

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF FLORIDA
ORLANDO DIVISION

Crystal Photonics, Inc., a Florida corporation,

Plaintiff,

v.

Siemens Medical Solutions USA, Inc.,
a Delaware corporation,

Defendant.

CASE NO.:

6:11-cv-1118-ORL-31 DAB

FILED
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U.S. DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
ORLANDO, FLORIDA

COMPLAINT FOR PATENT INFRINGEMENT AND DEMAND FOR JURY TRIAL

Plaintiff, Crystal Photonics, Inc., a Florida corporation ("CPI" or "Plaintiff"), by and through its undersigned counsel, files this Complaint for Patent Infringement and Demand for Jury Trial against Defendant, Siemens Medical Solutions USA, Inc., a Delaware corporation ("Siemens Medical" or "Defendant"), hereby demands a jury trial, and alleges as follows:

THE PARTIES

1. Plaintiff Crystal Photonics is a Florida corporation with its principal place of business at 5525 Benchmark Lane, Sanford, Florida 32773.
2. Defendant Siemens Medical is a Delaware corporation with its principal place of business at 51 Valley Stream Parkway, Malvern, Pennsylvania 19355. Siemens Medical is registered to do business as a foreign corporation in Florida and is doing business in this judicial district, in Florida, and elsewhere throughout the United States. Siemens Medical's

JURISDICTION AND VENUE

3. This action arises under the Patent laws of the United States, 35 U.S.C. § 101 *et seq.*, including 35 U.S.C. § 271. This Court has original and exclusive subject matter jurisdiction over this case for patent infringement under 28 U.S.C. §§ 1331 and 1338(a).

4. This Court has personal jurisdiction over Defendant Siemens Medical at least because, on information and belief, Siemens Medical has regularly conducted business in Florida and because Siemens Medical has authorized an agent to receive service of process in Florida.

5. Venue is proper in this district under 28 U.S.C §§ 1391 and 1400 because Defendant Siemens Medical is subject to personal jurisdiction in this district as alleged in the previous paragraph.

FACTUAL BACKGROUND

6. CPI's founder and president, Bruce H.T. Chai, is the named inventor on 29 United States patents and several pending United States patent applications.

7. Beginning in 1999, Dr. Chai and his coworkers developed lutetium yttrium orthosilicate ("LYSO") crystals for scintillation and other purposes. LYSO offers several advantages over lutetium orthosilicate ("LSO") crystals, including enhanced light yield, lower growth temperatures, reduction of trace portions of radioactive lutetium without sacrificing net light yield, somewhat lower cost, and a favorably reduced index of refraction.

8. In 2004, Dr. Chai discovered that the light yield of both LSO and LYSO could be significantly enhanced by diffusing oxygen into as-grown crystals. In particular, the light yield of typical as-grown crystals of LSO and LYSO tends to vary from crystal to crystal –

and even within different portions of the same crystal. Because of such variations, as-grown LSO and LYSO crystals require costly and time-consuming manual evaluation to make sure that they perform consistently to one another in positron emission tomography (“PET”) scanners.

9. Siemens Medical provides medical imaging products, including PET scanners.

10. PET scanners include a bed and a ring of detectors around the opening of the scanner, with a detector being the combination of a scintillation crystal and a photomultiplier tube that detects a light pulse emitted by the scintillation crystal.

11. When someone undergoes a PET scan, s/he is first injected with a tracer that circulates into the bloodstream and throughout the body, the tracer having a special property that emits gamma rays in pairs.

12. The crystals detect the gamma rays and convert the energy into light. The light is then detected by a photodetector or a photomultiplier tube that converts the light signal into an electrical signal.

13. The electrical signals are accumulated by an image processor. The signals are processed and used to develop an image of the distribution of that tracer inside the patient.

14. Therefore, the scintillation crystals are the key component of how the PET scanner works as the PET scanners are very strongly dependent on the properties, i.e., the performance of, the crystals that are used in it.

15. Siemens Medical’s PET scanners utilize LSO crystals.

16. Based upon information and belief, the LSO crystals utilized in Siemens Medical's PET scanners demonstrate characteristics consistent with having been exposed to oxygen diffusing treatments claimed in U.S. Patent No. 7,151,261.

INFRINGEMENT OF U.S. PATENT NO. 7,151,261

17. CPI refers to and incorporates herein the allegations of Paragraphs 1 - 16 above.

18. U.S. Patent No. 7,151,261 (the "'261 Patent", Exhibit A), entitled "Method of Enhancing Performance of Cerium Doped Lutetium Orthosilicate Crystals and Crystals Produced Thereby", was issued on December 19, 2006.

19. The '261 patent is assigned to Plaintiff CPI, which continuously held title in the '261 Patent from its issuance to present.

20. As a result of this assignment, CPI alone has standing and authority to bring this Complaint against Siemens Medical for infringement of the '261 Patent, and possesses all rights of recovery under the '261 Patent.

21. The '261 Patent is directed to methods of enhancing performance of a monocrystalline cerium doped lutetium orthosilicate (LSO).

22. Siemens Medical has infringed and continues to infringe one or more claims of the '261 Patent either directly or through acts of contributory infringement or inducement in violation of 35 U.S.C. § 271, by making, using, offering to sell, and/or selling several types of electronics, including but not limited to PET scanners incorporating a LSO utilizing performance enhancing methods claimed in the '261 Patent.

23. CPI has been damaged by Siemens Medical's acts of patent infringement as set forth above.

24. Siemens Medical's activities have been without express or implied license from CPI.

25. CPI is entitled to recover from Defendant the damages sustained by CPI as a result of Defendant's wrongful acts in an amount subject to proof at trial.

26. Upon information and belief, Defendant's infringement of the '261 Patent has been willful and deliberate, entitling CPI to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

27. Defendant's infringement of CPI's exclusive rights under the '261 Patent will continue to damage CPI's business, causing irreparable harm for which there is no adequate remedy at law, such that this Court should enjoin Siemens Medical from any further infringement.

PRAYER FOR RELIEF

WHEREFORE, CPI prays for judgment as follows:

1. An adjudication that Siemens Medical has infringed and continues to infringe claims of the '261 Patent;

2. An award to CPI of damages adequate to compensate CPI for Siemens Medical's acts of infringement, such damages to be determined by a jury;

3. An award to CPI of prejudgment and post-judgment interest at the highest rate(s) allowed by law;

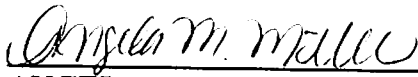
4. An award to CPI of enhanced damages, up to and including trebling of CPI's damages pursuant to 35 U.S.C. § 284, for Siemens Medical's willful infringement;
5. An award of CPI'S costs of suit and reasonable attorneys' fees pursuant to 35 U.S.C. § 285 due to the exceptional nature of this case, or as otherwise permitted by law;
6. A grant of permanent injunction pursuant to 35 U.S.C. § 283, enjoining Siemens Medical, its officers, agents, representatives, and employees, and those persons in active concert or participation with any of them, and their successors and assignees from further acts of infringement, including but not limited to selling or offering for sale components of the product patented by the '261 Patent; and
7. Any further relief as this Court may deem just and proper.

DEMAND FOR JURY TRIAL

CPI demands a trial by jury of all issues so triable.

Dated: July 7, 2011.

Respectfully submitted,



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