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March 10, 2004
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CBI 04-156 OUR FILE NO. 1260147-901707

The Honorable Marilyn R. Abbott
Secretary
U.S. International Trade Commission
500 E Street, S.W.
Washington, D.C. 20436

PUBLIC INSPECTION

**Re: In the Matter of Certain Optical Disk Controller Chips and Chipsets and Products
Containing Same, Including DVD Players and PC Optical Storage Devices**

Dear Secretary Abbott:

Enclosed for filing on behalf of Zoran Corporation and Oak Technology, Inc. (collectively "Complainants") are the following documents in support of Complainants' request that the U.S. International Trade Commission ("Commission") commence an investigation pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337. Requests for confidential treatment of Confidential Exhibits 18 and 19, Rhyne Confidential Exhibit F, and Confidential Appendices G and H are included with this filing.

Accordingly, Complainants submit the following documents for filing:

1. An original and twelve (12) copies of the verified Complaint (original and one (1) copy unbound and unpunched) [19 C.F.R. § 210.8(a), as modified by ITC Notice; 19 C.F.R. § 201.8(d)];
2. An original and six (6) copies of the accompanying Non-confidential Exhibits (original and one (1) unbound and unpunched) [19 C.F.R. § 210.8(a), as modified by ITC Notice; 19 C.F.R. § 201.8(d)];
3. An original and six (6) copies of the Confidential Exhibits to the Complaint, segregated from other material [19 C.F.R. § 210.8(a), as modified by ITC Notice; 19 C.F.R. § 201.8(d)];
4. Twelve (12) additional copies of the Confidential Exhibits [19 C.F.R. § 210.8(a)];
5. Envelope designated "Request for Confidential Treatment" containing a request for confidential treatment of the exhibits and a certification concerning the confidentiality of such documents [19 C.F.R. § 201.6];

AUSTIN LA JOLLA SACRAMENTO SAN DIEGO SAN FRANCISCO SEATTLE SILICON VALLEY WASHINGTON, DC

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Gray Cary Ware & Freidenrich LLP

The Honorable Marilyn R. Abbott

March 10, 2004

Page Two

6. Envelope designated "Request for Confidential Treatment" containing a request for confidential treatment of the license agreements and a certification concerning the confidentiality of such documents [19 C.F.R. § 201.6];

7. Folder designated as "Appendix G" containing three (3) copies of the License Agreement with Samsung Electronics Corporation, Ltd. [19 C.F.R. § 210.12(c)(3)];

8. Folder designated as "Appendix H" containing three (3) copies of the License Agreement with SunPlus Technology Co., Ltd. [19 C.F.R. § 210.12(c)(3)]

9. Ten (10) physical samples of Oak Technology, Inc.'s OTI-9510 chip [19 C.F.R. §210.12(b)];

10. Ten (10) physical samples of Zoran Corporation's Vaddis 6E-2i chip [19 C.F.R. §210.12(b)];

11. One (1) physical sample of MediaTek, Inc's MT1379GE chip [19 C.F.R. §210.12(b)];

12. One (1) physical sample of MediaTek, Inc.'s MT1199E chip [19 C.F.R. §210.12(b)];

13. Twelve (12) additional copies of the Complaint and the Non-confidential Exhibits, all for service upon each of the proposed respondents, ASUSTek Computer, Inc., Creative Technology Ltd., Creative Labs, Inc., Jiangsu Shinco Electronic Group Co., Ltd., LITE-ON Information Technology Corporation, MediaTek, Inc., Mintek Digital, Shinco International AV Co., Ltd., TEAC Corporation, TEAC America, Inc., Terapin Technology Corporation and Terapin Technology [19 C.F.R. [19 C.F.R. § 210.8(a), as modified by ITC Notice; 19 C.F.R. § 201.8(d)];

14. Four (4) additional copies of the Complaint and accompanying Non-confidential Exhibits for service upon the Embassies of the Republic of China on Taiwan, the Republic of Singapore, the People's Republic of China and Japan in Washington, D.C. [19 C.F.R. § 210.8(a)];

15. Four (4) copies of Appendix A, each containing an uncertified copy of the prosecution history files for U.S. Patent No. 6,466,736 B1. A certified copy of this prosecution history has been requested from the U.S. Patent and Trademark Office and will be filed with the Commission as soon as it is available [19 C.F.R. §210.12(c)(2)];

16. Four (4) copies of Appendix B (subdivided into Volumes I-II), each containing a certified copy of the prosecution history files for U.S. Patent No. 6,584,527 B2 [19 C.F.R. §210.12(c)(2)];

17. Four (4) copies of Appendix C (subdivided into Volumes I-II), each containing an uncertified copy of the prosecution history files for U.S. Patent No. 6,546,440 B1. A certified copy of this prosecution history has been requested from the U.S. Patent and Trademark Office and will be filed with the Commission as soon as it is available [19 C.F.R. §210.12(c)(2)];

Gray Cary Ware & Freidenrich LLP

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18. Four (4) copies of Appendix D, each containing a copy set of all reference documents mentioned in the prosecution history files for U.S. Patent No. 6,466,736 B1 [19 C.F.R. § 210.12(c)(3)];

19. Four (4) copies of Appendix E (subdivided into Volumes I-IV), each containing a copy set of all reference documents mentioned in the prosecution history files for U.S. Patent No. 6,584,527 B2 [19 C.F.R. § 210.12(c)(3)];

20. Four (4) copies of Appendix F (subdivided into Volumes I-V), each containing a copy set of all reference documents mentioned in the prosecution history files for U.S. Patent No. 6,546,440 B1 [19 C.F.R. § 210.12(c)(3)];

We thank you for your attention to this matter.

Very truly yours,

Gray Cary Ware & Freidenrich LLP

By: _____


Mark Fowler
mfowler@graycary.com

MF:lo
Enclosures

UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.

In the Matter of

CERTAIN OPTICAL DISK
CONTROLLER CHIPS AND
CHIPSETS AND PRODUCTS
CONTAINING SAME,
INCLUDING DVD PLAYERS
AND PC OPTICAL STORAGE
DEVICES

Investigation No. 337-TA-_____

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RECEIVED
U.S. INTERNATIONAL TRADE COMMISSION

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

Complainants:

Zoran Corporation
1390 Kifer Road
Sunnyvale, CA 94086-5305
Tel: 408-523-6500

Oak Technology, Inc.
1390 Kifer Road
Sunnyvale, CA 94086-5305
Tel: 408-523-6500

Proposed Respondents:

ASUSTek Computer, Inc.
150 Li-Te Road, Peitou
Taipei, Taiwan 112
Tel: 886-2-2894-3447

Creative Technology, Ltd.
31 International Business Park, Creative Resource
Singapore 609921, Republic of Singapore
Tel: 65-6895-4000

Creative Labs, Inc.
1901 McCarthy Boulevard
Milpitas, California 95035
Tel: 408-428-6600

Jiangsu Shinco Electronic Group Co., Ltd.
5# Waihuan Road, Changzhou
Jiangsu, China 213022
Tel: 86-519-5205126

LITE-ON Information Technology Corporation
14F, No. 392, Ruey Kuang Road, Neihu
Taipei 114, Taiwan
Tel: 886-2-8798-2888

MediaTek, Inc.
5F, No.1-2, Innovation Road 1, Science-Based
Industrial Park,
Hsin-Chu City, Taiwan 300
Tel: 886-3-567-0766

Mintek Digital
4915 E. Hunter Ave.
Anaheim, California 92807
Tel: 714-777-3090

Shinco International AV Co., Ltd.
Rm 1503, Kinox Center
9 Hung To Road, Ngau Tau Kok
Kowloon, Hong Kong
Tel: 852-23435042

TEAC Corporation
3-7-3 Naka-Cho, Musashino-shi
Tokyo 180-8550 Japan
Tel: 81-422-52-5000

TEAC America, Inc.
7733 Telegraph Road
Montebello, California 90640
Tel: 323-726-0303

Terapin Technology Corporation
76 Playfair Rd #04-03 Block 2, LHK2 Building,
Singapore 367996, Republic of Singapore
Tel: 65-6282-7924

Terapin Technology
1430 Valwood Parkway, Suite 110
Carrollton, Texas, 75006
Tel: 972-488-9995

Counsel for Complainants

John Allcock

Mark Fowler

Gerry T. Sekimura

William G. Goldman

Thomas A. Burg

GRAY CARY WARE & FREIDENRICH LLP

2000 University Avenue

East Palo Alto, California 94303

Tel: 650-833-2000

Fax: 650-833-2001

I

INTRODUCTION

1. This complaint is filed by Zoran Corporation (“Zoran”) and Oak Technology Inc. (“Oak”) (collectively “Complainants”) pursuant to section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, based upon the importation into the United States, the sale for importation into the United States, or the sale within the United States after importation by ASUSTek Computer, Inc., Creative Technology Ltd., Creative Labs, Inc., Jiangsu Shinco Electronic Group Co., Ltd., LITE-ON Information Technology Corporation, MediaTek Inc., Mintek Digital, Inc., Shinco International AV Co. Ltd., TEAC Corporation, TEAC America, Inc., Terapin Technology Corporation, and Terapin Technology (collectively “Respondents”) of certain optical disk controller chips and chipsets, and products containing same, including DVD players and PC optical storage devices, that infringe one or more claims of United States Patent Nos. 6,466,736 (the “736 Patent”), 6,584,527 (the “527 Patent”), and 6,546,440 (the “440 Patent”) (hereinafter, the “Asserted Patents”). Complainants are co-owners by assignment of each of these patents and seek an order prohibiting importation into the United States of any optical disk controller chips and chipsets and products containing the same that infringe any of the Asserted Patents, and permanent cease and desist orders prohibiting the importation and sale after importation by Respondents and those acting together with them of infringing optical disk controller chips and chipsets and products containing the same.

II

COMPLAINANTS

2. Zoran is a Delaware corporation, headquartered in Sunnyvale, California, that is a leading provider of digital solutions-on-a-chip for applications in the growing consumer electronics and digital imaging markets. Zoran has facilities in Sunnyvale, California and several foreign countries including, Canada, China, Israel, Great Britain, Korea, Taiwan and Hong Kong. During its fiscal year 2003 (ending 12/31/03), Zoran had worldwide net sales in excess of \$224.1 million.

3. For two decades, Zoran has pioneered high-performance digital audio, video, and imaging applications. In particular, Zoran is an industry leader in pioneering back-end decoder chips for both PC optical storage systems and CD/DVD players. Its decoder products are widely used by many of the industry's leading manufacturers. Accordingly, Zoran-based DVD products have received recognition for excellence and are now in millions of homes worldwide.

4. In an effort to expand on its success in the DVD player market, on August 11, 2003, Zoran and Oak Technology, Inc. ("Oak") engaged in a merger transaction that resulted in Oak becoming a wholly owned subsidiary of Zoran pursuant to an Agreement and Plan of Reorganization dated as of May 4, 2003.¹ The Merger Agreement is included at Exhibit 9.

5. Zoran and Oak are co-owners of the Asserted Patents.

6. Prior to the merger, Oak pioneered the IDE/ATAPI CD-ROM controller chip (the technology covered by the '527 and '440 Patents), and was recognized as one of the industry's largest suppliers of CD-ROM controllers.

7. By acquiring Oak, Zoran is able to benefit from Oak's complementary technologies and products, especially its front-end integrated controllers, to enable Zoran to provide a single chip integrated solution for CD/DVD players that includes both front-end (controller and DSP functions) and back-end (decoder functions) capability.

8. To achieve this, Zoran invested significantly in acquiring Oak's intellectual property portfolio and related expertise - especially in intellectual property relating to front-end (controller and DSP functions) optical recording. The fair market value of the Oak acquisition was publicly reported at \$227,462,000.

9. Zoran invests substantial amounts in research and development to design and manufacture its integrated circuits. Such investment includes substantial activity that occurs in

¹ In connection with the merger, Zinc Corporation ("Zinc") was incorporated as a wholly-owned subsidiary of Zoran. Oak was merged into Zinc, and Zinc's name was subsequently changed to Oak Technology, Inc. See Exhibits 9 and 10. It is this corporation, together with Zoran, that are co-owners of the Asserted Patents.

the United States. A detailed analysis of this domestic activity is discussed *infra* and is summarized in Confidential Exhibit 18.

10. Additional information concerning Zoran and its products can be obtained from Zoran's 2002 annual report, which is attached hereto as Exhibit 11.

11. Complainants have licensed patents in their patent portfolio. In particular, the Asserted Patents (among others) currently are licensed to both Samsung Electronics ("Samsung") and Sunplus Technology Co., Ltd. ("Sunplus"). Copies of these license agreements are included at Confidential Appendices G and H, respectively.

III

PROPOSED RESPONDENTS

12. On information and belief, Respondent ASUSTek Computer, Inc. ("ASUS") is an entity organized and existing under the laws of the Republic of China (Taiwan), with its principal headquarters at 150 Li - Te Road, Peitou, Taipei, Taiwan 112.

13. On information and belief, ASUS imports into the United States, sells for importation into the United States, and/or sells after importation into the United States, products containing optical disk controller chips and chipsets that infringe the Asserted Patents.

14. On information and belief, Respondent Creative Technology, Ltd. ("Creative") is an entity organized and existing under the laws of the Singapore, with its principal headquarters at 31 International Business Park, Creative Resource, Singapore 609921. Creative has a wholly-owned U.S. subsidiary, Creative Labs, Inc. ("Creative Labs"), an entity organized and existing under the laws of California, with its principal headquarters at 1901 McCarthy Boulevard, Milpitas, California 95035.

15. On information and belief, Creative and Creative Labs import into the United States, sell for importation into the United States, and/or sell after importation into the United States, products containing optical disk controller chips and chipsets that infringe the Asserted Patents.

16. On information and belief, Respondent Jiangsu Shinco Electronic Group Co., Ltd. ("Shinco") is an entity organized and existing under the laws of the Peoples Republic of China,

with its principal place of business at 5# Waihuan Road, Changzou, Jiangsu, China 213022. Shinco International AV Co. Ltd. (“Shinco International”), is an entity organized and existing under the laws of Peoples Republic of China, with its principal headquarters at Kinox Centre, 9 Hung To Road, Ngau Tau Kok, Kowloon, Hong Kong, and is a subsidiary of Shinco. Mintek Digital, Inc. (“Mintek”) is a corporation organized and existing under the laws of California, with its principal place of business at 4915 E. Hunter Ave., Anaheim, CA 92807 and is affiliated with Shinco and/or Shinco International.

17. On information and belief, Shinco, Shinco International and Mintek manufacture, import into the United States, sell for importation into the United States, and/or sell after importation into the United States, optical disk controller chips and chipsets and products containing optical disk controller chips and chipsets that infringe the Asserted Patents.

18. On information and belief, Respondent LITE-ON Information Technology Corp. (“LITE-ON I.T.”) is an entity organized and existing under the laws of the Republic of China (Taiwan), with its principal headquarters at 15F, 392, Ruey Kuang Road, Neihu, Taipei 114, Taiwan.

19. On information and belief, LITE-ON I.T. imports into the United States, sells for importation into the United States, and/or sells after importation into the United States, products containing optical disk controller chips and chipsets that infringe the Asserted Patents.

20. On information and belief, Respondent MediaTek, Inc. (“MediaTek”) is an entity organized and existing under the laws of Taiwan, with its principal headquarters at 5F, No.1-2, Innovation Road 1, Science-Based Industrial Park, Hsin-Chu City, Taiwan 300.

21. On information and belief, MediaTek manufactures, imports into the United States and/or sells for importation into the United States, optical disk controller chips and chipsets that infringe the Asserted Patents. Those infringing chips and chipsets typically enter the United States as components of optical storage devices and/or DVD players manufactured by MediaTek’s customers.

22. On information and belief, Respondent TEAC Corporation (“TEAC”) is an entity organized and existing under the laws of Japan, with its principal headquarters at 3-7-3 Naka-Cho, Musashino-shi, Tokyo 180-8550 Japan. TEAC America, Inc. (“TEAC America”), is an entity organized and existing under the laws of California, with its principal headquarters at 7733 Telegraph Road, Montebello, California 90640 and is a subsidiary of TEAC.

23. On information and belief, TEAC and TEAC America import into the United States, sell for importation into the United States, and/or sell after importation into the United States, products containing optical disk controller chips and chipsets that infringe the Asserted Patents.

24. On information and belief, Respondent Terapin Technology Corporation (formerly known as Teraoptix and now owned by Serial System Ltd.) (“Terapin”), is an entity organized and existing under the laws of Singapore, with its principal headquarters at 76 Playfair Rd #04-03 Block 2, LHK2 Building, Singapore 367996. Terapin Technology (“Terapin Technology”), is an entity organized and existing under the laws of California, with its principal headquarters located at 1430 Valwood Parkway, Suite 110, Carrollton, Texas, 75006 and is a subsidiary of Terapin.

25. On information and belief, Terapin and Terapin Technology import into the United States, sell for importation into the United States, and/or sell after importation into the United States products containing optical disk controller chips and chipsets that infringe the Asserted Patents.

26. Complainants have not licensed Respondents to practice the Asserted Patents to manufacture, sell and/or import optical disk controller chips and chipsets or articles incorporating such chips and chipsets (such as CD/DVD players and PC optical storage devices) that are covered by the Asserted Patents. Accordingly, any importation, sale after importation, offer for sale, and/or manufacture of the chips and chipsets themselves or articles containing such chips and chipsets covered by the Asserted Patents by these Respondents is an illegal infringing activity for which Complainants seek appropriate remedy.

IV
**BACKGROUND INFORMATION ON CHIPS AND CHIPSETS USED IN
OPTICAL STORAGE DEVICES AND DVD PLAYERS**

27. The products at issue are optical disk controller chips and chipsets used in DVD players and other optical disk storage devices, including those incorporated into personal computers. Optical disk controller chips and chipsets, such as those used in DVD players, are used to control the transfer of data from the optical disk, i.e., a CD or DVD, through the controller to an MPEG decoder. Similarly, optical disk controller chips and chipsets used in personal computer disk drives are used to transfer data from the disk to the host computer for a variety of purposes. In contrast to earlier DVD and CD control systems, which used discrete chips to perform many of the required functions, the products at issue here combine many of those functions onto one chip.

28. In modern systems, consumers desire a single drive that can play both CDs and DVDs, so the controllers must be able to decode and transfer data coming from different optical disk formats. Consumers and manufacturers also demand optical drives that can be incorporated directly into modern personal computers and laptops without additional adapter cards. Thus, the controllers at issue here that are used in personal computers can directly interface with the IDE/ATA bus, a highly efficient and widely adopted standard computer architecture.

29. The controller chips and chipsets at issue generally are incorporated into the circuit boards of the optical disk storage devices. These boards can then be incorporated into stand-alone DVD players, such as those purchased for playing movies on a television, or into CD/DVD players or recorders that are installed into personal computers and laptops.

30. These controllers are used in CD products, such as CD-ROM and CD recordable (“CD-R/W”) products, DVD products, such as DVD-ROM and DVD recordable (“DVD-R/W”) products, products that are capable of reading and/or writing both CD and DVD data (“COMBI”), and DVD players, such as portable or stand-alone DVD player machines.

V

THE PATENTS AT ISSUE

A. The '736 Patent

1. Identification of the Patents and Ownership by Complainants

31. Complainants are co-owners by assignment of U.S. Patent No. 6,466,736 entitled "Integrated DVD/CD Controller," which duly issued from the United States Patent and Trademark Office (the "USPTO") on October 15, 2002. The '736 Patent is based upon an application filed on December 31, 1998. A copy of the '736 Patent is attached hereto as Exhibit 1. A copy of the assignment of the '736 Patent from the inventors to Oak is attached hereto as Exhibit 4. A copy of the Merger Agreement detailing the transfer of assets from Oak to Zinc Acquisition Corporation, a Delaware corporation and wholly-owned subsidiary of Zoran established to effectuate the merger with Oak, is attached as Exhibit 9. Zinc Acquisition Corporation was subsequently renamed Oak Technology, Inc. A copy of the Restated Certificate of Incorporation of Zinc Acquisition Corporation renaming Zinc Acquisition Corporation to Oak Technology, Inc. is attached hereto as Exhibit 10. A copy of the co-ownership assignment of the '736 Patent between Oak and Zoran is attached hereto as Exhibit 7.

32. Pursuant to Commission Rule 210.12, the original of this Complaint is accompanied by: (1) a certified copy of the '736 Patent (Exhibit 1); (2) four copies of the prosecution history of the '736 Patent (Appendix A);² (3) four copies of each document referenced therein (Appendix D); and (4) copies of the recorded assignments of the '736 Patent (Exhibits 4 and 7, respectively).³

33. The '736 Patent is valid and in full force and effect.

² A certified copy of this prosecution history was requested on January 22, 2004, from the U.S. Patent and Trademark Office and will be filed with the Commission as soon as it is available.

³ A certified copy of the assignment from the inventors to Oak is attached as Exhibit 4. A certified copy of the co-ownership assignment between Oak and Zoran was requested from the U.S. Patent and Trademark Office on February 26, 2004, and will be filed with the Commission as soon as it is available.

2. Description of the Patented Inventions

34. In general, the '736 Patent is directed to a controller architecture in an optical disk drive that uses an unique "parallel interface" (i.e., a parallel set of data lines to transmit data) and a shared memory (i.e., a common memory used by various sub-systems on the controller) to facilitate the transfer of CD data and DVD data from the controller to an "MPEG decoder" (a device that decodes video and/or audio data). The unique parallel interface and shared memory allow DVD/CD playback systems that incorporate the invention to occupy less space, have smaller pin counts, be less complex, and be less expensive to manufacture than conventional playback systems.

35. Before the '736 Patent invention, most conventional DVD/CD players used separate subsystems to process information read from CDs and DVDs, since the format of the information received from each is different. A block diagram (Fig. 1 from the '736 Patent) representing such a conventional playback system is shown below:

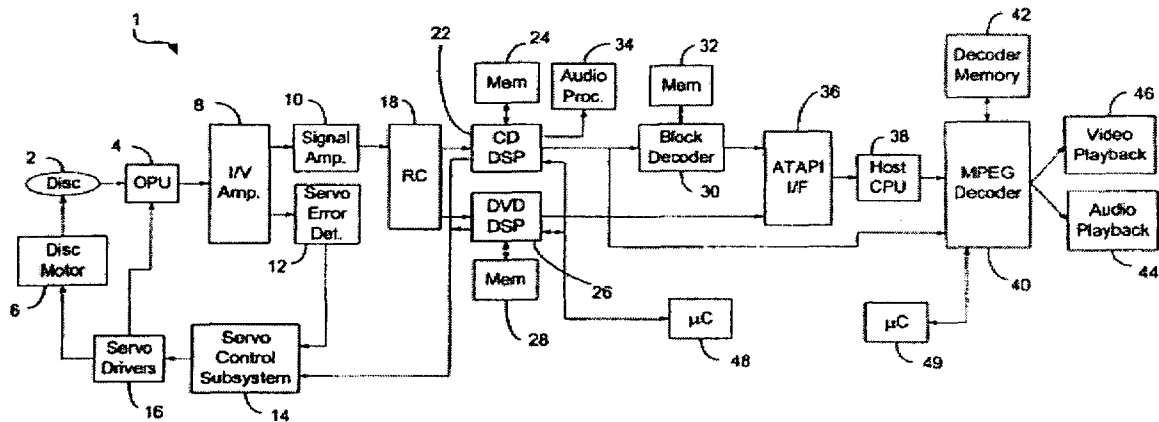


Fig. 1
PRIOR ART

36. As can be seen from the above figure, the various subsystems generally were incorporated into separate chips (e.g., the CD DSP (block 22) and its associated memory (block 24), the DVD DSP (block 26) and its associated memory (block 28), the block decoder (block 30), the ATAPI interface (block 36) and the host CPU (block 38)). Each such chip was

dedicated to processing information of a particular format. Unfortunately, these separate subsystems occupied valuable space in the playback system (the entire circuitry constituting the DVD player, for example) and, as a whole, made the playback system bulky and expensive. Furthermore, use of separate subsystems for information processing resulted in inefficient use of system processing and memory resources, and hindered efficient sharing of distributed resources. In addition, the large number of chips increased the total pin count of the playback system, making it bulky and complex. All of the above factors further translated to increased manufacturing costs. *See* '736 Patent (Exhibit 1).

37. As is described in the '736 Patent, because of the low bit rates associated with CDs (a user bit rate is only 1.4112 Mbit/sec for 1x CD), most conventional CD-DSP controllers used a "serial interface" (i.e., a single data line) to communicate with those subsystems that were external to the controller, such as the MPEG decoder or the block decoder. The serial interface was a cost-effective solution for low speed CD devices because CDs did not require high bit rates.⁴ However, because the data flow internal to the CD-DSP controllers uses an 8-bit parallel data path, to facilitate a serial interface to the external subsystems, parallel to serial conversion was required. And since the external subsystems usually also use a parallel internal data path, the external subsystems were then required to perform a serial-to-parallel conversion for further processing of the data. *See* '736 Patent (Exhibit 1).

38. With the emergence of DVD technology, which uses a higher user bit rate (11.08 Mbit/sec for 1x DVD), a parallel interface normally is provided for data transfer, since a considerable amount of information is needed to be transmitted and processed quickly. Therefore, in conventional combination DVD/CD playback systems, the MPEG decoder normally had to support (1) an 8-bit parallel interface for DVD information and (2) a conventional serial interface for CD information such as that described above. Accordingly, the 8-bit parallel to serial conversion at the CD controller (for the CD information) and the re-

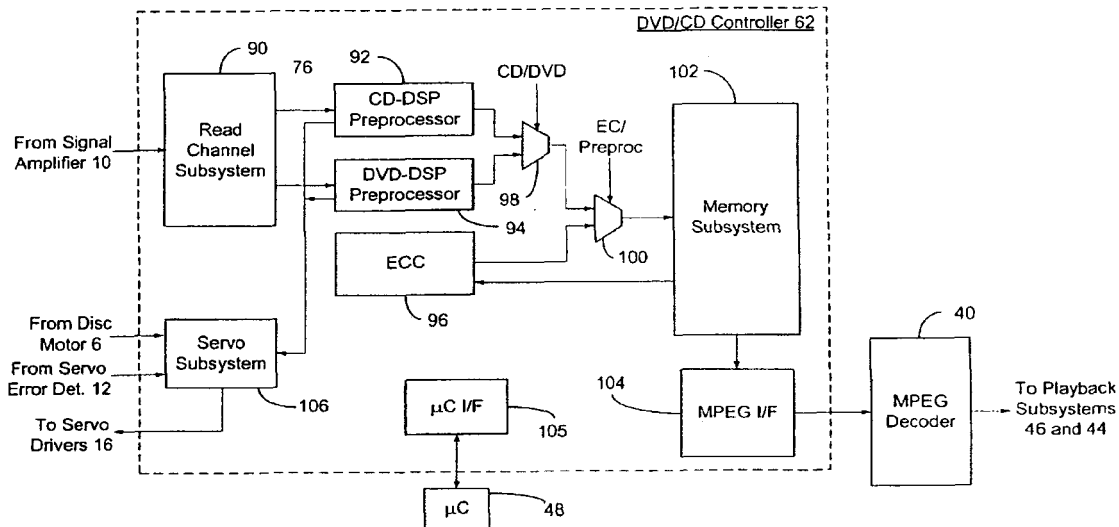
⁴ Bit rate is similar to the rate of data throughput.

conversion of the serial data back to parallel for processing at the MPEG decoder not only posed an unnecessary overhead in hardware for the playback system, but also required an 8-times higher transfer rate for the serial interface to be concurrent with the data being transferred in parallel to the MPEG decoder. Thus, a new transfer protocol which eliminated the serial interface associated with traditional CD-DSP controllers was needed. *See* '736 Patent (Exhibit 1).

39. The '736 Patent met this need by providing a controller architecture optimized for processing audio and video information in playback systems used with optical disks of different formats, such as CDs and DVDs.

40. Certain novel characteristics of the invention include a unique MPEG parallel interface that facilitates transfer of CD data and DVD data from the DVD/CD controller to a MPEG decoder, and a shared memory for processing the CD and DVD data. The DVD/CD controller also includes a read channel subsystem (i.e., a data path for reading information from the optical disk), a CD-DSP subsystem (i.e., for performing sync detection and demodulation of CD data), a DVD-DSP subsystem (i.e., for performing sync detection and demodulation of DVD data), an error code correction and detection subsystem (i.e., for analyzing the CD or DVD data for correctness), and a memory subsystem (i.e., to facilitate the processing of DVD and/or CD data). *See* '736 Patent (Exhibit 1). While these sub-systems are generally conventional in nature, their organization in the manner described in the '736 Patent is novel.

41. The following figure (Fig. 4 from the '736 Patent) illustrates an embodiment of the invention described in the '736 Patent:



42. The unique parallel MPEG interface (block 104) eliminates the need for an ATAPI interface or host CPU (referred to in the prior art figure as blocks 36 and 38, respectively) for transfer of data from the front-end DSPs to the MPEG decoder.⁵ Due to this simplified MPEG interface, the DVD/CD controller also may be easily integrated into the MPEG decoder. *See* '736 Patent (Exhibit 1).

43. Another novel characteristic of the invention is the memory subsystem (block 102), which provides a common memory resource for the subsystems of the DVD/CD controller, such as the CD-DSP (block 92), DVD-DSP (block 94), error code correction and detection subsystem (block 96), and the decoder (block 40). The memory subsystem thus provides efficient sharing of memory resources among the subsystems and, as a result, reduces the number of memory chips required for audio and video processing. Among other things, this reduces manufacturing costs of the playback system. *See* '736 Patent (Exhibit 1).

44. As a result of this invention, the parallel MPEG interface eliminates parallel-to-serial and serial-to-parallel conversion overhead problems associated with conventional DVD/CD

⁵ An ATAPI interface (AT Attachment Packet Interface) is an interface between a host computer and attached optical storage drives that provides certain commands needed for controlling the disk drive so that it can be used over a specific type of data bus.

playback systems. Because multiple parallel data lines are provided, the parallel interface also obviates the need to transfer information at higher rates as in conventional DVD/CD playback systems that utilized a serial interface. Thus, DVD/CD playback systems incorporating the '736 Patent invention occupy less space, have smaller pin counts, are less complex, and are cheaper to manufacture than conventional playback systems. *See* '736 Patent (Exhibit 1).

3. Foreign Counterparts to the '736 Patent

45. No other patent applications corresponding to the '736 Patent have been filed, issued, or remain pending.

4. Licensees of the '736 Patent

46. Complainants have licensed the '736 Patent to Samsung and to Sunplus. These are the only licensees to the '736 Patent. A copy of these licenses are attached at Confidential Appendices G and H, respectively.

B. The '527 and '440 Patents

1. Identification of the Patents and Ownership by Complainants

47. Complainants are co-owners by assignment of U.S. Patent No. 6,584,527 entitled "Optical Drive Controller With A Host Interface For Direct Connection To An IDE/ATA Data Bus," which duly issued from the USPTO on June 24, 2003. The '527 Patent is based upon an application filed on June 28, 1996, and is a continuation of patent application serial no. 08/264,361, filed June 22, 1994, and issued as U.S. Patent No. 5,581,715. Copies of the '527 Patent and assignments from the inventors to Oak are attached to this Complaint as Exhibits 2 and 5, respectively. A copy of the Merger Agreement detailing the transfer of assets from Oak to Zinc Acquisition Corporation, a Delaware corporation and wholly-owned subsidiary of Zoran established to effectuate the merger with Oak, is attached as Exhibit 9. A copy of the Restated Certificate of Incorporation of Zinc Acquisition Corporation renaming Zinc Acquisition Corporation to Oak Technology, Inc. is attached hereto as Exhibit 10. A copy of the co-ownership agreement between Oak and Zoran is attached hereto as Exhibit 8.

48. Complainants are also co-owners by assignment of U.S. Patent No. 6,546,440 entitled “Optical Drive Controller With A Host Interface For Direct Connection To An IDE/ATA Data Bus,” which duly issued from the USPTO on April 8, 2003. The ‘440 Patent is based upon an application filed on November 18, 1999, and is a continuation of patent application serial no. 08/673,327, filed June 28, 1996, and issued as the ‘527 Patent referenced above. Copies of the ‘440 Patent and assignments from the inventors to Oak are attached to this Complaint as Exhibits 3 and 6, respectively. A copy of the Merger Agreement detailing the transfer of assets from Oak to Zinc Acquisition Corporation, a Delaware corporation and wholly-owned subsidiary of Zoran established to effectuate the merger with Oak, is attached as Exhibit 9. A copy of the Restated Certificate of Incorporation of Zinc Acquisition Corporation renaming Zinc Acquisition Corporation to Oak Technology, Inc. is attached hereto as Exhibit 10. A copy of the co-ownership agreement between Oak and Zoran is attached hereto as Exhibit 8.

49. Pursuant to Commission Rule 210.12, the original of this Complaint is accompanied by: (1) a certified copy of the ‘527 and ‘440 Patents (Exhibits 2 and 3, respectively); (2) four copies of the prosecution histories of the ‘527 and ‘440 Patents (Appendices B and C, respectively);⁶ (3) four copies of each document referenced therein (Appendices E and F, respectively); and (4) copies of the recorded assignments of the ‘527 and ‘440 Patents (Exhibits 5, 6 and 8, respectively).⁷

50. The ‘527 and ‘440 Patents are valid and in full force and effect.

2. Description of the Patented Inventions

51. In general, the ‘527 and ‘440 Patents are directed to an optical drive controller having a host interface permitting a direct connection to an IDE/ATA data bus. An IDE/ATA

⁶ A certified copy of the ‘527 Patent file history is included as Appendix B. A certified copy of the prosecution history files for the ‘440 Patent was requested on January 22, 2004, from the U.S. Patent and Trademark Office and will be filed with the Commission as soon as it is available.

⁷ Certified copies of the assignments from the inventors to Oak for the ‘527 and ‘440 Patents are attached as Exhibits 5 and 6, respectively. Certified copies of the co-ownership assignments between Oak and Zoran for the ‘527 and ‘440 Patents were requested on February 26, 2004, from the U.S. Patent and Trademark Office and will be filed with the Commission as soon as they are available.

data bus is a standard electronic interface used to transfer information between the host computer and the optical disk storage device. Information is transferred between the computer and the disk drive according to a specific standard, known as the IDE/ATA standard. The inventive drive controller permits the transfer of information between the optical storage disk and the host computer over such a data bus in accordance with these standards, for example by receiving data addresses and commands from the host computer and transmitting digital information from the disk to the host computer. *See* '527 and '440 Patents (Exhibits 2 and 3, respectively).

52. The integration of optical drives into personal computers comprises one of the largest markets for optical storage media applications. Conventional optical storage drive designs supported the Industry Standard Architecture (ISA) bus convention (a standard bus architecture for communicating with a computer's expansion slots and devices connected thereto). Accordingly, computers using a traditional ISA bus required the insertion of an interface card or host adapter card into an expansion slot of the computer to connect a disk drive to the computer. *See* '527 and '440 Patents (Exhibits 2 and 3, respectively).

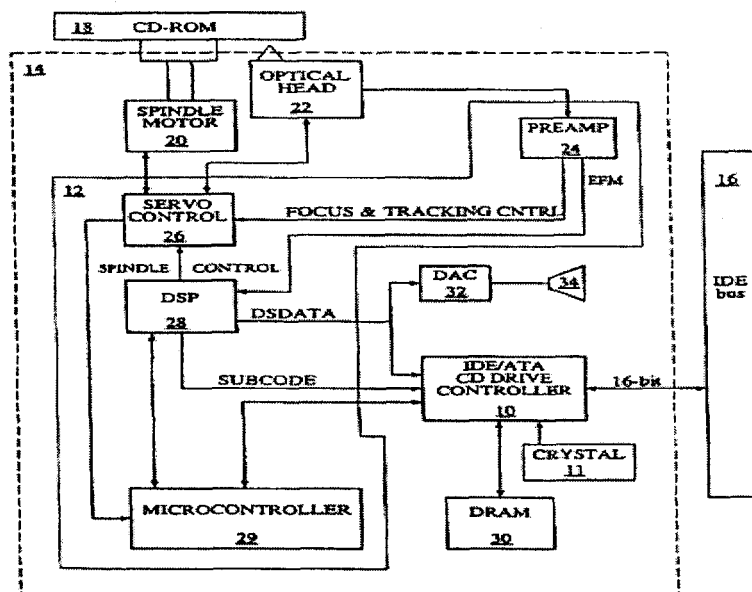
53. The reliance of all conventional optical drive designs exclusively on the use of the ISA input/output bus resulted in the additional expense of host adapter card electronics. Furthermore, a reduction in the range of employment of any given computer system due to the permanent commitment of an input/output bus slot to communicate with the drive controller was a limitation in the art. *See* '527 and '440 Patents (Exhibits 2 and 3, respectively).

54. However, an alternative bus structure within standard personal computers is available for use with an optical drive controller. This structure is referred to as Integrated Drive Electronics with an AT Attachment Interface, or IDE/ATA bus. As noted above, the American National Standards Institute (ANSI) has published a standard governing this interface and it is currently widely available.

55. Conventional optical drives failed to make use of the IDE/ATA bus. The '527 and '440 Patents are aimed at providing an optical drive controller that interfaces with this IDE/ATA bus. This obviates the need for an additional host adapter card and associated electronics,

thereby lowering the overall cost of the system and easing the installation of such devices in personal computers. There also are fewer compatibility issues because the devices practicing the invention conform to a widely-adopted standard. See '527 and '440 Patents (Exhibits 2 and 3, respectively).

56. The following figure (Fig. 1 from the '527 and '440 Patents) illustrates the use of such a drive controller in a compact disk drive for use in a personal computer:



57. The above figure is a block diagram of a CD drive configuration with the inventive CD drive controller added thereto.⁸ The CD drive controller designed according to the '527 and '440 Patents communicates command data, status signals and other data over the IDE/ATA bus of a personal computer. This invention thereby allows the CD drive to be integrated into many personal computers without requiring the use of an ISA bus expansion slot. Furthermore, the invention allows for a wider selection of personal computer peripheral cards, such as sound

⁸ Though the description is in the context of a CD drive controller, the invention applies generally to other optical storage technologies as well, such as CD-RW, DVD-ROM, DVD-RW, and COMBI drives for personal computers.

boards, for use with a given personal computer and CD drive. See '527 and '440 Patents (Exhibits 2 and 3, respectively).

58. In operation, the drive controller accepts digital data from the drive's electronics, particularly the microcontroller and DSP (the signal processor), and stores the data into a memory buffer. Error correction and detection operations are performed on each sector of data (to ensure that the data is correct), and the data is then passed from the drive controller to the IDE data bus. Thus, the inventive controller communicates command data, status signals and corrected data over the IDE bus of the host computer, eliminating the need for a host adapter card or additional ISA bus interface electronics, to reduce the cost of the drive. This invention thus allows the optical drive to be integrated into many different personal computers without requiring the use of an ISA input/output bus slot of the host computer. See '527 and '440 Patents (Exhibits 2 and 3, respectively).

3. Foreign Counterparts to the '527 and '440 Patents

59. Oak had filed foreign patent applications corresponding to the '527 and '440 Patents as shown below:

<u>Patent/Application No.</u>	<u>Filing Date</u>	<u>Status</u>
EP0689207	June 19, 1995	Withdrawn

4. Licensees of the '527 and '440 Patents

60. Complainants have licensed the '527 and '440 Patents to Sunplus and to Samsung. These are the only licensees to the '527 and '440 Patents. Copies of the Samsung and Sunplus licenses are included at Confidential Appendices G and H, respectively.

VI

UNFAIR ACTS OF THE RESPONDENTS – PATENT INFRINGEMENT

61. Pursuant to Commission Rule 210.12(b), the original of this Complaint is accompanied by photographs and/or specification sheets identifying both the domestic articles and all imported articles that are the subject of the Complaint. Evidence of the unfair

importation of Respondents is shown in the attached Declaration of William G. Goldman (“Goldman Decl.”), attached hereto as Exhibit 12.

62. On information and belief, MediaTek offers comprehensive chip and chipset solutions for optical storage drives which include CD-ROM, DVD-ROM, CD-R/RW, DVD-rewritable drives, and DVD players, as well as related chipsets. MediaTek’s chip and chipset solutions include single-chip and multi-chip sets that are combination of two or more individual MediaTek chips.

63. On information and belief, currently, MediaTek’s chips and chipsets include chips and chipsets for CD-ROM, DVD-ROM and CD-R/RW drives that are used in relation to personal computers and for consumer products such as DVD players.

64. On information and belief, MediaTek’s product line includes optical storage chips and chipsets, including a COMBI chipset, a CD-R/RW chipset, a DVD-ROM chipset, and a CD-ROM chipset. Its product line also includes a digital consumer electronics chipset for DVD player applications.

65. As best understood based on information and belief, the following table illustrates the MediaTek chipset family relationships:

MediaTek Product Family			
Optical Storage Chipset		Digital Consumer Electronics Chipset	
COMBI	MT1618	DVD Player	MT1369
	MT1628		MT1379
			MT1389
CD-R/RW	MT1508		
	MT1518		
DVD-ROM	MT1328		
	MT1338		
	MT1358		
CD-ROM	MT1199		
DVD/RW	MT1818		

66. On information and belief, these MediaTek chipsets infringe the Asserted Patents as set forth in the declarations of Thomas Rhyne (“Rhyne Decl.”) and Allen Samuels (“Samuels Decl.”), attached hereto as Exhibits 13 and 14, respectively.

A. Infringement of the ‘736 Patent

67. On information and belief, Respondents MediaTek, Mintek, Shinco, Shinco International, Terapin and Terapin Technology are making, using, selling, importing and/or offering to sell for importation or sell after importation, optical storage chips and chipsets and products containing the same that either directly or contributorily infringe independent claims 1, 5-8, and 10-12 and dependent claims 2-4, and 9 of the ‘736 Patent by incorporating infringing MediaTek chipsets into their optical storage systems and/or DVD players.

68. The optical storage chips and chipsets manufactured and sold by Respondent MediaTek and sold for importation into the United States and/or sold after importation into the United States by Respondents MediaTek, Mintek, Shinco, Shinco International, Terapin and Terapin Technology as components of optical storage products, such as DVD players, infringe the ‘736 Patent and have no substantial non-infringing uses. *See* Exhibit 13, Rhyne Decl., ¶ 45.

69. Moreover, Respondent MediaTek also contributes to and induces infringement of these claims of the ‘736 Patent through its making, using, selling, importing and/or offering to sell for importation or after importation its infringing chips and chipsets (which are specifically designed to be installed into PC optical storage devices and/or DVD players) with the knowledge that these chips and chipsets infringe the ‘736 Patent. On information and belief, prior to the Oak/Zoran merger, MediaTek engaged in extensive discussions with Oak about acquiring Oak’s patent portfolio, and individual MediaTek representatives traveled to Oak’s Sunnyvale, California facility to personally review Oak’s complete portfolio of issued patents and pending patent applications, including the Asserted Patents.

70. Attached to the Rhyne Decl. as Exhibit D is a claim chart detailing how representative claim 1 of the ‘736 Patent reads on the representative MediaTek 1379 chip

(MT1379), which is incorporated in Respondent Terapin's TT-2600DVD product.⁹

71. On information and belief, the MT1379 chipset is representative of MediaTek's entire digital consumer electronics chipset family, which also includes the MT1369 and MT1389 chipsets. As set forth in the Rhyne Decl., on information and belief, the MT1369, MT1379 and MT1389 chipsets share a common architecture that infringes the '736 Patent. *See* Exhibit 13, Rhyne Decl., ¶ 45.

B. Infringement of the '527 and '440 Patents

72. On information and belief, Respondents AsusTek, Creative, Creative Labs, Lite-On I.T., MediaTek, TEAC, and TEAC America are making, using, selling, importing and/or offering to sell for importation or after importation, chips and chipsets and/or products containing the same that either directly or contributorily infringe independent claims 1-3 of the '527 Patent and independent claims 1 and 14 and dependent claims 2-13, and 15-35 of the '440 Patent by incorporating infringing MediaTek chips and chipsets into their optical storage devices and/or DVD players.

73. The optical storage chips and chipsets manufactured and sold by Respondent MediaTek and sold for importation into the United States and/or sold after importation into the United States by Respondents AsusTek, Creative, Creative Labs, Lite-On I.T., MediaTek, TEAC, and TEAC America as components of optical storage products, such as disk drives, infringe the '527 and '440 Patents and have no substantial non-infringing uses. *See* Exhibit 14, Samuels Decl. ¶ 73.

74. Moreover, Respondent MediaTek also contributes to and induces infringement of these claims of the '736 Patent through its making, using, selling, importing and/or offering to sell for importation or after importation its infringing chips and chipsets (which are specifically

⁹ Furthermore, the Supreme AV Labs chipset present in the Mintek DVD players (such as model numbers MDP-5860, MDP-1720, and MDP-1810, manufactured by Shinco and/or Shinco International), is a private-labeled MediaTek chip believed to be the MT1379 chip. *See* Declaration of William Goldman, ¶¶ 10-14. Complainants reserve the right to include other infringing products based on further analysis and discovery.

designed to be installed into PC optical storage devices and/or DVD players) with the knowledge that these chips and chipsets infringe the '527 and '440 Patents. On information and belief, prior to the Oak/Zoran merger, MediaTek engaged in extensive discussions with Oak about acquiring Oak's patent portfolio, and individual MediaTek representatives traveled to Oak's Sunnyvale, California facility to personally review Oak's complete portfolio of issued patents and pending patent applications, including the Asserted Patents.

75. Attached to the Samuels Decl. as Exhibits E and F are respective claim charts detailing how representative Claim 1 of the '527 Patent (Exhibit 2) and representative Claim 14 of the '440 Patent (Exhibit 3) reads on the representative MediaTek 1199 chip (MT1199), which is incorporated in Respondent Creative Lab's 5233E optical storage drive product.¹⁰

76. On information and belief, the MT1199 chipset is representative of MediaTek's entire optical storage chipset family. As set forth in the Samuels Decl., on information and belief, the

¹⁰ As discussed above, the MT1199 chipset is representative of MediaTek's optical storage chipset family, which also includes the MT1328, MT1508, MT1518, MT1818, and MT1628 chipsets. On information and belief, these chipsets are present in at least the following of Respondent's products (Complainants reserve the right to include other infringing products based on further analysis and discovery):

Chipset	Product
MT1508	Lite-on LTR-40125W Lite-on LTR-48125S
MT1518	Lite-on LTR-52246S Asus CRW-4824A Asus CRW-5224A Asus CRW-5224A-U Teac CD-W552E
MT1588	Lite-on LTR-52327S
MT1818	Lite-on LDW-411S Lite-on LDW-811S Lite-on LDW-401S

MT1618, MT1628, MT1508, MT1518, MT1328, MT1338, MT1358, MT1199 and MT1818 chipsets share a common architecture and comply with the ATAPI standard and therefore infringe the '527 and '440 Patent. *See* Samuels Decl., ¶¶ 29-41.

VII

SPECIFIC INSTANCES OF UNFAIR IMPORTATION

77. Respondents' infringing chips and chipsets are imported into the United States, sold for importation into the United States or sold following importation into the United States. The infringing chips and chipsets may be classified under Heading 8522.90.65 of the Harmonized Tariff Schedule of the United States. The articles that incorporate the infringing chips and chipsets are imported separately or as components of articles that may be classified under at least the following headings of the Harmonized Tariff Schedule of the United States: 8471.90.00, 8473.50.30, 8522.90.25, 8522.90.65, 8529.90.13, 8529.90.22, 8534.00.00, 8542.21.80, 8543.90.68, 8471.30.00, 8471.49.15, 8471.49.50, 8471.49.85, 8471.49.95, 8471.60.10, 8520.90.00, 8521.90.00. Complainants reserve the right to append the preceding list as necessary to properly include all possible classifications of components of such articles that are applicable in this investigation.

78. As discussed above, MediaTek's infringing chipsets are imported into the United States as components in a variety of optical storage and DVD player systems. The following briefly describes certain instances of unfair importation of infringing products by the Respondents. Complainants reserve the right to include other infringing products based on further analysis and discovery and supplement the list of named Respondents as may become necessary in order to adequately protect their interests in this action.

79. On information and belief, Respondent ASUS distributes, imports into the United States and/or sells for importation into the United States, and sells after importation into the United States, products containing optical disk controller chips that infringe the Asserted Patents. Evidence of this importation and availability is described in the accompanying Goldman Decl. at ¶¶ 1-3 which is attached hereto as Exhibit 12.

80. On information and belief, Respondent Creative and/or Creative Labs distributes, imports into the United States, sells for importation into the United States, and/or sells after importation into the United States, products containing optical disk controller chips that infringe the Asserted Patents. Evidence of this importation and availability is described in the Goldman Decl. at ¶¶ 4-6 (Exhibit 12).

81. On information and belief, Respondent LITE-ON I.T. distributes, imports into the United States, sells for importation into the United States, and/or sells after importation into the United States, products containing optical disk controller chips that infringe the Asserted Patents. Evidence of this importation and availability is described in the Goldman Decl. at ¶¶ 7-9 (Exhibit 12).

82. On information and belief, Respondent Mintek (and/or Shinco and Shinco International) distributes, imports into the United States, sells for importation into the United States, and/or sells after importation into the United States, optical disk controller chips that infringe the Asserted Patents. Evidence of this importation and availability is described in the Goldman Decl. at ¶¶ 10-14 (Exhibit 12).

83. On information and belief Mintek's (and/or Shinco's and Shinco International's) imported DVD players utilize a chipset that is marked with the name Supreming AV Labs. On information and belief, this Supreming AV Labs chipset is a private-labeled MediaTek chipset from MediaTek's digital consumer electronics family believed to be the MT1379 chipset. Evidence of this is described in the Goldman Decl. at ¶¶ 13-14 (Exhibit 12).

84. On information and belief, Respondent TEAC and/or TEAC America distributes, imports into the United States, sells for importation into the United States, and/or sells after importation into the United States, products containing optical disk controller chips that infringe the Asserted Patents. Evidence of this importation and availability is described in the Goldman Decl. at ¶¶ 15-17 (Exhibit 12).

85. On information and belief, Respondent Terapin and/or Terapin Technology distributes, imports into the United States, sells for importation into the United States, and/or

sells after importation into the United States, products containing optical disk controller chips that infringe the Asserted Patents. Evidence of this importation and availability is described in the Goldman Decl. at ¶¶ 18-20 (Exhibit 12).

86. The above evidences the illegal importation of products that contain optical disk controller chips that infringe the Asserted Patents. As noted, the above is merely exemplary of the illegal importation that is occurring to the detriment of Complainants' domestic industry in their own products and those of their licensees. Complainants reserve the right to supplement this activity as identified through further analysis and discovery and as may become necessary in order to adequately protect their interests in this action.

VIII

DOMESTIC INDUSTRY

87. Zoran has been an industry leader in developing back-end (decoder, encoder, and output) circuit functions, while Oak has been an industry leader in developing front-end (read channel, servo motor control, DSP processor) circuit functions.

88. The following table lists representative customers as well as other OEMs that purchase Zoran DVD products through resellers:

Direct Customers and Other OEMs	
Alco Electronics Ltd.	Sanyo
Alcom Electronics	Sanyo Electric
Amoisonic Electronics Ltd.	Sharp
Beautiful Enterprise Co. Ltd.	Shenzhen Bao Tong Electronic
Daewoo Electronics Co. Ltd.	Shenzhen HPT Electronics Co. Ltd.
Fly Ring Digital Technology	Shenzhen Paragon Ind.
FM COM Corp.	Sichuan Changhong Electronic Co.
Fujifilm	Sky Wise Holdings Ltd.
J&S Industrial Co.	Tomen Electronics Cop.
Jiangsu Hongtu High Technology	Toshiba
Marketa Semiconductor	Universal Pacific Co. Ltd.
Mustek International, Inc.	Up-Today Industrial Co. Ltd.
Newell Hong Kong	Zenitron Corporation
Orion	Zhongshan Kenloon Lighing Co.
Samsung Electronics	

89. Since 1996 Zoran has been developing its DVD multiprocessor line of products, referred to collectively as the “Vaddis” family. In the DVD player industry, Zoran manufactures three separate chips: the Vaddis 5; the Vaddis 5A; and the Vaddis 6.

90. The Vaddis 6 (Zoran part number ZR36768) is the newest member of the Vaddis product line of advanced DVD multimedia solutions. It delivers breakthrough technology in a unified shared memory architecture controlled by a single internal CPU. With the Vaddis 6, Zoran has delivered the DVD front-end and back-end functions on a single integrated circuit. Integrating both the DVD player front-end servo system with the back-end MPEG decoding system delivers higher quality performance for consumers and increased profitability for DVD player manufacturers. The Vaddis 6 Product Brief specification is attached hereto as Exhibit E to the Rhyne Decl.

91. The Vaddis 6, like all integrated CD/DVD controllers utilizing a shared memory and a parallel interface, is covered by the claims of the ‘736 Patent, though Oak had never accused Zoran of infringing the ‘736 Patent.¹¹ A claim chart detailing how the Vaddis 6 practices the claims of the ‘736 Patent is attached as Confidential Exhibit F to the Rhyne Decl. (Exhibit 13). Zoran’s present domestic activities relating to the support for the Vaddis 6 create a significant domestic industry in the ‘736 Patent. *See* Confidential Exhibit 18.

92. In addition to its substantial investment in acquiring Oak and its intellectual property (including the Asserted Patents), Zoran invested in excess of \$4.9 million in the United States in the research and development of its technology covered by the Asserted Patents between 2001 and 2004. Zoran is presently investing \$2.485 million in the United States in research and development efforts relating to technology that is covered by the Asserted Patents. Evidence of Zoran’s domestic industry as to the Asserted Patents is shown in the attached Confidential Exhibit 18.

¹¹ The Vaddis 6 was not released into the market until December 2002, only a few months before Oak and Zoran agreed to merge.

93. Specifically, Zoran is engaged in research and development efforts on a recordable DVD chipset solution known as the i60 that will practice the '736 Patent. Zoran is also engaged in research and development efforts on a product known as the SOL3, which also will practice the '736 Patent. Details of Zoran's investment in the domestic industry for the SOL3 and the i60 are detailed in Confidential Exhibit 18.

94. A domestic industry in the Asserted Patents (in particular, the '527 and '440 Patents) also is evidenced by the pre-merger technical achievements of Oak in the United States in the design and development of Oak products. Those products continue to be sold (and supported) by Zoran's licensee Sunplus through its wholly-owned United States subsidiary, Sunext Technology Co., Ltd. ("Sunext"). Such products are then incorporated into DVD and PC optical storage products that are sold in the United States.¹²

95. Oak pioneered the IDE/ATAPI CD-ROM controller chip (the technology covered by the '527 and '440 Patents) in 1993, and was recognized as one of the industry's largest merchant suppliers of CD-ROM controllers.

96. In 1997, Oak began to investigate expanding into additional optical storage market segments, conducting research and development targeting optical storage semiconductors for use in CD-Recordable (CD-R) and CD-Rewritable (CD-RW) drives. Oak also engaged in research and development that leveraged its CD-ROM and CD-R/RW development efforts, by pursuing the development of additional optical storage semiconductors, including MPEG-1 and MPEG-2 audio/video decoders for use in such emerging markets as DVD-ROM drives and DVD players.

97. Prior to the acquisition, Oak's Optical Storage Group was a leading provider of controllers to the optical storage market, and a pioneer in this field with the first IDE/ATAPI CD-ROM controller. Its product deployments were targeted on recordable CD drives (CD-RW), CD-RW drives with DVD read capability (commonly known as COMBI drives), and recordable

¹² Additionally, Zoran's existing MaestroLink chipset practices the '527 and '440 Patents. The product specification sheet for the MaestroLink is attached as Exhibit 20. Relevant financial investment activities in the United States for the MaestroLink are detailed in Confidential Exhibits 18 and 19.

DVD drives (DVD-RW). Oak had solutions for CD-RW and COMBI drives, and a three-chip solution for DVD Recordable.

98. The following table illustrates the optical storage products developed by Oak that are covered by the Asserted Patents.¹³

Product	Description
OTI-9796	Integrated controller with enhanced audio and SDRAM support and Exactlink buffer underrun protection
OTI-9797S	Similar to 9796 but with higher speeds
OTI-9897	“Combo” controller
OTI-9797T	Similar to 9797S but with higher speeds
OTI-9831/OTI-9832/OTI-9838	3 chip solution for recordable DVD

99. Respective claim charts that detail how Oak’s OTI-9510 chip is covered by the ‘527 and ‘440 Patents are attached as Exhibits G and H to the Samuels Decl. (Exhibit 14).

100. Oak also had invested significantly in activities related to its optical storage business. For example, for the three years spanning from 2000-2002, Oak spent approximately \$49.2 million, \$50.6 million, and \$53.2 million, respectively, on research and development activities. On information and belief, of this activity, nearly all of the activity occurred in the United States. Evidence of Oak’s domestic industry as to the ‘527 and ‘440 Patents is shown in the attached Confidential Exhibit 19. Additionally, a copy of Oak’s 2002 Annual Report is attached hereto as Exhibit 15.

101. In an effort to continue developing a successful market for its optical storage technology, on April 3, 2003, shortly before the merger discussions began with Zoran, Oak completed the sale of its Optical Storage Group and related assets to Sunplus for approximately \$30 million. A copy of the Asset Purchase Agreement is attached as Exhibit 16.

102. Under the terms of the agreement, Oak retains the right to use the technology covered by the asserted patents. Sunplus is licensed under the Oak patents and sells chips

¹³ On information and belief certain earlier Oak chipsets also are covered by the Asserted Patents.

embodying the patented Oak technology (such as the OTI-9510 chip) through its subsidiary Sunext. *See* Exhibit 16.

103. Additionally, in 2003 Oak entered into a licensing agreement with Samsung relating to the development of a new chip that was to practice the '527 and '440 Patents. Samsung agreed to pay Oak \$10 million dollars for a license to certain of Oak's patents in its portfolio, including the '527 and '440 Patents. Details of the investment by Oak in the United States relating to licensing its patent portfolio, including the '527 and '440 Patents are identified in Confidential Exhibit 19.

104. As discussed above, a domestic industry exists in the United States with respect to the articles covered by the Asserted Patents as a result of Zoran's and Oak's substantial investment in the exploitation of these patents.¹⁴ Pursuant to Commission Rule 210.12(a)(6)(i), details of financial investment relevant to the domestic industry of Zoran that is applicable to the '736, '527 and '440 Patents is contained in Confidential Exhibit 18 to the Complaint.

105. Additionally, pursuant to Commission Rule 210.12(a)(6)(i), details of the financial investment relevant to the domestic industry of Oak that is applicable to the '527 and '440 Patents is contained Confidential Exhibit 19 to this Complaint.

106. Lastly, Exhibit 20 to this Complaint is a specification sheet of the Oak OTI-9510 chipset which is a product of the domestic industry detailed in Confidential Exhibit 19. Exhibits G and H to the Samuels Decl. are respective claim charts that detail how the OTI-9510 is covered by the '527 Patent and '440 Patents.

IX

OTHER LITIGATION

107. There has been no foreign or domestic court or agency litigation involving either the '527, '440, or '736 Patents. The '715 Patent, the parent of the '527 Patent, was the subject of

¹⁴ Importantly, the Commission has previously found a domestic industry in the related parent patent to the '527 and '440 Patents (U.S. Patent No. 5,581,715 (the "'715 Patent'")) on which Oak had previously sued MediaTek. That domestic industry still exists today.

two previous ITC investigations, Inv. No. 337-TA-401 (Oak/UMC) and Inv. No. 337-TA-409 (Oak/MediaTek/UMC).

108. In the Oak/UMC litigation, Oak filed a complaint with the ITC alleging a violation of U.S. trade laws based on the Oak's belief that certain CD-ROM controllers were infringing the '715 Patent. A formal investigative proceeding was instituted by the ITC (Investigation No. 337-TA-401) on August 19, 1997 against the following respondents: Winbond Electronics Corporation (Winbond); Winbond Electronics North America Corporation; Wearnes Technology (Private) Ltd.; Wearnes Electronics Malaysia Sendirian Berhad; and Wearnes Peripheral International (Pte.) (the latter four companies were Winbond affiliates). The parties eventually settled this litigation.

109. Oak's ITC complaint in the Oak/UMC litigation also identified as proposed respondents: United Microelectronics Corporation (UMC); Lite-On Group; Lite-On Technology Corp.; Behavior Tech Computer Corp. and Behavior Tech Computer (USA) Corp. Prior to the ITC's institution of the formal investigation proceeding, Oak and UMC entered into a settlement agreement. Shortly thereafter the remaining respondents also entered into a settlement agreement.

110. On October 27, 1997, Oak filed a complaint in the United States District Court, Northern District of California against UMC for breach of contract, breach of the covenant of good faith and fair dealing and fraud based on UMC's breach of the settlement agreement arising out of the initial ITC action. On December 24, 1997, UMC answered Oak's complaint and counterclaimed asserting causes of action for rescission, restitution, fraudulent concealment, mistake, lack of mutuality, interference and declaratory judgment of non-infringement, invalidity and unenforceability of the '715 Patent that was the subject of the original ITC action filed against UMC.

111. On December 19, 1997, MediaTek, a UMC affiliated Taiwanese entity, filed a complaint in the United States District Court, Northern District of California, against Oak for declaratory judgment of non-infringement, invalidity and unenforceability of the '715 Patent that

was the subject of the original ITC action against UMC, and intentional interference with prospective economic advantage. On June 11, 1998 the Court consolidated the two district court actions into one case (“the District Court Action”).

112. On April 7, 1998, Oak filed a new complaint with the ITC alleging that five companies were violating U.S. trade laws by importing or selling CD-ROM drive controllers that infringed the ‘715 Patent. Oak’s second ITC complaint was asserted against United Microelectronics Corp., MediaTek, Inc., Lite-On Group, Lite-On Technology Corp. and AOpen, Inc. A formal investigative proceeding was instituted by the ITC (Investigation No. 337-TA-409) on May 8, 1998 naming as respondents United Microelectronics Corp. MediaTek, Inc., Lite-On Technology Corp. and AOpen, Inc.

113. On August 28, 1998, the Administrative Law Judge (ALJ) supervising the investigation entered an initial determination that the investigation be terminated as to respondent UMC. The litigation continued against MediaTek and the remaining respondents. The Commission ultimately found the ‘715 Patent valid and enforceable, but found the accused products did not infringe the asserted claims. That ruling was affirmed by the Federal Circuit (Appeal No. 00-1078).¹⁵

114. The District Court Action is still pending before the U.S. District Court for the Northern District of California (Case No. 97-20959 RMW). On October 10, 2001, the Court dismissed UMC’s and MediaTek’s respective patent declaratory relief claims, leaving only the state law claims in the case. The parties filed a number of summary judgment motions in December 2002. Those motions currently are pending hearings and rulings by the district court.

¹⁵ The finding of non-infringement was upheld on appeal. The respondents did not appeal the Commission’s finding that the patent was valid and enforceable.

X

PRAYER FOR RELIEF

115. WHEREFORE, by reason of the foregoing, Complainants request that the International Trade Commission:

A. institute an immediate investigation pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, with respect to violations of that section based upon the importation into the United States, the sale for importation, or the sale within the United States after importation by Respondents of certain chips and chipsets and products containing the same that infringe valid and enforceable United States Patent Nos. 6,466,736, 6,584,527, and 6,546,440;


B. schedule and conduct a hearing on said unlawful acts and, following said hearing;

C. issue a permanent exclusion order pursuant to Section 337(d) of the Tariff Act, as amended, 19 U.S.C. § 1337(d), excluding entry into and the sale within the United States of certain optical disk controller chips and chipsets and products containing the same, including DVD players and PC optical storage devices that infringe valid and enforceable United States Patent Nos. 6,466,736, 6,584,527, and 6,546,440;

D. issue permanent cease and desist orders pursuant to Section 337(f) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337(f), prohibiting Respondents from importing and selling after importation in the United States certain optical disk controller chips and chipsets and products containing the same, including DVD players and PC optical storage devices that infringe valid and enforceable United States Patent Nos. 6,466,736, 6,584,527, and 6,546,440;

E. issue such other further relief as the Commission deems just and proper based on the facts determined by the investigation and the authority of the Commission.

Respectfully submitted,



Dated: March 10, 2004

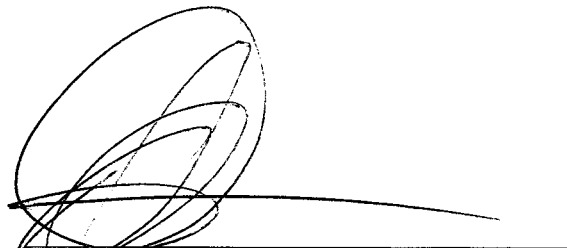
VERIFICATION TO COMPLAINT

I, Karl Schneider, 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 Vice President of Finance and Chief Financial Officer of Zoran Corporation and am duly authorized to sign this complaint on behalf of Complainants;
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;
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 March 10, 2004


Karl Schneider
Senior Vice President, Finance and Chief
Finance Officer