AO 120 (Rev. 2/99)

TO: Mail Stop 8 Director of the U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	**REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK**

In Compliance with 35 § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Northern District of California on the following X Patents or ☐ Trademarks:

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
CV 11-00827 LB	February 22, 2011	Northern District of California, 1301 Clay Street, RM 400S, Oakland, CA 94612

PLAINTIFF	DEFENDANT
SHERMAN & ASSOCIATES, INC., ET AL.	OXFORD INSTRUMENTS, PLC., ET AL.

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 6,652,924		SEE ATTACHED
2		
3		
4		
5		

In the above—entitled case, the following patent(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		SEE ATTACHED
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
Richard W. Wieking	Cynthia	

Copy 1—Upon initiation of action, mail this copy to Commissioner Copy 3—Upon termination of action, mail this copy to Commissioner
Copy 2—Upon filing document adding patent(s), mail this copy to Commissioner Copy 4—Case file copy

CLARK S. STONE (SBN 202123)
PATRICK LUNDELL (SBN 273506)
HAYNES AND BOONE, LLP
2033 Gateway Place, Suite 400
San Jose, California 95110
Phone: (408) 660-4120
Facsimile: (408) 660-4121
E-mail: clark.stone@haynesboone.com
patrick.lundell@haynesboone.com

Attorneys for Plaintiffs
SHERMAN & ASSOCIATES, INC. and
DR. ARTHUR SHERMAN, PH.D.

E-filing

ADR

ORIGINAL FILED

FEB 22 2011

Richard W. Wieking
Clerk, U.S. District Court
Northern District of California
San Jose

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SHERMAN & ASSOCIATES, INC., a Delaware Corporation, and DR. ARTHUR SHERMAN, PH.D., an individual, Plaintiffs, v. OXFORD INSTRUMENTS, PLC, a British Corporation, and OXFORD INSTRUMENTS AMERICA, INC., a Massachusetts Corporation, Defendants.	Case No. CV11- 0827 **COMPLAINT FOR PATENT INFRINGEMENT** **DEMAND FOR JURY TRIAL**

LB

Plaintiffs, by their attorneys, allege as follows:

THE PARTIES

1. Dr. Arthur Sherman, Ph.D., is an individual currently residing in Ivoryton, Connecticut.

2. Sherman & Associates, Inc., is a Delaware corporation with its principal place of business in Ivoryton, Connecticut. Dr. Arthur Sherman, Ph.D. and Sherman & Associates, Inc. are hereinafter collectively referred to as "SHERMAN."

3. On information and belief, Defendant Oxford Instruments, plc is a corporation organized and existing under the laws of Great Britain, with its principal place of business located at Tubney Woods, Abingdon, Oxfordshire OX13 5QX.

4. On information and belief, Oxford Instruments America, Inc., is a Massachusetts corporation qualified to do business in the State of California, with an office located at 7020 Koll Center Parkway, Suite 140, Pleasanton, California 94588.

5. On information and belief, Oxford Instruments America, Inc., is a wholly-owned subsidiary of Oxford Instruments, plc. Oxford Instruments, plc and Oxford Instruments America, Inc. are hereinafter referred to as "OXFORD."

6. On information and belief, OXFORD is presently, and has at all times relevant to this Complaint conducted business within this judicial district at least through offices located at 7020 Koll Center Parkway, Suite 140, Pleasanton, California 94588 and at 360 El Pueblo Road, Suite 104, Scotts Valley, California 95066.

JURISDICTION AND VENUE

7. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

8. This Court has personal jurisdiction over OXFORD because OXFORD has constitutionally sufficient contacts with California to make personal jurisdiction proper in this Court, including having regular and established places of business within this judicial district at least at 7020 Koll Center Parkway, Suite 140, Pleasanton, California 94588 and at 360 El Pueblo Road, Suite 104, Scotts Valley, California 95066.

9. On information and belief, OXFORD solicits business within this District and elsewhere in California, and derives substantial revenue from the sale of its products and/or services within this District and elsewhere in California.

10. On information and belief, OXFORD has purposefully directed activities to this judicial district, by actively participating in marketing events conducted within this judicial district and by selling products which infringe the patent asserted in this Complaint to customers located within this judicial district.

11. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391(b), 1391(c), 1391(d) and 1400(b) because OXFORD has committed acts of infringement within this District, maintains an

established place of business within this District, and has sufficient contacts with this district to subject it to personal jurisdiction, if this District were a separate State.

INTRA-DISTRICT ASSIGNMENT

12. Pursuant to Civil Local Rules 3-2(c) and 3-5(b), assignment of this intellectual property action is proper to any division within this District.

BACKGROUND

The Technology at Issue

13. The thin film manufacturing industry is highly competitive and driven by both technological and economic factors. This creates unique and lucrative opportunities for manufacturing equipment suppliers. Because of the ever-increasing complexity of thin film deposition technology and the drive to decrease manufacturing costs, equipment suppliers constantly seek to employ novel manufacturing techniques and new equipment to meet these challenges.

14. Deposition of thin films of conductive and/or insulating layers on the surfaces of components is a critical process in the manufacture of many important commercial products. One of the processes for the deposition of such thin films is known as chemical vapor deposition, or "CVD."

15. During the CVD process, an object or substrate is placed inside a reactor chamber, heated to a high temperature and then exposed to a mixture of reactive gases. The high temperature of the substrate then causes a surface reaction with the reactive gases which is intended to form a high-quality, uniform thin film on the surface.

16. CVD reactors represent one of the most complex and expensive components in any manufacturing operation involving thin film deposition. The effectiveness of a particular CVD process can be measured by its ability to uniformly deposit unique and high quality conductive and/or insulating layers upon a device or substrate. However, due to the use of mixtures of

reactive gases in the CVD process, reactions within these gases as they approach the hot substrate limit the quality and uniformity of the film in critical applications.

17. In particular, film conformity over non-uniform surfaces can be difficult to achieve for critical applications by CVD. Similarly, the high substrate temperatures required for CVD processes can be detrimental if the substrate is sensitive to temperature.

18. Commercially-viable CVD reactor operation, in recent years, has depended upon the advancement of techniques which permit reactor operation at reduced temperatures, and that produce uniform and conformal thin films of high quality materials over large substrate surfaces.

19. CVD processes are used to manufacture a wide variety of products that feature deposited thin films including integrated circuits, digital storage devices, light emitting diodes ("LEDs"), organic-light emitting diodes ("OLEDs"), inkjet printerheads, microelectromechanical systems ("MEMS"), optical coatings, solar cells, solid electrocyte fuel cells, piezoelectric sensors, and even jewelry.

ALD: A New and Novel Thin-Film Deposition Process

20. One of the new and novel techniques that address the needs of thin film deposition equipment manufacturers, for advanced applications, is atomic layer deposition, or "ALD."

21. With ALD technology, large areas of a substrate can be coated with a very uniform, very thin film. This is accomplished by exposing the surface to sequential and repeated pulses of two separate reactants, thereby achieving an atomically-thin, layer-by-layer, thin film deposition over three-dimensional structures without compromising thickness uniformity.

22. Furthermore, the less extreme temperatures employed by ALD technology make it suitable for coating substrates that are unusually temperature-sensitive, such as plastics.

Sherman's Pioneering Work in ALD Equipment and Processes

23. Since 1994, SHERMAN has been a pioneering leader in the development of ALD equipment and processes used in thin film deposition.

24. SHERMAN is a recognized expert in the area of thin film deposition technology, including research and development in the areas of manufacturing processes and equipment.

25. SHERMAN has over thirty years experience in various thin film deposition technologies, has published over fifty technical papers, three engineering textbooks, and has been awarded a dozen United States and foreign patents.

The Patent-in-Suit

26. On November 25, 2003, United States Letters Patent No. 6,652,924 (hereinafter "the Sherman '924 Patent") entitled "Sequential Chemical Vapor Deposition" was duly and legally issued in the name of the inventor, Arthur Sherman. A true and correct copy of the Sherman '924 Patent is attached to this Complaint as Exhibit A.

27. The Sherman '924 Patent covers various aspects of thin film deposition processing practiced by ALD equipment.

28. On March 22, 2006, SHERMAN assigned legal title to the Sherman '924 Patent to ASM America, Inc. and ASM International, N.V. (collectively, "ASM"), while retaining the exclusive right to sublicense the Sherman '924 Patent in all fields other than microelectronics applications.

COUNT I

Patent Infringement

29. SHERMAN incorporates the allegations of paragraphs 1–28 as though fully set forth herein.

30. The Sherman '924 Patent is in full force and effect and ASM continues to own it.

31. SHERMAN holds the exclusive right to sublicense the Sherman '924 Patent in all fields of use other than in the field of microelectronic applications.

32. OXFORD has infringed and is currently infringing the Sherman '924 Patent by making, having made, using, importing, selling and offering for sale, products which practice the invention claimed in the Sherman '924 Patent in fields of use other than in the field of microelectronics applications, including at least the FlexAL® ALD Tool.

33. Each of OXFORD's infringing activities is without the consent of, authority of, or license from SHERMAN.

34. OXFORD has been on notice of its infringement of the Sherman '924 Patent since at least as early as June 29, 2009.

35. OXFORD's infringement has been and continues to be willful, knowing, and deliberate.

36. As a direct and proximate result of OXFORD's infringement, SHERMAN has suffered damages in an amount that cannot yet be fully ascertained, which will be proven at trial.

37. Unless enjoined, OXFORD will continue to engage in the aforementioned acts to SHERMAN's further and continuing damage. Such continuing acts, unless enjoined, will cause irreparable damage in that SHERMAN will have no adequate remedy at law to compel OXFORD to cease such acts.

PRAYER FOR RELIEF

WHEREFORE, Sherman & Associates, Inc. and Dr. Arthur Sherman, Ph.D. pray for judgment on the complaint as follows:

a. Judgment in favor of Sherman & Associates, Inc. and Dr. Arthur Sherman, Ph.D. and against Oxford Instruments, plc, and Oxford Instruments America, Inc. for infringement of the Sherman '924 Patent;

b. Entry of a permanent injunction enjoining Oxford Instruments, plc and Oxford Instruments America, Inc., along with Defendants' officers, agents, servants, employees, and attorneys, and those persons in active concert or participation with Defendants who receive actual notice thereof, from directly or indirectly infringing, or inducing infringement of the Sherman '924 Patent;

c. An award of Sherman & Associates, Inc. and Dr. Arthur Sherman, Ph.D.'s damages for infringement of the Sherman '924 Patent by Oxford Instruments, plc and Oxford Instruments America, Inc. in an amount adequate to compensate, but in no event less than a reasonable royalty;

d. An award of Sherman & Associates, Inc. and Dr. Arthur Sherman, Ph.D's treble

damages for willful, knowing and deliberate infringement of the Sherman '924 Patent by Oxford Instruments, plc and Oxford Instruments America, Inc.;

e. Entry of judgment for Sherman & Associates, Inc. and Dr. Arthur Sherman, Ph.D's declaring that this is an exceptional case under 35 U.S.C. § 285 and awarding Sherman & Associates, Inc. and Dr. Arthur Sherman, Ph.D's costs, interest, and reasonable attorneys' fees incurred herein;

f. Such other and further relief as the Court may deem just and appropriate.

DATED: February 22, 2011

HAYNES AND BOONE, LLP

By _____

Clark S. Stone
Patrick Lundell
Attorneys for Plaintiffs
SHERMAN & ASSOCIATES, INC. and
DR. ARTHUR SHERMAN, PH.D.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiffs SHERMAN & ASSOCIATES, INC. and DR. ARTHUR SHERMAN, PH.D. demand a trial by jury on all issues so triable in this action.

DATED: February 22, 2011

HAYNES AND BOONE, LLP

By _____

Clark S. Stone
Patrick Lundell
Attorneys for Plaintiffs
SHERMAN & ASSOCIATES, INC. and
DR. ARTHUR SHERMAN, PH.D.