

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF NEW YORK
ALBANY DIVISION

HAIER AMERICA TRADING, L.L.C.,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD.; LG
ELECTRONICS, INC.; PANASONIC
CORPORATION; KONINKLIJKE PHILIPS
N.V.; ZENITH ELECTRONICS, LLC;
TRUSTEES OF COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK; and MPEG
LA, L.L.C.,

Defendants.

Case No. 1:17-cv-921 (TJM/CFH)

JURY TRIAL DEMANDED

COMPLAINT

Plaintiff Haier America Trading, L.L.C. submits this Complaint against Defendants and seeks monetary and declaratory relief for the reasons described below.

PARTIES AND JURISDICTION

A. The Parties.

1. Haier America Trading, L.L.C. (“Haier”) is a South Carolina limited liability company with its principal place of business in the State of New Jersey. Its lone member is Haier America Holding Corp., which is a Delaware corporation whose principal place of business is in South Carolina. Its states of citizenship are New Jersey, Delaware and South Carolina.

2. Samsung Electronics Company, Limited (“Samsung”) is a South Korean entity located at 1320-10, Seocho 2-Dong, Seocho-Gu, Seoul 137-857, South Korea. Samsung is the patentee or assignee of one or more patents at issue in this lawsuit, which subjects it to personal

jurisdiction in the United States under Rule 4(k)(2) of the Federal Rules of Civil Procedure and/or maintains a network of authorized dealers of its products in the State of New York. It places numerous products into the stream of commerce with the full intent that they reach the State of New York. As a licensor of technology in the ATSC patent portfolio, Samsung has extensive contacts related to this lawsuit that subject it to personal jurisdiction in this state. It has previously litigated as a plaintiff in the federal courts of this State against alleged infringers of patents administered by MPEG LA and therefore is amenable to personal jurisdiction in this State.

3. MPEG LA, L.L.C. (“MPEG LA”) is a Delaware limited liability company. Its principal place of business is 6312 South Fiddlers Green Circle, Suite 400E, Greenwood Village, Colorado 80111. Its registered agent for service of process is The Corporation Trust Center 1209 Orange Street, Wilmington, Delaware 19801. MPEG LA has voluntarily submitted itself to personal jurisdiction in the State of New York and all federal courts in this State by contract.

4. LG Electronics, Inc. (“LG”) is a foreign corporation formed under the laws of the Republic of Korea. Its principal place of business is LG Twin Towers 20, Yoido-dong, Youngdungpo-gu, Seoul, Republic of Korea 150-721. LG has extensive contacts relating to this lawsuit that subject it to personal jurisdiction in the United States under Rule 4(k)(2) of the Federal Rules of Civil Procedure and/or maintains a network of authorized dealers of its products in the State of New York. It places numerous products into the stream of commerce with the full intent that they reach the State of New York and has submitted to jurisdiction in the federal courts of this State in prior litigation. As a licensor of technology in the ATSC patent portfolio, LG has extensive contacts related to this lawsuit that subject it to personal jurisdiction in this state. It has previously litigated as a plaintiff in the federal courts of this State against alleged

infringers of patents administered by MPEG LA and therefore is amenable to personal jurisdiction in this State.

5. Zenith Electronics, LLC (“Zenith”) is a limited liability company with its principal place of business at 2000 Millbrook Drive, Lincolnshire, Illinois 60069. It is a wholly owned subsidiary of LG. Zenith has sufficient contacts with this State for the Court to exercise general and specific personal jurisdiction over it and it has previously sued alleged infringers of patents administered by MPEG LA in the federal courts of this State. As a licensor of technology in the ATSC patent portfolio, it has extensive contacts related to this lawsuit that subject it to personal jurisdiction in this state.

6. Koninklijke Philips N.V. (“Philips”) is a Netherlands corporation with its principal place of business at Philips Center, Amstelplein 2, Amsterdam 1096 BC, Netherlands. Philips is the patentee or assignee of one or more patents at issue in this lawsuit, which subjects it to personal jurisdiction in the United States under Rule 4(k)(2) of the Federal Rules of Civil Procedure. It has previously litigated as a plaintiff in the federal courts of this State against alleged infringers of patents administered by MPEG LA and therefore is amenable to personal jurisdiction in this State. As a licensor of technology in the ATSC patent portfolio, Philips has extensive contacts related to this lawsuit that subject it to personal jurisdiction in this state.

7. Panasonic Corporation is a Japanese Corporation headquartered in Osaka, Japan. Its principal place of business is 1006 Oaza Kodoma, Kadoma-shi, Osaka 571-8501, Japan. It has no registered agent for service of process in this State. As a licensor of technology in the ATSC patent portfolio, Panasonic has extensive contacts related to this lawsuit that subject it to the jurisdiction of the United States under Rule 4(k)(2) and to personal jurisdiction in this State.

8. The Trustees of Columbia University in the City of New York (“Columbia University”) is a New York university corporation with its principal place of business at 211 Low Library, 535 West 116th Street, Mail Code 4324, New York, NY 10027. As a New York university corporation, Columbia University is subject to jurisdiction in the State of New York.

B. Jurisdiction and Venue.

9. This is an action for violations of the United States antitrust laws, their New York counterparts, and for declaratory judgment relating to patent rights, among other claims. Subject matter jurisdiction for this Court comes from 15 U.S.C. § 1, *et seq.*; 28 U.S.C. §§ 1331, 1367, and 2201; 35 U.S.C. § 1, *et seq.*

10. This action arises out of or in connection with a license agreement between Haier and MPEG LA regarding the ATSC patent portfolio for which MPEG LA is the licensing administrator. A true and correct copy of the ATSC license agreement between Haier and MPEG LA is attached to the Declaration of Ari Rafilson (“Rafilson Decl.”) as its Exhibit A. Haier is the licensee in the ATSC license; MPEG LA is the licensing administrator for various licensors who purport to have the authority and right to license various patents that comprise the ATSC patent portfolio.

11. Haier is also a licensee of the MPEG-2 patent portfolio for which MPEG LA is the licensing administrator. A true and correct copy of the MPEG-2 license agreement between Haier and MPEG LA is attached to the Rafilson Decl. as its Exhibit B.

12. Among the licensors who have authorized MPEG LA to license their patents in the ATSC license and who receive benefits in licensing consideration from MPEG LA are Samsung, LG, Zenith, Panasonic, Columbia University, and Philips.

13. The ATSC license specifies that the parties “consent to the exclusive jurisdiction of the federal and state courts of . . . Colorado, Delaware, Maryland and/or New York” for all disputes in connection with the license. ATSC license, ¶ 7.16. That forum selection clause vests jurisdiction in the courts of this State, both federal and local.

14. Venue is proper in this district under 28 U.S.C. §§ 1391(b)(1), 1391(b)(3), and/or 1391(c), and under the ATSC license, which subjects all parties to the jurisdiction of the state and federal courts of New York for all disputes arising from or relating to the license.

15. Plaintiff demands a trial by jury on all issues so triable.

FACTS

A. Haier.

16. Haier is an American subsidiary of the Haier Group, which is a Chinese consumer electronics manufacturer also known for its status as the largest manufacturer of home appliances in the world.

17. Haier sells televisions compliant with the Advanced Television Systems Committee (“ATSC”) standard and the MPEG-2 standard for digital television broadcasting. Currently Haier lists no fewer than 11 TV models for sale in the in the United States. Such TVs must use the ATSC and MPEG-2 standards. A listing of Haier’s product line, taken from Haier’s website, is attached to the Rafilson Decl. as its Exhibit C.

18. On August 12, 2009, British Telecommunications plc and others, including Samsung, LG, and Philips, sued Haier in the United States District Court for the Southern District of New York for patent infringement. The case settled upon various conditions, including requiring Haier to license the ATSC and MPEG-2 patent portfolios.

B. MPEG LA.

19. MPEG LA is a business entity that licenses various patents for universal technical standards. On its website, it bills itself as “the world’s leading packager of patent pools for standards and other technology platforms used in consumer electronics.” According to its website, MPEG LA “provides access to patents that are essential to” the MPEG-2, ATSC, H.264, MPEG-4, and IEEE 1394 data transmission standards. MPEG LA purports to provide such access by licensing pools of patents “essential to” these standards.

20. The business model MPEG LA claims to use is the “Many-to-Many Licensing Model” by which patent holders license *many* patents necessary for meeting a specified electronic standard to *many* licensees. MPEG LA’s website states its model “maximizes creativity, usage, profitability and affordability of products” such that “we help make markets for intellectual property that maximize profits for intellectual property owners and make utilization of intellectual property affordable for manufacturers, consumers and other users.”

21. MPEG LA administers license agreements for each of the patent pools it has formed, which it claims include only patents that are essential to practice the particular technology standard. For such agreements, MPEG LA is the licensing administrator.

C. The ATSC and MPEG-2 License Agreements.

22. The licenses MPEG LA offers are agreements between it and any licensee that wishes to license the subject technology. Such licenses are made for the benefit of the licensors. In this case, the licenses are between Haier and MPEG LA for the patents MPEG LA represents are essential to the ATSC and MPEG-2 standards.

23. The licenses are agreements between MPEG LA and the licensee—Haier—to allow the licensee to pay a per receiver license fee to use and practice “Essential Patents” it

needs for practicing the standards. Subject to certain exemptions not relevant here, the ATSC license defines ATSC Essential Patents as “any and all claim(s), but only such claims, in a Patent which are necessarily infringed in connection with the use or implementation of the ATSC standard under the laws of the country which issued or published the Patent.” The MPEG-2 license contains similar language.

24. The ATSC standard is mandated for use in the United States, Canada, South Korea, Mexico and certain other countries for transmitting and decoding digital television (“DTV”) signals over terrestrial, cable and satellite networks. Televisions sold in countries that have adopted the ATSC standard contain the technology necessary to receive ATSC-compliant or compatible digital television signals. Televisions sold in Europe do not use the ATSC standard.

25. The MPEG-2 standard is an integral part of the ATSC standard. The Library of Congress notes that the “[m]ost significant” adoption of MPEG-2 “is the format's required use in digital terrestrial broadcasting to homes in the United States and several other nations, as governed by the ATSC (Advanced Television Systems Committee) specifications.”

26. In the ATSC license, “ATSC Receiver Products” are products or devices that are “capable of demodulating and decoding an over-the-air, RF terrestrial broadcast signal in compliance with the ATSC standard.” Such devices are commonly referred to as TV tuners. Only ATSC Receiver Products are licensed. Specifically, the ATSC license states in relevant part:

[T]he License Administrator hereby grants to Licensee . . . a royalty-bearing worldwide, nonexclusive, nontransferable sublicense to all ATSC Essential Patent(s) in the ATSC Patent Portfolio to make, . . . sell, import or offer for sale an ATSC Receiver Product . . . NO OTHER LICENSE IS GRANTED IN THIS SECTION 2.1, BY IMPLICATION OR OTHERWISE.

ATSC license § 2.1. (capitalization in original). The ATSC license does not apply to devices that broadcast and transmit RF signals even though, as shown below, the ATSC patent portfolio contains numerous patents covering broadcasting technology.

27. The royalty MPEG LA charges is \$5.00 for each ATSC Receiver Product from January 1, 1998 through December 31, 2016, \$1.50 per ATSC Receiver Product from January 1, 2017 through December 31, 2020, and \$1.00 per ATSC Receiver Product from January 1, 2021 forward. Alternatively, licensees may elect, with written notice to MPEG LA, a further reduced royalty of \$1.00 per ATSC Receiver Product from the later of January 1, 2017 or the receipt of such notice with 30-day right of termination on or after January 1, 2021.

28. The \$5 ATSC license fee in effect throughout the years 2004-2016 was about five times the fee charged to DTV manufacturers for equivalent technology licenses in Europe. The \$1.50 license fee in effect in calendar years 2017-2020 will be approximately 150-200% higher than comparable technology licenses in Europe.¹

29. ATSC-compliant DTVs need the capability of decoding MPEG-2 coded video transmissions. To that end, such DTVs had to contain an MPEG-2 decoder. From January 1, 2010 to December 31, 2015, the per-unit license fee for the MPEG-2 patent portfolio was \$2. From January 1, 2016 to December 31, 2017, the per-unit fee is \$0.35 to \$0.50.

30. With the MPEG-2 fee stacked atop the \$5 ATSC fee, from 2010-2015, MPEG LA charged \$7 in royalties for meeting the ATSC standard.

31. Although companies whose patents are part of the ATSC and MPEG-2 patent portfolios retain the right to license their patents outside the structure of the licenses, approaching such companies individually to license necessary technology is a fruitless

¹ The license terms for the European DVB-T2 standard are available at <http://www.sisvel.com/licensing-programs/digital-video-display-technology/dvb-t2/license-terms>.

endeavor—Haier has approached licensors LG, Samsung, and Thomson Licensing about licensing necessary patents for its TV tuners; all have refused to negotiate individually and referred Haier back to MPEG LA. At least one licensee, upon information and belief, has approached various ATSC licensors seeking individual licenses to patents but not the whole ATSC patent portfolio. All the licensors ignored the potential licensee’s requests.

D. Standard Setting Organizations and Technological Innovation.

32. The development of uniform technical standards can aid in the development of new technology. Developing uniform standards can encourage innovation as technical specifications for the standards become widely accepted. But technical standardization also creates a “lock-in” effect and the risk of “patent hold-up.”

33. Absent uniform standards, the royalty a patentee can earn from a patent license for its technology is constrained by the availability of alternative technologies; however, once a standard *requires* a manufacturer to employ specific patented technology, other technologies are no longer available substitutes. This is especially true when the standard is mandated by law. The patentee whose technology is part of the standard can demand royalties that far exceed the intrinsic value of the technology.² Thus, for example, the triumph of the Blu-Ray standard over the HD-DVD standard rendered patents relevant only to the first far more valuable than patents relevant only to the latter.

34. Once a standard has been selected, manufacturers will develop products that comply with it. The manufacturer that implements, or is required to implement, a standard therefore becomes “locked-in.” Owners of patents that cover aspects of the standard can take advantage of lock-in by demanding exorbitant royalties from manufacturers because they know it

² This analysis is discussed in the World Intellectual Property Organization publication “Patent Pools and Antitrust,” March 2014 at 8.

would be less costly for the manufacturers to pay the excessive royalty than incur the cost of litigation, including the risk of an injunction, or developing products that utilize a different technology that does not meet the standard and thus cannot be imported, sold, or offered for sale in the relevant jurisdiction.

35. To prevent patent hold-up, standard setting process participants that may own essential patents must generally commit to license those rights on Fair, Reasonable And Non-Discriminatory (“FRAND”) terms to any manufacturer that uses the standard.

E. Creating the ATSC Standard.

36. The ATSC is a standard-setting organization. ATSC is based in Washington, D.C. and comprised of representatives from various entities involved in the creation and maintenance of standards related to digital television in the United States.

37. This case has its roots in the choice of the ATSC standard for digital televisions in the United States.

38. In 1987, the Federal Communications Commission (“FCC”) initiated a rule-making proceeding to consider advanced television technologies. In that same year, the FCC established the Advisory Committee on Advanced Television Service³ to assist in gathering and processing necessary information on, and ultimately in choosing, an advanced television system. The advisory committee created planning, testing, and implementation subcommittees and installed a process for the submittal and evaluation of competing proposals. The ATSC worked closely with the advisory committee throughout this process.

39. Upon information and belief, the advisory committee accepted 23 different systems proposals from various system proponents. By about 1991, the number of competing

³ See Federal Communications Commission Fifth Further Notice of Proposed Rulemaking, adopted May 9, 1996, at App. C. Available at https://transition.fcc.gov/Bureaus/Mass_Media/Notices/fcc96207.txt

proposals had winnowed to six, of which four were all-digital systems. The four all-digital systems were tested, but the advisory committee did not approve any.

40. Upon information and belief, in or about February 1993, the advisory committee determined that an all-digital system was feasible. It requested that certain improvements be made to each of the four all-digital systems and requested that each system proposal be re-submitted for further testing. Simultaneously, the advisory committee also expressed a willingness to entertain a proposal by the remaining all-digital system proponents for a single system that incorporated the best elements of these systems.

41. Upon information and belief, in May 1993 the remaining all-digital system proponents combined to form what they deemed “the Grand Alliance”⁴ to seek a single digital standard that would have the FCC’s imprimatur. The Grand Alliance members included Zenith, which is now owned by LG.⁵ Upon information and belief, before they formed the Grand Alliance, each of its members had worked *competitively* against the others in hopes that the advisory committee would choose its proposed system. After they formed the Grand Alliance, its members worked closely *together* to develop a single all-digital system.

42. Ultimately, Grand Alliance members agreed to a system that incorporated various technologies and submitted their proposal to the advisory committee for testing. Following this testing, in which the ATSC participated, the ATSC membership approved the Grand Alliance system as the ATSC standard.

43. The advisory committee recommended to the FCC that the ATSC standard be adopted as the standard for digital terrestrial television broadcasting in the United States. On

⁴ The name choice evidently occurred without reference to the most notable historical Grand Alliance, which was formed to defeat Nazi Germany. See Winston S. Churchill, *The Grand Alliance* (1986 reprint).

⁵ The other members were AT&T, David Sarnoff Research Center (which is now part of SRI International), General Instrument Corp., MIT, Philips Electronics North American Corp., and Thomson Consumer Electronics.

December 24, 1996, the FCC adopted the major elements of the ATSC standard, mandating its use for digital television broadcasts in the United States.⁶ FCC rules required broadcasters to broadcast digital television signals in compliance with the ATSC standard, and required digital television receivers to be equipped with digital television tuners in compliance with the ATSC standard for receiving, decoding, and presenting such digital television signals.

44. In the Telecommunications Act of 1996, Congress required that all full power television stations in the United States transmit *only* digital signals as of February 17, 2009.⁷ This switch to all-digital signal transmission required consumers throughout the country either to replace their analog televisions with digital televisions or instead buy a digital-to-analog converter box so that digital signals after June 13, 2009, could be viewed on the consumers' analog televisions and VCRs.

45. The ATSC instituted policies and rules governing the disclosure and licensing of patents to protect against any member who would seek to benefit unfairly from, or to manipulate to its advantage, the advanced television standard-setting process. It purportedly designed its rules to enable the ATSC and its members to develop standards free from potentially blocking patents. To that end, ATSC implemented policies and rules regarding the disclosure and licensing of patents.

46. Upon information and belief, the ATSC's rules and policies require fairness and candor with respect to intellectual property including, for example, requiring members to disclose potential "standard essential" patents that read on the standards, and/or license them on FRAND terms.

⁶ *In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, MM Docket No. 87-268, Fourth Report and Order (December 24, 1996), hereafter "Fourth Report and Order." This document is publicly available at https://transition.fcc.gov/Bureaus/Mass_Media/Orders/1996/fcc96493.pdf.

⁷ The deadline was later extended to June 12, 2009.

F. The FCC's Adoption of the ATSC Standard.

47. When the FCC adopted portions of the ATSC standard, it prepared the Fourth Report and Order. In that order, the FCC stated that the proponents of the ATSC standard agreed to make any relevant patents they owned available either *free*, or on a *reasonable, nondiscriminatory basis*. The FCC expressly stated that it premised its adoption of the ATSC standard directly upon those assurances:

54. In earlier phases of this proceeding we indicated that, in order for DTV to be successfully implemented, the patents on the technology would have to be licensed to other manufacturing companies *on reasonable and nondiscriminatory terms*. We noted that the system proponents that participated in the Advisory Committee's competitive testing process were required to submit a statement that they would comply with the ANSI patent policies. *The proponents agreed* to make any relevant patents that they owned available either free of charge or on a reasonable, nondiscriminatory basis *and we stated that we intended to condition selection of a DTV system on such commitments*.

55. It appears that licensing of the patents for DTV technology will not be an impediment to the development and deployment of DTV products for broadcasters and consumers. *We reiterate that adoption of this standard is premised on reasonable and nondiscriminatory licensing of relevant patents*, but believe that greater regulatory involvement is not necessary at this time. We remain committed to this principle and if a future problem is brought to our attention, we will consider it and take appropriate action.

Fourth Report and Order at 23 (emphases added).

48. Upon information and belief, various members of the Grand Alliance committed, to either the ATSC, FCC or both, that they would license their ATSC standard patents on FRAND terms. These commitments included Zenith's pledge, made in a February 28, 1995 letter from VP Wayne Luplow (who later became an ATSC Board member) to the ATSC's Robert Hopkins, "that in connection with the current high definition television standards selection proceedings before the ATSC, Zenith will make available to qualified applicants a license to

practice such inventions in the field of HDTV *under reasonable terms and conditions that are demonstrably free of any unfair discrimination.*” (emphasis added).

49. In a July 28, 2003 letter from Zenith’s Senior VP of Research and Technology to the ATSC, Zenith reiterated that it

has been granted the exclusive rights by LG Electronics, Inc. and ATI Technologies Inc., to license certain inventions which are believed required (i.e. essential) for compliance with ATSC Document T3-596 . . . and the adopted ATSC standard to issue based on such document (the ‘ATSC standard’). This is to confirm that pursuant to the ATSC Patent Policy, to the extent any such inventions are approved as a part of the ATSC standard, Zenith will made [sic] available to applicants a license to practice such inventions for compliance with the ATSC standard *under reasonable terms and conditions that are demonstrably free of any unfair discrimination.*” (emphasis added).

50. In a November 6, 2003 letter to the ATSC, LG stated it had granted exclusive rights to Zenith to license inventions it viewed as essential to the A/53 ATSC standard. It stated Zenith would license inventions on FRAND terms and that if the rights reverted to LG, it would employ FRAND licensing practices.

51. Philips’ North American subsidiary told ATSC in a February 23, 1995 letter that it would make intellectual property it owned that was specific to the Grand Alliance proposal available for licensing under FRAND conditions. Philips’ subsidiary noted that it “has considerable experience licensing intellectual property and is widely regarded as a respectable company in that context.”

52. Various other licensors made similar assurances to the ATSC.

53. Zenith and other members of the Grand Alliance made these commitments to the ATSC and/or FCC because if they had not provided FRAND assurances, their patents would not have been incorporated into the ATSC standard and/or the FCC would not have adopted the

ATSC standard using the chosen technology—it would have picked another technology from the available alternatives.

54. The representations by ATSC standard proponents to the FCC were a predicate to the acceptance of the ATSC standard. The FCC and consumers were entitled to rely on these representations on an ongoing basis in exchange for the substantial benefits the members of the Grand Alliance received from the FCC’s acceptance of the ATSC standard.

55. Since its selection by the FCC, the ATSC standard has evolved and expanded. Although some of the ATSC standards are mandated by the FCC, others are not and are provided as “recommendations.”

56. The FCC’s mandated use of ATSC technology creates an absolute barrier to entry into the U.S. TV market for manufacturers who would use competing technology.

G. MPEG LA and the ATSC Patent Portfolio.

1. Zenith’s Leading Role.

57. In or about December 2004, MPEG LA called for submissions of patents from patent owners that believed their patents could be essential for implementing the ATSC standard. Upon information and belief, the law firm of Proskauer Rose LLP (“Proskauer”) performed the initial patent evaluations.

58. Upon information and belief, at an initial meeting in about June 2005, Proskauer reported that ATSC essential patent holders interested in joining the ATSC pool included LG Electronics, Samsung, and Scientific-Atlanta, among others. At subsequent meetings between MPEG LA and ATSC standard patent holders, those parties discussed creating the ATSC patent portfolio.

59. Upon information and belief, at one of those subsequent meetings, in 2006, MPEG LA predicted that by 2009, the price of ATSC tuners would fall about 80% from their 2003 price levels. MPEG LA further predicted that the retail price of digital televisions would also substantially decrease.

60. Zenith was a primary proponent of the ATSC standard. Among the first patents for which Zenith sought inclusion as part of the ATSC standard were its patents for digital vestigial sideband (“VSB”) technology. Thus, before the FCC accepted the ATSC standard, Zenith engaged in a program of contacting potential licensees and offering licenses to its VSB patents for \$5.00 per ATSC unit.

61. Zenith also engaged in aggressive enforcement of its VSB patents by suing potential licensees who, at first, refused Zenith’s request to take a license.

62. Between late 2006 and early 2007, MPEG LA had discussions with Zenith about joining the ATSC pool. Upon information and belief, at that time Zenith was involved in settlement discussions with various manufacturers Zenith had sued for infringing its VSB patents.

63. In about April 2007, MPEG LA, after discussions with Zenith, proposed a specific royalty rate to ATSC essential patent holders of \$5 per unit, regardless of the device or its market price. Zenith is a licensor of the ATSC patent pool.

2. Samsung’s Concerns Regarding the ATSC Patent Portfolio.

64. To its credit, in correspondence on April 24, 2007, upon information and belief Samsung told Zenith and others, including Philips and Panasonic that “the royalty burden on the manufactures [*sic*] will eventually become the cost burden on the US consumers through the price of DTVs – which seems to be against the US Government policy of lessening the burden

on the customers.” To that end, Samsung said “we also question about *a possible antitrust concern* – can setting up a high royalty and transferring the cost burden to consumers through a patent pool to favor one essential patent holder constitute a *patent abuse*?” (emphases added).

65. Upon information and belief, Samsung further claimed that the Zenith patents were not essential to the ATSC standard because VSB technology was only “an informative part [of the ATSC standard] – which is not considered mandatory.” For that reason, Samsung was “concerned that *such scheme may raise anti-trust risk* of tying of non-essential patents to essential patents *and have negative impact on the market.*” (emphases added).

66. In that same letter, upon information and belief, Samsung noted that comparable royalty rates for DTV standards used in Europe and Japan ranged from \$0.67 to \$1.00 per unit and showed that in one example the \$5/unit rate would be 8.3% of the price—an “extremely high ratio – especially because the current royalty scheme fixes the royalty to \$5 [through] 2016 *without taking the inevitable drop of the product price into account.*” (emphasis added). Samsung wondered “what makes the ATSC standard so expensive and valuable” when compared to the European and Japanese standards.

67. Upon information and belief, on that same day Panasonic noted it “can share Samsung’s concerns.”

68. In or about July 2007, MPEG LA and the ATSC patent licensors came to agreement on the licensing terms of the ATSC pool, and agreed to charge a royalty rate of \$5 per unit for each television sold. From inception of the ATSC patent portfolio through 2016, this rate did not change. Upon information and belief, MPEG LA charges lower rates to contributors to the ATSC patent portfolio or MPEG LA provides only its licensors with substantial rebates to the license fee.

69. Samsung joined the ATSC patent portfolio as a licensor despite its misgivings regarding the royalty rate and the royalty split between licensors. Upon information and belief, MPEG LA and/or ATSC patent portfolio licensors negotiated a side agreement with Samsung that provided incentives for it to join the portfolio. Upon information and belief, as of January 1, 2017, Samsung withdrew from the ATSC patent portfolio.

3. The DOJ's Antitrust Review of the MPEG-2 Patent Portfolio.

70. In 1997, MPEG LA obtained a business review letter from the U.S. Department of Justice ("DOJ") for its MPEG-2 patent portfolio. In that letter, the DOJ noted that patent pools "can restrict competition, whether among intellectual property rights within the pool or downstream products incorporating the pooled patents," and that patent licensors could use the license "as a vehicle to disadvantage competitors in downstream product markets." To avoid these harmful outcomes, the DOJ said "[t]he limitation of the Portfolio to technically essential patents and *the use of an independent expert to be the arbiter of that limitation* reduces the risk that the patent pool will be used to eliminate rivalry between potentially competing technologies." (emphasis added).

71. MPEG LA did *not* obtain a business review letter from the DOJ regarding the ATSC patent portfolio.

72. Upon information and belief, MPEG LA does not use an independent expert to ensure that the ATSC patent portfolio contains only technically essential patents. Instead, MPEG LA uses and/or has used its attorneys at Proskauer to review the ATSC patent portfolio. Proskauer also has acted as trial counsel for MPEG LA and/or licensors including Zenith, Panasonic, Columbia University, Philips, British Telecommunications, CIF Licensing, Fujitsu, GE, LG, Mitsubishi, Samsung, Sony, Thomson Licensing, and JVC Kenwood, as shown in, *inter*

alia, Cause Nos. 0:13-cv-61237-KMM, 9:13-cv-80567-DMM, 9:13-cv-80568-DMM, and 9:13-cv-80570-DMM in the Southern District of Florida; Cause Nos. 2:14-cv-00845-JAK-AJW and 2:14-cv-5150 in the Central District of California; and Cause No. 7:09-cv-07114-WGY in the Southern District of New York.

73. Proskauer’s status as both counsel for MPEG LA and/or its licensors *and* as the “adviser” that determines which patents should be included in the MPEG LA portfolios demonstrate that Proskauer is *not* independent. It is the agent of MPEG LA and/or its licensors upon which MPEG LA relies.

4. Haier’s Futile Attempts to License Directly.

74. From at least 2007, Defendants and/or their licensees have competed with Haier in selling DTVs throughout the United States.

75. Haier is a licensee of the ATSC patent portfolio. It executed a license as a condition of settlement in the British Telecommunications suit. As a condition of licensing, MPEG LA demanded Haier pay royalties dating back to December 24, 1996, the coverage date of the license that somehow predates MPEG LA’s pooling of ATSC patents.

76. Haier has attempted to negotiate license agreements technology on FRAND terms with Defendants Samsung and LG directly. Both Samsung and LG informed Haier that it must only obtain licensing from MPEG LA. Haier made the same attempt, and received the same response, when it sought to license certain patents directly from Thomson Licensing. Haier’s experience is not unprecedented—at least one other potential licensee is believed to have tried to secure necessary licenses from individual licensors but the licensors have ignored its requests.

H. How MPEG LA and the Licensors Misuse the ATSC Patent Portfolio to Monopolize Access to the U.S. Television Market.

77. Practicing the ATSC standard in the United States *cannot* require a license to

every patent in the ATSC patent portfolio for at least three reasons: (1) numerous patents in the ATSC patent portfolio are non-U.S. patents, which have no effect within the United States;⁸ (2) various patents in the ATSC patent portfolio have expired and MPEG LA has replenished the portfolio primarily with broadcast and transmission patents that do not apply to receiver technology, cannot apply to ATSC Receiver Products, and whose only purpose is to extend the life of the licensing scheme; and (3) various patents in the ATSC patent portfolio are not, in fact, “standard essential” patents and have never been evaluated and determined to be essential by an *independent* third party. The Defendants’ misuse is further detailed below.

1. Unreasonable Pricing.

78. MPEG LA has demanded royalty rates that exceed the rate its ATSC patent portfolio should command based on the fair market value of the patents in the portfolio.

79. The price of ATSC tuners has declined since the FCC adopted the ATSC standard. Both the FCC and industry participants interested in the development of the ATSC standard expected that the tuner prices would fall.⁹ Nonetheless, the MPEG LA license fee remained \$5 from the creation of the portfolio to January 2017, when MPEG LA dropped the rate to \$1.50 per unit. This means the royalty rate increased as retail prices plummeted. This adversely affects lower price-tier manufacturers and sellers of smaller TV sets, such as Haier, who have to pass their costs onto consumers or not enter the U.S. market at all. The license fee is therefore unreasonable.

80. The royalty rate for the ATSC patent portfolio does not account for the availability of, and royalty rates for, similar patents. The ATSC patent portfolio rate also does

⁸ Similarly, practicing the ATSC standard outside the United States cannot require licensing the numerous U.S. patents in the portfolio.

⁹ *In the Matter of Review of the Commission’s Rules and Policies Affecting the Conversion To Digital Television*, FCC 02-230, MM Docket No. 00-39, Second Report and Order at ¶¶ 10-22.

not account for the profitability of the patented inventions, including the duration and term of the license, selling price of the products and alternatives that could have been written into the standard. The retail market price for stand-alone ATSC tuners at the end of 2016 was somewhere in the range of \$20-50 per unit, which rendered the license fee a 10-25% royalty rate on retail purchases. The high royalty rate also means that consumers are harmed by the inability of lower-priced TVs to enter the U.S. market and by the reduced competition that results from enforcement of the ATSC patent portfolio.

81. MPEG LA's actions artificially inflated the price of DTVs in the United States, erected barriers to entry in the U.S. market for lower price-tier manufacturers and constitute anticompetitive conduct. Such conduct ultimately harms U.S. consumers by limiting the availability of lower-priced DTVs and reduces competition in DTV manufacturing.

82. MPEG LA's actions have also knowingly injured Haier by overcharging it to license ATSC technology, which prevented it from competing on price to obtain customers and sales that it would have obtained but for MPEG LA's anticompetitive patent pooling. Haier estimates its damages in the millions of dollars.

2. MPEG LA Has Attempted to Maintain its Excessive Royalty Rate by Adding "Broadcasting" Patents.

83. MPEG LA has periodically removed expired patents and submitted new patents to extend the lifespan of the ATSC patent portfolio and ensure its licensors can continue to receive royalties. In the ATSC license, MPEG LA states that "the Patent(s) in the ATSC patent portfolio may not include all present and *future* ATSC Essential Patent(s)." ATSC license § 4.4 (emphasis added). Thus, MPEG LA constantly adds and subtracts patents from the ATSC patent portfolio without notice or comment from licensees and without independent third-party evaluation to

ensure essentiality. MPEG LA *only* adds patents owned by or assigned to its existing cartel members.

84. Recent patents MPEG LA has added have not been properly analyzed for suitability or applicability. For example, MPEG LA has added 46 patents since October 2015 that relate to broadcasting and transmitting over-the-air signals to ATSC-compliant receivers.

85. Haier has identified no fewer than 54 patents in the ATSC patent portfolio that claim inventions relating to broadcasting signals but *not* receiving such signals (the “Broadcast Patents”). The list of the Broadcast Patents and the date MPEG LA added them to the portfolio is attached as Exhibit D to the Rafilson Declaration. The 46 patents MPEG LA added since October 2015 is more than 80% of that total. The other eight Broadcast Patents were added to the portfolio in either October 2011 or January 2012.

86. Of the 54 Broadcast Patents, *zero* are required for Haier (or any other DTV manufacturer or seller) to make its DTVs ATSC compliant because its DTVs do not broadcast signals. Listing the patents in the ATSC patent portfolio is deceptive because the license only covers ATSC *Receiver* Products.

87. MPEG LA’s, Panasonic’s and LG’s decision to list the Broadcast Patents in the ATSC license is improper. By listing the Broadcast Patents as part of the ATSC patent pool, but excluding them from the license grant, MPEG LA has violated the requirement the DOJ imposed in reviewing the MPEG-2 patent portfolio that only standard-essential patents, as determined by an independent expert, may be included in a patent pool. Upon information and belief, MPEG LA added the Broadcast Patents to the ATSC license without the approval of an independent expert.

88. Upon information and belief, MPEG LA started adding the Broadcast Patents in October 2015 to maintain the size of the ATSC patent portfolio and replace expiring patents. It added the patents both to extend the licensing term of the portfolio and to justify continued royalties, even though the ATSC license only applies to ATSC Receiver Products.

3. Improper Royalty Stacking.

89. The ATSC standard requires the ATSC receiver product to decode MPEG-2 video and audio. But the MPEG-2 patents are not included in the ATSC patent portfolio. Thus, to comply with all allegedly necessary licenses, ATSC Receiver Products must be licensed under both the ATSC license and the MPEG-2 license.

90. MPEG LA's royalty stacking renders both the MPEG-2 and ATSC licenses unfair and/or unreasonable, both singly and in combination.

91. The combined cost for the two licenses for calendar years 2011 (when Haier was first licensed) through 2015 was \$7 per ATSC receiver product.

92. The \$7 stacked royalty is 14-35% of the \$20-50 retail price for stand-alone ATSC receivers.

93. For low-priced TVs in the \$200 range, a \$7 total royalty is 3.5% of the product's TV's retail price. For a 75" Samsung TV that retails for \$2000, the royalty is 0.35%. Thus, the regressive price structure of stacked royalties is unfair and discriminates against low-cost TV brands. The regressive price structure disproportionately harms poorer consumers who purchase lower-priced televisions and who are the target buyers of low-cost TV brands.

94. The combined \$7 license fee stack is also far higher than comparable licenses required in Europe for compliance with DTV standards, which renders it unreasonable.

95. The \$2 license fee for MPEG-2 technology is unreasonably high for purchasers of the ATSC license. To protect against anticompetitive effects, licensors of standard-essential technology must provide licenses that are reasonable in scope. The ATSC license fee is already excessive. Because it does not license necessary MPEG-2 technology, the ATSC patent portfolio license fee is even *less* reasonable than if it had included MPEG-2 patents. Charging licensees an additional 40% for necessary technology (\$2 on top of the \$5 ATSC license fee per product) constitutes an unreasonable fee stacked atop an existing license.

4. Inclusion of Non-Essential Patents in the ATSC Patent Portfolio.

96. The ATSC patent portfolio also fails to meet FRAND licensing requirements because it forces licensees to purchase licenses to non-essential technology as a condition of receiving licenses to essential technology. For example, Attachment 1 of the ATSC license includes thirteen patents owned by LG that are directed to a method of identifying the status of a broadcast channel in a digital broadcast receiver (the “LG Channel-Skipping Patents”).¹⁰ See Rafilson Decl. Ex. E (list of channel-skipping patents); Ex. F (attachment 1 of ATSC license). All claims of the LG Channel-Skipping Patents require that the receiver be capable of automatically skipping inactive channels. But the ATSC standard imposes no such channel-skipping requirement. Instead, automatic channel skipping is simply a “recommended practice” for the ATSC standard. It is not mandated. Haier’s DTVs are not capable of automatically skipping inactive channels. They show a blank screen for an inactive channel, which is an admitted prior art feature. Thus, the LG patents are not ATSC essential patents.

¹⁰ The LG Channel-Skipping Patents are U.S. Patent Nos. 8,752,082, 8,707,367, 7,831,994, 7,814,530, 7,814,529, 7,620,972, 7,603,695, 7,469,415, 7,448,064, 7,100,189, 7,080,401, 7,051,361, and 7,051,359. Three LG patents, U.S. Patent Nos. 7,831,994, 7,814,530, and 7,814,529, are also Broadcast Patents. They are among the first eight Broadcast Patents added to the ATSC patent portfolio before 2015 and not in the group of 46 Broadcast Patents MPEG LA added in 2015.

97. Similarly, all claims of U.S. Patent No. 6,104,436 (the “Samsung Patent”), which is owned by Samsung, require that a DTV update programming information on subchannels while the user is watching the DTV. But the ATSC standard does not require subchannel information to be updated while a user is watching the DTV. Instead, it is “strongly recommended” that subchannel information be updated when the DTV is *not in use*. Thus, the Samsung Patent is not an ATSC essential patent.

98. In addition, Columbia University’s U.S. Patent Nos. 7,199,836, 8,115,873, 8,531,608, 8,854,552, and 8,917,357 (the “Columbia Patents”) relate to the processing and display of object-based video and audio-visual information. There are several “MPEG” compression formats. The first compression standard for video and audio was MPEG-1. The MPEG-2 standard improved upon MPEG-1 by supporting high definition video.¹¹ The MPEG-4 standard is newer than the MPEG-2 standard and uses more complex coding tools than MPEG-2. One central MPEG-4 coding method is based on video objects, also known as object-based coding. Object-based coding is not used for MPEG-2 or MPEG-1 compression.

99. The Columbia Patents disclose and claim inventions related to processing and displaying object-based video and audiovisual data at a receiver as provided by MPEG-4. They do not apply to MPEG-2 compression and transmission. None of the Haier TVs use the MPEG-4 standard embodied in the Columbia Patents.

100. Due to the non-essential nature of the various ATSC patent portfolio patents; the value of the patents relative to the price of Haier’s DTVs; the availability and royalty rates for

¹¹ ATSC Digital Television Standard, Part 1 – Digital Television System, Doc. A/53, § 4.2, Aug. 7, 2013 (“The transport format and protocol for the Digital Television Standard is based on the MPEG LA-2 Systems specification defined in ISO/IEC 13818-1 [14], including direct references and additional extensions, constraints and conditions.”); ATSC Digital Television Standard, Part 4 – MPEG LA-2 Video System Characteristics, Doc. A/53, Aug. 7, 2009.

similar patents; the profitability of the patented invention, including the duration and term of the license, alternatives that could have been written into the standard, and the customary selling price of the products; and/or the declining market price for DTVs, MPEG LA required Haier to enter the license on non-FRAND terms.

I. The Relevant Technology Market.

101. The relevant market is the market for the technology embodied in the ATSC standard (including the technology embodied in the ATSC Essential Patents), which the FCC requires for every television sold in the United States. Hereafter the market will be referred to as “the relevant technology market.”

102. The FCC’s requirement means that there are no available substitutes for ATSC standard-compliant products. Every DTV sold in the United States must be ATSC-compliant.¹² Defendants’ ownership of the patents they claim are ATSC Essential Patents provides them with the power to control prices and exclude competition. Acting through MPEG LA, the other Defendants therefore hold the ability to prevent competitors from using the ATSC standard.

103. Defendants acquired monopoly power in the ATSC standard essential technology market by making false promises to the ATSC and the FCC—specifically, Defendants falsely promised that they would license ATSC essential technology on a FRAND basis. They did not.

104. Defendants’ repudiation of FRAND terms and inclusion of invalid, foreign, and inapplicable patents in the ATSC patent portfolio renders their monopoly power, both patent and standard-essential, illegal.

105. In addition, MPEG LA’s practice of separating technology necessary to meet the ATSC standard into the MPEG-2 and ATSC patent portfolios, instead of ensuring all necessary

¹² Certain companies like Vizio sell screens that do not contain ATSC tuners. Such screens are technically *monitors*, akin to computer screens, not televisions.

ATSC standard technology is available in the ATSC patent portfolio, creates illegal royalty stacking. Such royalty stacking forces licensees to pay an even higher, more unreasonable rate, for necessary technology and creates barriers to entry in the relevant technology market.

106. Haier and Defendants, or their licensees, are or were horizontal competitors in the downstream product market. Haier competes intensely on price; Defendants and/or their licensees have incentive to lessen the intensity of Haier's price competition and/or drive lower price-tier television sellers such as Haier from the market by imposing an unreasonably high royalty, thereby increasing lower price-tier television sellers' costs, and increasing revenues for Defendants.

107. Haier entered the ATSC license under duress after various ATSC licensors sued it. It holds the license because it markets and distributes Haier-brand DTVs in the United States.

108. Defendants have and had intentionally set their royalty rates at prices that are not only far above FRAND levels, but are intentionally chosen to restrain or eliminate competition from Haier and others who sell their products at lower prices than those charged for comparable products sold by Haier. Such conduct results in higher costs charged to U.S. consumers.

109. Defendants and MPEG LA, as licensing administrator for the ATSC pool, have set royalty rates that raise costs, and thus prices, on products for which the royalties are paid. Such elevated costs restrict output and reduce or eliminate competition in the downstream product market.

110. The anticompetitive conduct described above has harmed competition in the downstream product market in since the ATSC patent pool was formed, including reducing the number of companies manufacturing televisions, reducing competition to the detriment of consumers, and increasing market share for certain licensors in the ATSC patent pool.

111. Upon information and belief, MPEG LA's licensors have insulated themselves from the anticompetitive effects of the royalty payment by entering into cross-licenses to help defray their costs and to avoid paying the full per-TV royalty, which would otherwise apply to the patents each licensor does not own. This cross-licensing by licensors enables the licensors to reduce costs to compete while concurrently raising barriers to entry for non-licensors.

112. The MPEG LA licensors have received royalties far exceeding the value of their claimed inventions that relate to the ATSC standard.

113. One MPEG-2 licensor, Hitachi, upon information and belief estimated on or about November 15, 2004, that Zenith would eventually collect more than \$5 billion in royalties on its VSB technology "[a]gainst a \$50 to \$75 million investment."

114. As administrator of the ATSC patent portfolio, MPEG LA has received hundreds of millions of dollars in licensing fees and therefore has a vested interest in perpetuating non-FRAND licenses for the ATSC patent portfolio. Unless MPEG LA can extend the licenses by adding non-essential patents, MPEG LA has no reason to exist, the huge bonuses and pay for their executives disappear and the game ends. That is why MPEG LA and its contributors do not allow an independent third party to determine if proposed additional patents for MPEG LA's portfolios are actually standard-essential.

115. MPEG LA along with LG, Samsung, Philips, Panasonic and other licensors have conspired in restraint of trade to affect, raise, fix, maintain, and stabilize prices in the downstream product market by demanding an excessive, non-FRAND royalty rate for the ATSC standard. The effect of this unlawful conduct has been and will continue to be to restrain or eliminate competition and reduce output, and to decrease the production of ATSC compliant

DTVs at low prices, all to the detriment of U.S. consumers and competition in the consumer electronics market.

J. Antitrust Standing.

116. The actions by MPEG LA and the other Defendants to create, develop and enforce the illegal patent pool MPEG LA markets as the ATSC patent portfolio, refusal to license it to Haier on FRAND terms, and stacking the ATSC patent portfolio with the MPEG-2 patent portfolio constitute but-for and proximate causes of injury to Haier. The injury to Haier is immediate in its directness—the non-FRAND license has increased costs to Haier and restrained competition by discouraging Haier from selling DTVs in the United States.

117. Defendants created, developed and participate in the ATSC patent portfolio because it has provided an additional source of income for them regardless of whether their included patents are necessary to comply with the ATSC standard, stifled lower cost and lower-price competitors from competing against the licensors and their licensees in the television marketplace, and raised DTV prices. In turn, the ATSC patent portfolio increases revenues for Defendants by reducing competition among the lower-price DTV manufacturers, and allowing Defendants to offset low profit margins from producing low-price DTVs with license revenue. Distributing patents required to practice the ATSC standard into *both* the ATSC patent portfolio and MPEG-2 patent portfolio created a \$7 royalty per unit from 2010-2015 for ATSC-compatible DTVs.

118. The harm Haier has suffered is quantifiable. The added costs to Haier to comply with the non-FRAND license MPEG LA offers results in higher pricing of Haier DTVs for consumers.

119. The risk of duplicative injury is minimal. Haier's injuries are particular and specific to Haier and are not difficult to apportion between it and any other plaintiff that could claim injury from Defendants' monopolization activities.

120. Haier is a suitable plaintiff for pursuing antitrust violations by Defendants. Haier is a licensee of the ATSC patent portfolio. Its injuries are directly attributable to Defendants' anti-competitive conduct, there are no known licensed plaintiffs in a better position to vindicate the public interest in preventing the patent pool in question from failing to be licensed on FRAND terms as required by the FCC, and the specific harm to Haier indicates that other victims of Defendants' illegal conduct are not likely to seek damages that would be cumulative of the injury Haier has suffered.

121. Tying the licensing of nonessential patents included in the ATSC patent portfolio to essential patents for practicing the ATSC standard has a substantial effect upon interstate commerce.

122. Haier is a participant in the United States DTV market as are numerous ATSC patent portfolio and MPEG-2 patent portfolio licensees.

123. There are other companies who have been harmed by their refusal to accept or acceptance of MPEG LA's non-FRAND licensing terms for the license.

124. Upon information and belief, MPEG LA and Defendants have used the cover of the ATSC patent portfolio to engage in additional concerted action in unreasonable restraint of trade, including without limitation: increasing the costs of rivals such as Haier, who do not share in the ATSC patent portfolio revenues and do not own patents to trade for offsetting royalties; preventing willing licensees of ATSC technology from engaging in negotiation with individual licensors; conditioning licensing essential technology upon licensing nonessential technology;

failing to offer licenses for their patents on FRAND terms; engaging in patent hold up; demanding royalty rates that are excessive; failing to reduce royalty rates as patents expired; requiring the purchase of licenses for unnecessary patents in order to obtain licenses for patents necessary to manufacture ATSC-compliant televisions; acting to restrain and eliminate trade as to lower price-tier television sellers such as Haier by charging excessive rates calculated to inflate costs and eliminate lower price-tier competition; tying the licensing of patents in countries for which a licensee does not require a license to patents in countries for which the licensee desires a license; failing to demonstrate essentiality of all patents in the pool; tying the licensing of ATSC essential patents to obtaining licenses for patents not essential to the ATSC standard; listing patents as part of the ATSC patent pool, but excluding them from the license grant; stacking patent portfolios to increase royalties beyond reasonable rates; charging unreasonable rates for ATSC licensees to obtain the MPEG-2 license; and having inadequate safeguards to ensure that the pool is limited to patents actually essential to the ATSC standard. These actions are the “Anticompetitive Conduct.”

K. Expiration of the ATSC and MPEG-2 Patent Licenses.

125. Section 6.1 of the ATSC license provides in relevant part:

This Agreement shall expire on the earlier of (i) December 31, 2016 or (ii) the expiration of all ATSC Essential Patent(s). Upon expiration of this Agreement pursuant to clause (i) above, this Agreement shall be automatically renewed for successive five (5) year periods until the expiration of all ATSC Patent Portfolio Patents (unless terminated pursuant to Section 6.4) upon notice of renewal to Licensee by the licensing administrator.

126. The licensing administrator did not provide notice of renewal of the ATSC license to Haier. Thus, the ATSC license expired on December 31, 2016. Section 6.1 of the MPEG-2 license provides that it expires “on the expiration of all MPEG-2 Patent Portfolio Patents.” Under section 1.16, only an “MPEG-2 Essential Patent” (a patent that is “necessarily infringed in

connection with the use or implementation of the MPEG-2 standard”) can constitute an “MPEG-2 Patent Portfolio Patent.” Only two unexpired U.S. patents remain on MPEG LA’s list of patents for the MPEG-2 license. Rafilson Decl. Ex. G at 1.

127. On August 11, 2017, Haier notified MPEG LA that, to the extent the ATSC license and the MPEG-2 license had not terminated by their own terms, Haier had terminated its licensee status as to both licenses, effective the 30th day after notification.

**FIRST CLAIM FOR RELIEF – MONOPOLIZATION (SHERMAN ACT § 2)
(against Zenith, Samsung, Panasonic, Philips, LG, and Columbia)**

128. Haier incorporates by reference all allegations above as if set forth here in full.

129. The relevant technology market defined above is a valid antitrust market.

130. Because they claim their patents are or may be required for ATSC receivers, and therefore are ATSC standard-essential patents, Defendants each possess monopoly power in the relevant technology market.

131. There are no alternative products to Defendants’ patents that Haier can use as a substitute.

132. Defendants’ conduct described above occurred in interstate commerce or affected same.

133. Defendants have willfully acquired and maintained monopoly power in the relevant technology market by engaging in anticompetitive conduct including: (a) falsely representing to the ATSC and/or FCC that if its patented technology was included in the ATSC standard, it would license any such patents to all applicants on FRAND terms; (b) failing to license the alleged ATSC essential patents on FRAND terms; (c) using false promises to have its technology incorporated into the ATSC standard and intending for the FCC and ATSC to rely on such promises in determining the standard for DTV transmission and decoding; (d) using and/or

conspiring to use the ATSC patent portfolio, including inapplicable and expired patents, to raise prices and exclude competition in the DTV market.

134. By engaging in the Anticompetitive Conduct and adding patents such as the LG Channel-Skipping Patents, Samsung Patent, Columbia University Patents and/or Broadcast Patents to the ATSC patent portfolio, Defendants and other licensors have improperly prolonged the life of the ATSC patent portfolio and thus the time period during which licensees are required to take a license greatly exceeds the limited monopoly granted to patentees in exchange for disclosure of their invention. Thus, Defendants have engaged in willful acquisition and/or maintenance of monopoly power unrelated to economic growth or development that would occur due to historic accident, creating superior products and/or exercising superior business acumen.

135. Defendants have illegally tied licensing patents essential for receiver products to meet the ATSC standard with licensing patents that are nonessential for such purposes, including requiring licensing patents that do not have legal effect in the United States. Defendants do not provide licenses to nonessential patents free of charge.

136. Such activities by Defendants have had, or will have, the following results: competition in the relevant market has and will be impaired and restrained, and Defendants have and will have illegally obtained the power to control prices and/or restrain and exclude competition in the downstream product market, thereby affecting interstate commerce.

137. Defendants' conduct has a direct, substantial, and reasonably foreseeable effect on trade or commerce on import trade or import commerce with China.

**SECOND CLAIM FOR RELIEF – CONSPIRACY TO MONOPOLIZE AND ILLEGAL TYING (SHERMAN ACT §§ 1, 2)
(against all Defendants)**

138. Haier incorporates by reference all allegations above as if set forth here in full.

139. ATSC patent portfolio licensors possess monopoly power in the relevant technology market because each of their patents that MPEG LA lists as a potential ATSC Essential Patent provides the patentee the power to block customers' implementation of the ATSC standard, and thus the sale of digital televisions in the downstream product market. In addition, by engaging in the Anticompetitive Conduct, including pooling their allegedly standard-essential ATSC patents into the ATSC patent portfolio that MPEG LA maintains, Defendants have monopoly power in the relevant technology market. Companies like Haier that wish to sell digital televisions in the U.S. had to pay the non-FRAND license fee of \$5 per unit through 2016. Thus, through each of their individual ATSC patents and through the collective ATSC patent portfolio, as administered by MPEG LA, Defendants each individually possess, and also collectively possess, monopoly power in the relevant technology market. Their conduct occurs in and/or affects interstate commerce.

140. Defendants like Samsung, Zenith, Panasonic, Philips, Columbia, and LG together with their subsidiaries, the other licensors, and/or MPEG LA have an agreement or mutual understanding to acquire, maintain and protect monopoly power and control prices in the relevant technology market. MPEG LA and the licensors unlawfully acquired monopoly power in the relevant technology market by falsely promising to the FCC and/or ATSC that they would license their ATSC standard essential patents on FRAND terms.

141. MPEG LA and its licensors knowingly, voluntarily, intentionally, and willfully entered into an agreement and mutual understanding to acquire or maintain monopoly power and

control prices in the relevant technology market with the conscious aim of using anticompetitive conduct to maintain market power and restrain competition from lower-cost competitors like Haier.

142. By continually adding patents such as the LG Channel-Skipping Patents, Samsung Patent, Columbia Patents, and/or Broadcast Patents to the ATSC patent portfolio, Defendants and other licensors have improperly prolonged the life of the ATSC patent portfolio and thus the time-period during which licensees are required to take a license greatly exceeds the limited “monopoly” granted to patentees in exchange for disclosure of their invention.

143. Defendants have illegally tied the licensing of patents essential for receivers to meet the ATSC standard with licensing patents that are nonessential for such purposes including requiring licensing patents that do not have legal effect in the United States. Defendants do not provide licenses to nonessential patents free of charge nor do they delineate which patents are essential and which are not.

144. Defendants’ conduct has a direct, substantial, and reasonably foreseeable effect on trade or commerce on import trade or import commerce with China.

145. Defendants’ actions constitute conspiracy to monopolize.

146. Defendants’ actions also constitute improper tying under Section 2 of the Sherman Act. Defendants effectively require potential licensees to license the ATSC patent portfolio from MPEG LA because no individual licensor will enter negotiations for licensing only necessary patents to potential licensees; instead, each individual licensor refers potential licensees to MPEG LA. As shown above, the ATSC patent portfolio includes both standard-essential and nonstandard-essential patents, therefore Defendants tie a license to nonstandard-

essential patents (which Haier does not need) to a license for standard-essential patents (which Haier requires to sell DTVs in the U.S.).

**THIRD CLAIM FOR RELIEF – CONCERTED ACTION IN RESTRAINT OF TRADE
(SHERMAN ACT § 1)
(against all Defendants)**

147. Haier incorporates by reference all allegations above as if set forth here in full.

148. Upon information and belief, Haier alleges a contract, combination or conspiracy exists between or among Defendants and/or others that unreasonably restrains and/or eliminates trade.

149. Defendants are engaged in commerce in the United States, and the Anticompetitive Conduct alleged herein involves products in the flow of interstate commerce and will substantially impact and has substantially impacted interstate commerce because television products complying with the ATSC standard are sold throughout the United States.

150. Defendants that are or were horizontal competitors of Haier in the product market, upon information and belief, have conspired and agreed with MPEG LA to reduce or eliminate competition from lower price-tier television sellers such as Haier by entering into the following agreements in restraint of trade: (a) an agreement not to license the pooled patents individually; and (b) an agreement to set a non-FRAND royalty rate for the pooled patents.

151. MPEG LA has conspired and agreed with the other Defendants to reduce or eliminate competition from lower price-tier television sellers such as Haier by entering into the following agreements in restraint of trade: (a) an agreement not to license the pooled patents individually; (b) an agreement to set a non-FRAND royalty rate for the pooled patents; and (c) forcing market entrants to obtain multiple (stacked) licenses and increasing royalties beyond reasonable rates.

152. The agreement to engage in Anticompetitive Conduct between Defendants constitutes a contract, combination, or conspiracy in unreasonable restraint of trade in violation of Section 1 of the Sherman Act, the purpose of which is to unreasonably restrain trade and suppress price competition in the DTV market.

153. Upon information and belief, the Defendants' actions have caused competition in the downstream product market to be unreasonably impaired and restrained, thereby affecting interstate commerce; erected unreasonable barriers to entry into the DTV market in the U.S.; allowed Defendants and other licensors to reduce their own costs, while increasing the costs of rivals.

**FOURTH CLAIM FOR RELIEF – VIOLATION OF NEW YORK'S DONNELLY ACT
(against all Defendants)**

154. Haier incorporates by reference all allegations above as if set forth here in full.

155. Upon information and belief, Haier alleges a contract, combination or conspiracy exists between or among Defendants and/or others to engage in the Anticompetitive Conduct that unreasonably restrains and/or eliminates trade.

156. Specifically, Defendants have combined their capital, skill or acts to carry out restrictions in trade or commerce; limit the production and/or increase the price of televisions, which are merchandise; prevent competition in making and selling merchandise; entered into agreements to keep the price of an article at a fixed figure or establish the price of an article so as to directly preclude a free and unrestricted competition among purchasers of such article or agreed to pool interests connected with the sale of an article so as to affect the price of such article.

157. Defendants are engaged in commerce in New York, and the activities alleged herein involve products in the flow of commerce and will substantially impact and has

substantially impacted commerce because television products complying with the ATSC standard are sold throughout New York.

158. Defendants that are or were horizontal competitors of Haier in the product market, upon information and belief, have conspired and agreed with MPEG LA to reduce or eliminate competition from lower price-tier television sellers such as Haier by entering into the following agreements in restraint of trade: (a) an agreement not to license the pooled patents individually; and (b) an agreement to set a non-FRAND royalty rate for the pooled patents.

159. Upon information and belief, MPEG LA and Defendants have used the cover of the ATSC patent portfolio to engage in the Anticompetitive Conduct.

160. The agreement to engage in Anticompetitive Conduct between Defendants constitutes a contract, combination, or conspiracy in unreasonable restraint of trade in violation of Section 1 of the Sherman Act, the purpose of which is to unreasonably restrain trade and suppress price competition in the DTV market, and therefore violates the New York Donnelly Act.

161. Upon information and belief, the Defendants' actions have caused competition in the downstream product market to be unreasonably impaired and restrained, thereby affecting interstate commerce; driven companies out of the DTV market in the U.S.; allowed Defendants and other licensors to reduce their own costs, while increasing the costs of rivals such as Haier.

**FIFTH CLAIM FOR RELIEF – DECLARATORY JUDGMENT OF
NONESSENTIALITY AND PATENT MISUSE (against LG)**

162. Haier incorporates by reference all allegations above as if set forth here in full.

163. All of the claims of the LG Channel-Skipping Patents require that a receiver be capable of automatically skipping inactive channels. But the ATSC standard imposes no such

channel-skipping requirement. Instead, automatic channel skipping is simply a “recommended practice” for the ATSC standard. It is not mandated.

164. Including nonessential patents in a patent portfolio that purports to license patents necessary to meet specific technological standards is not fair or reasonable to licensees who are required to pay for access to such nonessential patents.

165. In addition, inclusion of such patents and bundling them in the ATSC patent portfolio constitute an impermissible attempt to obtain economic rights and benefits beyond the legitimate scope of those that inhere in LG’s statutory patent rights, which constitutes patent misuse.

166. As a condition for approval of the ATSC patent portfolio from the FCC, MPEG LA had to utilize an independent expert who would ensure nonessential patents were not included in the portfolio. Such inclusion would violate FRAND requirements by adding unreasonable conditions to the patent license.

167. Upon information and belief, Defendants used no *independent* expert to ensure nonessential patents would not be included in the ATSC patent portfolio.

168. An actual and justiciable controversy exists as to whether the LG Channel-Skipping Patents are nonessential and their inclusion in the ATSC patent portfolio violates federal and state antitrust laws.

169. Plaintiff seeks a declaration from the Court that the LG Channel-Skipping Patents are not ATSC Essential Patents and that their inclusion in the ATSC patent portfolio and requirement that licensees license those patents with other patents necessary for the ATSC standard constitutes patent misuse and renders the LG Channel-Skipping Patents unenforceable.

SIXTH CLAIM FOR RELIEF – DECLARATORY JUDGMENT OF NONESSENTIALITY AND PATENT MISUSE (against LG and Panasonic)

170. Haier incorporates by reference all allegations above as if set forth here in full.

171. The claims of the Broadcast Patents listed in Exhibit D of the Rafilson Declaration are directed to transmitting ATSC-compliant signals to receivers, not receiving such signals.

172. The claims of more than 40 patents in the ATSC patent portfolio from LG and at least 5 from Panasonic are directed solely to broadcasting ATSC-compliant signals to ATSC receivers.

173. MPEG LA included patents that ATSC receiver products do not use in a license for ATSC Receiver technology. To maintain a \$5 fee level for the ATSC license, MPEG LA, Panasonic and LG simply added nearly four dozen patents to the Portfolio in 2015 to disguise MPEG LA's weakening portfolio strength. Such subterfuge demonstrates that MPEG LA did not offer the license on reasonable terms.

174. By listing the Broadcast Patents as part of the ATSC patent pool, but excluding them from the license grant, MPEG LA has violated the requirement the DOJ imposed in reviewing the MPEG-2 patent portfolio that only standard-essential patents, as determined by an independent expert, may be included in a patent pool.

175. Upon information and belief, Defendants used no *independent* expert to ensure nonessential patents would not be included in the ATSC patent portfolio.

176. An actual and justiciable controversy exists as to whether adding the Broadcast Patents to the ATSC patent portfolio, which could not confer any benefit upon the licensees, violates federal and state antitrust laws and fails to meet FRAND requirements.

177. Plaintiff seeks a declaration from the Court that listing the Broadcast Patents as part of the ATSC patent pool, but excluding them from the license grant, constitutes patent misuse and renders the Broadcast Patents unenforceable.

SEVENTH CLAIM FOR RELIEF – DECLARATORY JUDGMENT OF NONESSENTIALITY AND PATENT MISUSE (against Columbia University)

178. Haier incorporates by reference all allegations above as if set forth here in full.

179. The Columbia Patents relate to decoding object-based signals, which are used in MPEG-4 transmissions, not MPEG-2 transmissions.

180. No claims of the Columbia Patents relate to reception of ATSC-compliant signals.

181. Haier TVs cannot decode MPEG-4 signals.

182. The ATSC standard does not require ATSC receivers to have the capacity to decode MPEG-4 signals.

183. As a condition for approval of the MPEG-2 patent portfolio from the FCC, MPEG LA had to utilize an independent expert who would ensure nonessential patents were not included in the portfolio. Such inclusion would violate FRAND requirements by adding unreasonable conditions to the patent license.

184. An actual and justiciable controversy exists as to whether adding the Columbia Patents to the ATSC patent portfolio, which could not confer any benefit upon the licensees, violates federal and state antitrust laws.

185. Haier seeks a declaration from the Court that the Columbia Patents are not ATSC Essential Patents and that their inclusion in the ATSC patent portfolio and requirement that licensees license those patents with other patents necessary for the ATSC standard constitutes patent misuse and renders the Columbia Patents unenforceable.

EIGHTH CLAIM FOR RELIEF – DECLARATORY JUDGMENT REGARDING THE EXPIRATION DATES OF THE ATSC AND MPEG-2 LICENSES

186. Haier incorporates by reference all allegations above as if set forth here in full.

187. An actual and justiciable controversy exists as to the date on which the ATSC license expired.

188. Haier seeks a declaration from the Court that the ATSC license expired on December 31, 2016.

189. An actual and justiciable controversy exists as to the date of which the MPEG-2 license expired.

190. Haier seeks a declaration from the Court establishing the expiration date of the MPEG-2 license.

NINTH CLAIM FOR RELIEF – BREACH OF DUTY OF GOOD FAITH AND FAIR DEALING (Against All Defendants)

191. Haier incorporates by reference all allegations above as if set forth here in full.

192. The Broadcast Patents relate to transmitting ATSC-compliant signals to receivers.

193. No claims of the Broadcast Patents relate to reception of ATSC-compliant signals.

194. Haier TVs cannot broadcast ATSC-compliant signals.

195. More than 40 patents in the ATSC patent portfolio from LG and no fewer than 5 from Panasonic relate solely to broadcasting ATSC-compliant signals to ATSC receivers.

196. By listing the Broadcast Patents as part of the ATSC patent pool, but excluding them from the license grant, MPEG LA has violated the requirement the DOJ imposed in reviewing the MPEG-2 patent portfolio that only standard-essential patents. To maintain a \$5 fee level for the ATSC license, MPEG LA, Panasonic and LG simply added nearly four dozen

patents to the Portfolio to disguise MPEG LA's weakening portfolio strength. Such subterfuge demonstrates that MPEG LA did not perform the license in good faith.

197. The Columbia University Patents, LG Patents, and Samsung Patent are not standard-essential for the ATSC standard for the reasons stated above.

198. As a condition for approval of the MPEG-2 patent portfolio from the FCC, MPEG LA had to utilize an independent expert who would ensure nonessential patents were not included in the portfolio. Such inclusion would violate FRAND requirements by adding unreasonable conditions to the patent license.

199. Haier entered into the ATSC license.

200. It performed substantially all of its obligations under the license and related agreements.

201. MPEG LA's insertion of 54 broadcast patents into the ATSC patent pool to maintain a large number of patents despite their irrelevance to the receiver products that are the basis of paying the license fee unfairly and improperly interfered with Haier's right to the fruits of the license.

202. MPEG LA's inclusion of the Columbia Patents, the Samsung Patent, the LG Patents and/or other nonessential patents for the ATSC standard unfairly and improperly interfered with Haier's right to the fruits of the license.

203. MPEG LA's use of Proskauer patent counsel to evaluate patents for inclusion in the ATSC patent pool denies Haier and all licensees of the benefit of the bargain because Proskauer, which has represented MPEG LA licensors in patent infringement lawsuits against companies accused of infringing ATSC and/or MPEG-2 patents within the respective MPEG LA portfolios, is not an *independent* third party.

204. In addition, by engaging in the Anticompetitive Conduct, Defendants have breached their duty of good faith and fair dealing by denying Haier the benefit of the ATSC license.

205. Upon information and belief, all Defendants agreed with, permitted, or ratified MPEG LA's decision to include their patents in the ATSC patent portfolio.

206. Upon information and belief, all Defendants agreed with, permitted, or ratified MPEG LA's decision to utilize Proskauer to evaluate patents for inclusion in the MPEG-2 and ATSC portfolios.

207. Haier was harmed by MPEG LA's breach of its duty of good faith and fair dealing.

**TENTH CLAIM FOR RELIEF -- BREACH OF THIRD-PARTY BENEFICIARY
CONTRACT (Against All Defendants)**

208. Haier incorporates by reference all allegations above as if set forth here in full.

209. Upon information and belief, Defendants, in express or implied statements to the FCC and/or ATSC, and/or via their agreements with MPEG LA, agreed to license any essential patents for the ATSC standard on FRAND terms.

210. Upon information and belief, for consideration, including membership and participation in the FCC, ATSC, and/or the ATSC patent pool, Defendants entered into an express and/or implied contract with the FCC and/or ATSC, to which others, including Haier, are third party beneficiaries.

211. Upon information and belief, Defendants, individually and through MPEG LA, breached their contractual obligations by failing to license their allegedly standard-essential patents on FRAND terms. Haier is informed and believes, and on that basis alleges, that Defendants' demands for unreasonable royalties and/or failure to license their allegedly standard

essential patents on FRAND terms failed to consider the following: licensors of the ATSC patent pool agreed that the royalty rate for the ATSC patent pool was anti-competitive and would harm competition; the costs of rivals, such as Haier, would be increased, as they do not share in the ATSC patent pool revenues and do not own their own patents with which to trade for offsetting royalties; from inception through 2016, patents in the ATSC patent pool expired and the royalty rates did not decrease accordingly; the ATSC patent pool includes non-U.S. patents; and Defendants have inadequate safeguards to ensure that the ATSC patent pool is limited to patents actually essential to the ATSC standard.

212. Haier complied with the MPEG-2 and ATSC licenses after Defendants breached their commitment to license on FRAND terms.

213. Upon information and belief, Haier has incurred damages and irreparable harm and will be further damaged in the future due to Defendants' breaches of their contractual obligations. Such damages include, without limitation: lost profits; the ongoing threat of having to pay unreasonable royalties; the costs of having to prosecute this lawsuit; and the threat of other lawsuits that may be brought by Defendants regarding other ATSC patents they own, and/or by other ATSC licensors regarding their ATSC patents.

ELEVENTH CLAIM FOR RELIEF – PROMISSORY ESTOPPEL
(against all Defendants)

214. Upon information and belief, Defendants made representations and engaged in other conduct, including representations and/or omissions to the FCC and/or ATSC that obligated them to license any patents they may own that they allege are required to operate in accordance with the ATSC standard, on FRAND terms.

215. Upon information and belief, Defendants' conduct constituted promises to the FCC, ATSC, and/or third parties that make, use, sell, offer to sell, or import into the United

States products compliant with the ATSC standard. Haier is further informed and believes, and on that basis alleges that Defendants intended that their promises be relied upon and that by making such promises, Defendants knew or reasonably should have known they would be relied upon.

216. Upon information and belief, the FCC, ATSC, and/or third parties, including Haier, reasonably relied upon Defendants' promises, and invested substantial resources developing, marketing, and/or selling products that are alleged to utilize the ATSC standard, with the expectation that Defendants would comply with their promises and offer licenses to any standard essential patents on FRAND terms.

217. Defendants are estopped from defaulting on these promises under the doctrine of promissory estoppel.

218. Upon information and belief, Haier has been damaged as a result of its reasonable reliance as set forth herein, and is threatened by the continuing loss of profits, customers, potential customers, goodwill, and product image such that injustice can only be avoided by enforcement of Defendants' promises. Such damages include, without limitation: lost profits; the ongoing threat of having to pay unreasonable royalties; the costs of having to defend this lawsuit; and the threat of other lawsuits that may be brought by Defendants with regard to other ATSC patents they own, and/or by other ATSC licensors with regard to their ATSC patents.

219. Haier will suffer irreparable injury by reason of the acts and conduct of Defendants alleged above until and unless the court enjoins such acts, practices and conduct.

PRAYER FOR RELIEF

Wherefore, Haier respectfully requests that this Court enter a judgment for Haier including:

1. A declaration, order, decree or other judicial finding that the ATSC license is unenforceable and/or illegal under the Sherman Act and/or New York Donnelly Act,
2. Awarding Haier damages, as well as treble damages, in an amount to be proven at trial for Defendants' acts that violated Section 1 of the Sherman Act (15 U.S.C. § 1),
3. Awarding to Haier damages, as well as treble damages, in an amount to be proven at trial for Defendants' acts that violated Section 2 of the Sherman Act (15 U.S.C. § 2) and for the acts of Defendants for Conspiracy to Monopolize in violation of Section 2 of the Sherman Act,
4. Awarding to Haier damages, as well as treble damages, in an amount to be proven at trial for Defendants' acts that violated the New York Donnelly Act,
5. Finding that Haier is entitled to injunctive relief and restitution for Defendants' unfair competition,
6. Declarations that the Samsung Patent, the LG Patents, and the Columbia Patents are not ATSC Essential Patents, and that the Samsung Patent, the LG Patents, the Columbia Patents, and the Broadcast Patents are unenforceable.
7. A declaration, order, decree or other judicial finding that the ATSC license expired on December 31, 2016 and of the date of expiration of the MPEG-2 license,
8. Actual damages suffered by Haier due to Defendants' breach of their implied covenant of good faith and fair dealing, breach of contract, and/or promissory estoppel,

9. Awarding to Haier attorneys' fees and costs pursuant to 15 U.S.C. § 15,
10. Awarding to Haier all fees and costs allowed under the Donnelly Act,
11. Denying any relief to Defendants, and
12. Ordering all such other and further relief to which Haier is entitled.

Dated: August 21, 2017

HARRIS BEACH, PLLC

By: /s/ Elliot A. Hallak
Elliot A. Hallak (Bar Roll No. 520048)
677 Broadway, Suite 1101
Albany, New York 12207
Tel: (518) 427-9700
Fax: (518) 427-0235
E-mail: ehallak@harrisbeach.com

Michael W. Shore*
Alfonso G. Chan*
Joseph F. DePumpo*
Ari B. Rafilson*
Russell J. DePalma*
SHORE CHAN DEPUMPO LLP
901 Main Street, Suite 3300
Dallas, Texas 75202
Telephone: 214.593.9110
Facsimile: 214.593.9111
E-mail: mshore@shorechan.com
achan@shorechan.com
jdepumpo@shorechan.com
arafilson@shorechan.com
rdepalma@shorechan.com

* *Pro hac vice* application to be filed

Attorneys for Plaintiff