

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

CODON DEVICES, INC., DUKE )  
UNIVERSITY, and the MASSACHUSETTS )  
INSTITUTE OF TECHNOLOGY, )  
 ) C.A. No. \_\_\_\_\_  
Plaintiffs, )  
 )  
v. ) DEMAND FOR JURY TRIAL  
 )  
BLUE HERON BIOTECHNOLOGY, INC., )  
 )  
Defendant. )

**COMPLAINT**

Plaintiffs Codon Devices, Inc. (“Codon”), Duke University (“Duke”), and the Massachusetts Institute of Technology (“MIT”) allege as follows:

**NATURE OF THE ACTION**

1. This is an action arising under the patent laws of the United States (35 U.S.C. § 271 et seq.) based upon Defendant Blue Heron Biotechnology, Inc.’s infringement of four patents owned by Duke and one patent owned by MIT relating generally to the preparation and manufacture of nucleic acids and the assembly of genes from nucleic acids. Exclusive rights in and to each of these five patents have been granted to Codon. Duke, MIT, and Codon seek damages for Defendant’s infringement and a permanent injunction restraining Defendant from further infringement.

**PARTIES**

2. Plaintiff Codon Devices, Inc. is a Delaware corporation which maintains its principal place of business at One Kendall Square, Building 300, Cambridge, Massachusetts.

3. Plaintiff Duke University is an educational and research institution located in Durham, North Carolina.

4. Plaintiff Massachusetts Institute of Technology is an educational and research institution located in Cambridge, Massachusetts.

5. Upon information and belief, Defendant Blue Heron Biotechnologies, Inc. (“Blue Heron”) is a Delaware corporation which maintains its principal place of business at 22310 20th Avenue SE #100, Bothell, Washington.

### **JURISDICTION AND VENUE**

6. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338.

7. This Court has personal jurisdiction over Defendant because, among other reasons, Defendant resides in this district.

8. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b) and (c), and § 1400(b).

### **BACKGROUND**

9. Duke is the owner of U.S. Patent No. 5,459,039 (“the ‘039 Patent”), entitled “Methods for mapping genetic mutations.” The ‘039 patent was duly and legally issued to Paul L. Modrich, Shin-San Su, Karin G. Au, and Robert S. Lahue on October 17, 1995, and was assigned to Duke. A true and correct copy of the ‘039 Patent is attached to this Complaint as Exhibit A.

10. Duke is the owner of U.S. Patent No. 5,556,750 (“the ‘750 Patent”), entitled “Methods and kits for fractionating a population of DNA molecules based on the presence or absence of a base-pair mismatch utilizing mismatch repair systems.” The ‘750 patent was duly and legally issued to Paul L. Modrich, Shin-San Su, Karin G. Au, Robert S.

Lahue, Deani L. Cooper, and Leroy Worth, Jr. on September 17, 1996, and was assigned to Duke. A true and correct copy of the '750 Patent is attached to this Complaint as Exhibit B.

11. Duke is the owner of U.S. Patent No. 5,679,522 ("the '522 Patent"), entitled "Methods of analysis and manipulation of DNA utilizing mismatch repair systems." The '522 patent was duly and legally issued to Paul L. Modrich, Shin-San Su, Karin G. Au, Robert S. Lahue, Deani L. Cooper, and Leroy Worth, Jr. on October 21, 1997, and was assigned to Duke. A true and correct copy of the '522 Patent is attached to this Complaint as Exhibit C.

12. Duke is the owner of U.S. Patent No. 5,702,894 ("the '894 Patent"), entitled "Methods of analysis and manipulating of DNA utilizing mismatch repair systems." The '894 patent was duly and legally issued to Paul L. Modrich, Shin-San Su, Karin G. Au, Robert S. Lahue, Deani L. Cooper, and Leroy Worth, Jr. on December 30, 1997, and was assigned to Duke. A true and correct copy of the '894 Patent is attached to this Complaint as Exhibit D.

13. MIT is the owner of U.S. Patent No. 5,750,335 ("the '335 Patent"), entitled "Screening for genetic variation." The '335 patent was duly and legally issued to David K. Gifford on May 12, 1998, and was assigned to MIT. A true and correct copy of the '335 Patent is attached to this Complaint as Exhibit E.

14. Upon information and belief, Defendant manufactures and uses a gene synthesis platform called GeneMaker and provides related services. Defendant's GeneMaker platform, and the methods it performs, are used to synthesize oligonucleotides, hybridize oligonucleotides into duplexes, and assemble genes from the duplexes. Defendant's GeneMaker platform, and the methods it performs, do so using purification techniques, assembly techniques, and other techniques designed to purify, separate and/or detect mismatched nucleic acid duplexes and non-mismatched duplexes for use in the preparation and manufacture of nucleic acids.

15. Exclusive rights in and to the '039, '750, '522, and '894 patents have been licensed to Codon by Duke. Codon is the worldwide exclusive licensee of these patents in a field involving purification, separation and/or detection of mismatched nucleic acid duplexes and non mismatched duplexes for use in the preparation and manufacture of nucleic acids. Pursuant to the license agreement between Codon and Duke, Codon has the right to enforce the '039, '750, '522, and '894 patents within this field. Defendant's GeneMaker platform, the methods it performs, and/or the products of those methods, infringe Codon's exclusive rights in and to the '039, '750, '522, and '894 patents.

16. Exclusive rights in and to the '335 patent have been licensed to Codon by MIT. Codon is the worldwide exclusive licensee of this patent in all fields. Pursuant to the license agreement between Codon and MIT, Codon has the right to enforce the '335 patent. Defendant's GeneMaker platform, the methods it performs, and/or the products of those methods, infringe Codon's exclusive rights in and to the '335 patent.

**FIRST CLAIM**  
***(Patent Infringement Of The '039 Patent)***

17. On information and belief, Defendant has been and is infringing one or more claims of the '039 Patent, directly and/or indirectly, pursuant to 35 U.S.C. § 271, in connection with its GeneMaker platform.

18. On information and belief, Defendant's infringement of the '039 Patent has been and is willful, and will continue unless enjoined by this Court. Duke and Codon have suffered, and will continue to suffer, irreparable injury as a result of this willful infringement. Pursuant to 35 U.S.C. § 284, Duke and Codon are entitled to damages for infringement and treble damages. Pursuant to 35 U.S.C. § 283, Duke and Codon are entitled to a permanent injunction against further infringement.

19. This case is exceptional and, therefore, Duke and Codon are entitled to attorneys' fees pursuant to 35 U.S.C. § 285.

**SECOND CLAIM**  
***(Patent Infringement Of The '750 Patent)***

20. On information and belief, Defendant has been and is infringing one or more claims of the '750 Patent, directly and/or indirectly, pursuant to 35 U.S.C. § 271, in connection with its GeneMaker platform.

21. On information and belief, Defendant's infringement of the '750 Patent has been and is willful, and will continue unless enjoined by this Court. Duke and Codon have suffered, and will continue to suffer, irreparable injury as a result of this willful infringement. Pursuant to 35 U.S.C. § 284, Duke and Codon are entitled to damages for infringement and treble damages. Pursuant to 35 U.S.C. § 283, Duke and Codon are entitled to a permanent injunction against further infringement.

22. This case is exceptional and, therefore, Duke and Codon are entitled to attorneys' fees pursuant to 35 U.S.C. § 285.

**THIRD CLAIM**  
***(Patent Infringement Of The '522 Patent)***

23. On information and belief, Defendant has been and is infringing one or more claims of the '522 Patent, directly and/or indirectly, pursuant to 35 U.S.C. § 271, in connection with its GeneMaker platform.

24. On information and belief, Defendant's infringement of the '522 Patent has been and is willful, and will continue unless enjoined by this Court. Duke and Codon have suffered, and will continue to suffer, irreparable injury as a result of this willful infringement. Pursuant to 35 U.S.C. § 284, Duke and Codon are entitled to damages for infringement and

treble damages. Pursuant to 35 U.S.C. § 283, Duke and Codon are entitled to a permanent injunction against further infringement.

25. This case is exceptional and, therefore, Duke and Codon are entitled to attorneys' fees pursuant to 35 U.S.C. § 285.

**FOURTH CLAIM**  
***(Patent Infringement Of The '894 Patent)***

26. On information and belief, Defendant has been and is infringing one or more claims of the '894 Patent, directly and/or indirectly, pursuant to 35 U.S.C. § 271, in connection with its GeneMaker platform.

27. On information and belief, Defendant's infringement of the '894 Patent has been and is willful, and will continue unless enjoined by this Court. Duke and Codon have suffered, and will continue to suffer, irreparable injury as a result of this willful infringement. Pursuant to 35 U.S.C. § 284, Duke and Codon are entitled to damages for infringement and treble damages. Pursuant to 35 U.S.C. § 283, Duke and Codon are entitled to a permanent injunction against further infringement.

28. This case is exceptional and, therefore, Duke and Codon are entitled to attorneys' fees pursuant to 35 U.S.C. § 285.

**FIFTH CLAIM**  
***(Patent Infringement Of The '335 Patent)***

29. On information and belief, Defendant has been and is infringing one or more claims of the '335 Patent, directly and/or indirectly, pursuant to 35 U.S.C. § 271, in connection with its GeneMaker platform.

30. On information and belief, Defendant's infringement of the '335 Patent has been and is willful, and will continue unless enjoined by this Court. MIT and Codon have

suffered, and will continue to suffer, irreparable injury as a result of this willful infringement. Pursuant to 35 U.S.C. § 284, MIT and Codon are entitled to damages for infringement and treble damages. Pursuant to 35 U.S.C. § 283, MIT and Codon are entitled to a permanent injunction against further infringement.

31. This case is exceptional and, therefore, MIT and Codon are entitled to attorneys' fees pursuant to 35 U.S.C. § 285.

WHEREFORE, Duke, MIT, and Codon pray for relief as follows:

**PRAYER FOR RELIEF**

A. That Defendant be adjudged to have infringed the '039 Patent, '750 Patent, '522 Patent, '894 Patent and '335 Patent;

B. That Defendant, and its officers, agents, servants, employees, attorneys, and those persons in active concert or participation with any of them, be preliminarily and permanently restrained and enjoined from directly or indirectly infringing the '039 Patent, '750 Patent, '522 Patent, '894 Patent and '335 Patent;

C. An accounting for damages by virtue of Defendant's infringement of the '039 Patent, '750 Patent, '522 Patent, '894 Patent and '335 Patent;

D. An award of damages to compensate Duke and Codon for Defendant's infringement of the '039 Patent, '750 Patent, '522 Patent, and '894 Patent, pursuant to 35 U.S.C. § 284, said damages to be trebled because of Defendant's willful infringement;

E. An award of damages to compensate MIT and Codon for Defendant's infringement of the '335 Patent, pursuant to 35 U.S.C. § 284, said damages to be trebled because of Defendant's willful infringement;

F. An assessment of pre-judgment and post-judgment interest and costs against Defendant, together with an award of such interest and costs, in accordance with 35 U.S.C. § 284;

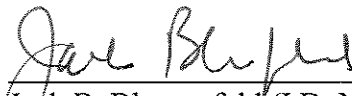
G. That Defendant be directed to pay Duke, MIT, and Codon's attorneys' fees incurred in connection with this lawsuit pursuant to 35 U.S.C. § 285; and

H. That Duke, MIT, and Codon have such other and further relief as this Court may deem just and proper.

**JURY DEMAND**

Duke, MIT, and Codon demand a trial by jury, pursuant to Fed. R. Civ. P. 38(b), on all disputed issues.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

  
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