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IN THE UNITED STATES DISTRICT COURT

DISTRICT OF OREGON  
**PORTLAND DIVISION**

**STATE OF OREGON, *ex rel.* John Kroger,**  
**Attorney General,**

Plaintiff,

v.

**AU OPTRONICS CORPORATION, AU  
OPTRONICS CORPORATION AMERICA,  
INC., CHI MEI CORPORATION, CHI MEI  
INNOLUX CORPORATION, CHI MEI  
OPTOELECTRONICS USA, INC.,  
CHUNGHWA PICTURE TUBES, LTD.,  
CMO JAPAN CO., LTD., EPSON  
IMAGING DEVICES CORPORATION,  
EPSON ELECTRONICS AMERICA, INC.,  
EPSON IMAGING DEVICES  
CORPORATION, HANNSTAR DISPLAY  
CORPORATION, HITACHI DISPLAYS,  
LTD., HITACHI ELECTRONIC DEVICES**

Case No. :

**CV '10 - 933 MO**

**COMPLAINT**

- (1) VIOLATION OF THE SHERMAN ACT, 15 U.S.C. § 1
- (2) VIOLATION OF THE OREGON ANTITRUST ACT, §§ 646.725-.730
- (3) UNJUST ENRICHMENT, ORS § 646.770

(USA), INC., HITACHI, LTD., LG DISPLAY AMERICA, INC., LG DISPLAY CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., SAMSUNG ELECTRONICS CO., LTD., SHARP CORPORATION, SHARP ELECTRONICS CORPORATION, INC., TOSHIBA AMERICA ELECTRONIC COMPONENTS, INC., TOSHIBA AMERICA INFORMATION SYSTEMS, INC., TOSHIBA CORPORATION, TOSHIBA MOBILE DISPLAY COMPANY, LTD., AND HYDIS TECHNOLOGIES CO., LTD., f/k/a BOE HYDIS TECHNOLOGY CO., LTD.,

Defendants.

## INTRODUCTION

1. Oregon Attorney General John Kroger brings this civil action on behalf of the State of Oregon, its agencies, political subdivisions, and local governments, and all natural persons residing in Oregon who were indirect purchasers of Thin Film Transistor Liquid Crystal Display (TFT-LCD or LCD) products containing LCD panels against all defendants.

Collectively, the parties represented are referred to herein as “Oregon indirect purchasers.”

2. This case arises out of a long-running conspiracy extending from at least January 1, 1996 through at least December 11, 2006, among defendants and their co-conspirators to fix, raise, stabilize, and maintain prices for LCD panels sold indirectly to Oregon indirect purchasers.

3. Defendants and their co-conspirators formed an international cartel to illegally restrict competition in the LCD panel market, specifically targeting and severely injuring indirect-purchaser consumers and affecting billions of dollars of commerce throughout the United States and millions of dollars of commerce within the State of Oregon. The conspiracy

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included communications and meetings in which defendants agreed to eliminate competition, control production, and fix prices for LCD panels. As a result of defendants' price fixing conspiracy, Oregon indirect purchasers have been injured by paying more for LCD products than they otherwise would have paid in the absence of the conspiracy.

4. During 2006, the Antitrust Division of the Department of Justice began investigating defendants' alleged participation in this global conspiracy. The investigation is ongoing, but to date at least eight corporate defendants in this action and more than a dozen individual executives have pleaded guilty to Sherman Act violations relating to suppressing and eliminating competition by price-fixing.

5. More than 50 civil actions now have been filed stemming from allegations of this global price-fixing conspiracy. The cases have been transferred to the Judicial Panel on Multi District Litigation, and they are being handled by U.S. Federal District Judge Susan Y. Illston in the United States District Court for the Northern District of California. See In Re TFT-LCD (Flat Panel) Antitrust Litigation, MDL 1827. The cases have been consolidated and include class actions on behalf of citizens from 23 states. On March 28, 2010, Judge Illston granted Class certification on behalf of direct and indirect purchasers, although excluded from those classes are state and local governments and citizens from the State of Oregon.

6. Oregon indirect purchasers now bring this action and request transfer of this case to the MDL Panel to coordinate discovery and pretrial proceedings with the other LCD actions, after which the case should be returned to the District of Oregon for trial at the earliest possible setting.

## JURISDICTION AND VENUE

7. This action is brought under Section 16 of the Clayton Act, 15 U.S.C. § 26, for equitable relief against defendants due to their violations of Section 1 of the Sherman Act, 15 U.S.C. § 1, as well as under the antitrust laws of the State of Oregon, and to obtain restitution, recover damages, and secure other relief against defendants.

8. This Court has subject matter jurisdiction under Section 16 of the Clayton Antitrust Act, 15 U.S.C. § 26, Section 1 of the Sherman Act, 15 U.S.C. § 1, and 28 U.S.C. §§ 1331 and 1337. This Court has subject matter jurisdiction of the state-law claims under 28 U.S.C. § 1367.

9. Venue is proper in this Judicial District pursuant to Section 12 of the Clayton Act, 15 U.S.C. § 22, and 28 U.S.C. § 1391(b), (c), and (d), because a substantial part of the events giving rise to Oregon indirect purchasers' claims occurred in this District, a substantial portion of the affected interstate trade and commerce was carried out in this District, and one or more of the defendants has an agent, maintains an office or does business in this District.

10. Defendants conduct business throughout the United States, including in this jurisdiction, and they purposefully have availed themselves of the laws of the United States, including the laws of the State of Oregon. Defendants' products are sold in interstate commerce, and defendants' activities had a direct, substantial and reasonably foreseeable effect on such commerce.

11. Defendants' conspiracy to fix prices and control production of LCD panels substantially affected commerce throughout the United States and in the State of Oregon because defendants, directly or through their agents, engaged in activities affecting Oregon commerce.

Defendants have purposefully availed themselves of the laws of Oregon with their activities relating to the production, marketing, and sale of LCD panels. Defendants produced, promoted, sold, marketed, and/or distributed LCD panels, thereby purposefully profiting from access to indirect-purchaser consumers within Oregon.

12. Prices of LCD panels sold in Oregon were raised to supracompetitive levels by the defendants and their co-conspirators. Defendants knew that commerce in LCD products in Oregon would be adversely affected by implementing their conspiracy.

### **DEFINITIONS**

13. “LCD” or “TFT-LCD” means the LCD display technology that involves sandwiching a liquid crystal compound between two glass plates called substrates. The resulting screen contains hundreds or thousands of electrically charged dots, or pixels, that form an image. This panel is then combined with a backlight unit, a driver, and other equipment to create a “module” allowing the panel to operate and be integrated into a television, computer monitor, or other product.

14. “LCD panel” or “TFT-LCD panel” also refers to the particular kinds of LCD panels that are used in LCD products.

15. “LCD products” means the following products of which LCD panels are a component: televisions, computer monitors, and laptop computers.

16. “OEM” means any original equipment manufacturer of LCD products.

17. “ODM” means any original design manufacturer of LCD products.

18. “EMS provider” means any electronics manufacturing services provider of LCD product.

## PARTIES

### Plaintiff

19. Oregon Attorney General John Kroger brings this civil action in the name of the State of Oregon on behalf of itself, its agencies, political subdivisions, and local governments, and in its parens patriae capacity on behalf of natural persons residing in Oregon. The Oregon Attorney General is authorized to bring this action under Section 16 of the Clayton Act, 15 U.S.C. § 26, and under ORS § 646.775.

20. The following entities indirectly purchased LCD panels contained in LCD products from one or more of the defendants for end use and not for resale:

- (a) The State of Oregon, including without limitation its agencies, political subdivisions, and all local governments.
- (b) All natural persons residing in Oregon who indirectly purchased an LCD panel or LCD product and were injured as a result of defendants' illegal conduct.

### Defendants

#### AU Optronics

21. AU Optronics Corporation, one of the largest manufacturers of LCD panels having its corporate headquarters at No. 1, Li-Hsin Rd. 2, Hsinchu Science Park, Hsinchu 30078, Taiwan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

22. AU Optronics Corporation America Inc., a wholly-owned and controlled subsidiary of defendant AU Optronics Corporation having its corporate headquarters at 9720

Cypresswood Drive, Suite 241, Houston, Texas and with facilities located in San Diego and Cupertino, California, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

23. AU Optronics Corporation and AU Optronics Corporation America, Inc. are referred to collectively herein as “AU Optronics.”

**Chi Mei**

24. Chi Mei Corporation, another of the world’s largest manufacturers of LCD panels having its corporate headquarters at No. 11-2, Jen Te 4<sup>th</sup> St., Jen Te Village, Jen Te, Tainan 717, Taiwan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, and/or specifically in the State of Oregon.

25. Chi Mei Innolux Corporation, *f/k/a* Chi Mei Optoelectronics Corporation, another of the world’s largest manufacturers of LCD panels and a wholly-owned subsidiary of Chi Mei Corporation, with its global headquarters at No. 3, Sec. 1, Huanshi Rd., Southern Taiwan Science Park, Sinshih Township, Tainan County, 74147 Taiwan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

26. Chi Mei Optoelectronics USA, Inc., *f/k/a* International Display Technology USA, Inc., a wholly-owned and controlled subsidiary of Chi Mei Corporation having its corporate headquarters at 101 Metro Drive Suite 510, San Jose, California, is hereby named as a

defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

27. CMO Japan Co., Ltd., *f/k/a* International Display Technology, Ltd. and/or Chi Mei Optoelectronics Japan Co. Ltd., a subsidiary of Chi Mei Corporation having its principal place of business located at Nansei Yaesu Bldg. 3F, 2-2-10 Yaesu, Chuo-Ku, Tokyo 104-0028, Japan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

28. Defendants Chi Mei Corporation, Chi Mei Optoelectronics Corporation, Chi Mei Optoelectronics USA, Inc., and CMO Japan Co., Ltd. are referred to collectively herein as “Chi Mei.”

### **Hitachi**

29. Hitachi, Ltd., with its headquarters at 6-6 Marunouchi 1-Chrome, Chiyoda-ku, Tokyo, 100-8280, Japan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon..

30. Hitachi Displays, Ltd., with its principal place of business located at AKS Bldg. 5F, 6-2 Kanda Neribeicho 3, Chiyoda-ku, Tokyo, 101-0022, Japan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.



31. Hitachi Electronic Devices (USA), Inc., a wholly-owned and controlled subsidiary of defendant Hitachi Ltd. having its principal place of business at 575 Mauldin Road, Greenville, South Carolina 29607, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

32. Defendants Hitachi Displays Ltd., Hitachi America Ltd. and Hitachi Electronic Devices (USA), Inc. are referred to collectively as “Hitachi.”

### **Epson**

33. Epson Imaging Devices Corporation (“Epson Japan”) is a Japanese company with its principle place of business at 3-101, Minami-Yoshitkata, Tottori-Shi, Tottori, 680-8577, Japan. Epson Japan was originally formed as a joint venture between Seiko Epson Corporation and Sanyo Electric Company, Ltd., but is now a wholly-owned subsidiary of Seiko Epson Corporation. Prior to January 2007, Epson Japan was known as Sanyo Epson Imaging Devices Corporation.

### **HannStar**

34. HannStar Display Corporation (“HannStar”), having its headquarters at No. 480, Rueiguang Road, 12<sup>th</sup> Floor, Neihu Chiu, Taipei 114, Taiwan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

### **LG Display**

35. LG Display Co., Ltd, *f/k/a* LG Phillips LCD Co., Ltd., a leading manufacturer of LCD panels and a joint venture created in 1999 by Philips Electronics NV and LG LCD, which maintains offices in San Jose, California and which has its principal place of business located at 20 Yoido-dong, Youngdungpo-gu, Seoul, 150-721, Republic of Korea, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

36. LG Display America, Inc. *f/k/a* LGD LCD America, Inc., having its principal place of business located at 150 East Brokaw Road, San Jose, CA 95112, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

37. Defendants LG Display Co., Ltd. and LG Display America, Inc. are referred to collectively herein as “LGD.”

### **Samsung**

38. Samsung Electronics Co., Ltd., having its principal place of business at Samsung Main Building, 250-2 ga, Taepyung-ro Chung-gu, Seoul, Republic of Korea, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

39. Samsung Semiconductor, Inc., is a wholly-owned and controlled subsidiary of Samsung Electronics Co., Ltd. having its principal place of business is at 3655 North First Street, San Jose, California 95134, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

40. Samsung Electronics America, Inc., (Samsung America), a wholly-owned and controlled subsidiary of defendant Samsung Electronics Company, Ltd. having its principal place of business at 105 Challenger Road, Ridgefield Park, New Jersey, is hereby named as a defendant. Samsung America sold and distributed LCD Products manufactured by Samsung Electronics Company, Ltd. to consumers throughout the United States.

41. Defendants Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Semiconductor, Inc. are referred to collectively herein as “Samsung.”

### **Sharp**

42. Sharp Corporation, having its principal place of business at 22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels to customers throughout the United States.

43. Sharp Electronics Corporation, a wholly-owned and controlled subsidiary of Sharp Corporation having its principal place of business at Sharp Plaza, Mahwah, New Jersey, 07430, is hereby named as a defendant. This defendant manufactured, marketed sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

44. Defendants Sharp Corporation and Sharp Electronics Corporation are referred to collectively herein as “Sharp.”

**Toshiba**

45. Toshiba Corporation, having its principal place of business at 1-1, Shibaura 1-chome, Minato-ku, Tokyo, 105-8001, Japan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

46. Toshiba Mobile Display Company, Ltd., *f/k/a* Toshiba-Matsushita Display Technology Co., Ltd., having its principal place of business located at Rivage Shinagawa, 1-8 Konan 4-chome, Minato-ku, Tokyo, 108-0075, Japan, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

47. Toshiba America Electronic Components, Inc., a wholly-owned and controlled subsidiary of defendant Toshiba Corporation having its corporate headquarters at 19900 MacArthur Blvd., Ste. 400, Irvine, California 92612, is hereby named as a defendant. This defendant manufactured, marketed, sold and/or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and/or specifically in the State of Oregon.

48. Defendant Toshiba America Information Systems, Inc. is a California corporation having its principal place of business at 9470 Irvine Blvd., Irvine, California.

Toshiba America Information Systems, Inc. is a wholly-owned and controlled subsidiary of Toshiba America, Inc. Toshiba America Information Systems, Inc. sold and distributed TFT-LCD Products manufactured by Toshiba Corporation to customers throughout the United States.

49. Defendants Toshiba Corporation, Toshiba Mobile Display Company, Ltd., and Toshiba America Electronic Components, Inc., and Toshiba America Information Systems, Inc. are referred to collectively herein as “Toshiba.”

### **Hydis Technologies**

50. Hydis Technologies Co., Ltd. f/k/a BOE Hydis Technology Co., Ltd. (“Hydis”), with its principal place of business located at SAN 136-1, Ami-ri, Bubal-eub, Icheon-si Gyeonggi-do 467-866, South Korea, is hereby named a defendant. This defendant manufactured, marketed, sold and /or distributed LCD panels used in LCD products to customers throughout the United States in general, destined for Oregon, and /or specifically in the State of Oregon.

51. Wherever in this complaint a family of defendant-corporate entities is referred to by a common name, it shall be understood that Oregon indirect purchasers are alleging that one or more officers or employees of one or more of the named related-defendant companies participated in the illegal acts alleged herein on behalf of the related-corporate family entities.

### **Agents and Co-Conspirators**

52. Various persons and entities whose identities currently are unknown to Oregon indirect purchasers participated as co-conspirators in the violations alleged in this complaint and performed acts and made statements in furtherance of the alleged violations. After Oregon

indirect purchasers learn the identities of these co-conspirators, they will seek the Court's leave to add them as named defendants.

53. Other co-conspirators whose identities are known to Oregon indirect purchasers include the following companies who have entered into tolling agreements with one or more plaintiffs in In Re TFT-LCD (Flat Panel) Antitrust Litigation, MDL 1827 (Flat Panel Antitrust Litigation): Epson Imaging Devices Corporation, (Epson); LG Electronics, Inc. and LG Electronics USA, Inc. (LG Electronics); Royal Philips Electronics N.V. and Philips Electronics North America Corp. (Philips Electronic). An additional co-conspirator whose identity is known includes Hydis Technologies Co., Ltd., *f/k/a* BOE Hydis Technology Co., Ltd. (Hydis). Oregon indirect purchasers may move to join additional defendants and/or their co-conspirators following discovery in the Flat Panel Antitrust Litigation.

54. The acts alleged in this complaint were done by defendants and their co-conspirators, or were authorized, ordered, or done by their respective officers, agents, employees, or representatives while actively engaged in the management of each defendant's business or affairs.

55. Each of the defendants named in this complaint acted as the agent or joint venture of or for the other defendants with respect to the acts, violations and common course of conduct alleged herein. Each defendant that is a wholly-owned subsidiary of a foreign parent is the United States agent for its parent company.

## **TRADE AND COMMERCE AFFECTED BY THE CONSPIRACY**

### **LCD Panels**

56. Defendants and their co-conspirators engaged in the business of marketing and selling TFT-LCD panels used in products sold throughout the United States and the State of Oregon.

57. LCD is a type of display technology utilized in TVs, computer monitors, laptops, mobile phones, digital cameras, and numerous other electronic products. LCD panels are the dominant form of display screen in the TV, computer monitor, and laptop industries. Computer monitors now comprise approximately 50 percent of revenues for the large TFT-LCD products market, with TVs and laptop computers accounting for approximately 27 percent and 21 percent of revenues, respectively. All other LCD products combined accounted for between 2-5 percent of LCD panel revenues.

58. LCD technology offers benefits over both traditional cathode-ray tube (CRT) technology and the other flat screen technology, commonly called "plasma." Unlike CRTs which are heavy and bulky, and plasma technology which is impractical for use in laptops because it "runs hot" and cannot be operated by battery power, LCD technology is thin and light and uses low power. LCD panels also use less space, can be mounted on walls because of their light weight, and offer superior viewing angles.

59. LCD technology dominates the flat panel market. It has virtually 100 percent market share for laptops and flat panel computer monitors, and at least 80 percent market share for flat panel TVs.

60. LCD uses liquid crystal to control the passage of light. Specifically, an LCD panel is made of two glass sheets sandwiching a layer of liquid crystal. The front glass sheet is fitted with a color filter, while the back substrate has transistors fabricated on it. When voltage is applied to a transistor, the liquid crystal is bent, allowing light to pass through to form a pixel. A pixel, the smallest unit to indicate a picture image, is formed by three sub-pixels consisting of red, green and blue. The color filter in the front glass sheet gives each pixel its own color, and the combination of pixels in different colors forms the image on the panel.

61. There are significant manufacturing and technological barriers to entry in the LCD products market. A state-of-the-art fabrication plant (called “fabs” in the industry) can cost upwards of \$2 billion, and changing technology requires constant investments in research and development. The most expensive material used in making an LCD panel is the glass. In industry language, glass sizes advance in what are called “generations.” These generation sizes have developed at a rapid pace, continuing to expand in size.

62. Since 2000, glass substrate size for LCD panels has approximately doubled every 1.5 years. Large-generation glass offers great economies of scale: larger sheets allow display manufacturers to produce more, and larger, panels from a single substrate more efficiently.

63. Today’s eighth generation glass substrates have about four times the surface area of fourth generation substrates, which means they yield more (and larger) LCD panels. For instance, one eighth generation substrate can produce the panels needed for fifteen 32” LCD televisions.



64. Larger sheets of glass reduce manufacturing costs. For example, panel costs were approximately \$20/inch for fourth generation fabs, falling to \$10/inch for fifth generation fabs, and then falling another 80 percent to the eighth generation.

65. There have been at least eight generations of LCD fabs, each requiring significant new investment. Because building a new fabrication line or retrofitting the old line is very expensive, and because the glass is nearly all sourced from the same supplier, Corning Incorporated, LCD, panel manufacturers use standard sizes for their products. Thus, for the major input cost, each has the same supplier. A fab line that works with one size glass cannot switch over to another size without substantial retrofitting.

66. Because the fabrication plants are most efficient when they cut standard sizes for panels, different manufacturers with different generation fabs seek to make only the most efficient size panels for that fab. For example, a fab that uses 730mm x 920mm glass sheets can cut that sheet to make exactly six 17" LCD panels. A fab that uses 680mm x 880mm glass can cut exactly six 15" panels from that glass. But a 730mm x 920mm glass sheet can only yield two 17" panels, with the rest of the glass going to waste. Thus, when defendants need other panel sizes not efficiently made by their fabs, they cross-purchase from each other. For example, defendant LGD supplies certain size panels to other defendants, and, in turn, buys other size panels from Chunghwa, Chi Mei, and AU Optronics. HannStar and Chunghwa have an agreement whereby Chunghwa supplies 17" panels to HannStar and HannStar supplies 19" panels to Chunghwa. Samsung has a joint venture with Sony to supply each other with LCD panels, but Samsung also purchases panels from AU Optronics and HannStar. HannStar makes

panels for Hitachi. Chunghwa makes panels for AU Optronics, and Chi Mei makes panels for Sharp and Toshiba, as well as Sanyo.

67. These cross-licensing and cross-purchasing agreements provide opportunities for collusion and coordination among members, as well as a means of checking, agreeing on, and controlling prices and output not only beforehand, but also subsequently, in order to detect cheating on agreements to limit output and fix prices. Antitrust risk is particularly acute when there are cooperative efforts to develop, design, implement and license certain technologies, as exist in the LCD products market.

68. The many cross-licensing and cooperative arrangements in the LCD products market create additional opportunities for collusive activity. The various joint ventures, cross licenses, and other cooperative arrangements among the defendants have provided a means of implementing and policing the agreements to fix prices and limit output for LCD panels that defendants have entered into at numerous meetings described in this complaint. For example, defendants Samsung and LGD agreed to an unprecedented level of cooperation in conducting their flat-panel display businesses. In addition, with respect to LCD products:

- Defendant Chi Mei has licensing arrangements with defendants Sharp, AU Optronics, Chunghwa, HannStar and Hitachi;
- Defendant AU Optronics has licensing agreements with defendants Sharp and Samsung;
- Defendant Hitachi has a joint venture with Toshiba called IPS Alpha;
- Defendant Sharp makes LCD panels for defendant Toshiba; and

- Defendants Samsung and Sharp have cross licenses for the sharing of LCD panel technology and intellectual property.

69. These combinations are between significantly large rivals and are not trivial.

The effects of the combinations substantially lessen competition and/or tend to create a monopoly. The combinations were used to further the conspiracy alleged herein.

#### **Market Size and Structure**

70. The market for LCD panels is huge. Manufacturers produced approximately 48.4 million LCDs for televisions in 2006, and flat-panel sales – most of those using LCD technology – reached between US\$88 billion in 2006 and US\$100 billion in 2007.

71. The market for the manufacture and sale of LCD panels is conducive to the type of collusive activity alleged herein. At all times relevant to the Complaint, defendants collectively controlled a significant share of the market, both globally and in the United States. Specifically, the top six companies (Samsung, LGD, Chi Mei, AU Optronics, Sharp and Chunghwa) currently control in excess of 80 percent of the LCD panels market. As such, the defendants' conspiracy to fix the price of LCD panels substantially affected interstate trade and commerce in the LCD products market.

72. The LCD panels industry experienced significant consolidation, as reflected by AU Optronics' acquisition of Quanta Display, the creation in 2001 of AU Optronics itself through the merger of Acer Display and Unipac Electronics, Fujitsu Limited's transfer of its LCD business to Sharp in 2005, the 2002 merger of the LCD operations of Toshiba and Matsushita into one entity, defendant Toshiba Matsushita Display Co., Ltd., and the joint venture for the production of LCD panels for televisions by Hitachi, Toshiba, and Matsushita in 2004.

73. As described in this complaint, a number of the defendants and/or their corporate parents or subsidiaries, including Samsung, Hitachi, Epson, Sharp, LG, Toshiba, Chunghwa, and HannStar have either pleaded guilty to, or are currently being investigated by the U.S. Department of Justice for, entering into one or more price-fixing agreements in other closely-related industries similar to TFT-LCD panel industry. Defendants' entry into express price-fixing agreements in other computer electronics markets demonstrates that the oligopoly structure of those industries has not in itself been sufficient to achieve price uniformity and output controls, but that agreement among the market participants has been required to achieve price uniformity and output controls. Such evidence tends to exclude the possibility that price uniformity in the TFT-LCD panel industry is merely a result of normal market forces.

74. Products using medium-size and large LCD panels, such as televisions, desktop monitors, and computers, in 2004 made up 90 percent of the revenues for LCD panel makers. Direct purchasers buy panels in order to include them as components in TVs, computer monitors, laptops, and other electronic products. The largest direct purchasers of LCD panels are computer OEMs such as Dell, HP, Apple, and Gateway. Significantly, a number of the defendants are also computer and/or television OEMs, such as Toshiba and Samsung (computers) and Samsung, Hitachi and Toshiba (televisions). LCD panels have no independent utility and have value only as components of other products, such as TVs, computer monitors, and laptops. The demand for LCD panels thus derives directly from the demand for such products.

75. The market for LCD panels and the market for products into which they are placed are inextricably linked and intertwined because the TFT-LCD panel market exists to serve

the LCD products markets. The market for LCD panels and the markets for the products in which LCD panels are placed are, for all intents and purposes, inseparable in that one would not exist without the other.

76. Oregon indirect purchasers participated in the market for LCD products through the purchases of products containing LCD panels. Defendants' unlawful conspiracy has inflated the prices at which Oregon indirect purchasers have bought products made with LCD panels, and they have paid supracompetitive prices and been injured as a result.

77. Oregon indirect purchasers participated in the market for products containing LCD panels. To the extent Oregon indirect purchasers bought LCD panels as part of an LCD product, defendants' unlawful conspiracy inflated the prices at which OEMs resold LCD panels in these products.

78. Consumers, including Oregon indirect purchasers, are injured by paying supracompetitive prices for products containing LCD panels.

#### **DEFENDANTS' ILLEGAL CONDUCT**

79. Beginning at least as early as January 1, 1996 and continuing up to and including December 11, 2006 at a minimum, defendants and their co-conspirators agreed, combined, and conspired to raise, maintain, and stabilize at artificial levels the prices at which LCD panels have been sold directly and indirectly in the United States and the State of Oregon.

80. Defendants, through their officers, directors and employees, effectuated a contract, combination, trust, or conspiracy between themselves and their co-conspirators by, among other things:

- a. Participating in meetings and conversations to discuss the prices and supply of LCD panels in the United States;
- b. Agreeing to fix the prices and limit the supply of LCD panels sold in the United States in a manner that deprived direct and indirect purchasers of free and open competition;
- c. Issuing price announcements and quotations in accordance with the agreements reached;
- d. Selling LCD panels to various customers in the United States and the State of Oregon at fixed, non-competitive prices; and
- e. Invoicing customers in the United States and State of Oregon at the agreed-upon fixed prices for LCD panels and transmitting such invoices via U.S. mail and other interstate means of delivery.

#### **Defendants' Agreements To Fix Prices and Restrict Output**

81. The LCD panel conspiracy was effectuated through a combination of group and bilateral discussions that took place in Japan, Korea, Taiwan and the United States. In the early years, beginning in at least 1996, representatives of the Japanese defendants Hitachi, Sharp, and Toshiba met and agreed to fix prices for LCD panels generally, as well as to specific OEMs; they also agreed to limit the amount of LCD panels each would produce.

82. In the early years when the conspiracy was principally limited to the Japanese defendants, bilateral discussions were the preferred method of communication. As more manufacturers entered the conspiracy, however, group meetings became more prevalent.

83. As LCD production in Korea began to increase and become more sophisticated, the Japanese defendants expanded their meetings to include their Korean competitors, including defendants LGD and Samsung, both of which also agreed to fix prices and control supply. At or about this same time, the Japanese defendants began to partner with those defendants located in Taiwan to trade technology and collaborate on supply. Japanese engineers were lent to Taiwanese firms, and Taiwanese output was shipped to Japan. In 2001, the Korean defendants convinced Taiwanese LCD panel manufacturers, including defendants AU Optronics, Chi Mei, Chunghwa, and HannStar, to join the conspiracy to fix prices and control supply. Defendants' conspiracy included agreements on the prices at which certain defendants would sell LCD panels and products to their own corporate subsidiaries and affiliates that manufactured LCD-panel containing products, thereby ensuring that LCD panel prices remained the same as between defendants and their OEM customers, preventing any price competition on LCD products to consumers.

#### **"Crystal Meetings"**

84. In early 2001, high-level employees of at least two large manufacturers of LCD panels met in person and agreed to engage in periodic meetings to exchange sensitive competitive information and to fix the price of LCD panels and limit their production. From early 2001 through at least 2006, officials from defendants Samsung, AU Optronics, Chunghwa, Chi Mei, HannStar, LGD, and Sharp met periodically in Taiwan to discuss and reach agreements on LCD panel prices, price increases, production, and production capacity, and did in fact reach agreements increasing, maintaining, and/or fixing LCD panel prices and limiting their production. The group meetings these defendants participated in were called "Crystal Meetings."

Each defendant attended multiple meetings with one or more of the other defendants during this period. The Crystal price-fixing and output-limitation meetings occurred in Taiwan; other similar meetings took place in South Korea, Japan, and the United States on a regular basis throughout this period.

85. The Crystal Meetings were highly organized and followed a set pattern. Meetings among defendants' high-level executives were called "CEO" or "Top" meetings; those among defendants' vice presidents and senior sales executives were called "Commercial" or "Operational" meetings.

86. CEO meetings occurred quarterly from approximately 2001 to 2006. The purpose and effect of these meetings was to stabilize or raise prices. Each meeting followed the same general pattern, with a rotating designated "chairman" who would use a projector or whiteboard to put up figures relating to the supply, demand, production, and prices of LCD panels for the group to review. Those attending the meetings would take turns sharing information concerning prices, monthly and quarterly LCD fab output, production, and supply, until a consensus was reached concerning the participants' prices and production levels of LCD panels in the coming months or quarter.

87. The structure of Commercial meetings was largely the same as CEO meetings. These meetings occurred more frequently than CEO meetings, approximately monthly.

88. During all of these meetings, defendants exchanged information about current and anticipated prices for their LCD panels, ultimately reaching agreement concerning the specific prices to be charged in the coming weeks and months for LCD panels. Defendants set



these prices in various ways, including but not limited to setting "target" prices, "floor" prices, and the price range or differential between different sizes and types of LCD panels.

89. During these CEO/Commercial meetings, defendants also exchanged information about supply, demand, and their production of LCD panels, often reaching agreement concerning the amounts each would produce. Defendants limited the production of LCD panels in various ways, including but not limited to line slowdowns, delaying capacity expansion, shifting production to different-sized panels, and setting target production levels.

90. During these CEO/Commercial meetings, defendants also agreed to conceal the fact and substance of the meetings, and, in fact, took various steps to do so. Top executives and other officials attending these meetings were instructed on more than one occasion to not disclose the fact of these meetings to outsiders, or even to other employees not involved in LCD panel pricing or production. On at least one occasion, top executives at a CEO meeting staggered their arrivals and departures at the meeting site so they would not be seen in the company of each other coming or going to such meeting.

91. The structure of the so-called "working level" meetings was less formal than the CEO or Commercial meetings and often occurred at restaurants over a meal. The purpose of the working level meetings was to exchange information on price, supply and demand, and production information, which then would be transmitted up the corporate reporting chain to those individuals with pricing authority to facilitate implementation of the conspiracy and effectuate the agreements made at the CEO and Commercial meetings.

92. In approximately the summer of 2006, when they began to have concerns about antitrust issues, defendants discontinued the working-level meetings in favor of one-on-one

meetings to exchange pricing and supply information. The meetings were coordinated so that on the same date, each competitor met one-on-one with the other in a "round robin" set of meetings until all competitors had met with each other. These round robin meetings took place until at least November or December of 2006. The information obtained at these meetings was transmitted up the corporate reporting chain to permit the defendants to maintain their price-fixing and production-limitation agreement.

### **Bilateral Discussions**

93. During the Crystal Meetings, defendants also agreed to engage in bilateral communications with those defendants not attending these meetings. Certain defendants were "assigned" other defendants not in attendance and agreed to and did in fact communicate with non-attending defendants to synchronize the price and production limitations agreed to at the Crystal Meetings. For example, HannStar contacted Hitachi to relay the agreed-upon prices and production limitations. Subsequently, the Japanese defendants implemented the agreed-upon pricing and production limitations that had been conveyed to Hitachi by HannStar. This is one of the ways in which the Japanese defendants participated in the conspiracy to fix the prices and limit the production of LCD panels.

94. Crystal Meetings were supplemented by bilateral discussions between various defendants in which they exchanged information about pricing, shipments, and production. Defendants had bilateral discussions with one another during price negotiations with customers in order to avoid cutting prices and to implement the fixed prices set by defendants during the Crystal Meetings. These discussions usually took place between sales and marketing employees in the form of telephone calls, emails, and instant messages. The information gained in these

communications was then shared with supervisors and taken into account in determining the price to be offered the defendants' OEM customers.

### **Defendants' Participation In Group And Bilateral Discussions**

95. Defendants AU Optronics, Chi Mei, Chunghwa, HannStar, LGD, and Samsung attended multiple CEO, Commercial, and working-level meetings, as well as bilateral discussions. Also, Quanta Display and Unipac, which merged with AU Optronics, participated in working-level meetings. At the CEO and Commercial meetings, these defendants agreed on prices, price increases, and production limits and quotas for LCD panels.

96. Defendant Sharp participated in multiple working-level meetings, as well as bilateral discussions with other defendants. Through these discussions, Sharp agreed with the other defendants and co-conspirators named in this complaint on prices, price increases, and production limits and quotas for LCD panels.

97. Defendant Hitachi participated in multiple bilateral discussions with defendants, including HannStar. Through these discussions, Hitachi agreed on prices, price increases, and production limits and quotas for LCD panels.

98. Defendant Toshiba participated in multiple bilateral discussions with other defendants, including Sharp. Through these discussions, Toshiba agreed on prices, price increases, and production limits and quotas for LCD panels. As alleged below, defendant Sharp admitted to participating in bilateral meetings, conversations, and communications in Japan and the United States with unnamed co-conspirators during which they fixed the prices of LCD panels sold to Dell for use in computers; panels sold to Apple for use in iPods; and panels sold to Motorola for use in Razr phones. During this time, Toshiba was one of Sharp's principal

competitors in the sale of LCD panels to Dell for use in computers, as well as for panels sold to Apple for use in the iPod. In fact, in the small-to-medium size LCD display market, Toshiba Matsushita was ranked second (behind Sharp) in worldwide market share in the first half of 2005, with a 14.5 percent market share during the first quarter and a 14.1 percent market share during the second quarter. Sharp could not have successfully fixed the prices of LCD panels sold to Dell or Apple unless Toshiba agreed to fix prices of similar LCD panels at supra-competitive levels to those two OEMs.

99. Toshiba also participated in the conspiracy by entering into joint venture and other arrangements to manufacture or source flat panels with one or more of the defendants that attended the Crystal Meetings. The purpose and effect of these joint ventures by Toshiba and others was to limit the supply of LCD panels and fix prices of such panels at unreasonably high levels and to aid, abet, notify and facilitate the price-fixing and production-limitation agreements reached at the meetings. Toshiba sought and formed strategic partnerships with other LCD manufacturers, which allowed it to easily communicate and coordinate prices and production levels with other manufacturers as part of the overall conspiracy. For instance, Toshiba formed HannStar in January 1998 as a manufacturing joint venture. In 2001, Toshiba, Sharp, Matsushita, and Hitachi formed a joint venture to share basic LCD research costs. In 2001, Toshiba and Matsushita formed a joint venture, Advanced Flat Panel Displays, which merged their LCD operations. In April 2002, Toshiba and Matsushita formed a joint venture, Toshiba Matsushita Display Technology Co., Ltd., which combined the two companies' LCD development, manufacturing, and sales operations. In 2004, Toshiba, Matsushita, and Hitachi formed a joint venture, IPS Alpha Technology, Ltd., which manufactures and sells LCD panels

for televisions. In 2006, Toshiba purchased a 20 percent stake in LGD's LCD panel manufacturing facility in Poland. And in 2007, Toshiba and Sharp formed a joint venture in which Toshiba agreed to provide 50 percent of Sharp's chip needs and Sharp agreed to provide 40 percent of Toshiba's panel needs. The operation and management of these many different joint ventures enabled Toshiba and the other defendant-joint venture partners regular opportunities to communicate with each other to agree on prices, price increases, and production limits and quotas for LCD panels that each defendant manufactured and sold.

### **Market Conditions Demonstrating The Conspiracy**

100. Since at least 1996, the LCD panel market has not behaved as would be expected of a competitive market free of collusion. Rather, the behavior in this market strongly indicates that the defendants engaged in a significant price-fixing conspiracy that had the purpose and effect of stabilizing and raising prices for LCD panels to supra-competitive levels.

101. After initially being introduced into a market, consumer electronics products and their component parts typically show steady downward pricing trends. However, since at least 1996, the LCD panel market has been characterized by unnatural price stability and certain periods of substantial upward pricing trends.

102. Moreover, since at least 1996, the LCD panel market has not followed the basic laws of supply and demand in a competitive market. In a competitive market, price increases normally occur during shortage periods. Since at least 1996, however, there have been significant price increases in the LCD panel market during periods of both oversupply and shortage.

103. It is generally acknowledged that demand for consumer electronic products and their component parts increases steadily over time. As would be expected, demand for LCD panels and products made with them has steadily and substantially increased since 1996. For instance, a June 2006 forecast indicated that 2006 shipments of LCD panels used in televisions would reach 46.7 million units, a 74 percent increase from 2005. By 2009, sales of LCD televisions were expected to surpass sales of CRT televisions for the first time, and in 2010, LCD televisions will account for a majority of all televisions sold worldwide.

104. Rather than competing for this increased demand, since at least 1996, defendants worked together to stabilize prices by agreeing to fix prices at artificially high levels and to restrict the supply of LCD panels through, among other things, decreasing their capacity utilization and refraining from expanding existing capacity. Those defendants which were not already manufacturing LCD panels in 1996 joined this conspiracy when they began manufacturing LCD panels.

105. In 1996, the LCD panel market was experiencing excess supply and drastic price cuts. Prices already had fallen 40 to 50 percent in 1995 and were projected to continue dropping due to lower manufacturing costs. However, LCD panel prices began rising in 1996, allegedly due to insufficient production capacity. In fact, defendants were fixing prices.

106. The reverse in the downward spiral of prices began in early 1996. Defendants blamed the sudden increase in prices on an alleged inability to supply enough LCD panels to meet demand. By May of 1996, an industry magazine was reporting that "[f]lat-panel-display purchasers are riding a roller coaster of pricing in the display market, with no clear predictability

anytime soon . . . . Perplexed purchasers trying to keep up with the gyrating market can take solace that even vendors are constantly being surprised by the sudden twists and turns.”

107. Soon thereafter, industry analysts began commenting on the unusual rise in LCD panel prices, noting that this rise in prices was "quite rare in the electronics industry.”

108. 1996 also brought the advent of third generation fabrication plants. Since 1996, after entering the LCD panel market, defendants have updated their production facilities in order to keep pace with developing technology, which has resulted in at least eight generations of LCD panels. LG Electronics was scheduled to have its third generation fab online by 1997, and Hyundai was scheduled to do so by early 1998. Each new generation was produced from ever larger pieces of glass, so as to reduce the cost of the screens used in televisions, computer monitors, and laptops. Ever-increasing production capacity threatened to outstrip demand for LCD panels, with the result that prices of LCD panels should have decreased rapidly. Instead, defendants falsely claimed to be operating at full capacity and unable to meet demand, despite the millions of units of over-capacity that had supposedly existed months earlier, and prices surged upwards. These price increases occurred despite the fact that production had become more efficient and cost effective.

109. The artificially high prices of LCD panels are demonstrated by, *inter alia*, the fact that costs were decreasing. One of the most significant costs in producing an LCD panel is the cost of its component parts. Some of the major component parts include the backlight, color filter, PCB polarizer, and glass. For large-area LCD panels, the costs of these components comprise over two-thirds of the total cost of production. The costs of these components collectively and individually have been generally declining, and in some periods at a substantial

rate. Thus, the gap between TFT-LCD panel manufacturers' prices and their costs was unusually high.

110. During the end of 2001 and 2002, LCD panel prices increased substantially while the costs to produce these panels remained flat or decreased. Similarly, during the end of 2003 to 2004, LCD panel prices again increased by a substantial amount, while costs remained flat or decreased. This economic aberration is the intended and necessary result of defendants' conspiracy to raise, fix, maintain, or stabilize the prices of LCD panels.

111. LCD panel prices increased by more than 5 percent for the first time in October, 2001. These price increases continued until June of 2002, resulting in an approximately 35 percent increase in the average selling price of 15-inch LCD panels. Defendants were essentially able to raise the prices of LCD panels by at least \$60 USD from October of 2001 through May 2002.

112. At the time, defendants blamed the price increases on supply shortage. In fact, they were a direct result of defendants' agreement to fix, maintain, and/or stabilize prices, and defendants' false statements about supply shortages were designed to conceal their price-fixing agreement. When asked why prices had increased, defendants repeatedly explained that the increases in LCD prices were due to increased demand and a "supply shortage."

113. These price increases occurred as production costs declined due to lower prices for parts and components and improvements in manufacturing efficiency. While the price of 15-inch LCD panels, for instance, shot up from US\$190-200 in the third quarter of 2001 to US\$250 in the first quarter of 2002, current production costs remained at approximately US\$200. These decreasing costs should have led to lower prices and competition among defendants. Instead,



because defendants had entered into an agreement to fix, raise, and maintain LCD panel prices at artificially high levels, defendants reaped extremely high profits. For example, defendants AU Optronics Inc., Chi Mei Optoelectronics Corp., Chunghwa Picture Tubes Ltd., and HannStar Display, Inc. posted higher pretax profits than expected in the first quarter of 2002. AU Optronics reported revenue of NT\$19.7 billion in the first quarter, with pretax profit reaching about NT\$2 billion. Chi Mei Optoelectronics reported pretax earnings of NT\$800 million on revenue of about NT \$8.8 billion at the same period.

114. This increase in prices and revenue was unprecedented. During the first six months of 2002, revenue for Taiwan's five major LCD panel manufacturers (defendants AU Optronics, Chi Mei, Chunghwa Picture Tubes Ltd., HannStar Display Inc., and Quanta Display Inc. (later purchased by AU Optronics)) rose 184 percent from the same period in 2001.

#### **Public Statements Reflecting The Conspiracy**

115. Defendants made repeated public statements admitting to or referencing their agreement to fix LCD panel prices through supply manipulation.

116. On or about January 20, 2003, Hsu Wen-lung, defendant Chi Mei's Chairman, stated that "both Taiwanese and South Korean LCD panel makers should avoid the fierce price competition and build a money-making environment. To this end, both sides are recommended to exchange market information periodically."

117. Again, on January 29, 2003, K.Y. Lee, the Chairman of defendant AU Optronics, publicly stated that "the local LCD industry should move to set up a reasonable and healthy pricing strategy thus avoiding the price fluctuations."

118. Soon after these public statements were made, LCD panel prices increased for five consecutive quarters in 2003 and 2004, the direct result of the CEO, Commercial and working-group meetings identified above which took place on a regular basis over this period of time. LCD panels used in laptops and computer monitors increased by as much as 28 percent during this time period as reported by defendant AU Optronics. Similarly, defendant LGD reported similar price increases over the same period.

119. This price-fixing scheme resulted in substantial increases in the profits reaped by the defendant LCD panel manufacturers. For example, the eight largest LCD panel manufacturers reported a collective profit increase of 740 percent between the second quarter of 2003 and the second quarter of 2004. These record profits resulted from defendants' agreement to fix, raise, or stabilize the price of LCD panels.

120. Although the price increases were the direct result of defendants' agreement to fix, raise, or maintain the price of LCD panels, the defendants repeatedly made public statements blaming these price increases on other factors. For example, at an August 2003 flat panel industry conference sponsored by DisplaySearch, Dr. Hui Hsiung, executive vice president of defendant AU Optronics, explained that the recent increases in the price of LCD panels were due to increased demand shortage. In March of 2004, Liu Chih-chun, Chungwa's vice president, blamed the high prices on an inadequate supply of key parts from upstream suppliers.

121. In fact, while LCD panel prices were increasing in late 2003 and the first half of 2004, defendants AU Optronics, Chi Mei, and HannStar were decreasing capacity utilization. AU Optronics delayed construction of a new generation plant to help prices increase. Similarly, while LCD panel prices were increasing in 2003 and 2004, LCD panel manufacturers' capacity

growth rate was decelerating. Defendants' artificial supply restriction had the purposeful effect of fixing, raising, maintaining, or stabilizing LCD panel prices at artificially high levels.

122. Reducing production capacity is not something an LCD panel manufacturer would do unless its competitors were doing so as well. As AU Optronics executive Hsu Hsiung himself would later note when discussing defendants' cuts in production capacity in public statements made at a May 2006 annual international conference on Taiwan's flat panel display industry, reducing production capacity pushes LCD panel manufacturer's fixed production costs up and is not effective in fixing or maintaining the price of LCD panels unless the other defendants act likewise. Yet, as Mr. Hsiung himself noted in those public statements, an increase of 2 to 3 percent of AU Optronics' fixed production costs was preferable to a drop of 15 to 20 percent in LCD panel prices.

123. Defendants' public statements admitting to their agreement to fix, maintain, and stabilize LCD panel prices continued. In late 2004, panel makers in Taiwan were reported to "agree the ultimate solution" to keep supply and demand in their favor which was to "involve closer cooperation." For example, Chi Mei's Chairman, C.H. Lin, noted that mergers were not likely because of the large size of the companies in the industry, but he encouraged "a new era of mutual cooperation." He noted that the Japanese companies Toshiba and Panasonic had done so, as had Samsung and Sony.

124. These public statements referenced an agreement among defendants to fix prices and resulted in, among other things, a temporary halt in the expansion of production capacity among defendants. Because of this illegal agreement to fix, raise, and maintain LCD panel prices, defendants were able to maintain prices at artificially high levels in 2005.

125. On a November 25, 2005 conference call with investors, Dr. Hui Hsiun, executive vice president of defendant AU Optronics, admitted to conspiring with other LCD panel manufacturers to artificially increase the LCD panel prices. Discussing the "undersupply/oversupply" of LCD panels, he noted, "there's various actions we can take such as slightly reduce the capacity loading or shift the product mix," but he predicted that, with respect to supply levels, "we will see some parity among different panel suppliers in 2006." In response to a question about what AU Optronics would do if demand turned out to be weaker than expected, Dr. Hsiung stated:

Our policy, our strategy, has always been minimizing our inventory and that turned out to be quite successful in the past few years by keeping the inventory lower. *And I think in the past we did have some problem convincing our competitors doing the same thing. But in recent months, especially this year, actually, it did start to happen.* I think that the industry understand [sic] the benefit of keeping capacity low. Again, even if the scenario does happen that we have a 5% over capacity this is not the drastic action to reduce about 5% of the loading . . . So, we think the industry become [sic] more mature. That is precisely what our competitors would do.

126. Similarly, a November 3, 2005 Samsung presentation, available on its website, stated that "it was possible to secure a reasonable amount of profit while following industry leaders." This, too, constituted a public signal and invitation to the other defendants to fix prices by restricting output.

127. In the spring of 2006, at a conference of manufacturers of LCD panels in Taiwan, Mr. Hsiung publicly stated that defendants should collectively look at cutting back on production from 100 percent to at least 85 percent. Otherwise, Mr. Hsiung said, if supply outpaced demand, manufacturers would be forced to cut prices. This was an express invitation

to reduce output in order to raise, fix, stabilize, and peg the prices of LCD panels and LCD products.

128. In June of 2006, Mr. Hsiung told the *Wall Street Journal* that AU Optronics had cut production of LCD panels because of bloated inventories, a move that could bring more stability to prices by the third quarter if other companies followed suit. Mr. Hsiung also told the *Wall Street Journal*, "You have to have discipline every month to adjust inventory. If others follow, that will help prices stabilize by the third quarter." Mr. Hsiung further said that buildup of LCD panel inventories led to a bigger than expected decline in prices recently. He urged other makers to stop building up inventory during periods of oversupply. "Supply and demand balance can be maintained during a period of overcapacity if 'fab' loading is reduced by only 5 percent to 10 percent," he said, adding that a slight reduction would increase unit fixed costs by only 2 percent to 3 percent. Mr. Hsiung stated that AU Optronics was making efforts to cut manufacturing costs to prevent margin erosion. He added that further mergers and acquisitions were needed in the LCD panel industry to help stabilize prices. The foregoing statements were reported by the *Wall Street Journal* on June 15, 2006 in an article entitled "AU Optronics Cuts LCD Output in Bid to Stabilize Falling Prices." When Mr. Hsiung made these statements to the *Wall Street Journal*, he knew and intended that they would be publicly reported and would become known to all of the defendants; and in making these statement, he intended to send a signal and an invitation to the other defendants to cut production in order to raise, fix, stabilize, and peg prices of LCD panels and LCD products.

129. Mr. Hsiung made his comments to the *Wall Street Journal* after defendant LGD LCD publicly announced it was lowering its outlook for the second quarter because of high

inventories of LCD panels. The President of defendant LGD LCD, Ron Wirahadiraksa, publicly stated on June 12, 2006, that the company would review its capacity plans for 2006. These statements were also signals and an invitation to the other defendants to curtail production of LCD panels and LCD products and thereby raise, fix, stabilize, and peg prices for LCD panels and LCD products.

130. Thereafter, defendants announced plans to cut back production. In the second half of 2006, LGD announced plans to cut its capacity expansion by two thirds; AU Optronics Corp announced plans to cut capital expansion by 30 percent to 40 percent; Chi Mei announced plans to delay the mass-production date of its newest production plant; and HannStar adopted a "build to order" mode. These public statements and actions allowed defendants to continue to fix, maintain, and stabilize the price of LCD panels at artificially high levels.

131. Defendants had ample opportunities for collusion when they met and discussed pricing at various industry trade shows where all major participants in the LCD products industry were present. For example, on June 20 and June 21, 2001, a Market Seminar meeting was held at National Chiao Tung University, Hsinchu, Taiwan. The meeting was co-sponsored by DisplaySearch and the industry trade group Semiconductor Equipment and Materials Institute ("SEMI"). The agenda stated that "this year's seminar will be expanded to two days and cover all major FPD [flat panel display] applications including notebook PCs, desktop monitors, LCD TVs, mobile phones, PDAs and internet appliances. Also covered will be the TFT LCD supply and demand, pricing, component shortages and the TFT LCD equipment and materials markets. In addition to DisplaySearch analysts, leading executives from FPD producers, OEMs, brands and equipment and materials suppliers are expected to be present."

132. Most, if not all, of the defendants were represented at this seminar at which discussions regarding LCD panel supply and pricing were held.

133. The express invitations to collude referred to above were, in fact, accepted, agreed to, and acted upon by the defendants, who, repeatedly and continuously, jointly and collusively, limited output of LCD panels in order to raise, fix, and stabilize prices of LCD panels and LCD products, each defendant knowing and understanding that the other defendants had agreed to do likewise and were doing likewise.

#### **DEPARTMENT OF JUSTICE INVESTIGATION**

134. In or about 2006, the Antitrust Division of the Department of Justice began investigating a number of the defendants' alleged participation in a global conspiracy to fix prices of TFT-LCD panels. That investigation is ongoing. To date, seven corporate defendants in this action have pleaded guilty to Sherman Act violations relating to suppressing and eliminating competition by fixing the prices of LCD panels. Those defendants are Sharp Corporation (CR 08-802 SI); LG Display Co. Ltd. and LG Display America, Inc. (CR 08-803 SI), Chunghwa Picture Tubes, Ltd. (CR 08-804 SI); Hitachi Displays Ltd. (CR09-247 SI); Epson Imaging Devices Corporation (CR09-854 SI); and Chi Mei Optoelectronics Corporation (CR 09-1166 SI).

135. Four of the defendants (LG Display Co., Ltd., LG Display America, Inc., Chunghwa Picture Tubes, Ltd., and Chi Mei Optoelectronics Corporation) pleaded guilty to participating in a conspiracy from 2001 to 2006 among "major TFT-LCD producers, the primary purpose of which was to fix the price of certain TFT-LCD sold in the United States and elsewhere." Three of the defendants (Sharp Corporation, Hitachi Displays Ltd., and Epson

Imaging Devices Corporation) pleaded guilty to participating in price-fixing conspiracies with “major TFT-LCD producers” with regard to sales of specific types of products to specific entities. For example, Sharp pleaded guilty to participating in a conspiracy to fix prices of LCD panels sold to Dell, Inc. for use in computer monitors and laptops from April 2001 to December 1, 2006; participating in a conspiracy to fix prices of LCD sold to Apple Computer Inc. for use in iPod portable music players from September 2005 to December 2006; and for participating in a conspiracy to fix prices of LCD sold to Motorola, Inc. for use in Razr mobile phones from the fall of 2005 to the middle of 2006. See CR 08-802 SI.

### **PASS-THROUGH OF OVERCHARGES TO CONSUMERS**

136. Defendants’ price-fixing activities directly and substantially affected the price of TFT-LCD Panels and TFT-LCD Products purchased in the United States, specifically including Oregon. Defendants intentionally sent price-fixed TFT-LCD Panels into a stream of commerce destined for the United States with the expectation of producing a substantial adverse affect in the United States and specifically within Oregon, in the form of inflated prices for TFT-LCD Panels and TFT-LCD Products. The artificial inflation of prices for TFT-LCD Products was a foreseeable and immediate consequence of defendants’ illegal activities. Accordingly, defendants’ unlawful conduct directly and substantially affected the price of TFT-LCD Products and unreasonably restrained commerce with Oregon.

137. Defendants’ conspiracy to raise, fix, or maintain the price of LCD panels at artificial levels resulted in harm to Oregon indirect purchasers alleged herein because it resulted in their paying higher prices for products containing LCD panels than they otherwise would have



in the absence of defendants' conspiracy. The entire overcharge for LCD panels at issue was passed on to Oregon indirect purchasers.

138. Defendants identified above as having attended CEO, commercial, and/or working-group meetings made sure that so-called "street-prices" (i.e. consumer retail prices) of LCD products were monitored on a regular basis. The purpose and effect of investigating such retail market data was at least two-fold. First, it permitted defendants, such as Chunghwa, which did not manufacture LCD products the way defendant Samsung did, to police the price-fixing agreement to be sure that intra-defendant LCD panel sales were kept at supra-competitive levels. Second, it permitted all defendants to police their price-fixing agreement to independent OEMs who would reduce prices for furnished goods if there was a corresponding reduction in LCD panel prices from a defendant. As a result of street-pricing monitoring, defendants assured that 100 percent of the supra-competitive over-charges for LCD panels were passed on to indirect-purchaser consumers.

139. When an LCD panel leaves a defendant's manufacturing plant, it requires minimal additional labor or materials to make it into a TV or a computer monitor, or to install it into a laptop computer. The LCD panel itself typically accounts for 60-70 percent of the total retail price of a TV (even more for panels exceeding 40"), while comprising between 70-80 percent of the retail price of computer monitors. LCD panels typically comprise roughly 10 percent of the retail cost of a laptop computer.

140. LCD panels are commodity products, with functionally equivalent products available from the defendants, who manufacture LCD panels pursuant to standard specifications and sizes.

141. The indirect-purchaser consumer buys products containing LCD panels through one of two distribution chains: either from the direct-purchaser OEM, such as Dell, or through a reseller such as Best Buy.

142. Computer and TV OEMs are not “manufacturers” at all, but assemblers of components and purveyors of brand names. For example, for computers, a company like HP or Apple does not make any of the parts that go into making an LCD monitor or laptop. Rather, such companies purchase LCD panels from defendants and hire contract assemblers to turn the panels into the finished products. On information and belief, computer and TV OEMs price their end-products on a “cost-plus” basis. Thus, changes in the cost of LCDs have immediate effects on the cost of the finished products.

143. On information and belief, there are two methods by which OEMs sell their branded LCD products to retailers. The first method is to obtain pre-orders. The second is to sell their branded products to retailers by estimating the retail market for LCD products, and purchasing the LCD panels before the orders for the end product are obtained. In either case, all supracompetitive overcharges are passed through to Oregon indirect purchasers, who are end-users who pay more for products containing LCD panels than in a competitive market.

144. OEMs and retailers of products containing LCD panels are all subject to vigorous price competition, whether selling TVs, computer monitors, or laptops. The market for LCD panels and the market for products containing these panels are therefore inextricably linked and cannot be considered separately. Defendants are all aware of this intimate relationship and use forecasts of TVs, laptops, and computer monitors to predict sales of LCD panels.

145. Because OEMs have thin net margins, they must pass on any increase in component costs such that increases in the price of LCD panels lead to quick corresponding price increases at the OEM level for products containing such panels.

146. Once an LCD panel leaves its place of manufacture, it remains essentially unchanged as it moves through the distribution system. LCD panels are identifiable, discrete physical objects that do not change form or become an indistinguishable part of the TVs, computer monitors, laptops, or other products in which they are contained. And a given LCD product contains one and only one LCD panel.

147. Because defendants control the market for LCD panels, and because of defendants' conspiracy alleged herein, there are virtually no choices for persons and businesses that require products containing such panels other than buying such products manufactured by a direct purchaser that paid supracompetitive prices for LCD panels.

148. When distribution markets are highly competitive, as they are in the case of products containing LCD panels as components, all of the overcharge will be passed through to ultimate consumers, such as Oregon indirect purchasers. Hence, the inflated prices of products containing LCD panels resulting from defendants' price-fixing conspiracy have been passed on to Oregon indirect purchasers by direct-purchaser manufacturers, distributors, and retailers.

149. Quantitative correlation analysis strongly suggests that the market for products containing LCD panels is inextricably linked to the market for LCD panels by virtue of the strong correlation between the price of LCD panels and the price of LCD monitors, TVs, and laptop computers.

150. The purpose of the conspiratorial conduct of defendants was to raise, fix, or stabilize the price of LCD panels and, as a direct and foreseeable result, products containing such panels. Economists have developed techniques to isolate and understand the relationship between one “explanatory” variable and a “dependent” variable in those cases when changes in dependent variable are explained by changes in a multitude of variables – when all such variables may be changing simultaneously. That analysis, called regression analysis, is commonly used in the real world and in litigation to determine the impact of a price increase on one cost in a product or service that is an assemblage of costs. Thus, it is possible to isolate and identify only the impact of an increase in the price of LCD panels on prices for products containing such panels even though such products contain a number of other components whose prices may be changing over time. A regression model can explain how variation in the price of LCD panels affects changes in the price of products containing such panels. In such models, rather than being treated as the dependent variable, the price of LCD panels is treated as an independent or explanatory variable. The model can isolate how changes in the price of LCD panels impact the price of products containing such panels while controlling for the impact of other price-determining factors.

151. Economic and legal literature recognizes that the more pricing decisions are based on cost, the easier it is to determine the pass-through rate. The directness of affected costs refers to whether an overcharge affects a direct (*i.e.* variable) cost or an indirect (*i.e.* overhead) cost. Overcharges will be passed through sooner and at a higher rate if the overcharge affects direct costs. Here, LCD panels are a direct (and substantial) cost of products containing such panels.

152. Other factors that lead to the pass-through of overcharges include: (1) whether price changes are frequent; (2) the duration of the anti-competitive overcharge; (3) whether pricing decisions are based on cost; (4) whether the overcharge affects variable, as opposed to overhead, costs; (5) whether the resellers' production technology is uniform; (6) whether the reseller supply curve exhibits a high degree of elasticity; and (7) whether the demand of the resellers is inelastic. All of these factors were present in the LCD market. The precise amount of such an impact on the prices of products containing LCD panels can be measured and quantified. Commonly used and well-accepted economic models can be used to measure both the extent and the amount of the supracompetitive charge passed through the chain of distribution.

153. Oregon indirect purchasers have been forced to pay supracompetitive prices for products containing LCD panels. These inflated prices have been passed on to them by direct purchaser manufacturers, distributors, and retailers, and they unjustly enriched defendants.

#### **ACTIVE CONCEALMENT**

154. Throughout and beyond the conspiracy, defendants and their co-conspirators affirmatively and actively concealed their unlawful conduct from Oregon indirect purchasers. Defendants and their co-conspirators conducted their conspiracy in secret and kept it mostly within the confines of their higher-level executives. Defendants and their co-conspirators publicly provided pretextual and false justifications regarding their price increases. Defendants and their co-conspirators conducted their conspiracy in secret, concealed the true nature of their unlawful conduct and acts in furtherance thereof, and actively concealed their activities through various other means and methods to avoid detection. Oregon indirect purchasers did not

discover, and could not have discovered through the exercise of reasonable diligence, that defendants and their co-conspirators were violating the antitrust laws as alleged herein until recently.

155. As a result of the active concealment of the conspiracy by defendants and their co-conspirators, any and all applicable statutes of limitations have been tolled.

**FIRST CLAIM FOR RELIEF**

**(Violation of Section 1 of the Sherman Act, 15 U.S.C. § 1)**

156. Oregon indirect purchasers reallege each and every allegation set forth above.

157. Defendants and their co-conspirators entered into a continuing agreement, understanding, and conspiracy in restraint of trade to artificially fix, raise, stabilize, and peg prices for LCD panels and LCD products in the United States and particularly within the State of Oregon in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1.

158. In formulating and carrying out the alleged agreement, understanding, and conspiracy, defendants and their co-conspirators did those things that they combined and conspired to do, including but not limited to the acts, practices, and course of conduct set forth above, and the following, among others:

- a. Fixing, raising, stabilizing, and pegging the price of LCD panels;  
and
- b. Allocating amongst themselves and collusively reducing the  
production of LCD panels.

159. The combination and conspiracy alleged herein has had the following effects, among others:

- a. Price competition in the sale of LCD panels has been restrained, suppressed, and/or eliminated in the United States and particularly in the State of Oregon;
- b. Prices for products containing LCD panels sold by defendants and their co-conspirators have been fixed, raised, maintained and stabilized at artificially high, non-competitive levels throughout the United States and particularly the State of Oregon; and
- c. Those who purchased products containing LCD panels directly or indirectly from defendants and their co-conspirators have been deprived of the benefits of free and open competition.

160. Oregon indirect purchasers have been injured and will continue to be injured in their business and property by paying more for LCD panels purchased indirectly from defendants and their co-conspirators than they would have paid and will pay in the absence of the combination and conspiracy, including paying more for TVs, laptops, and computer monitors, in which LCD panels are included, as a result of higher prices paid for TFT-LCD panels by the direct purchases of such panels.

161. Oregon indirect purchasers are entitled to an injunction against defendants, preventing and restraining the violations alleged herein.

### **SECOND CLAIM FOR RELIEF**

**(Violation of the Oregon Antitrust Act, ORS §§ 646.725-.730)**

162. Oregon indirect purchasers reallege each and every allegation set forth above.

163. Defendants and their co-conspirators entered into a continuing agreement, understanding, contract, combination in the form of trust or otherwise, or conspiracy in restraint of trade or commerce to artificially fix, raise, stabilize, and peg prices for LCD panels and LCD products in the United States and particularly the State of Oregon in violation of ORS § 646.725.

164. Oregon indirect purchasers have been injured and will continue to be injured in their business and property by paying more for LCD panels purchased indirectly from defendants and their co-conspirators than they would have paid and will pay in the absence of the combination and conspiracy, including paying more for TVs, laptops, and computer monitors, in which LCD panels are included, as a result of higher prices paid for LCD panels by the direct purchasers of such panels.

165. Oregon indirect purchasers are entitled to treble damages, attorneys' fees, and costs.

### **THIRD CLAIM FOR RELIEF**

#### **(Unjust Enrichment, ORS § 646.770)**

166. Oregon indirect purchasers reallege each and every allegation set forth above.

167. Defendants have been unjustly enriched through overpayments by Oregon indirect purchasers and resulting profits. Pursuant to common law principles of unjust enrichment and as authorized under ORS § 646.770, defendants should not be permitted to retain the benefits conferred on them by overpayments by Oregon indirect purchasers.

168. Oregon indirect purchasers seek disgorgement of all profits resulting from such overpayments and establishment of a constructive trust from which Oregon indirect purchasers may seek restitution.



169. Oregon indirect purchasers also seek their costs and attorney fees in pursuing this claim.

### **PRAYER FOR RELIEF**

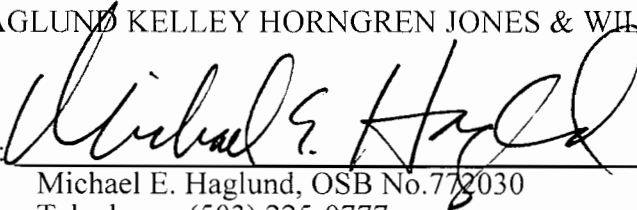
WHEREFORE, the State of Oregon, individually and as representative of Oregon indirect purchasers, prays that this Court provide trial by jury and award the following relief:

1. Declare that defendants' conduct constitutes illegal price fixing in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1;
2. Preliminarily and permanently enjoin defendants and their agents and employees from continuing their unlawful conspiracy alleged above;
3. Award the State of Oregon a judgment for damages in an amount to be determined at trial, but presently estimated at \$100 million;
4. Order disgorgement of profits resulting from defendants' unlawful conduct and imposition of a constructive trust, and award Oregon indirect purchasers restitution;
5. Award to the State of Oregon the maximum civil penalties under ORS 646.760 of \$250,000 for each act, contract, combination or conspiracy in restraint of trade or commerce;
6. Award reasonable attorneys' fees and costs;
7. Award pre-judgment interest on all damages at the highest rate allowed by law; and

8. Grant such other and further relief as the Court deems just and equitable.

DATED this 16<sup>th</sup> day of August, 2010.

HAGLUND KELLEY HORNGREN JONES & WILDER LLP

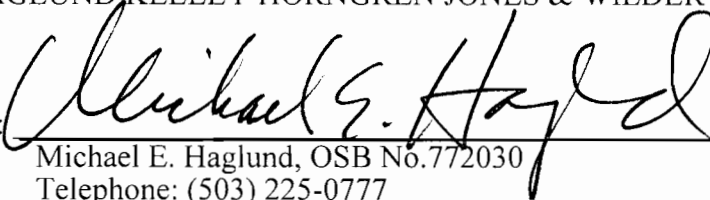
By: 

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Special Assistant Attorney General for Plaintiff

Plaintiff demands a trial by jury in this action.

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