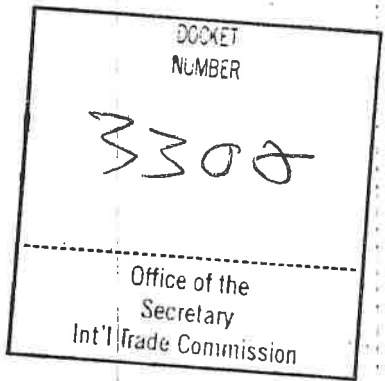


March 27, 2018

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VIA HAND DELIVERY

The Honorable Lisa R. Barton
Secretary to the Commission
U.S. International Trade Commission
500 E Street, S.W., Room 112
Washington, D.C. 20436



Re: Certain Light Engines and Components Thereof;
Investigation No. 337-TA-

Dear Secretary Barton:

Enclosed for filing on behalf of Ultravision Technologies, LLC ("Complainant") are the following documents in support of Complainant's request that the Commission commence an investigation under Section 337 of the Tariff Act of 1930, as amended. A request for confidential treatment, of Confidential Exhibit Nos. 50, 51, 52, 53 and certain exhibits thereto, 54, 55, 56, and 57, is included with this letter.

Accordingly, Complainant submits the following documents for filing:

- An original and eight (8) copies of the verified Non-Confidential Complaint and the Public Interest Statement; one (1) CD of the accompanying Non-Confidential exhibits, and one (1) CD with Confidential Exhibits Nos. 50 through 57 (19 CFR §§ 210.4(f)(2), 210.8(a)(1)(i)), 210.8(b) and 210.12(a)(1));
- Thirty-nine (39) additional copies of the verified Non-confidential Complaint, the Public Interest Statement and thirty-nine (39) CDs of the Non-Confidential exhibits for service upon the proposed Respondents (19 CFR §§ 210.8(a)(1)(iii) and 210.11(a));
- Thirty-nine (39) additional copies of Confidential Exhibit Nos. 50 through 57 on CDs for service upon the proposed Respondents (19 CFR § 210.8(a)(1)(iii));

OF COUNSEL
JOHN C STEINBERGER
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*admitted to a bar other than DC; practice limited to federal courts and agencies

The Honorable Lisa R. Barton

March 27, 2018

Page 2

- One (1) Non-certified copy¹ each of U.S. Patent No. 9,349,306 (“the ’306 Patent”) and U.S. Patent No. 9,916,782 (“the ’782 Patent”) (collectively, the “Asserted Patents”), cited in the Complaint as Exhibits 1 and 3 (19 C.F.R. §§ 210.8(a)(1)(iii) and 210.12(a)(9)(i));
- One (1) Non-certified copy² of the Prosecution History for the Asserted Patents (Appendices A and C) and three (3) additional copies on separate CDs (210.12(c)(1) and 210.12(d));
- Four (4) copies on CD of each reference document identified in the prosecution history of the Asserted Patents (Appendices B and D) (210.12(c)(2)); and,
- Five (5) additional copies of the Non-confidential Complaint for service upon the Embassy of the People’s Republic of China; The British Embassy; Embassy of Belgium; Embassy of Japan and Embassy of France in Washington, D.C. (210.8(a)(1)(iv)).

A certification is provided below pursuant to 19 CFR §§ 201.6(b) and 210.5(d) requesting confidential treatment of Confidential Exhibit Nos. 50, 51, 52, 53 and certain exhibits thereto, 54, 55, 56, and 57. The information for which confidential treatment is sought is Complainant’s proprietary commercial information, which is not otherwise publicly available. Specifically, the confidential portions of these exhibits disclose information regarding Complainant’s suppliers, licensing, business plans, market research, sales, and investments and employment in the United States establishing a domestic industry.

The information described above qualifies as confidential business information pursuant to Commission Rule 201.6 because:

- a. it is not available to the public;
- b. unauthorized disclosure of such information could cause substantial harm to Complainant’s competitive position; and
- c. its disclosure could impair the Commission’s ability to obtain information necessary to perform its statutory function.

¹ Certified copies of the Asserted Patents have been ordered and will be submitted when obtained.

² Certified copies of the Prosecution History for the Asserted Patents have been ordered and will be submitted when obtained.

The Honorable Lisa R. Barton
March 27, 2018
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I am available at your convenience to answer any questions. Thank you for your attention to this matter.

Sincerely,



Jonathan J. Engler
Counsel for Complainant
Ultravision Technologies, LLC

Enclosures

UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.

In the Matter of

**CERTAIN MODULAR LED
DISPLAY PANELS**

Investigation No. 337-TA-____

STATEMENT REGARDING THE PUBLIC INTEREST

In support of its Complaint, filed March 27, 2018, and pursuant to 19 C.F.R. § 210.8(b), Complainant Ultravision Technologies, LLC (“Ultravision”) respectfully submits this Statement Regarding the Public Interest. Ultravision seeks exclusion orders and cease and desist orders against certain modular LED display panels that infringe U.S. Patent No. 9,349,306 (“the ’306 patent”) and U.S. Patent No. 9,916,782 (“the ’782 patent”) (the “Accused Products”). Exclusion of such products from the United States will not have an adverse effect on the public health and welfare in the United States, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, or United States consumers. As a result, the Commission’s consideration of the public interest during the remedy phase of the investigation is sufficient and delegation of this issue to the presiding Administrative Law Judge is unnecessary.

I. MODULAR LED DISPLAY TECHNOLOGY

Modular LED display panels are digital displays that use light emitting diodes built into panels, which can be assembled into a large array or installation of varying sizes—a small billboard or sign, a sports team’s scoreboard or digital display, or even large scale LED displays like those commonly seen in New York City’s Times Square.

Since its founding, innovation has been a key driver of Ultravision’s success. Prior to Ultravision’s development of its revolutionary UltraPanel product, LED-based digital displays

suffered from significant problems, including overheating, high failure rates, and large costs associated with their manufacturing, installation, and operation. For example, previous LED display panels were not waterproof, and thus needed to be placed in a sealed cabinet in order to operate outside. These waterproof cabinets required fans and air conditioning systems, which resulted in very high operating costs. Additionally, previous LED display panels were not modular, meaning that each installation required a bespoke design. This resulted in expensive manufacturing, shipping, and installation. These LED display panels were also difficult to maintain, often requiring expensive maintenance contracts with specialized technicians.

Recognizing a need in the industry for a more cost effective and overall improved LED display solution, William Hall, Ultravision's founder, and a small team of engineers at Ultravision, completely revolutionized the industry by developing and introducing the UltraPanel product: a lightweight modular, waterproof LED display panel in standard sizes that can easily be built into large displays of difference sizes and shapes, requires no waterproof outer cabinet, and runs on single-phase electric power. This lightweight, single-phase, modular LED display panel dramatically lowered the customer's total cost of installation and total cost of operation compared to older traditional cabinet LED display designs. As a result of these innovations, Mr. Hall been awarded numerous patents in the field of LED displays. The technology covered by these patents captures the key features in Ultravision's innovative and market-leading UltraPanel products.

II. USE IN THE UNITED STATES OF THE ACCUSED PRODUCTS POTENTIALLY SUBJECT TO THE REMEDIAL ORDERS

The Accused Products are modular LED display panels that infringe Ultravision's '306 and/or '782 patents. The Accused Products are sold for importation into the United States, imported into the United States, and/or sold in the United States after importation, at least, by

proposed Respondents,¹ who are manufacturers, private label companies, and resellers. The proposed Respondents' Accused Products are imported into the United States and sold through many channels, including: direct-to-consumer sales by the Manufacturing Respondents; sales from the Manufacturing Respondents to the Private Label Respondents, who then relabel and resell the Accused Products to consumers; and sales from the Manufacturing and Private Label Respondents to the Distributor Respondents, who then resell the Accused Products to consumers. In addition to the named Respondents, due to the complexity of this distribution network, the identity of many manufacturers, private label companies, and distributors is not known to Ultravision. Respondents use both the Internet and showrooms to sell the Accused Products.

III. THE REQUESTED REMEDIAL ORDERS POSE NO PUBLIC HEALTH, SAFETY, OR WELFARE CONCERNS

The issuance of Ultravision's requested relief, a permanent general or limited exclusion order and cease and desist orders, would have no adverse effect on the public health, safety, or

¹ The "Manufacturing Respondents" include Shenzhen Absen Optoelectronic Co., Ltd, Absen Inc., Shenzhen AOTO Electronics Co., Ltd, AOTO Electronics (US) LLC, Barco NV, Barco, Inc., Cirrus Systems, Inc., digiLED Group Limited, formerly displayLED (HK) Limited, Elation Lighting, Inc., d/b/a Elation Professional, Glux Visual Effects Tech (Shenzhen) Co., Ledman Optoelectronic Co., Ltd., Shenzhen Liantronics Co. Ltd., Liantronics, LLC, Lighthouse Technologies (Hong Kong) Limited, Shenzhen Mary Photoelectricity Co., Ltd., MRLED, Inc., Prismaflex International France S.A., Prismaflex USA, Inc., Rocketsign Hong Kong Ltd., Tianjin Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., Shanghai Sansi Electronic Engineering Co., Ltd., Sansi North America, LLC, Unilumin Group Co., Ltd., Unilumin LED Technology FL LLC, Yaham Optoelectronics Co., Ltd., and Yaham LED U.S.A., Inc.

The "Private Label Respondents" include Formetco Inc., Leyard Optoelectronic Co., Leyard American Corporation, Mitsubishi Electric Corporation, Mitsubishi Electric Power Products, Inc., NanoLumens Inc., Panasonic Corporation, Panasonic Corporation of North America, and Vanguard LED Displays, Inc., formerly Aeson LED Display Technologies, Inc.

The "Distributor Respondents" include ANC Sports Enterprises, LLC, GoVision, LLC, and RMG Networks Holding Corporation.

welfare in the United States. In general, concerns about a proposed remedy having a negative impact on public health, safety, or welfare have arisen in investigations involving pharmaceuticals, medical equipment, or green technology products, such as hybrid cars or solar panels. For example, the Commission has previously concluded that access to necessary medical equipment is a significant public interest consideration. *See Certain Fluidize Supporting Apparatus & Components Thereof*, Inv. No. 337-TA-182/188, USITC Pub. 1667, Comm'n Op. at 23-25 (Oct. 1984). None of those concerns is present here. The Accused Products are modular LED display panels used for advertising and commercial purposes. Access to Respondents' infringing modular LED display panels does not implicate any reasonably conceivable public health, safety, or welfare concern. Rather, the requested relief supports the public interest because it would serve the purpose of enforcing U.S. intellectual property rights. *See Certain Two-Handle Centerset Faucets and Escutcheons, & Components Thereof*, Inv. No. 337-TA-422, Comm'n Op. at 9 (Jun. 19, 2000).

IV. THE REQUESTED RELIEF WILL NOT HARM THE AVAILABILITY OF LIKE OR DIRECTLY COMPETITIVE ARTICLES THAT COULD REPLACE THE ACUSED PRODUCTS

Ultravision has the capacity to meet the demand for modular LED display panels protected by the '306 patent and the '782 patent with its own UltraPanel products, should Respondents' infringing products be excluded from the United States. In fact, Ultravision designed, developed, engineered, assembled, and installed a majority of the LED displays in Times Square. Ultravision also has the capacity to increase production of its modular LED display panels, should demand require it to do so. There are no public interest concerns where domestic demand for a complainant's products can be met by the complainant, and any legitimate competitors whose products do not infringe the complainant's intellectual property rights. *See Inkjet Ink Supplies & Components Thereof*, Inv. No. 337-TA-691, Comm'n Op. on Remedy, the Public Interest, & Bonding at 15 (Jan. 28, 2011) ("There is no evidence that domestic demand for [complainant's]

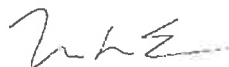
inkjet cartridges cannot be met by [complainant] and its legitimate competitors, *i.e.*, manufacturers and retailers of inkjet cartridges who do not infringe the patent claims at issue. Thus, the record does not support a finding that issuance [of] the remedial orders is precluded by consideration of the public interest factors.”). Consequently, the availability of like or directly competitive articles indicates that the remedial orders requested by Ultravision would not adversely impact competitive conditions in the United States, or otherwise be contrary to the public interest.

V. THE REQUESTED REMEDIAL ORDER WOULD NOT ADVERSELY IMPACT CONSUMERS

U.S. consumers will have available to them in the United States marketplace non-infringing, authentic modular LED display panels—Ultravision’s UltraPanel products—should the Accused Products be excluded from the United States. Indeed, U.S. consumers would benefit from the unique, domestic quality, warranty, and technical services Ultravision provides to support its customers. In light of the availability of commercial alternatives to the Accused Products, the exclusion of the infringing modular LED display panels will not negatively impact U.S. consumers. Rather, the requested relief will serve the public interest by enforcing U.S. intellectual property rights and protecting the public from unfair competition.

Dated: March 27, 2018

Respectfully submitted,



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UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.

In the Matter of

**CERTAIN MODULAR LED
DISPLAY PANELS**

Investigation No. 337-TA-_____

**VERIFIED COMPLAINT UNDER SECTION 337
OF THE TARIFF ACT OF 1930, AS AMENDED**

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EXHIBIT & APPENDIX LIST

Non-Confidential Exhibits	
Ex. No.	Description
1	Copy of U.S. Patent No. 9,349,306 (Certified copy is on order and will be supplied once available)
2	Copy of U.S. Patent No. 9,349,306 Assignment Record (Certified copy is on order and will be supplied once available)
3	Copy of U.S. Patent No. 9,916,782 (Certified copy is on order and will be supplied once available)
4	Copy of U.S. Patent No. 9,916,782 Assignment Record (Certified copy is on order and will be supplied once available)
5	Alibaba webpage results for "modular LED display"
6	Representative Claim Chart Comparing Absen X Series/Xv Series to the '306 Patent
7	Representative Claim Chart Comparing AOTO E-Series to the '306 Patent
8	Representative Claim Chart Comparing Barco C8s to the '306 Patent
9	Representative Claim Chart Comparing Cirrus BladeX to the '306 Patent
10	Representative Claim Chart Comparing digiLED OTek to the '306 Patent
11	Representative Claim Chart Comparing Elation EPT6IP to the '306 Patent
12	Representative Claim Chart Comparing Glux ODSn/Leyard CLO to the '306 Patent
13	Representative Claim Chart Comparing Ledman Diasign to the '306 Patent
14	Representative Claim Chart Comparing Liantronics RA3T to the '306 Patent
15	Representative Claim Chart Comparing Lighthouse Rev/Panasonic Rev to the '306 Patent
16	Representative Claim Chart Comparing MRLED R Series to the '306 Patent
17	Representative Claim Chart Comparing Prismaflex Sealed Module to the '306 Patent
18	Representative Claim Chart Comparing Rocketsign Mecanus II/Vanguard Thulium to the '306 Patent
19	Representative Claim Chart Comparing Samsung XR100F to the '306 Patent
20	Representative Claim Chart Comparing Sansi XQ to the '306 Patent
21	Representative Claim Chart Comparing Unilumin UPADIII05 to the '306 Patent
22	Representative Claim Chart Comparing Yaham D0/Mitsubishi Diamond Vision to the '306 Patent
23	Representative Claim Chart Comparing Formetco FTX to the '306 Patent
24	Representative Claim Chart Comparing NanoLumens/Absen XD6 to the '306 Patent
25	Representative Claim Chart Comparing Absen X Series/Xv Series to the '782 Patent
26	Representative Claim Chart Comparing AOTO E-Series to the '782 Patent
27	Representative Claim Chart Comparing Barco C8s to the '782 Patent
28	Representative Claim Chart Comparing Cirrus BladeX to the '782 Patent
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42	Representative Claim Chart Comparing Formetco FTX to the '782 Patent
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50	E-mail from Liantronics to William Hall Public Version
51	E-mail from MRLED to William Hall Public Version
52	E-mail from Liantronics to William Hall Public Version
53	Declaration of Thomas L. Credelle Public Version
54	Declaration of William Hall Public Version
55	Declaration of Larry Rosolowski Public Version
56	The '306 Patent Licensee Public Version
57	The '782 Patent Licensee Public Version

Confidential Exhibits	
Ex. No.	Description
50	E-mail from Liantronics to William Hall
51	E-mail from MRLED to William Hall
52	E-mail from Liantronics to William Hall
53	Declaration of Thomas L. Credelle
54	Declaration of William Hall
55	Declaration of Larry Rosolowski
56	The '306 Patent Licensee
57	The '782 Patent Licensee

Appendices	
Appendix	Description
A	U.S. Patent No. 9,349,306 File Wrapper
B	U.S. Patent No. 9,349,306 Technical References Cited in Prosecution History
C	U.S. Patent No. 9,916,782 File Wrapper
D	U.S. Patent No. 9,916,782 Technical References Cited in Prosecution History

I. INTRODUCTION

1. This Complaint is filed by Ultravision Technologies, LLC (“Ultravision” or “Complainant”), pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337 (“Section 337”), based on the unlawful offer for sale for importation into the United States, sale for importation into the United States, importation into the United States, and/or sale within the United States after importation of Modular LED Displays (“Accused Products”) by proposed Respondents: Shenzhen Absen Optoelectronic Co., Ltd, Absen, Inc., Shenzhen AOTO Electronics Co., Ltd, Barco NV, Barco, Inc., Cirrus Systems, Inc., AOTO Electronics (US) LLC, digiLED Group Limited, formerly displayLED (HK) Limited, Elation Lighting, Inc., d/b/a Elation Professional, Glux Visual Effects Tech (Shenzhen) Co., Ledman Optoelectronic Co., Ltd., Shenzhen Liantronics Co. Ltd., Liantronics, LLC, Lighthouse Technologies (Hong Kong) Limited, Shenzhen Mary Photoelectricity Co., Ltd., MRLED, Inc., Prismaflex International France S.A., Prismaflex USA, Inc., Rocketsign Hong Kong Ltd., Tianjin Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., Shanghai Sansi Electronic Engineering Co., Ltd., Sansi North America, LLC, Unilumin Group Co., Ltd., Unilumin LED Technology FL LLC, Yaham Optoelectronics Co., Ltd., and Yaham LED U.S.A., Inc. (the “Manufacturing Respondents”); Formetco Inc., Leyard Optoelectronic Co., Leyard American Corporation, Mitsubishi Electric Corporation, Mitsubishi Electric Power Products, Inc., NanoLumens Inc., Panasonic Corporation, Panasonic Corporation of North America, and Vanguard LED Displays, Inc., Aeson LED Display Technologies, Inc. (the “Private Label Respondents”); and ANC Sports Enterprises, LLC, GoVision, LLC, and RMG Networks Holding Corporation (the “Distributor Respondents”) (together, “Respondents”).

2. Respondents' Accused Products infringe one or more claims of U.S. Patent No. 9,349,306 ("the '306 patent," attached as Ex. 1) and U.S. Patent No. 9,916,782 ("the '782 patent," attached as Ex. 2) (collectively, "the Asserted Ultravision Patents"), in violation of Section 337(a)(1)(B).

3. As required by Sections 337(a)(1)(A) and (a)(2)-(3), an industry exists or is in the process of being established in the United States relating to Complainant's Modular LED Displays and the Asserted Ultravision Patents, which are practiced by Complainant's Modular LED Displays. Complainant's Modular LED Displays sold domestically are designed, developed, manufactured, tested, assembled, and supported in the United States. To design, develop, manufacture, test, assemble, and support Complainant's Modular LED Displays, Complainant has made and continues to make significant investment in plant and equipment, has employed and continues to employ significant labor or capital, and has made and continues to make substantial investments in the exploitation of the Asserted Ultravision Patents through activities such as engineering and research and development in the United States.

4. Additionally, Complainant is in the process of moving its manufacturing back to the United States. Complainant's current and future significant investment in plant and equipment and significant employment of labor or capital for domestic manufacturing demonstrates that Complainant is growing the domestic industry for its Modular LED Displays.

5. Because Respondents' conduct evidences likely circumvention of any limited exclusion orders ("LEO") that may issue, because there exists a pattern of violation of Section 337, and because it is difficult to identify the source of accused Modular LED Displays, Complainant seeks, as relief, a permanent general exclusion order ("GEO") barring from entry all accused Modular LED Displays imported, sold for importation, or sold within the United States after

importation. Alternatively, Complainant seeks an LEO barring from entry Modular LED Displays imported, sold for importation, or sold within the United States after importation by Respondents in violation of Section 337.

6. Complainant also seeks, as relief, permanent cease and desist orders (“CDO”) against Respondents prohibiting the sale, offer for sale, advertising, marketing, packaging, distribution, maintenance of inventory, or solicitation of any sale of imported Modular LED Displays, whether through traditional “brick and mortar” retailers, distributors, the internet, or other electronic means.

II. THE PARTIES

A. The Complainant

7. Complainant Ultravision Technologies, LLC is a corporation incorporated and existing under laws of the State of Delaware and is registered to do business in Texas. Ultravision Technologies, LLC has its principal place of business at 4542 McEwen Road, Dallas, Texas 75244.

8. Ultravision is a leading innovator, designer, manufacturer, and distributor of commercial high-efficiency digital video displays, LED lighting, and LED digital advertising displays. Ultravision has invested significant human and financial resources within the United States in connection with the research, design, development, and testing of its LED display products, which are protected by the Asserted Ultravision Patents. Ultravision’s management and design team has extensive experience in the commercial LED lighting and LED digital advertising industry. Ultravision’s displays have been installed throughout the United States including at New York’s Times Square.

9. The Chief Executive Officer of Ultravision, William Hall, has a long-standing career in the commercial lighting and video billboard industry in the United States. Mr. Hall

formed Ultravision's predecessor, Ultravision Holdings, LLC ("Ultravision Holdings"), in 2010 to focus on LED displays and lights for the commercial billboard industry. Ultravision Holdings, LLC is a limited liability company organized under the laws of Texas. Ultravision Technologies, LLC, as defined above as "Ultravision," was formed in 2014. Ultravision obtained substantially all of the assets, including all of the intellectual property (e.g., patents and trade secrets) and contract rights, of Ultravision Holdings. Ultravision holds all rights, title, and interest in and to the Asserted Ultravision Patents.

10. Ultravision has dedicated significant human and financial resources in the United States to invent, design, develop, manufacture, assemble, test, and calibrate a number of improved LED displays. As a result of Ultravision's investments, it has developed certain valuable know-how relating to the design, development, manufacture, assembly, and testing of LED displays, and to the distribution and sale of such LED displays. Furthermore, as discussed below in paragraphs 78-89, Ultravision filed patent applications to protect some aspects of these improved LED displays. Those filings have resulted in multiple issued United States patents, including the Asserted Ultravision Patents.

B. The Proposed Respondents

11. On information and belief, the Respondents include original equipment manufacturers, private label re-sellers, and distributors, including agents therefor, that import, sell for importation, offer for sale, and/or sell within the United States after importation Modular LED Displays that infringe one or more claims of the Asserted Ultravision Patents.

1. The Manufacturing Respondents

**a) Shenzhen Absen Optoelectronic Co., Ltd.
and Absen, Inc.**

12. On information and belief, Respondent Shenzhen Absen Optoelectronic Co., Ltd. is a limited liability company incorporated under the laws of the People's Republic of China, with its principal operating business located at 18-20F Building 3A, Cloud Park, Bantian, Longgang District, Shenzhen, 518129, P.R. China. On information and belief, Shenzhen Absen Optoelectronic Co., Ltd. manufactures the Accused Products in China and imports, sells for importation, offers for sale, and/or sells within the United States after importation the Accused Products.

13. On information and belief, Respondent Absen, Inc. is a company incorporated under the laws of Delaware, with its principal operating business located at 7120 Lake Ellenor Drive, Orlando, Florida 32809. On information and belief, Absen, Inc. imports, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation the Accused Products manufactured by Shenzhen Absen Optoelectronic Co., Ltd.

14. On information and belief, Shenzhen Absen Optoelectronic Co., Ltd. and Absen, Inc. are related entities; these entities are therefore collectively referred to herein as "Absen."

15. As further detailed below, Absen manufactures, imports into the United States, sells for importation, and/or markets, sells and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Absen uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Absen is not licensed to any of the Asserted Ultravision Patents. Respondent Absen's infringement is knowing and intentional.

**b) Shenzhen AOTO Electronics Co., Ltd. and
AOTO Electronics (US) LLC**

16. On information and belief, Respondent Shenzhen AOTO Electronics Co., Ltd. is a limited liability company incorporated under the laws of the People's Republic of China, with its principal operating business located at 9-10/F, United Headquarters Mansion, N0.63 Xuefu Road, Hi-Tech Zone, Nanshan in Shenzhen, P.R. China. On information and belief, Shenzhen AOTO Electronics Co., Ltd. manufactures the Accused Products in China and imports, sells for importation, offers for sale, and/or sells within the United States after importation the Accused Products.

17. On information and belief, Respondent AOTO Electronics (US) LLC is a limited liability company organized under the laws of California, with its principal operating business located at 12 Hughes, #D-100, Irvine, California 92618. On information and belief, AOTO Electronics (US) LLC imports, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation the Accused Products manufactured by Shenzhen AOTO Electronics Co., Ltd.

18. On information and belief, Shenzhen AOTO Electronics Co., Ltd. and Shenzhen AOTO Electronics Co., Ltd. are related entities; these entities are therefore collectively referred to herein as "AOTO."

19. As further detailed below AOTO manufactures, imports into the United States, sells for importation, and/or markets, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, AOTO uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products

in a manner that directly infringes the Asserted Ultravision Patents. AOTO is not licensed to any of the Asserted Ultravision Patents. Respondent AOTO's infringement is knowing and intentional.

c). **Barco NV and Barco, Inc.**

20. On information and belief, Respondent Barco NV is a company incorporated under the laws of Belgium, with its principal operating business located at Barco One Campus Beneluxpark 21, BE-8500 Kortrijk, Belgium. On information and belief, Barco NV manufactures the Accused Products in Belgium and imports, sells for importation, offers for sale, and/or sells within the United States after importation the Accused Products.

21. On information and belief, Respondent Barco, Inc. is a company incorporated under the laws of Delaware, with its principal operating business located at 3059 Premiere Parkway, Duluth, Georgia 30097. On information and belief, Barco, Inc. imports, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation the Accused Products manufactured by Barco NV.

22. On information and belief, Barco NV and Barco, Inc. are related entities; these entities are therefore collectively referred to herein as "Barco."

23. As further detailed below Barco manufactures, imports into the United States, sells for importation, and/or markets, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Barco uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Barco is not licensed to any of the Asserted Ultravision Patents. Respondent Barco's infringement is knowing and intentional.

d) Cirrus Systems, Inc.

24. On information and belief, Respondent Cirrus Systems, Inc. ("Cirrus") is a company incorporated under the laws of Delaware, with its principal operating business located at 47 Spring Hill Rd., Saco, Maine 04072. As further detailed below Cirrus manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Cirrus uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Cirrus is not licensed to any of the Asserted Ultravision Patents. Respondent Cirrus's infringement is knowing and intentional.

**e) digiLED (UK) Limited, formerly
displayLED (HK) Limited**

25. On information and belief, Respondent digiLED (UK) Limited, formerly displayLED (HK) Limited ("digiLED"), is a company incorporated under the laws of the United Kingdom, with its principal operating business located at The Pixel Depot, Copse Farm, Moorhurst Lane, Beare Green, Near Dorking, Surrey RH5 4LJ, United Kingdom. As further detailed below digiLED manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, digiLED uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. digiLED is not licensed to any of the Asserted Ultravision Patents. Respondent digiLED's infringement is knowing and intentional.

f) Elation Lighting, Inc.

26. On information and belief, Respondent Elation Lighting, Inc. d/b/a Elation Professional (“Elation”) is a company incorporated under the laws of Nevada, with its principal operating business located at 6122 S. Eastern Avenue, Los Angeles, California 90040. As further detailed below Elation manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Elation uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Elation is not licensed to any of the Asserted Ultravision Patents. Respondent Elation’s infringement is knowing and intentional.

g) Glux Visual Effects Tech (Shenzhen) Co.

27. On information and belief, Respondent Glux Visual Effects Tech (Shenzhen) Co. (“Glux”) is a company incorporated under the laws of the People’s Republic of China and wholly-owned subsidiary of Beijing Yicai Glux Tech Co., Ltd., with its principal operating business located at Glux Industrial Park, Donghuan 2nd Road, Longhua District, Shenzhen, Guangdong, China. As further detailed below Glux manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Glux uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Glux is not licensed to any of the Asserted Ultravision Patents. Respondent Glux’s infringement is knowing and intentional.

h) Ledman Optoelectronic Co., Ltd.

28. On information and belief, Respondent Ledman Optoelectronic Co., Ltd. ("Ledman") is a company incorporated under the laws of the People's Republic of China, with its principal operating business located at Building 8, Block 2, Baimang Baiwangxin, Industrial Park, Xili Area, Nanshan District, Shenzhen, China. As further detailed below Ledman manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Ledman uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Ledman is not licensed to any of the Asserted Ultravision Patents. Respondent Ledman's infringement is knowing and intentional.

i) Shenzhen Liantronics Co. Ltd. and Liantronics, LLC

29. On information and belief, Respondent Shenzhen Liantronics Co. Ltd. is a company incorporated under the laws of the People's Republic of China, with a principal operating business located at Liantronics Building, Antongda Industrial Zone, 3rd Liuxian Road, 68 Block Baoan, Shenzhen, China. On information and belief, Shenzhen Liantronics Co. Ltd. manufactures the Accused Products in China and imports, sells for importation, offers for sale, and/or sells within the United States after importation the Accused Products.

30. On information and belief, Respondent Liantronics, LLC is a limited liability company organized under the laws of California, with its principal operating business located at 46722 Fremont Boulevard, Fremont, California 94538. On information and belief, Liantronics, LLC imports, sells for importation, and/or markets, offers for sale, sells, and distributes within the

United States after importation the Accused Products manufactured by Shenzhen Liantronics Co. Ltd.

31. On information and belief, Shenzhen Liantronics Co. Ltd. and Liantronics, LLC are related entities; these entities are therefore collectively referred to herein as “Liantronics.”

32. As further detailed below Liantronics manufactures, imports into the United States, sells for importation, and/or markets, sells and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Liantronics uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Liantronics is not licensed to any of the Asserted Ultravision Patents. Respondent Liantronics’s infringement is knowing and intentional.

j) Lighthouse Technologies (Hong Kong) Limited

33. On information and belief, Respondent Lighthouse Technologies Limited (“Lighthouse”) is a private company limited by shares incorporated under the laws of Hong Kong, with its principal operating business located at Unit 608, 6/F, Photonics Centre, 2 Science Park East Avenue, Hong Kong Science Park in New Territories, Hong Kong. As further detailed below, Lighthouse manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Lighthouse uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner

that directly infringes the Asserted Ultravision Patents. Lighthouse is not licensed to any of the Asserted Ultravision Patents. Respondent Lighthouse's infringement is knowing and intentional.

**k) Shenzhen Mary Photoelectricity Co., Ltd.
and MRLED Inc.**

34. On information and belief, Respondent Shenzhen Mary Photoelectricity Co., Ltd. is a company incorporated under the laws of the People's Republic of China and subsidiary of Fujian FURI Electronics Co., Ltd., with its principal operating business located at No. 4F, Meishengchuanggu Tech Park, 10th Longchang Road, Xin'an Street, Bao'an District, Shenzhen City, Guangdong Province, China. On information and belief, Shenzhen Mary Photoelectricity Co., Ltd. manufactures the Accused Products in China and imports, sells for importation, offers for sale, and/or sells within the United States after importation the Accused Products.

35. On information and belief, Respondent MRLED Inc. is a limited liability company organized under the laws of California, with its principal operating business located at 377 S. Lemon Avenue, Suite E, Walnut, California 91789. On information and belief, MRLED Inc. imports, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation the Accused Products manufactured by Shenzhen Mary Photoelectricity Co., Ltd.

36. On information and belief, Shenzhen Mary Photoelectricity Co., Ltd. and MRLED Inc. are related entities; these entities are therefore collectively referred to herein as "MRLED."

37. As further detailed below MRLED manufactures, imports into the United States, sells for importation, and/or markets, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, MRLED uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the

Accused Products in a manner that directly infringes the Asserted Ultravision Patents. MRLED is not licensed to any of the Asserted Ultravision Patents. Respondent MRLED's infringement is knowing and intentional.

l) Prismaflex International France S.A. and Prismaflex USA, Inc.

38. On information and belief, Respondent Prismaflex International France S.A. is a company incorporated under the laws of France, with its principal operating business located at 309 route de Lyon, CS 50001, 69610 Haute-Rivoire, France.

39. On information and belief, Respondent Prismaflex USA, Inc. is a company incorporated under the laws of North Carolina, with its principal operating business located at 113 West Broad Street, Elizabethtown, North Carolina 28337.

40. On information and belief, Prismaflex International France S.A. and Prismaflex USA, Inc. are related entities; these entities are therefore collectively referred to herein as "Prismaflex."

41. As further detailed below, Prismaflex manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Prismaflex uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Prismaflex is not licensed to any of the Asserted Ultravision Patents. Respondent Prismaflex's infringement is knowing and intentional.

m) Rocketsign Hong Kong Ltd.

42. On information and belief, Respondent Rocketsign Hong Kong Ltd.

("Rocketsign") is a company incorporated under the laws of Hong Kong, with its principal operating business located at RM 1601, The Sun's Group Center, Gloucester Road 200, Hong Kong. As further detailed below Rocketsign manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Rocketsign uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Rocketsign is not licensed to any of the Asserted Ultravision Patents. Respondent Rocketsign's infringement is knowing and intentional.

**n) Tianjin Samsung Electronics Co., Ltd. and
 Samsung Electronics America, Inc.**

43. - On information and belief, Respondent Tianjin Samsung Electronics Co., Ltd. is a company incorporated under the laws of the People's Republic of China, with its principal operating business located at 12 Fourth Avenue, Economic Development Zone, Tanggu, 300457, China. On information and belief, Tianjin Samsung Electronics Co., Ltd. manufactures the Accused Products in China and South Korea and imports, sells for importation, offers for sale, and/or sells within the United States after importation the Accused Products.

44. On information and belief, Respondent Samsung Electronics America, Inc. is a company incorporated under the laws of New York, with its principal operating business located at 85 Challenger Road, Ridgefield Park, New Jersey 07760. On information and belief, Samsung Electronics America, Inc. imports, sells for importation, and/or markets, offers for sale, sells, and

distributes within the United States after importation the Accused Products manufactured by Tianjin Samsung Electronics Co., Ltd.

45. On information and belief, Tianjin Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. are related entities; these entities are therefore collectively referred to herein as “Samsung.”

46. As further detailed below, Samsung manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Samsung uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Samsung is not licensed to any of the Asserted Ultravision Patents. Respondent Samsung’s infringement is knowing and intentional.

o) Shanghai Sansi Technology Co., Ltd. and Sansi North America, LLC

47. On information and belief, Respondent Shanghai Sansi Technology Co., Ltd is a public company incorporated under the laws of the People’s Republic of China, with its principal operating business located at No. 1280 Shuying Road, Shanghai, 201100 P.R. China. On information and belief, Shanghai Sansi Technology Co., Ltd. manufactures the Accused Products in China and imports, sells for importation, offers for sale, and/or sells within the United States after importation the Accused Products.

48. On information and belief, Respondent Sansi North America, LLC is a limited liability company organized under the laws of New York, with its principal operating business located at 1500 Broadway, Suite 901, New York, New York 10036. On information and belief,

Sansi North America, LLC imports, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation the Accused Products manufactured by Shanghai Sansi Technology Co., Ltd.

49. On information and belief, Shanghai Sansi Technology Co., Ltd. and Sansi North America, LLC are related entities; these entities are therefore collectively referred to herein as “Sansi.”

50. As further detailed below, Sansi manufactures, imports into the United States, sells for importation, and/or markets, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Sansi uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Sansi is not licensed to any of the Asserted Ultravision Patents. Respondent Sansi’s infringement is knowing and intentional.

p) Unilumin Group Co., Ltd. and Unilumin LED Technology FL LLC

51. On information and belief, Respondent Unilumin Group Co., Ltd. is a public company incorporated under the laws of the People’s Republic of China, with its principal operating business located at 112 Yongfu Rd., Qiaotou Village, Fuyong Town, Baoan District in Shenzhen, P.R. China. On information and belief, Unilumin Group Co., Ltd. manufactures the Accused Products in China and imports, sells for importation, offers for sale, and/or sells within the United States after importation the Accused Products.

52. On information and belief, Respondent Unilumin LED Technology FL LLC is a limited liability company organized under the laws of Florida, with its principal operating business located at 8350 Parkline Boulevard, Unit #15, Orlando, Florida 32809. On information and belief,

Unilumin LED Technology FL LLC imports, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation the Accused Products manufactured by Unilumin Group Co., Ltd.

53. On information and belief, Unilumin Group Co., Ltd. and Unilumin LED Technology FL LLC are related entities; these entities are therefore collectively referred to herein as "Unilumin."

54. As further detailed below, Unilumin manufactures, imports into the United States, sells for importation, and/or markets, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Unilumin uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Unilumin is not licensed to any of the Asserted Ultravision Patents. Respondent Unilumin's infringement is knowing and intentional.

q) Yaham Optoelectronic Co., Ltd. and Yaham LED U.S.A., Inc.

55. On information and belief, Respondent Yaham Optoelectronic Co., Ltd. is a company incorporated under the laws of the People's Republic of China, with its principal operating business located at #118 Yongfu Rd, Qiaotou Community, Fuyong, Baoan District, Shenzhen, P.R. China, 518103. On information and belief, Yaham Optoelectronic Co., Ltd. manufactures the Accused Products in China and imports, sells for importation, offers for sale, and/or sells within the United States after importation the Accused Products.

56. On information and belief, Respondent Yaham LED U.S.A., Inc. is a company incorporated under the laws of Nevada, with its principal operating business located at 4058 Dean

Martin Boulevard, Las Vegas, Nevada 89103. On information and belief, Yaham LED U.S.A., Inc. imports, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation the Accused Products manufactured by Yaham Optoelectronic Co., Ltd.

57. On information and belief, Yaham Optoelectronic Co., Ltd. and Yaham LED U.S.A., Inc. are related entities; these entities are therefore collectively referred to herein as "Yaham."

58. As further detailed below, Yaham manufactures, imports into the United States, sells for importation, and/or markets, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Yaham uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Yaham is not licensed to any of the Asserted Ultravision Patents. Respondent Yaham's infringement is knowing and intentional.

2. The Private Label Respondents

a) Formetco Inc.

59. On information and belief, Respondent Formetco Inc. ("Formetco") is a company incorporated under the laws of Georgia, with its principal operating business located at 2963 Pleasant Hill Road, Duluth, Georgia 30096. As further detailed below, Formetco manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Formetco uses, and actively, knowingly, and intentionally directs and/or induces others, and

specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Formetco is not licensed to any of the Asserted Ultravision Patents. Respondent Formetco's infringement is knowing and intentional.

b) Leyard Optoelectronic Co., Ltd. and Leyard American Corporation

60. On information and belief, Respondent Leyard Optoelectronic Co., Ltd is a public company incorporated under the laws of the People's Republic of China, with its principal operating business located at No.9 Zhenghongqi West Street, North of Summer Palace, Haidian District, Beijing, China, 100091.

61. On information and belief, Respondent Leyard American Corporation is a company incorporated under the laws of Delaware, with its principal operating business located at 1692 Barclay Boulevard, Buffalo Grove, Illinois 60089.

62. On information and belief, Leyard Optoelectronic Co., Ltd. and Leyard American Corporation are related entities; these entities are therefore collectively referred to herein as "Leyard."

63. As further detailed below, Leyard manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Leyard uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Leyard is not licensed to any of the Asserted Ultravision Patents. Respondent Leyard's infringement is knowing and intentional.

**c) Mitsubishi Electric Corporation and
Mitsubishi Electric Power Products, Inc.**

64. On information and belief, Respondent Mitsubishi Electric Corporation is a company incorporated under the laws of Japan, with its principal operating business located at Tokyo Building, 2-7-3, Marunouchi, Chiyoda, Tokyo, Japan.

65. On information and belief, Respondent Mitsubishi Electric Power Products, Inc. is a company incorporated under the laws of Delaware, with its principal operating business located at Thorn Hill Industrial Park, 530 Keystone Drive, Warrendale, Pennsylvania 15086.

66. On information and belief, Mitsubishi Electric Corporation and Mitsubishi Electric Power Products, Inc. are related entities; these entities are therefore collectively referred to herein as "Mitsubishi."

67. As further detailed below, Mitsubishi manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Mitsubishi uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Mitsubishi is not licensed to any of the Asserted Ultravision Patents. Respondent Mitsubishi's infringement is knowing and intentional.

d) NanoLumens Inc.

68. On information and belief, Respondent NanoLumens Inc. ("NanoLumens") is a company incorporated under the laws of Georgia, with its principal operating business located at 4900 Avalon Ridge Parkway, Peachtree Corners, Georgia 30071. As further detailed below, NanoLumens manufactures, imports into the United States, sells for importation, and/or markets,

offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, NanoLumens uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. NanoLumens is not licensed to any of the Asserted Ultravision Patents. Respondent NanoLumens's infringement is knowing and intentional.

e) Panasonic Corporation and Panasonic Corporation of North America

69. On information and belief, Respondent Panasonic Corporation is a public company incorporated under the laws of Japan, with its principal operating business located at 1006, Oaza Kadoma, Kadoma City in Osaka, Japan.

70. On information and belief, Respondent Panasonic Corporation of North America, which uses a trade name of Panasonic Enterprise Solutions Company, is a company incorporated under the laws of Delaware, with its principal operating business located at Two Riverfront Plaza, 828 McCarter Highway, Newark, New Jersey 07102.

71. On information and belief, Panasonic Corporation and Panasonic Corporation of North America are related entities; these entities are therefore collectively referred to herein as "Panasonic."

72. As further detailed below, on information and belief, Panasonic purchases Accused Products from Respondent Lighthouse, relabels them (or has them relabeled) as Panasonic private-label products, and sells them in the United States as Panasonic-branded products. Therefore, on information and belief, Panasonic imports into the United States, and/or markets, offers for sale, sells, and distributes within the United States after importation relabeled, private-label Accused

Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Panasonic uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Panasonic is not licensed to any of the Asserted Ultravision Patents. Respondent Panasonic's infringement is knowing and intentional.

**f) Vanguard LED Displays, Inc., formerly
Aeson LED Display Technologies, Inc.**

73. On information and belief, Respondent Vanguard LED Displays, Inc., formerly Aeson LED Display Technologies, Inc. ("Vanguard"), is a company incorporated under the laws of Florida, with its principal operating business located at 4910 Waring Road, Unit 101, Lakeland, Florida 33811. As further detailed below, Vanguard manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, Vanguard uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. Vanguard is not licensed to any of the Asserted Ultravision Patents. Respondent Vanguard's infringement is knowing and intentional.

3. The Distributor Respondents

a) ANC Sports Enterprises, LLC

74. On information and belief, Respondent ANC Sports Enterprises, LLC ("ANC") is a company incorporated under the laws of Delaware, with its principal operating business at 2 Manhattanville Road, Suite 402, Purchase, New York 10577. As further detailed below, ANC manufactures, imports into the United States, sells for importation, and/or markets, offers for sale,

sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, ANC uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. ANC is not licensed to any of the Asserted Ultravision Patents. Respondent ANC's infringement is knowing and intentional.

b) GoVision, LLC

75. On information and belief, Respondent GoVision, LLC ("GoVision") is a limited liability company organized under the laws of Texas, with its principal operating business located at 8291 Gateway Drive, Suite #100, Argyle, Texas 76226. As further detailed below, GoVision manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision Patents. In addition, GoVision uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. GoVision is not licensed to any of the Asserted Ultravision Patents. Respondent GoVision's infringement is knowing and intentional.

c) RMG Networks Holding Corporation

76. On information and belief, Respondent RMG Networks Holding Corporation ("RMG") is a company incorporated under the laws of Delaware, with its principal operating business located at 15301 Dallas Parkway, Suite 500, Addison, Texas 75001. As further detailed below, RMG manufactures, imports into the United States, sells for importation, and/or markets, offers for sale, sells, and distributes within the United States after importation one or more Accused Products that infringe, directly or indirectly, one or more claims of the Asserted Ultravision

Patents. In addition, RMG uses, and actively, knowingly, and intentionally directs and/or induces others, and specifically intends for those others, to use the Accused Products in a manner that directly infringes the Asserted Ultravision Patents. RMG is not licensed to any of the Asserted Ultravision Patents. Respondent RMG's infringement is knowing and intentional.

III. THE ASSERTED ULTRAVISION PATENTS¹

A. The '306 Patent

1. Identification of the Patent and Ownership

77. United States Patent No. 9,349,306 is entitled "Modular Display Panel" and issued on May 24, 2016. The '306 Patent is a continuation of U.S. Patent Application No. 14/444,719, filed on July 28, 2014, and claims priority to U.S. Provisional Patent Application No. 62/025,463, filed on July 16, 2014, and U.S. Provisional Patent Application No. 61/922,631, filed on December 31, 2013. The '306 Patent has thirty (30) claims, four (4) independent claims, and twenty-six (26) dependent claims. A certified copy of the '306 patent is attached to the Complaint as Exhibit 1.

78. The inventor of the '306 Patent, William Hall, assigned his rights in the '306 Patent to Ultravision Holdings, LLC on July 23, 2014, which subsequently assigned its rights in the '306 Patent to Ultravision Technologies, LLC on August 25, 2014. Ultravision therefore owns, by assignment, all right, title, and interest in and to the '306 Patent. A certified copy of the assignments of the '306 Patent is attached to the Complaint as Exhibit 2.

79. Pursuant to Commission Rule 210.12(c), together with this Complaint, Complainant has filed a certified copy and three additional copies of the prosecution history of the '306 Patent as Appendix A. Complainant has filed four (4) copies of the '306 Patent and all

¹ The non-technical descriptions of the Asserted Ultravision Patents are provided herein for purpose of general information and understanding and are not meant to be a position with respect to claim construction and/or other technical aspects of patent law.

technical references identified in the prosecution history of the application leading to the issuance of the '306 Patent as Appendix B.

2. Non-Technical Description of the Patented Invention

80. The '306 Patent generally describes a cabinet-free, waterproof, modular LED display panel designed to be easily and quickly integrated into a larger LED display comprised of any number of the individual modular LED display panels. The panel itself features a front-side grid of louver-separated LEDs mounted on a printed circuit board, which is found inside a casing containing other components. The '306 patent also discloses a mechanical support structure on which such modular LED displays can be mounted to form an integrated display panel.

3. Foreign Counterparts

81. The foreign counterpart patents and/or applications to the '306 patent are given below. Apart from those listed here, there are no other foreign patents or foreign patent applications pending, filed, abandoned, withdrawn, or rejected relating to the '306 patent.

Country	Application Number	Status	Patent Number
Australia	2014374062	Issued	AU 2014374062
Australia	2017251806	Pending	n/a
Canada	2,933,711	Pending	n/a
European Patent Office	14875899.8	Pending	n/a
United Kingdom	1518912.9	Issued	GB 2528001

4. Licenses

82. The '306 patent is subject to a license agreement. Pursuant to Commission Rule 210.12(a)(9)(iii), the licensee is identified in Confidential Exhibit 56.

B. The '782 Patent

1. Identification of the Patent and Ownership

83. United States Patent No. 9,916,782 is entitled "Modular Display Panel" and issued on March 13, 2018. The '782 Patent is based on U.S. Patent Application No. 15/162,439, filed on May 23, 2016, which is based on U.S. Patent Application No. 14/850,632 (which issued as the '306 patent), which is based on U.S. Patent Application No. 14/444,719, and claims priority to U.S. Provisional Patent Application No. 62/025,463, filed on July 16, 2014, and U.S. Provisional Patent Application No. 61/922,631, filed on December 31, 2013. The '782 Patent has thirty (30) claims, four (4) independent claims, and twenty-six (26) dependent claims. A certified copy of the '782 patent is attached to the Complaint as Exhibit 3.

84. The inventor of the '782 Patent, William Hall, assigned his rights in the '782 Patent to Ultravision Holdings, LLC on July 23, 2014, which subsequently assigned its rights in the '306 Patent to Ultravision Technologies, LLC on August 25, 2014. Ultravision therefore owns, by assignment, all right, title, and interest in and to the '782 Patent. A certified copy of the assignments of the '782 Patent is attached to the Complaint as Exhibit 4.

85. Pursuant to Commission Rule 210.12(c), together with this Complaint, Complainant has filed a certified copy and three additional copies of the prosecution history of the '782 Patent as Appendix C. Complainant has filed four (4) copies of the '782 Patent and all technical references identified in the prosecution history of the application leading to the issuance of the '782 Patent as Appendix D.

2. Non-Technical Description of the Patented Invention

86. The '782 Patent generally describes a cabinet-free, waterproof, modular LED display panel designed to be easily and quickly integrated into a larger LED display comprised of any number of the individual modular LED display panels. The panel itself features a front-side

grid of louver-separated LEDs mounted on a printed circuit board, which is found inside a shell containing other components. The '782 patent also discloses various structures for protecting the panel from the environment as well as particular materials for making the panel thermally efficient.

3. Foreign Counterparts

87. The foreign counterpart patents and/or applications to the '782 patent are given below. Apart from those listed here, there are no other foreign patents or foreign patent applications pending, filed, abandoned, withdrawn, or rejected relating to the '782 patent.

Country	Application Number	Status	Patent Number
Australia	2014374062	Issued	AU 2014374062
Australia	2017251806	Pending	n/a
Canada	2,933,711	Pending	n/a
European Patent Office	14875899.8	Pending	n/a
United Kingdom	1518912.9	Issued	GB 2528001

4. Licenses

88. The '782 patent is subject to a license agreement. Pursuant to Commission Rule 210.12(a)(9)(iii), the licensee is identified in Confidential Exhibit 57.

IV. PRODUCTS AT ISSUE

A. Market for Modular LED Displays

89. Since Mr. Hall invented the UltraPanel and the technology protected by the Asserted Ultravision Patents, to which Ultravision now has exclusive rights, accused modular LED displays have quickly become very popular, with many manufacturers supplying unauthorized copies to the United States, and many distributors purchasing, importing, and/or reselling unauthorized modular LED displays in the United States.

90. In September 2012, Ultravision engaged in discussions to have the UltraPanel products manufactured in China. In 2013, Ultravision began manufacturing its Ultravision panels

in China, and continued manufacturing in China through April 2015. Shortly thereafter, Ultravision ended its manufacturing activities in China due to ongoing concerns about theft of its intellectual property and quality of the products.

91. During and since the period Ultravision was manufacturing the UltraPanels in China, there has been a rapid proliferation of infringing modular LED displays, most of which are made in China. Large volumes of unlicensed modular LED displays are advertised for purchase online through websites such as www.alibaba.com. For example, a search for “modular LED display” on www.alibaba.com returns 1,364 products, 1358 of which identify the supplier location as China. *See* Ex. 5.

92. At the 2017 InfoComm trade show in Orlando, Florida (“InfoComm 2017”), Complainant observed at least 32 manufacturers exhibiting modular LED displays that, on information and belief, infringe the Asserted Ultravision Patents. Complainant collected product brochures for as many of these manufacturers as possible, some of which confirm that the products are infringing. Similarly, at Integrated Systems Europe 2018 trade show in Amsterdam (“ISE 2018”), Complainant observed at least 43 manufacturers exhibiting modular LED displays that, on information and belief, infringe the Asserted Ultravision Patents. Complainant collected product brochures for as many of these manufacturers as possible, some of which confirm that the products are infringing.

93. Further, on information and belief, there are dozens, if not hundreds, of distributors in the United States that are importing and/or selling modular LED displays as part of their custom LED display solutions that rely on the technology covered by the Asserted Ultravision Patents. On information and belief, these distributors, some of which have been named as Respondents,

purchase and/or import infringing modular LED displays from one or more of the many foreign manufacturers, and resell them as customized modular LED solutions.

94. As digital advertising is becoming more popular and efficient, the market for custom LED displays is poised to continue to increase.

B. Complainant's Products

95. Since its founding, innovation has been a key driver of Ultravision's success. With a background in digital advertising and LED displays, Mr. Hall started Ultravision to re-invent the technology behind digital LED displays.

96. Prior to Ultravision's development of its revolutionary UltraPanel product, LED-based digital displays suffered from significant problems, including overheating, high failure rates, and large costs associated with their manufacturing, installation, and operation.

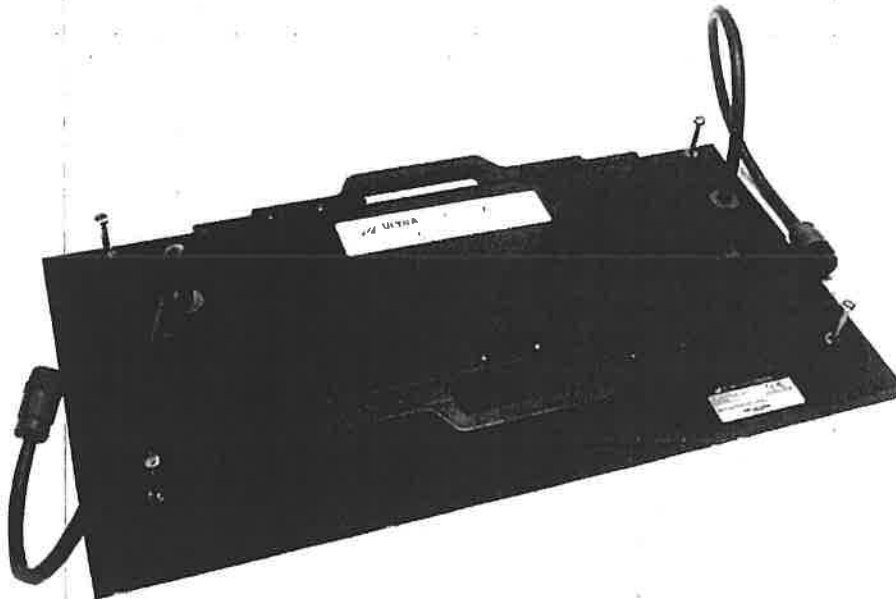
97. For example, previous LED display panels were not waterproof, and thus needed to be placed in a sealed cabinet in order to operate outside. These waterproof cabinets required fans, air conditioning systems, and three-phase electric power, which resulted in very high operating costs.

98. Additionally, previous LED display panels were not modular, meaning that each installation required a bespoke design. This resulted in expensive manufacturing, shipping, and installation. These LED display panels were also difficult to maintain, often requiring expensive maintenance contracts with specialized technicians.

99. Recognizing a need in the industry for a more cost effective and overall improved LED display solution, Mr. Hall, and a small team of engineers at Ultravision, completely revolutionized the industry by developing and introducing the UltraPanel product: a lightweight modular, waterproof LED display panel in standard sizes that can easily be built into large displays of different sizes and shapes, requires no waterproof outer cabinet, and runs on single-phase power

electric power. This lightweight, single-phase power, modular LED display panel dramatically lowered the customer's total cost of installation and total cost of operation compared to older traditional-cabinet-LED-display-designs. As a result of these innovations, Mr. Hall been awarded numerous patents in the field of LED displays. The technology covered by these patents captures the key features in Ultravision's innovative and market-leading UltraPanel products.

100. The UltraPanel is one of only two core product lines offered by Ultravision (Ultravision makes lighting products, in addition to digital displays). Ultravision's digital displays, scoreboards, and billboards rely on the UltraPanel's innovative modular configuration to allow custom LED solutions to be built to meet every customer's unique needs. The UltraPanel has evolved from initial prototypes that addressed only some of the problems discussed above, to a fully integrated modular unit that has revolutionized the LED display market. A picture of one of Ultravision's UltraPanels is seen below:



(Figure 1 – Ultravision’s UltraPanel)

101. Each UltraPanel is approximately 1 foot by 2 foot, and can include anywhere from 512 pixels to as many as 12,800 pixels. The panels are specifically designed and configured to be assembled into larger LED signs and billboards. Ultravision’s UltraPanel displays can be configured and assembled as a small billboard or sign, a sports team’s scoreboard or digital display, or even a large scale “Spectacular,” such as what is commonly seen in New York City’s Times Square. In fact, Ultravision designed, developed, engineered, assembled, and installed a majority of the LED displays in Times Square. One of Ultravision’s installations in Times Square is shown below:



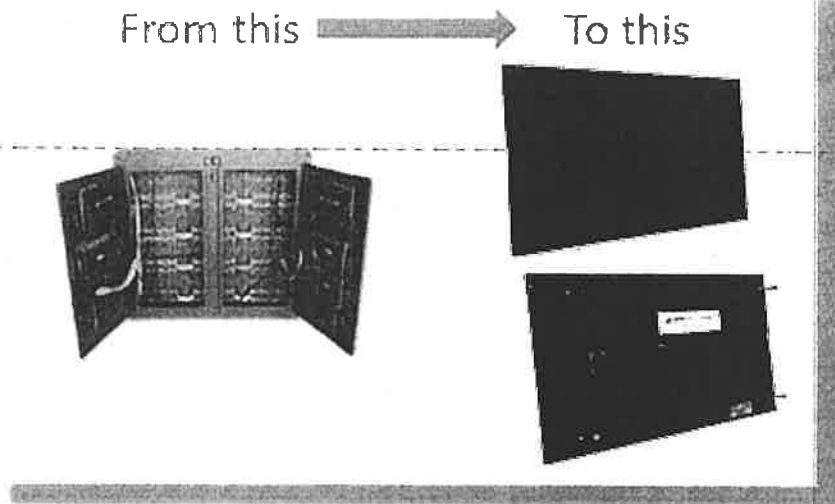
(Figure 2 – Ultravision’s UltraPanels configured as digital billboard in Times Square)

102. Further, Ultravision designed, engineered, manufactured, and installed an installation on Cromwell Road in London, which is the largest digital display in Europe. The Cromwell.Road installation is shown below:



(Figure 3 – Ultravision’s UltraPanels configured as digital billboard in London)

103. Upon its introduction, the UltraPanel immediately made prior cabinet-based designs obsolete. The UltraPanel’s unique combination of features has led to nearly the entire LED display industry, including but not limited to Respondents, copying this modular, waterproof design.



(Figure 4 – The evolution of the LED display panel)

104. As mentioned, Ultravision's innovations in the field of LED technology have resulted in numerous United States patents. Specifically, Ultravision owns by assignment the rights to the Asserted Ultravision Patents.

C. Accused Products

105. Respondents' Accused Products in this Complaint are modular LED displays. Respondents' modular LED displays infringe the Asserted Ultravision Patents by copying the unique and innovative features of Complainant's modular LED displays that provide for cabinet-free, waterproof, scalable, and customizable outdoor LED solutions.

106. Respondents' Accused Products are described further, with representative photographs, in Section VI.A below.

V. UNLAWFUL AND UNFAIR ACTS OF PROPOSED RESPONDENTS — PATENT INFRINGEMENT

107. On information and belief, Respondents import into the United States, sell for importation, and/or sell within the United States after importation Modular LED Displays in violation of Section 337.

108. The following chart shows the claims of the Asserted Ultravision Patents that

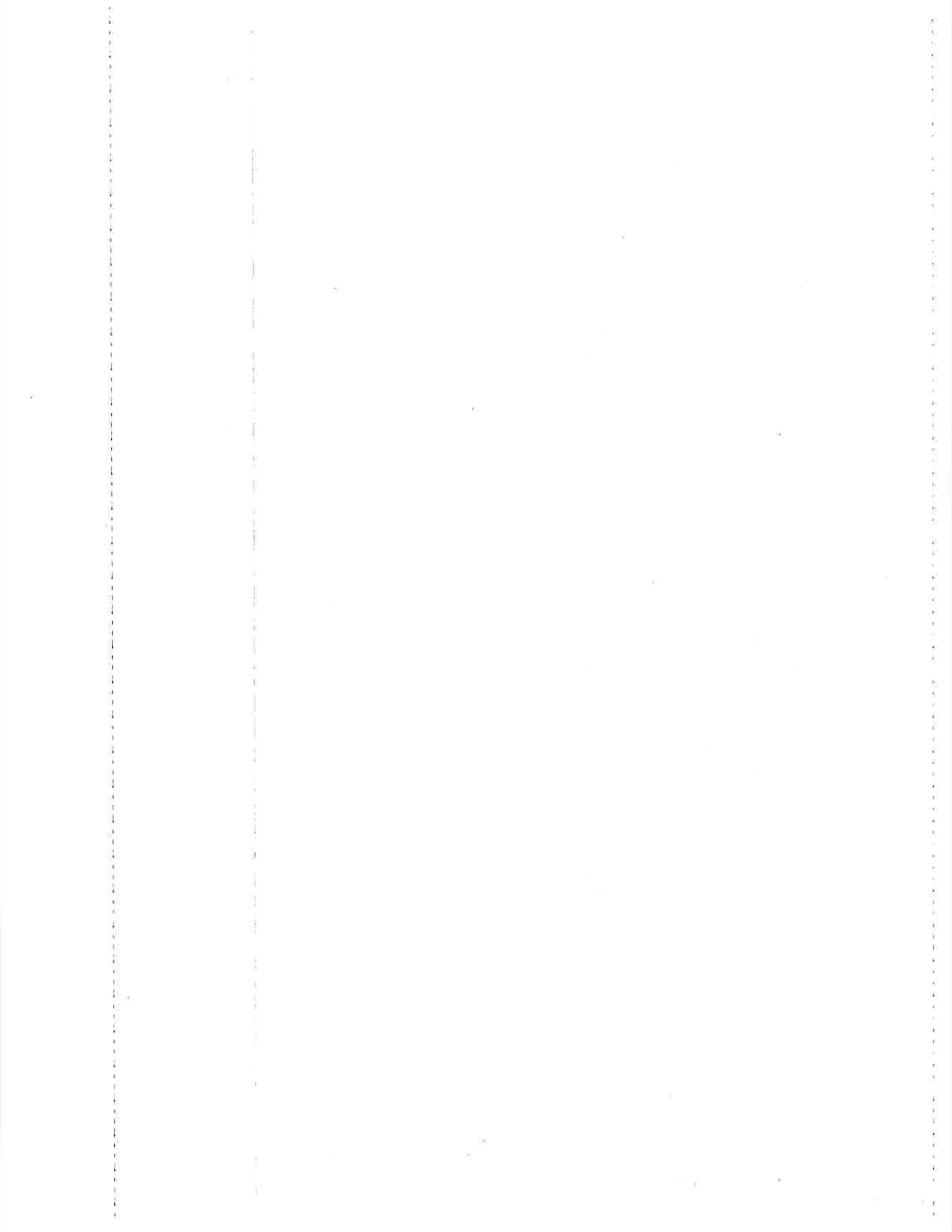
Ultravision asserts against each Respondent:

Respondent	306 Patent Claims	782 Patent Claims
Absen	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13
ANC	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13
AOTO	1, 3, 4, 5, 6, 7, 10, 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, 26, 27	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 22, 23, 24, 25, 28
Barco	1, 4, 6, 7, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Cirrus	1, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 16, 18, 21, 22, 23, 25, 26, 27	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16, 22, 24, 25, 26, 28
digiLED	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16
Elation	1, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Formetco	1, 3, 4, 5, 6, 7, 10, 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, 26, 27	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 22, 23, 24, 25, 28
Glux	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16
GoVision	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16
Ledman	1, 4, 5, 6, 7, 8, 10, 12, 13, 14, 16, 18, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Leyard	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16
Liantronics	1, 4, 6, 7, 8, 10, 12, 13, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Lighthouse	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Mitsubishi	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13

Respondent	'306 Patent Claims	'782 Patent Claims
MRLED	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
NanoLumens	1, 4, 6, 7, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Panasonic	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Prismaflex	1, 3, 4, 6, 7, 10, 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 16
RMG Network Solutions	1, 4, 6, 7, 8, 10, 12, 13, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Rocketsign	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Samsung	1, 4, 6, 7, 8, 9, 10, 12, 13, 14, 21, 22, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13
Sansi	1, 4, 6, 8, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13
Unilumin	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Vanguard	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16
Yaham	1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, 26	1, 3, 4, 5, 6, 9, 10, 11, 12, 13

A. Infringement of the '306 Patent

109. On information and belief, Respondents sell for importation into the United States, offer for sale for importation into the United States, import into the United States, and/or sell within the United States after importation Modular LED Displays that infringe one or more of at least claims 1, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, 26, and 27 of the '306 patent either literally or under the doctrine of equivalents.



110. Due to the nature of the custom LED business, and in particular, the size and cost of custom LED solutions comprised of the Accused Products, purchasing a representative Accused Product from each of the Respondents was not possible. In some cases, individual panels are not available for purchase. Further, Respondents likely would have found any attempt to purchase only a single sample panel suspicious and refused to sell Complainant a sample product. Thus, in the absence of physical samples, some of Complainant's infringement allegations are based on publicly available information regarding the Accused Products. Additional details regarding Respondents' infringement will be obtained during discovery.

1. The Manufacturing Respondents

a) Absen

111. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Absen demonstrates that Absen modular LED displays infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Absen is attached as Exhibit 6.

b) AOTO

112. Field examination of a physical sample of an Accused Product offered for sale for importation, sold for importation, and/or imported by Respondent AOTO, as well as publicly available product literature, demonstrates that AOTO modular LED displays infringe at least claims 1, 3, 4, 5, 6, 7, 10, 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, 26, and 27 of the '306 patent. A chart that applies claims 1, 3, 4, 5, 6, 7, 10, 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, 26, and 27 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for

importation, and/or imported by Respondent AOTO is attached as Exhibit 7.

c) Barco

113. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Barco demonstrates that Barco modular LED displays infringe at least claims 1, 4, 6, 7, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Barco is attached as Exhibit 8.

d) Cirrus

114. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Cirrus demonstrates that Cirrus modular LED displays infringe at least claims 1, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 16, 18, 21, 22, 23, 25, 26, and 27 of the '306 patent. A chart that applies claims 1, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 16, 18, 21, 22, 23, 25, 26, and 27 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Cirrus is attached as Exhibit 9.

e) digiLED

115. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent digiLED demonstrates that digiLED modular LED displays infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent digiLED is

attached as Exhibit 10.

f) Elation

116. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Elation demonstrates that Elation modular LED displays infringe at least claims 1, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Elation is attached as Exhibit 11.

g) Glux

117. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Glux demonstrates that Glux modular LED displays infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Glux is attached as Exhibit 12.

h) Ledman

118. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Ledman demonstrates that Ledman modular LED displays infringe at least claims 1, 4, 5, 6, 7, 8, 10, 12, 13, 14, 16, 18, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 5, 6, 7, 8, 10, 12, 13, 14, 16, 18, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Ledman is

attached as Exhibit 13.

i) Liantronics

119. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Liantronics demonstrates that Liantronics modular LED displays infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Liantronics is attached as Exhibit 14.

j) Lighthouse

120. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Lighthouse demonstrates that Lighthouse modular LED displays infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Lighthouse is attached as Exhibit 15.

k) MRLED

121. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent MRLED demonstrates that MRLED modular LED displays infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent MRLED is

attached as Exhibit 16.

l) Prismaflex

122. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Prismaflex demonstrates that the Prismaflex modular LED displays infringe at least claims 1, 3, 4, 6, 7, 10 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 3, 4, 6, 7, 10 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Prismaflex is attached as Exhibit 17.

m) Rocketsign

123. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Rocketsign demonstrates that Rocketsign modular LED displays infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Rocketsign is attached as Exhibit 18.

n) Samsung

124. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Samsung demonstrates that Samsung modular LED displays infringe at least claims 1, 4, 6, 7, 8, 9, 10, 12, 13, 14, 21, 22, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 9, 10, 12, 13, 14, 21, 22, 23, 25, and 26 of the of the '306 patent to an infringing modular LED display

offered for sale for importation, sold for importation, and/or imported by Respondent Samsung is attached as Exhibit 19.

o) Sansi

125. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Sansi demonstrates that Sansi modular LED displays infringe at least claims 1, 4, 6, 8, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 8, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Sansi is attached as Exhibit 20.

p) Unilumin

126. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Unilumin demonstrates that Unilumin modular LED displays infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Unilumin is attached as Exhibit 21.

q) Yaham

127. Field examination of a physical sample of an Accused Product offered for sale for importation, sold for importation, and/or imported by Respondent Yaham, as well as publicly available product literature, demonstrates that Yaham modular LED displays infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an

infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Yaham is attached as Exhibit 22.

2. The Private Label Respondents

a) Formetco

128. On information and belief, Respondent Formetco is a U.S. based distributor that purchases for importation, imports, and/or sells in the United States after importation, Accused Products manufactured by Respondent Absen as part of its custom LED solutions. The Formetco Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Absen. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Absen demonstrates that those products infringe at least claims 1, 3, 4, 5, 6, 7, 10, 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, 26, and 27 of the '306 patent. A chart that applies independent claim 1, 3, 4, 5, 6, 7, 10, 12, 13, 14, 16, 17, 18, 19, 21, 23, 25, 26, and 27 of the '306 patent to an infringing modular LED displays manufactured by Respondent Absen and distributed by Respondent Formetco is attached as Exhibit 23.

b) Leyard

129. On information and belief, Respondent Leyard purchases Accused Products from Respondent Glux and relabels them (or has them relabeled) as Leyard private-label products. The Leyard Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Glux. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Glux demonstrates that private-label Leyard modular LED displays also infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED

display manufactured by Respondent Glux and relabeled as Leyard is attached as Exhibit 12.

c) Mitsubishi

130. On information and belief, Respondent Mitsubishi purchases Accused Products from Respondent Yaham and relabels them (or has them relabeled) as Mitsubishi private-label products. The Mitsubishi Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Yaham. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Yaham demonstrates that private-label Mitsubishi modular LED displays also infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display manufactured by Respondent Yaham and relabeled as Mitsubishi is attached as Exhibit 22.

d) NanoLumens

131. On information and belief, Respondent NanoLumens purchases Accused Products from Respondent Absen and relabels them (or has them relabeled) as NanoLumens private-label products. The NanoLumens Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Absen. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Absen demonstrates that private-label NanoLumens modular LED displays also infringe at least claims 1, 4, 6, 7, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display manufactured by Respondent Absen and relabeled as NanoLumens is attached as Exhibit 24.

e) Panasonic

132. On information and belief, Respondent Panasonic purchases Accused Products from Respondent Lighthouse and relabels them (or has them relabeled) as Panasonic private-label products. The Panasonic Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Lighthouse. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Lighthouse demonstrates that private-label Panasonic modular LED displays also infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display manufactured by Respondent Lighthouse and relabeled as Panasonic is attached as Exhibit 15.

f) Vanguard

133. On information and belief, Respondent Vanguard purchases Accused Products from Respondent Rocketsign and relabels them (or has them relabeled) as Vanguard private-label products. The Vanguard Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Rocketsign. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Rocketsign demonstrates that private-label Vanguard modular LED displays also infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display manufactured by Respondent Rocketsign and relabeled as Vanguard is attached as Exhibit 18.

3. The Distributor Respondents

a) ANC

134. On information and belief, Respondent ANC is a U.S. based distributor that purchases for importation, imports, and/or sells in the United States after importation, Accused Products manufactured by Respondent Yaham and re-labeled by Respondent Mitsubishi as part of its custom LED solutions. The ANC Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Yaham. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Yaham demonstrates that those products infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display manufactured by Respondent Yaham and distributed by Respondent ANC is attached as Exhibit 22.

b) GoVision

135. On information and belief, Respondent GoVision is a U.S. based distributor that purchases for importation, imports, and/or sells in the United States after importation, Accused Products manufactured by Respondent digiLED as part of its custom LED solutions. The GoVision Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent digiLED. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent digiLED demonstrates that those products infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 14, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display manufactured by Respondent digiLED and distributed by Respondent GoVision is attached as Exhibit 10.

c) **RMG**

136. On information and belief, Respondent RMG is a U.S. based distributor that purchases for importation, imports, and/or sells in the United States after importation, Accused Products manufactured by Respondent Liantronics as part of its custom LED solutions. The RMG Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Liantronics. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Liantronics demonstrates that those products infringe at least claims 1, 4, 6, 7, 8, 10, 12, 13, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent. A chart that applies claims 1, 4, 6, 7, 8, 10, 12, 13, 16, 18, 19, 21, 23, 25, and 26 of the '306 patent to an infringing modular LED display manufactured by Respondent Liantronics and distributed by Respondent RMG is attached as Exhibit 14.

B. Infringement of the '782 Patent

137. On information and belief, Respondents sell for importation into the United States, offer for sale for importation into the United States, import into the United States, and/or sell within the United States after importation Modular LED Displays that infringe one or more of at least claims 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16, 22, 23, 24, 25, 26, and 28 of the '782 patent either literally or under the doctrine of equivalents.

138. Due to the nature of the custom LED business, and in particular, the size and cost of custom LED solutions comprised of the Accused Products, purchasing a representative Accused Product from each of the Respondents was not possible. In some cases, individual panels are not available for purchase. Further, Respondents likely would have found any attempt to purchase only a single sample panel suspicious and refused to sell Complainant a sample product. Thus, in the absence of physical samples, some of Complainant's infringement allegations are based on

publicly available information regarding the Accused Products. Additional details regarding Respondents' infringement will be obtained during discovery.

1. The Manufacturing Respondents

a) Absen

139. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Absen demonstrates that Absen modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Absen is attached as Exhibit 25.

b) AOTO

140. Field examination of a physical sample of an Accused Product offered for sale for importation, sold for importation, and/or imported by Respondent AOTO, as well as publicly available product literature, demonstrates that AOTO modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 22, 23, 24, 25, and 28 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 22, 23, 24, 25, and 28 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent AOTO is attached as Exhibit 26.

c) Barco

141. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Barco demonstrates that Barco modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for

importation, and/or imported by Respondent Barco is attached as Exhibit 27.

d) Cirrus

142. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Cirrus demonstrates that Cirrus modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16, 22, 24, 25, 26, and 28 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16, 22, 24, 25, 26, and 28 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Cirrus is attached as Exhibit 28.

e) digiLED

143. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent digiLED demonstrates that digiLED modular LED displays infringe at least claims 1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16 of the '782 patent. A chart that applies claims 1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent digiLED is attached as Exhibit 29.

f) Elation

144. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Elation demonstrates that Elation modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Elation is attached as Exhibit 30.

g) Glux

145. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Glux demonstrates that Glux modular LED displays infringe at least claims 1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16 of the '782 patent. A chart that applies claims 1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Glux is attached as Exhibit 31.

h) Ledman

146. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Ledman demonstrates that Ledman modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Ledman is attached as Exhibit 32.

i) Liantronics

147. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Liantronics demonstrates that Liantronics modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Liantronics is attached as Exhibit 33.

j) Lighthouse

148. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Lighthouse

demonstrates that Lighthouse modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Lighthouse is attached as Exhibit 34.

k) MRLED

149. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent MRLED demonstrates that MRLED modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent MRLED is attached as Exhibit 35.

l) Prismaflex

150. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Prismaflex demonstrates that the Prismaflex modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Prismaflex is attached as Exhibit 36.

m) Rocketsign

151. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Rocketsign demonstrates that Rocketsign modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for

importation, and/or imported by Respondent Rocketsign is attached as Exhibit 37.

n) Samsung

152. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Samsung demonstrates that Samsung modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Samsung is attached as Exhibit 38.

o) Sansi

153. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Sansi demonstrates that Sansi modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Sansi is attached as Exhibit 39.

p) Unilumin

154. Examination of publicly available product literature related to Accused Products offered for sale for importation, sold for importation, and/or imported by Respondent Unilumin demonstrates that Unilumin modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Unilumin is attached as Exhibit 40.

q) Yaham

155. Field examination of a physical sample of an Accused Product offered for sale for importation, sold for importation, and/or imported by Respondent Yaham, as well as publicly available product literature, demonstrates that Yaham modular LED displays infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent to an infringing modular LED display offered for sale for importation, sold for importation, and/or imported by Respondent Yaham is attached as Exhibit 41.

2. The Private Label Respondents

a) Formetco

156. On information and belief, Respondent Formetco is a U.S. based distributor that purchases for importation, imports, and/or sells in the United States after importation, Accused Products manufactured by Respondent Absen as part of its custom LED solutions. The Formetco Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Absen. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Absen demonstrates that those products infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 22, 23, 24, 25, and 28 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 22, 23, 24, 25, and 28 of the '782 patent to an infringing modular LED display manufactured by Respondent Absen and distributed by Respondent Formetco is attached as Exhibit 42.

b) Leyard

157. On information and belief, Respondent Leyard purchases Accused Products from Respondent Glux and relabels them (or has them relabeled) as Leyard private-label products. The Leyard Accused Products are, therefore, identical, or nearly identical, to the Accused Products

manufactured by Respondent Glux. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Glux demonstrates that private-label Leyard modular LED displays also infringe at least claims 1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16 of the '782 patent. A chart that applies claims 1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16 of the '782 patent to an infringing modular LED display manufactured by Respondent Glux and relabeled as Leyard is attached as Exhibit 31.

c) Mitsubishi

158. On information and belief, Respondent Mitsubishi purchases Accused Products from Respondent Yaham and relabels them (or has them relabeled) as Mitsubishi private-label products. The Mitsubishi Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Yaham. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Yaham demonstrates that private-label Mitsubishi modular LED displays also infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent to an infringing modular LED display manufactured by Respondent Yaham and relabeled as Mitsubishi is attached as Exhibit 41.

d) NanoLumens

159. On information and belief, Respondent NanoLumens purchases Accused Products from Respondent Absen and relabels them (or has them relabeled) as NanoLumens private-label products. The NanoLumens Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Absen. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Absen demonstrates that private-label NanoLumens modular LED displays also infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3,

4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display manufactured by Respondent Absen and relabeled as NanoLumens is attached as Exhibit 43.

e) Panasonic

160. On information and belief, Respondent Panasonic purchases Accused Products from Respondent Lighthouse and relabels them (or has them relabeled) as Panasonic private-label products. The Panasonic Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Lighthouse. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Lighthouse demonstrates that private-label Panasonic modular LED displays also infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display manufactured by Respondent Lighthouse and relabeled as Panasonic is attached as Exhibit 34.

f) Vanguard

161. On information and belief, Respondent Vanguard purchases Accused Products from Respondent Rocketsign and relabels them (or has them relabeled) as Vanguard private-label products. The Vanguard Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Rocketsign. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Rocketsign demonstrates that private-label Vanguard modular LED displays also infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display manufactured by Respondent Rocketsign and relabeled as Vanguard is attached as Exhibit 37.

3. The Distributor Respondents

a) ANC

162. On information and belief, Respondent ANC is a U.S. based distributor that purchases for importation, imports, and/or sells in the United States after importation, Accused Products manufactured by Respondent Yaham and re-labeled by Respondent Mitsubishi as part of its custom LED solutions. The ANC Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Yaham. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Yaham demonstrates that those products infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, and 13 of the '782 patent to an infringing modular LED display manufactured by Respondent Yaham and distributed by Respondent ANC is attached as Exhibit 41.

b) GoVision

163. On information and belief, Respondent GoVision is a U.S. based distributor that purchases for importation, imports, and/or sells in the United States after importation, Accused Products manufactured by Respondent digiLED as part of its custom LED solutions. The GoVision Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent digiLED. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent digiLED demonstrates that those products infringe at least claims 1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16 of the '782 patent. A chart that applies claims 1, 2, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16 of the '782 patent to an infringing modular LED display manufactured by Respondent digiLED and distributed by Respondent GoVision is attached as Exhibit 29.

c) RMG

164. On information and belief, Respondent RMG is a U.S. based distributor that purchases for importation, imports, and/or sells in the United States after importation, Accused Products manufactured by Respondent Liantronics as part of its custom LED solutions. The RMG Accused Products are, therefore, identical, or nearly identical, to the Accused Products manufactured by Respondent Liantronics. As explained above, examination of publicly available product literature related to Accused Products manufactured by Respondent Liantronics demonstrates that those products infringe at least claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent. A chart that applies claims 1, 3, 4, 5, 6, 9, 10, 11, 12, 13, and 16 of the '782 patent to an infringing modular LED display manufactured by Respondent Liantronics and distributed by Respondent RMG is attached as Exhibit 33.

VI. RELATED LITIGATION

165. On August 11, 2016, Ultravision brought an action against Shenzhen Only Optoelectronic Co Ltd ("Shenzhen Only") in the United States District Court for the Eastern District of Texas, alleging infringement of the '306 patent. The case was styled *Ultravision Technologies, LLC v. Shenzhen Only Tech Co Ltd*, Case No. 2:16-cv-895. A default judgment in favor of Ultravision was entered on November 15, 2017.

VII. SPECIFIC INSTANCES OF UNFAIR IMPORTATION AND SALE

166. On information and belief, Respondents are offering for sale for importation, selling for importation, importing, and/or selling in the United States after importation Modular LED Displays that infringe one or more claims of the Asserted Ultravision Patents and/or are the subject of unfair methods of competition in violation of Section 337, and will continue to do so.

167. The success of Ultravision's UltraPanels has attracted many entrants to the marketplace whose knock-off products are manufactured in China and imported into the United

States. The importation and sale after importation of these knock-off LED products is a significant and expanding problem.

A. The Manufacturing Respondents

1. Absen

168. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Absen. Absen manufactures Accused Products in China. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 5-6. Absen then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 5, 7-8.

2. AOTO

169. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent AOTO. AOTO manufactures Accused Product(s) in China. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 9-10. AOTO then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 10-12.

3. Barco

170. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Barco. Barco manufactures Accused Product(s) in Belgium and/or China. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 13-14. Barco then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 14-15.

4. Cirrus

171. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Cirrus. Cirrus's Accused Products are made in China. *See* Confidential Ex. 53, Credelle Dec. ¶ 16. Cirrus then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 16-18.

5. digiLED

172. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent digiLED. digiLED's Accused Products are made in China and/or Taiwan. *See* Confidential Ex. 53, Credelle Dec. ¶ 19. digiLED then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 20-21.

6. Elation

173. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation and/or sold within the United States after importation by Respondent Elation. Elation sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 22-23.

7. Glux

174. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Glux. Glux's Accused Products are made in China. *See* Confidential

Ex. 53, Credelle Dec. ¶ 24. Glux then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 25-27.*

8. Ledman

175. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Ledman. Ledman sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 28-29.*

9. Liantronics

176. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Liantronics. Liantronics's Accused Products are made in China. *See Credelle Dec. ¶ 30.* Liantronics then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 31-33.*

10. Lighthouse

177. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Lighthouse. Lighthouse sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 34-36.*

11. MRLED

178. On information and belief, modular LED displays that infringe the '306 patent and

the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent MRLED. MRLED's Accused Products are made in China. *See Confidential Ex. 53, Credelle Dec. ¶ 37.* MRLED then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 37-40.*

12. Prismaflex

179. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Prismaflex. Prismaflex's Accused Products are made in China and/or France. *See Confidential Ex. 53, Credelle Dec. ¶ 41.* Prismaflex then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 42-44.*

13. Rocketsign

180. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Rocketsign. Rocketsign sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 45-47.*

14. Samsung

181. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Samsung. Samsung sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 48-50.* Furthermore, Samsung will

be an exhibitor at Digital Signage Expo 2018 in Las Vegas, Nevada from March 27-30, 2018, where, on information and belief, Samsung will exhibit the Accused Product(s). *See* Confidential Ex. 53, Credelle Dec. ¶ 49.

15. Sansi

182. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Sansi. Sansi's Accused Products are made in China. *See* Confidential Ex. 53, Credelle Dec. ¶ 51. Sansi then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 52-53.

16. Unilumin

183. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Unilumin. Unilumin's Accused Products are made in China. *See* Confidential Ex. 53, Credelle Dec. ¶ 54. Unilumin then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 55-58.

17. Yaham

184. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Yaham. Yaham's Accused Products are made in China. *See* Confidential Ex. 53, Credelle Dec. ¶ 59. Yaham then sells the Accused Products for importation into the United States, imports them into the United States, and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 60-63.

B. The Private Label Respondents

1. Formetco

185. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Formetco. On information and belief, Accused Products are made in China and re-labeled for sale by or on behalf of Formetco. Formetco imports the Accused Products into the United States and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 64-65.

2. Leyard

186. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Leyard. On information and belief, Accused Products are made in China and re-labeled for sale by or on behalf of Leyard. *See* Confidential Ex. 53, Credelle Dec. ¶ 66. Leyard imports the Accused Products into the United States and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 67-69.

3. Mitsubishi

187. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Mitsubishi. On information and belief, Accused Products are made in China and re-labeled for sale by or on behalf of Mitsubishi. Mitsubishi imports the Accused Products into the United States and/or sells them within the United States after importation. *See* Confidential Ex. 53, Credelle Dec. ¶¶ 70-73.

4. NanoLumens

188. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent NanoLumens. On information and belief, Accused Products are made in China and re-labeled for sale by or on behalf of NanoLumens. NanoLumens imports the Accused Products into the United States and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 74-75.*

5. Panasonic

189. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Panasonic. On information and belief, Accused Products are made in China and re-labeled for sale by or on behalf of Panasonic. Panasonic imports the Accused Products into the United States and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 76-78.*

6. Vanguard

190. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent Vanguard. On information and belief, Accused Products are made in China and re-labeled for sale by or on behalf of Vanguard. *See Confidential Ex. 53, Credelle Dec. ¶ 79.* Vanguard imports the Accused Products into the United States and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 80-84.*

C. The Distributor Respondents

1. ANC

191. On information and belief, modular LED displays that infringe the '306 patent and

the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent ANC. ANC imports the Accused Products into the United States and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 85-86.*

2. GoVision

192. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent GoVision. GoVision imports the Accused Products into the United States and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 87-88.*

3. RMG

193. On information and belief, modular LED displays that infringe the '306 patent and the '782 patent are imported, sold for importation, and/or sold within the United States after importation by Respondent RMG. RMG imports the Accused Products into the United States and/or sells them within the United States after importation. *See Confidential Ex. 53, Credelle Dec. ¶¶ 89-90.*

VIII. CLASSIFICATION OF THE ACCUSED PRODUCTS UNDER THE HARMONIZED TARIFF SCHEDULE OF THE UNITED STATES

194. On information and belief, the infringing Accused Products may be classified under at least the following heading and subheading of the Harmonized Tariff Schedule of the United States ("HTS"): 8541.40.2000. These classifications are intended for illustration only and are not intended to restrict the scope of any exclusion order or other remedy ordered by the Commission.

IX. THE DOMESTIC INDUSTRY

195. With respect to each of the Asserted Ultravision Patents, a domestic industry, as defined by 19 U.S.C. §§ 1337(a)(1)(A) and 1337(a)(2)-(3), exists, or is in the process of being established, by virtue of Ultravision's significant investment in plant and equipment, significant employment of labor or capital for U.S. activities directed to its Modular LED Displays, and/or its substantial investment in the exploitation of the Asserted Ultravision Patents through activities such as engineering and research and development in the United States.

A. Technical Prong

196. Ultravision practices the Asserted Ultravision Patents in the United States through Ultravision's UltraPanel products.

197. Photographs of the UltraPanel products are included with this Complaint in Exhibits 47 and 48. Pursuant to Commission Rule 210.12(a)(9)(ix), claim charts applying claims of the Asserted Ultravision Patents to the UltraPanel products are attached as Exhibits 47 and 48.

198. In addition, Ultravision continues to exploit the inventions in the Asserted Ultravision Patents and plans to release new versions of Ultravision Products that will practice the Asserted Ultravision Patents in the United States.

B. Economic Prong

199. As required by 19 U.S.C. §§ 1337(a)(2) and 1337(a)(3), an industry exists, or is in the process of being established, in the United States relating to Complainant's Modular LED Displays and the Asserted Ultravision Patents, which are practiced by Complainant's Modular LED Displays. Complainants' Modular LED Displays sold domestically are designed, developed, manufactured, tested, assembled, and supported in the United States. To design, develop, manufacture, test, assemble, and support Complainant's Modular LED Displays, Complainant has made and continues to make significant investment in plant and equipment, has employed and

continues to employ significant labor or capital, and has made and continues to make substantial investments in the exploitation of the Asserted Ultravision Patents through activities such as engineering and research and development in the United States.

1. Existing Domestic Industry Related to Modular LED Displays

200. On the basis of Ultravision's domestic research and development, engineering, testing, and product support, a domestic industry related to products that practice the Asserted Ultravision Patents currently exists.

a) Ultravision's Domestic Activities Related to Modular LED Displays

201. Ultravision's domestic activities related to Modular LED Displays are set forth in Confidential Ex. 55.

b) Significant Investment in Plant and Equipment

202. Complainant's investments in its facilities, including plant space, rent, taxes, insurance, utilities, repair, and maintenance, for conducting activities related to the Ultravision Products protected by the Asserted Ultravision Patents are set forth in Confidential Ex. 55.

203. Additionally, Complainant uses various equipment, tools, and software in connection with its activities involving the Ultravision Products protected by the Asserted Ultravision Patents. Complainant's investments in the United States in equipment, tooling, and software utilized for activities related to the Ultravision Products protected by the Asserted Ultravision Patents are set forth in Confidential Ex. 55.

c) Significant Employment of Labor or Capital

204. Confidential Ex. 55 details Complainant's employment of labor in the United States in connection with activities directed to the Ultravision Products protected by the Asserted

Ultravision Patents and sets forth Complainant's expenditures for its employees' salaries and benefits.

205. Further, Confidential Ex. 55 details Complainant's employment of capital in the United States in connection with activities directed to the Ultravision Products protected by the Asserted Ultravision Patents.

d) Substantial Investment in Exploitation of Asserted Patents Through Engineering and Research and Development

206. Confidential Ex. 55 details Complainant's substantial U.S. investments in engineering and research and development to exploit the Asserted Ultravision Patents, and details Complainant's plans to continue to invest significantly in these activities to exploit the Asserted Ultravision Patents through new generations of Ultravision Products protected by the Asserted Ultravision Patents.

207. Accordingly, Complainant's investments in the United States in activities directed to the Ultravision Products protected by the Asserted Ultravision Patents, as described above and in Confidential Ex. 55, demonstrate the existence of a domestic industry as defined in Section 337(a)(1)(A) and (a)(3).

2. Ultravision's Domestic Industry in the Process of Being Established

208. In 2017, Ultravision made the decision to move manufacturing of the Ultravision UltraPanel products to the United States. Ultravision's activities and investments to on-shore its manufacturing activities are set forth in Confidential Ex. 54. To the extent that Ultravision's past investments related to the UltraPanel products are insufficient to demonstrate the existence of a domestic industry, Ultravision's planned expenditures related to its domestic manufacturing demonstrate that a domestic industry related to the UltraPanel products protected by the Asserted

Ultravision Patents is in the process of being established. Ultravision, through its domestic contract manufacturer, will make a significant investment in plant and equipment, will employ significant labor or capital, and/or will make substantial investments in the exploitation of the Asserted Ultravision Patents through engineering and research and development. Moreover, Ultravision expects to make a significant investment in plant and equipment and employ significant labor or capital to allow Ultravision to manufacture the UltraPanel products at its existing Dallas Facility. Ultravision's past and future activities and investments constitute necessary and tangible steps to establish a domestic industry in the United States. *See Confidential Ex. 55.*

209. As explained in Confidential Exhibit 54, Ultravision anticipates that its domestic contract manufacturing will be producing UltraPanel products in the United States by the end of the second quarter of 2018. Ultravision expects it will be manufacturing all or virtually all of its UltraPanel products in the United States by the end of 2018. Ultravision's expected domestic investment for the domestic manufacturing of the UltraPanel products is set forth in Confidential Exhibit 55.

X. GENERAL EXCLUSION ORDER

210. Should the ITC find a violation of Section 337, a general exclusion order ("GEO") directed to certain LED displays that infringe one or more claims of the Asserted Ultravision Patents is necessary and appropriate to prevent circumvention of an LEO directed to Respondents and/or to remedy a pattern of violation of Section 337 where it is difficult to identify the source of Accused Products. 19 U.S.C. § 1337(d)(2).

211. The facts as alleged in this Complaint and likely to be revealed through discovery demonstrate, with respect to modular LED displays, several grounds for the issuance of a GEO, such as: high demand for modular LED displays in the United States, a quickly-established and

growing market in the United States, a large and established distribution system in the United States, interchangeability of foreign manufacturers, large foreign manufacturing capacity, and a propensity and ability of foreign suppliers to change company names and corporate forms in an attempt to evade enforcement efforts. Representative public information relevant to these facts is described in more detail below.

A. Characteristics of the U.S. Market for Accused Products Weigh in Favor of a GEO

212. There exists high demand and a well-established and extensive distribution system for modular LED displays in the United States. That distribution system includes direct-to-consumer sales by the Manufacturing Respondents, as well as other manufacturers, U.S. based distributors that provide custom LED solutions, and extensive Internet-based sales and distribution networks. *See* Section I, *supra*. One indicator of the high demand for modular LED displays is the large number of Respondents selling and promoting Accused Products. *See* Section VII, *supra*. On information and belief, there are currently dozens, if not hundreds, of companies in the United States that import, warehouse, distribute, and/or sell modular LED displays that infringe one or more claims of the Asserted Ultravision Patents. Indeed, infringement of the Asserted Ultravision Patents and the conduct of unfair acts in connection with the advertising and sale of modular LED displays continues to grow.

213. For example, at InfoComm 2017, Complainant identified more than 32 companies promoting and selling LED panels that, on information and belief, violate Section 337. On information and belief, the LED panels purported to be manufactured outside the United States, mostly in China. Exhibitors at the show were present in Orlando for only a few days, during which time, on information and belief, they took orders for LED panels that are the subject of one or more unfair acts, including, but not limited to, infringement of the Asserted Ultravision Patents,

many of which will be bound for the United States. Exhibits 46-47 are the brochures for LED panels that Ultravision obtained at the 2017 InfoComm Trade Show, which show representative images of the LED panels and were being promoted at different exhibitors' booths throughout the InfoComm 2017.

B. There Are Many Sources of Accused Products

214. On information and belief, manufacturers of modular LED displays are largely interchangeable, and many manufacturers appear to supply multiple distributors, retailers, or resellers. For example, the modular LED displays offered for sale and sold by Respondent Vanguard appear identical to those offered for sale and sold by Respondent Rocketsign. *Compare e.g., Ex. 48, with Ex. 49.*

215. Moreover, in late 2017 and early 2018, Ultravision received at least three offers for sale of new LED products that, on information and belief, also infringe the Asserted Ultravision Patents. Specifically, a representative from a Chinese manufacturer, Shenzhen Liantronics Co., Ltd., emailed Mr. Hall, the inventor of the Asserted Ultravision Patents, to offer updated Accused Products. *See Ex. 50.* Likewise, another Chinese manufacturer, Shenzhen Mary Photoelectricity Co., Ltd. d/b/a MRLED contacted Mr. Hall offering to sell him new products that, on information and belief, also infringe the Asserted Ultravision Patents. *See Ex. 51.* In that correspondence, a representative of MRLED confirms the existence of a U.S. branch office, and that the products being offered for sale in the United States are now available from inventory held in Los Angeles. Finally, Chinese manufacturer Liantronics emailed Mr. Hall introducing its newly-launched VA series that, on information and belief, also infringes the Asserted Ultravision Patents. *See Ex. 52.* Just as with MRLED, many foreign manufacturers of Accused Products are, on information and belief, keeping Accused Products in inventory in the United States to facilitate faster sales and shipping to U.S. based customers.

216. Finally, the nature of these products, and the small number of components necessary for manufacturing, lend themselves to numerous foreign manufacturers being able to quickly and cheaply retool their factories to begin manufacturing new infringing modular LED displays. The products themselves are easily reverse engineered, and tooling and componentry costs for these products are relatively low, particularly as compared to the value of the products once they are integrated into custom LED solutions. Further, the components are not overly technical, and likely can be sourced as off the shelf components from numerous suppliers in China and elsewhere. Thus, any LED or component manufacturer could quickly reconfigure and retool an existing manufacturing line to begin manufacturing new infringing panels.

C. Identifying the Source of Accused Products is Difficult

217. Due to the number of manufacturers, suppliers, importers, distributors, consignees, sellers and re-sellers, warehouses, and other entities involved in the sale and importation of Accused Products, it is difficult to determine the source of imported LED panels. Many foreign manufacturers and sellers of LED panels appear to do business under multiple names, corporate forms, and/or websites, and through different subsidiaries, importers, or distributors, import modular LED displays into the United States. *See, e.g., supra* ¶¶ 12-14, 128, 133. In addition, many companies offer modular LED displays for sale and importation into the United States on the Internet. Many companies avail themselves of the ease of listing products for sale through their own websites.

218. The imposition of a GEO is therefore necessary due to the conditions of the market, the number of potential known and unknown infringers, and the potential for circumvention of an LEO.

XI. REQUESTED RELIEF

WHEREFORE, by reason of the foregoing, Ultravision respectfully requests that the United States International Trade Commission:

A. Institute an immediate investigation pursuant to Section 337(b)(1) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, into the violation of Section 337 based on the sale for importation into the United States, importation, and/or sale or lease within the United States after importation of Respondents' Accused Products that infringe one or more claims of the Asserted Ultravision Patents;

B. Schedule and conduct a hearing pursuant to Section 337(c), for purposes of receiving evidence and hearing argument concerning whether there has been a violation of Section 337, and following the hearing, to determine that there has been a violation of Section 337;

C. Issue a permanent general exclusion order forbidding entry into the United States of the Accused Products that infringe any claim of the Asserted Ultravision Patents;

D. Alternatively, issue a permanent limited exclusion order forbidding entry into the United States of Modular LED Displays imported, sold for importation, or sold after importation by Respondents that infringe the Asserted Ultravision Patents;

E. Issue a permanent cease and desist order, pursuant to Section 337(f), directing Respondents to cease and desist from the importation, sale, offer for sale, marketing, advertising, packaging, inventorying, distribution, transfer, or solicitation of any sale by Respondents of Modular LED Displays that infringe the Asserted Ultravision Patents;

F. Impose a bond, pursuant to 19 U.S.C. §§ 1337(e), (j), upon Proposed Respondents' importation of the Accused Products that infringe any claim of the Asserted Ultravision Patents during the 60-day Presidential review period to prevent further injury to Ultravision's domestic industry relating to the Asserted Ultravision Patents;

G. Award Ultravision its attorneys' fees in connection with bringing this action to remedy Proposed Respondents' unfair acts in violation of Section 337; and

H. -- Grant all such other and further relief as it deems appropriate under the law, based upon the facts complained of herein and as determined by the investigation.

Dated: March 27, 2018

Respectfully submitted,



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VERIFICATION OF COMPLAINT

I, William Hall, declare, in accordance with 19 C.F.R. §§ 210.4 and 210.12(a), under penalty of perjury that the following statements are true:

1. I am the Chief Executive Officer of Ultravision Technologies, LLC, and am duly authorized to sign this complaint on behalf of Complainant;
2. I have read the complaint and am aware of its contents;
3. The complaint is not being presented for any improper purpose, such as to harass or to cause unnecessary delay or needless increase in the cost of litigation;
4. To the best of my knowledge, information, and belief founded upon reasonable inquiry, the claims and legal contentions of this complaint are warranted by existing law or a good faith argument for the extension, modification, or reversal of existing law; and
5. The allegations and other factual contentions in the complaint have evidentiary support or are likely to have evidentiary support after a reasonable opportunity for further investigation or discovery.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on 27, March, 2018



Print Name: William Hall
Title: Chief Executive Officer
Ultravision Technologies, LLC