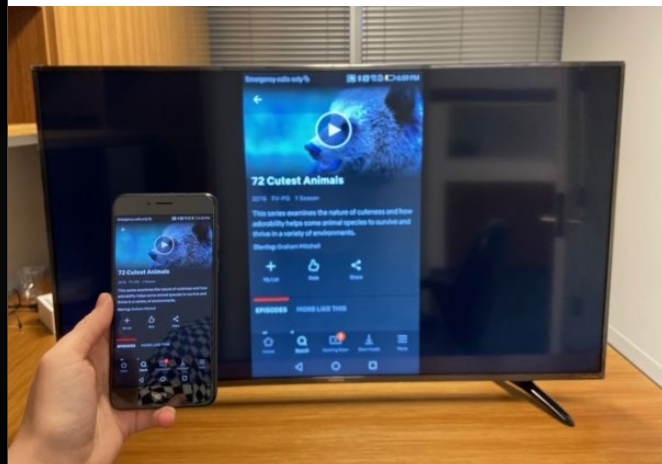
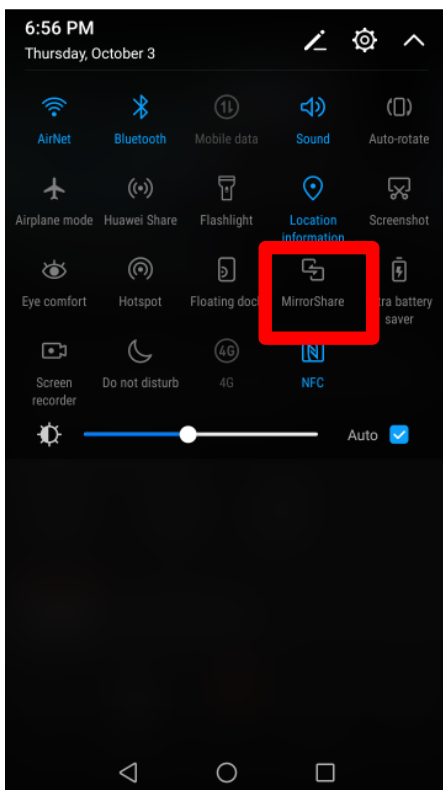
92. The Hisense Smart TV 55H8E is a television that can connect to an antenna or satellite to display contents acquired via the television broadcast and can connect to the internet through its wireless adapter to display contents via the internet. The Hisense Smart TV 55H8E has a physical remote controller that can control the television through an infrared ray. The screenshots below of the Hisense Smart TV 55H8E show broadcast content and content acquired via the internet.



| TYPE OF TV    |   |
|---------------|---|
| Smart TV      | Yes                                       |
| Built-in Apps | Yes (Netflix, Pandora and more)           |
| Web Browser   | Yes                                       |
| CONNECTIVITY  |   |
| WiFi Built in | Yes, 802.11 n/ac<br>Dual Band (2.4/5 GHz) |
| Ethernet      | Yes                                       |
| Bluetooth®    | Yes                                       |

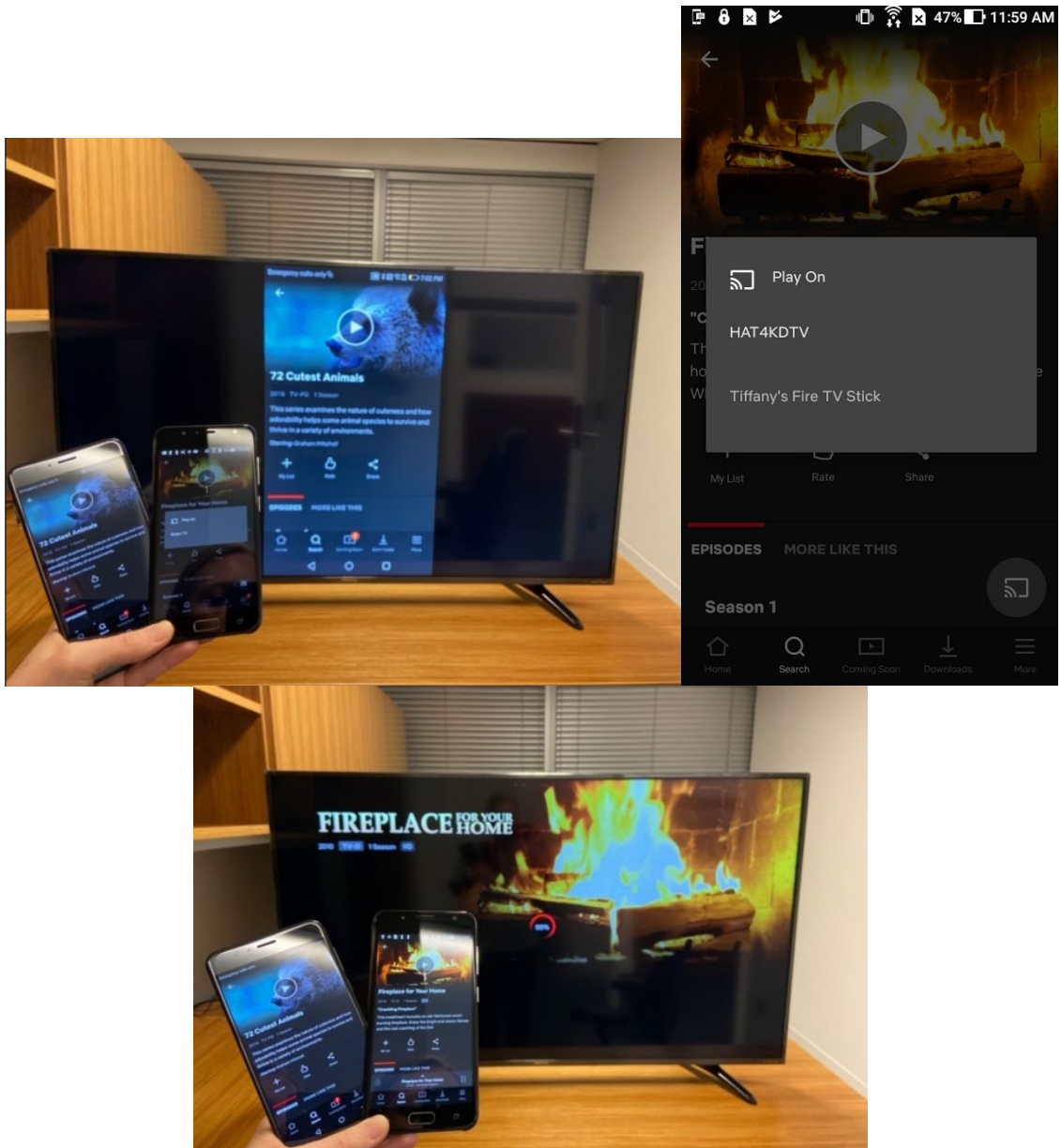
(Hisense 55H8E Specification Sheet, at 1-2)

93. The Hisense Smart TV 55H8E is equipped with a mirroring functionality, allowing it to communicate directly with a wireless terminal such as a smartphone, for example via WiFi Direct. This is shown in the screenshots below of the Hisense Smart TV 55H8E.



94. The Hisense Smart TV 55H8E is equipped with a network interface allowing it to communicate with other devices on the same network, such as WiFi-enabled smartphone devices. This communication via a router may occur, for example, via the DIAL protocol. For example, when a second smartphone establishes a connection with the Hisense Smart TV 55H8E via WiFi using the DIAL protocol, the screen mirroring connection previously established

between the first smartphone and the Hisense Smart TV 55H8E terminates, and the second video content casted from the second smartphone starts displaying on the Hisense Smart TV 55H8E. During this process, the Hisense Smart TV 55H8E sends a termination notification to the first smartphone. This is shown in the screenshots below of the Hisense Smart TV 55H8E.





95. In addition, when a user operates the remote controller to change the video content transmitted from the second video content to another video content, the connection established between the second smartphone and Hisense Smart TV 55H8E via the DIAL protocol terminates, and the video content selected by the remote controller starts displaying on the Hisense Smart TV 55H8E. During this process, the Hisense Smart TV 55H8E sends a termination notification to the second smartphone. This is shown in the screenshots below of the Hisense Smart TV 55H8E.







96. The foregoing features and capabilities of the Hisense Smart TV 55H8E, and Hisense's description and/or demonstration thereof, including in user manuals and advertising, reflect Hisense's direct infringement by satisfying every element of at least claim 3 of the '341 Patent, under 35 U.S.C. § 271(a).

97. On information and belief, Hisense further infringes the '341 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Hisense Smart TV 55H8E (collectively, "the '341 Accused Products"). On information and belief, the '341 Accused Products include, for example, Hisense 120L10E, 100L10E, 65H9F, 55H9F, 65H6500F, 58H6550F, 55H6500F, 65H8F, 55H8F, 50H8F, 65H8E, 55H8E, 100H10D, 75H10D, H10D series, 65H9D+, 55H9D+, H9D+ series, 65H9D, 55H9D, H9D series, 65R7E, 55R7E, 50R7E, 43R7E, 50R7050E, 75R6E, 65R6E, 60R6E, 55R6E, 50R6E, 43R6E, 65H6E, 60H6E, 55H6E, 50H6E, 43H6E, 40H4F, 32H4F, 43H4030F, 40H4030F, 32H4030F, 40F3100, 32F3100, 65H9100E+, 55H9100E+, 65H9E+, 55H9E+, 65H9E, 55H9E, 65H9080E, 55H9080E, 65H9050E, 55H9050E, 65H8C, 55H8C, 50H8C, 65H6D, 55H6D, 50H6D, 43H6D, 50H5E, 43H5E, 40H5E, 32H5E, 50H4D, 40H4D, 65H8050D, 55H8050D,

H8D series, 55H7D, 50H7D, 43H7D, H7D series, 55R6D, R6D series, 50H5D, 43H5D, 40H5D, 39H5D, 43H3D, 40H3D, 32H3D, 58H6550E, R8D series, and 40H4C1. For example, each of these products is also equipped with a mirroring functionality, allowing it to communicate directly with a wireless terminal such as a smartphone and with a network interface allowing it to communicate with other devices on the same network, such as WiFi-enabled smartphone devices to receive and display video content. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '341 Accused Products are identified to describe Hisense's infringement and in no way limit the discovery and infringement allegations against Hisense concerning other devices that incorporate the same or reasonably similar functionalities.

98. Hisense has indirectly infringed at least claim 3 of the '341 Patent in this District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '341 Accused Products. Hisense's customers who purchase devices and components thereof and operate such devices and components in accordance with Hisense's instructions directly infringe one or more claims of the '341 Patent in violation of 35 U.S.C. § 271. Hisense instructs its customers through at least user guides or websites, such as those located at: <https://www.hisense-usa.com/televisions/all-tvs/>; <https://www.hisense-usa.com/televisions/>; <https://www.hisense-usa.com/televisions/smart-choices/>. Hisense is thereby liable for infringement of the '341 Patent pursuant to 35 U.S.C. § 271 (b).

99. Hisense has indirectly infringed at least claim 3 of the '341 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '341 Accused Products by making, offering to sell, or selling, in the United States, or importing a

component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '341 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

100. For example, the '341 Accused Products include a mirroring functionality, allowing it to communicate directly with a wireless terminal and a network interface allowing it to communicate with other devices on the same network to receive and display video content. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Hisense is liable for infringement of the '341 Patent pursuant to 35 U.S.C. § 271(c).

101. Defendant has been on notice of the '341 Patent since at the latest, the service of this complaint. By the time of trial, Defendant will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claim 3 of the '341 Patent.

102. Defendant undertook and continues its infringing actions despite an objectively high likelihood that such activities infringed the '341 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendant has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '341 Patent, and that the '341 Patent is valid. On information and belief, Defendant could not reasonably, subjectively believe that its actions do not constitute infringement of the '341 Patent, nor could it reasonably, subjectively believe that



the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendant has continued its infringing activities. As such, Defendant willfully infringes the '341 Patent.

103. Maxell has been damaged by Hisense's infringement of the '341 Patent.

**COUNT 6 - INFRINGEMENT OF U.S. PATENT NO. 10,339,893**

104. Maxell incorporates paragraphs 1-103 above by reference.

105. U.S. Patent No. 10,339,893 (the "'893 Patent," attached hereto at Exhibit 6) duly issued on July 2, 2019 and is entitled *Display Apparatus*.

106. Maxell is the owner by assignment of the '893 Patent and possesses all rights under the '893 Patent, including the exclusive right to recover for past and future infringement.

107. Hisense has directly infringed one or more claims of the '893 Patent in this District and elsewhere in Texas, including at least claims 1, 2, 4, 11, 12, 16, 17, 19, and 20 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its televisions, including by way of example the Hisense Smart TV 55H8E.

108. The Hisense Smart TV 55H8E is a television, which has HDMI and USB ports for receiving and processing image information for display on the display of the television. The Hisense Smart TV 55H8E is equipped with a USB port, allowing it to display, for example, compressed images stored on a camcorder. The Hisense Smart TV 55H8E includes a central processor that decodes compressed image information (e.g., JPEG, PNG, and GIF) received by the USB port from, for example, a camcorder. The Hisense Smart TV 55H8E is equipped with an HDMI port, allowing it to display uncompressed images retrieved from, for example, a

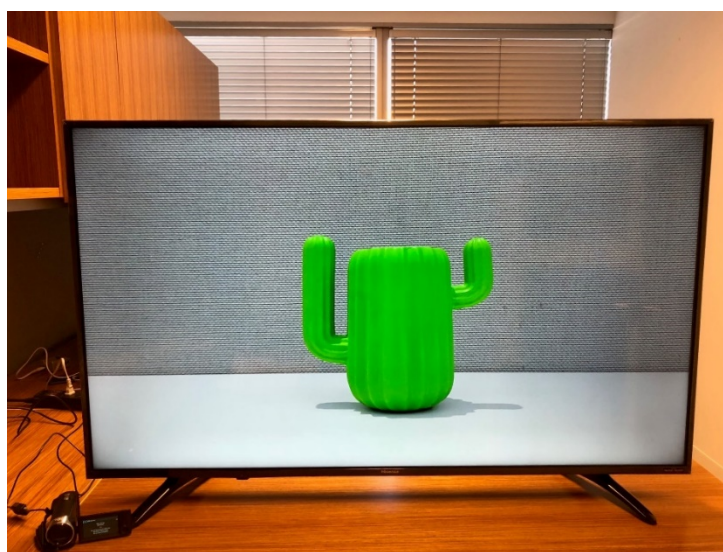
satellite receiver, a computer, a digital camera or a camcorder. This is shown in the screenshots below from the Hisense Smart TV 55H8E.



109. The processor in the Hisense Smart TV 55H8E has a selector that selects displaying the images on the display in response to a user operation on an input device. For example, the Hisense Smart TV 55H8E has multiple types of inputs (e.g., HDMI, USB, and AV) and responds to user operations (e.g., the selection of “input” source) on an input device (e.g., a remote controller). The Hisense Smart TV 55H8E also includes the functionality of displaying a slide show of images received from the USB and HDMI ports. For example, when a camcorder containing JPEG images is connected to the USB port of the Hisense Smart TV 55H8E and a user selects the USB port as the input source, in response to an operation by the user for conducting a slide show (e.g., selection of slide show functionality) via a remote controller, the Hisense Smart TV 55H8E transmits a signal to the camcorder via the USB port

causing it to output compressed image information corresponding to still pictures, receives the compressed image information output from the camcorder via the USB port, decodes the received compressed image information by the central processor, and conducts a slide show at predetermined time intervals. This is shown in the screenshots below from the Hisense Smart TV 55H8E.









110. In addition, for example, when a camcorder containing JPEG images is connected to the HDMI port of the Hisense Smart TV 55H8E and a user selects the HDMI port as the input source, in response to an operation by the user for conducting a slide show (e.g., selection of slide show functionality) via a remote controller, the Hisense Smart TV 55H8E transmits a signal to the camcorder via the HDMI port causing it to decode the JPEG images and output uncompressed images, receives the uncompressed images from the camcorder via the HDMI, and conducts a slide show at predetermined time intervals. This is shown in the screenshots below from the Hisense Smart TV 55H8E.









111. The foregoing features and capabilities of the Hisense Smart TV 55H8E, and Hisense's description and/or demonstration thereof, including in user manuals and advertising, reflect Hisense's direct infringement by satisfying every element of at least claims 1, 2, 4, 11, 12, 16, 17, 19, and 20 of the '893 Patent, under 35 U.S.C. § 271(a).

112. On information and belief, Hisense further infringes the '893 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Hisense Smart TV 55H8E (collectively, "the '893 Accused Products"). On



information and belief, the '893 Accused Products include, for example, Hisense 120L10E, 100L10E, 65H9F, 55H9F, 65H6500F, 58H6550F, 55H6500F, 65H8F, 55H8F, 50H8F, 65H8E, 55H8E, 65H6E, 60H6E, 55H6E, 50H6E, 43H6E, 40F3100, 32F3100, 65H9100E+, 55H9100E+, 65H9E+, 55H9E+, 55H9E, 65H9080E, 55H9080E, 65H9050E, 55H9050E, 65H8C, 55H8C, 50H8C, 65H6D, 55H6D, 50H6D, 43H6D, 50H5E, 43H5E, 40H5E, 32H5E, 50H5D, 43H5D, 40H5D, 39H5D, 43H3D, 40H3D, 32H3D, 58H6550E, 100H10D, 75H10D, H10D series, 65H9D+, 55H9D+, H9D+ series, 65H9D, 55H9D, H9D series, 65H8050D, 55H8050D, H8D series, 55H7D, 50H7D, 43H7D, and H7D series. For example, each of these products also include an HDMI port and USB port for receiving images from an external image apparatus such as a digital camera or camcorder for conducting a slide show at predetermined time intervals. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '893 Accused Products are identified to describe Hisense's infringement and in no way limit the discovery and infringement allegations against Hisense concerning other devices that incorporate the same or reasonably similar functionalities.

113. Hisense has indirectly infringed at least claims 1, 2, 4, 11, 12, 16, 17, 19, and 20 of the '893 Patent in this District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '893 Accused Products. Hisense's customers who purchase devices and components thereof and operate such devices and components in accordance with Hisense's instructions directly infringe one or more claims of the '893 Patent in violation of 35 U.S.C. § 271. Hisense instructs its customers through at least user guides or websites, such as those located at: <https://www.hisense-usa.com/televisions/all-tvs/>; <https://www.hisense-usa.com/televisions/>; <https://www.hisense-usa.com/televisions/>

[usa.com/televisions/smart-choices/](http://usa.com/televisions/smart-choices/). Hisense is thereby liable for infringement of the '893 Patent pursuant to 35 U.S.C. § 271 (b).

114. Hisense has indirectly infringed at least claims 1, 2, 4, 11, 12, 16, 17, 19, and 20 of the '893 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '893 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '893 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

115. For example, the '893 Accused Products include an HDMI port and USB port for receiving images from an external image apparatus such as a digital camera or camcorder for conducting a slide show at predetermined time intervals. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Hisense is liable for infringement of the '893 Patent pursuant to 35 U.S.C. § 271(c).

116. Defendant has been on notice of the '893 Patent since at the latest, the service of this complaint. By the time of trial, Defendant will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 1, 2, 4, 11, 12, 16, 17, 19, and 20 of the '893 Patent.

117. Defendant undertook and continues its infringing actions despite an objectively high likelihood that such activities infringed the '893 Patent, which has been duly issued by the

USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendant has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '893 Patent, and that the '893 Patent is valid. On information and belief, Defendant could not reasonably, subjectively believe that its actions do not constitute infringement of the '893 Patent, nor could it reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendant has continued its infringing activities. As such, Defendant willfully infringes the '893 Patent.

118. Maxell has been damaged by Hisense's infringement of the '893 Patent.

**COUNT 7 - INFRINGEMENT OF U.S. PATENT NO. 8,913,197**

119. Maxell incorporates paragraphs 1-118 above by reference.

120. U.S. Patent No. 8,913,197 (the "'197 Patent," attached hereto at Exhibit 7) duly issued on December 16, 2014 and is entitled *Digital Broadcast Receiver Unit*.

121. Maxell is the owner by assignment of the '197 Patent and possesses all rights under the '197 Patent, including the exclusive right to recover for past and future infringement.

122. Hisense has directly infringed one or more claims of the '197 Patent in this District and elsewhere in Texas, including at least claims 27 and 28 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its televisions, including by way of example the Hisense Smart TV 55H9D+.

123. The Hisense Smart TV 55H9D+ is a television that can display a digital TV broadcast program based on received ATSC digital television signals from an external Antenna/Cable. For example, the Hisense Smart TV 55H9D+ receives a digital broadcast television signal by its ATSC/QAM receiving system and isolates video signals depending on the user operation. For example, it isolates video signals when the user operates the remote to

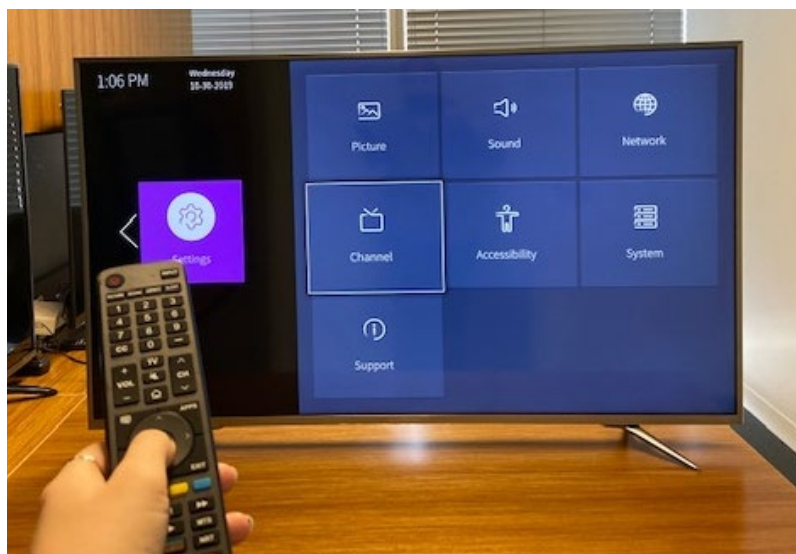
change channels. The screenshots below from the Hisense Smart TV 55H9D+ show the virtual channel 26.1 at 1080i, virtual channel 26.2 at 480i, virtual channel 26.3 at 480i, virtual channel 26.4 at 480i.





124. The screenshots below from the Hisense Smart TV 55H9D+ show the TV channel scanning setup manual scan for physical channel 7, which discovers 4 virtual digital channels for physical channel number 7.

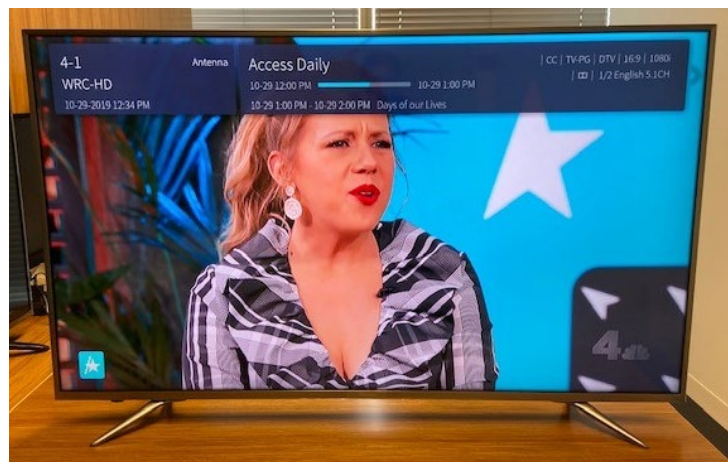








125. The Hisense Smart TV 55H9D+ also has a decoder to decode program-associated information and a decoder to decode video signals. The Hisense Smart TV 55H9D+ receives multiplexed ATSC digital television signals containing a plurality of video programs of different formats, which are encoded using the MPEG standard. The Hisense Smart TV 55H9D+ has a processor for displaying a video signal processed by the video processor sections. The screenshots below from the Hisense Smart TV 55H9D+ show receiving and displaying 1080i digital live TV, 480i digital live TV, and 720p digital live TV.







126. The foregoing features and capabilities of the Hisense Smart TV 55H9D+, and Hisense's description and/or demonstration thereof, including in user manuals and advertising, reflect Hisense's direct infringement by satisfying every element of at least claims 27 and 28 of the '197 Patent, under 35 U.S.C. § 271(a).

127. On information and belief, Hisense further infringes the '197 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Hisense Smart TV 55H9D+ (collectively, "the '197 Accused Products"). On information and belief, the '197 Accused Products include, for example, Hisense 120L10E, 100L10E, 65H8E, 55H8E, 65R7E, 55R7E, 50R7E, 43R7E, 50R7050E, 75R6E, 65R6E, 60R6E, 55R6E, 50R6E, 43R6E, 65H6E, 60H6E, 55H6E, 50H6E, 43H6E, 65H9100E+, 55H9100E+,

65H9E+, 55H9E+, 65H9E, 55H9E, 65H9080E, 55H9080E, 65H9050E, 55H9050E, 65H8C, 55H8C, 50H8C, 65H6D, 55H6D, 50H6D, 43H6D, 50H5E, 43H5E, 40H5E, 32H5E, 50H4D, 40H4D, 100H10D, 75H10D, H10D series, 65H9D+, 55H9D+, H9D series, 65H9D, 55H9D, H9D series, 65H8050D, 55H8050D, 55H7D, 50H7D, 43H7D, 55R6D, R6D series, 50H5D, 43H5D, 40H5D, 39H5D, 43H3D, 40H3D, 32H3D, 40H4C1, 58H6550E, and R8D series. For example, each of these products also allow a user to watch broadcasted ASTC digital television signals, which carry a number of television program video signals encoded using the MPEG standard and that are multiplexed into a single stream. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '197 Accused Products are identified to describe Hisense's infringement and in no way limit the discovery and infringement allegations against Hisense concerning other devices that incorporate the same or reasonably similar functionalities.

128. Hisense has indirectly infringed at least claims 27 and 28 of the '197 Patent in this District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '197 Accused Products. Hisense's customers who purchase devices and components thereof and operate such devices and components in accordance with Hisense's instructions directly infringe one or more claims of the '197 Patent in violation of 35 U.S.C. § 271. Hisense instructs its customers through at least user guides or websites, such as those located at: <https://www.hisense-usa.com/televisions/all-tvs/>; <https://www.hisense-usa.com/televisions/>; <https://www.hisense-usa.com/televisions/smart-choices/>. Hisense is thereby liable for infringement of the '197 Patent pursuant to 35 U.S.C. § 271 (b).

129. Hisense has indirectly infringed at least claim 27 of the '197 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '197 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '197 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

130. For example, the '197 Accused Products include the functionality of allowing a user to watch broadcasted ASTC digital television signals, which carry a number of television program video signals encoded using the MPEG standard that are multiplexed into a single stream. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Hisense is liable for infringement of the '197 Patent pursuant to 35 U.S.C. § 271(c).

131. Hisense has been on notice of the '197 Patent since, at least, September 14, 2015. By the time of trial, Hisense will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 27 and 28 of the '197 Patent.

132. Hisense undertook and continued its infringing actions despite an objectively high likelihood that such activities infringed the '197 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since, at least September 14, 2015, Hisense has been aware of an objectively high likelihood that its actions constituted and continue to

constitute infringement of the '197 Patent, and that the '197 Patent is valid. On information and belief, Hisense could not reasonably, subjectively believe that its actions do not constitute infringement of the '197 Patent, nor could it reasonably, subjectively believe that the patent is invalid. As noted above in paragraphs 5 and 131, Hisense became aware of the '197 Patent and its infringement of the '197 Patent in communication with Maxell's licensing agent and had discussions, correspondence, and/or meetings thereafter regarding the '197 Patent. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Hisense has continued its infringing activities. As such, Hisense willfully infringes the '197 Patent.

133. Maxell has been damaged by Hisense's infringement of the '197 Patent.

**COUNT 8 - INFRINGEMENT OF U.S. PATENT NO. 6,144,412**

134. Maxell incorporates paragraphs 1-133 above by reference.

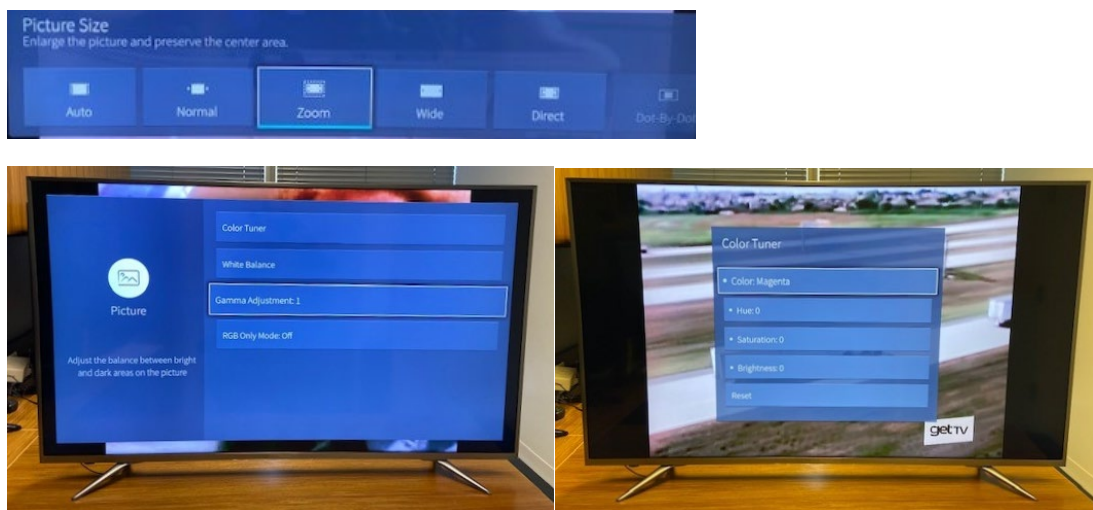
135. U.S. Patent No. 6,144,412 (the "'412 Patent," attached hereto at Exhibit 8) duly issued on November 7, 2000 and is entitled *Method And Circuit For Signal Processing Of Format Conversion Of Picture Signal*.

136. Maxell is the owner by assignment of the '412 Patent and possesses all rights under the '412 Patent, including the exclusive right to recover for past and future infringement.

137. Hisense has directly infringed one or more claims of the '412 Patent in this District and elsewhere in Texas, including at least claims 1, 4, 14, 15, 18, and 19 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its televisions, including by way of example the Hisense Smart TV 55H9D+.

138. The Hisense Smart TV 55H9D+ is a television that can receive and display video signals from several different formats including, for example, broadcast and digital television

signals, NTSC video signals, composite analog video signals, ATSC video signals, HDTV video signals, YUV video signals that are either progressive or interlaced. The Hisense Smart TV 55H9D+ is configured to receive progressive or non-interlaced pictures such as 480p and 1080p pictures and provide the received progressive picture signals for additional processing and displaying on the LCD display. The Hisense Smart TV 55H9D+ is also configured to receive interlaced pictures such as 480i, 1080i, NTSC and/or analog composite video pictures and provide the received picture signals for additional processing and displaying on the LCD display. The Hisense Smart TV 55H9D+ is configured to perform a scaling operation of at least one of compression in a horizontal direction, expansion in a horizontal direction, compression in a vertical direction, expansion in a vertical direction, and frame rate conversion on the provided picture signal of progressive scanning in accordance with the format of the input picture signal (which may include a component signal of either one of 4:2:2 and 4:2:0, including luminance and color difference signals) and the predetermined display format of the picture output device. The Hisense Smart TV 55H9D+ is also configured to conduct at least one of color space conversion and inverse gamma conversion on a picture signal, which has been subjected to the scaling operation. This is shown below in screenshots from the Hisense Smart TV 55H9D+.





139. On information and belief, the Hisense Smart TV 55H9D+ uses a combination of hardware and software to achieve the foregoing results. For example, the Hisense Smart TV 55H9D+ includes a scanning convertor to perform local signal processing and convert input interlaced picture signals into progressive format for output on the LCD display. The input picture signal or the converted progressive signal is selected for horizontal and/or vertical scaling by a scaling unit (e.g., by way of Hisense's UHD Upscaler), consistent with the desired or selected viewing mode and/or the native display format/resolution of the television (or a connected external device). The Hisense Smart TV 55H9D+ further includes a CPU or processor that selects parameters in accordance with the format of the picture signal and display format of the television (or a connected external device), to control the foregoing scaling, converting, and selection operations.

140. Hisense Smart TV 55H9D+ is further configured to multiply picture elements by a coefficient to expand or compress the number of pixels in the horizontal and/or vertical directions, upon selection of any one of the available viewing modes (e.g., zoom, direct, auto, normal, or wide). This format conversion is necessarily achieved using a line memory and selectively controlled switches (or their equivalents).

141. The foregoing features and capabilities of the Hisense Smart TV 55H9D+, and Hisense's description and/or demonstration thereof, including in user manuals and advertising,

reflect Hisense's direct infringement by satisfying every element of at least claims 1, 4, 14, 15, 18, and 19 of the '412 Patent, under 35 U.S.C. § 271(a).

142. On information and belief, Hisense further infringes the '412 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Hisense Smart TV 55H9D+ (collectively, "the '412 Accused Products"). On information and belief, the '412 Accused Products include, for example, Hisense 65H8C, 55H8C, 50H8C, 65H6D, 55H6D, 50H6D, 43H6D, 50H4D, 40H4D, 100H10D, 75H10D, H10D series, 65H9D+, 55H9D+, H9D+ series, 65H9D, 55H9D, H9D series, 65H8050D, 55H8050D, 55H7D, 50H7D, 43H7D, 55R6D, R6D series, 50H5D, 43H5D, 40H5D, 39H5D, 43H3D, 40H3D, 32H3D, 40H4C1, 58H6550E, and R8D series. For example, each of these products also include a scaling operation for the vertical and horizontal directions. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '412 Accused Products are identified to describe Hisense's infringement and in no way limit the discovery and infringement allegations against Hisense concerning other devices that incorporate the same or reasonably similar functionalities.

143. Hisense has indirectly infringed at least claims 1, 4, 14, 15, 18, and 19 of the '412 Patent in this District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '412 Accused Products. Hisense's customers who purchase devices and components thereof and operate such devices and components in accordance with Hisense's instructions directly infringe one or more claims of the '412 Patent in violation of 35 U.S.C. § 271. Hisense instructs its customers through at least user guides or websites, such as those located at: <https://www.hisense-usa.com/televisions/all-tvs/>; <https://www.hisense-usa.com/televisions/>; <https://www.hisense-usa.com/televisions/smart->



[choices/](#). Hisense is thereby liable for infringement of the '412 Patent pursuant to 35 U.S.C. § 271 (b).

144. Hisense has indirectly infringed at least claims 1, 4, 14, 15, 18, and 19 of the '412 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '412 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '412 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

145. For example, the '412 Accused Products include a scaling operation for the vertical and horizontal directions. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Hisense is liable for infringement of the '412 Patent pursuant to 35 U.S.C. § 271(c).

146. Hisense has been on notice of the '412 Patent since, at least, September 14, 2015. By the time of trial, Hisense will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 18 and 19 of the '412 Patent.

147. Hisense undertook and continued its infringing actions despite an objectively high likelihood that such activities infringed the '412 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since, at least September 14, 2015, Hisense has



been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '412 Patent, and that the '412 Patent is valid. On information and belief, Hisense could not reasonably, subjectively believe that its actions do not constitute infringement of the '412 Patent, nor could it reasonably, subjectively believe that the patent is invalid. As noted above in paragraphs 5 and 146, Hisense became aware of the '412 Patent and its infringement of the '412 Patent in communication with Maxell's licensing agent and had discussions, correspondence, and/or meetings thereafter regarding the '412 Patent. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Hisense has continued its infringing activities. As such, Hisense willfully infringes the '412 Patent.

148. Maxell has been damaged by Hisense's infringement of the '412 Patent.

**PRAYER FOR RELIEF**

WHEREFORE, Maxell prays for relief as follows:

149. A judgment declaring that Hisense has infringed and is infringing one or more claims of '713, '995, '369, '029, '341, '893, '197, and '412 Patents;

150. A judgment awarding Maxell compensatory damages as a result of Hisense's infringement of one or more claims of the '713, '995, '369, '029, '341, '893, '197, and '412 Patents, together with interest and costs, consistent with lost profits and in no event less than a reasonable royalty;

151. A judgment awarding Maxell treble damages and pre-judgment interest under 35 U.S.C. § 284 as a result of Hisense's willful and deliberate infringement of one or more claims of the '713, '995, '369, '029, '341, '893, '197, and '412 Patents;

152. A judgment declaring that this case is exceptional and awarding Maxell its expenses, costs, and attorneys' fees in accordance with 35 U.S.C. §§ 284 and 285 and Rule 54(d) of the Federal Rules of Civil Procedure;

153. A grant of preliminary and permanent injunctions enjoining Defendant from further acts of infringement of one or more claims of the '713, '995, '369, '029, '341, '893, '197, and '412 Patents; and

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

**JURY TRIAL DEMANDED**

Maxell hereby demands a trial by jury.

Dated: November 22, 2019

By: /s/ Geoffrey Culbertson

Geoff Culbertson  
Kelly Tidwell  
Patton, Tidwell & Culbertson, LLP  
2800 Texas Boulevard (75503)  
Post Office Box 5398  
Texarkana, TX 75505-5398  
Telephone: (903) 792-7080  
Facsimile: (903) 792-8233  
gpc@texarkanalaw.com  
kbt@texarkanalaw.com

Jamie B. Beaber  
Alan M. Grimaldi  
Kfir B. Levy  
James A. Fussell, III  
Baldine B. Paul  
Tiffany A. Miller  
William J. Barrow  
Saqib Siddiqui  
Bryan C. Nese  
Alison T. Gelsleichter  
Clark S. Bakewell  
MAYER BROWN LLP  
1999 K Street, NW  
Washington, DC 20006

Telephone: (202) 263-3000  
Facsimile: (202) 263-3300  
jbeaber@mayerbrown.com  
agrimaldi@mayerbrown.com  
klevy@mayerbrown.com  
jfussell@mayerbrown.com  
bpaul@mayerbrown.com  
tmiller@mayerbrown.com  
wbarrow@mayerbrown.com  
ssiddiqui@mayerbrown.com  
bnese@mayerbrown.com  
agelsleichter@mayerbrown.com  
cbakewell@mayerbrown.com

Amanda Streff Bonner  
Luiz Miranda  
MAYER BROWN LLP  
71 S. Wacker Drive  
Chicago, IL 60606  
(312) 782-0600  
asbonner@mayerbrown.com  
lmiranda@mayerbrown.com

Elliot Choi  
MAYER BROWN LLP  
1221 Avenue of the Americas  
New York, New York 10020  
(212) 506-2500  
echoi@mayerbrown.com

*Counsel for Plaintiff Maxell, Ltd.*