IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

ILLUMINA, INC. and SOLEXA, INC.,)
Plaintiffs,	
v.	Civil Action No.
COMPLETE GENOMICS, INC.,))) JURY TRIAL DEMANDED
Defendant.) JUNI I MAL DEMANDED

COMPLAINT

Plaintiffs Illumina, Inc. ("Illumina") and Solexa, Inc. ("Solexa") (collectively "Plaintiffs"), by their undersigned attorneys, for their Complaint against Defendant, Complete Genomics, Inc. ("Complete Genomics"), allege:

NATURE OF THE ACTION

- 1. This is an action for patent infringement under the patent laws of the United States, Title 35 U.S.C. § 100 et seq., including 35 U.S.C. § 271(a), arising from Complete Genomics's infringement of U.S. Patent No. 6,306,597, U.S. Patent No. 7,232,656, and U.S. Patent No. 7,598,035, each of which is owned by Plaintiffs.
- 2. Plaintiffs seek damages for Complete Genomics's infringement of these patents and a permanent injunction restraining Complete Genomics from further infringement.

THE PARTIES

- Illumina is a Delaware corporation with its principal place of business at 9885
 Towne Centre Drive, San Diego, California, 92121.
- 4. Until February 8, 2010, Solexa was a Delaware corporation with its principal place of business at 25861 Industrial Boulevard, Hayward, California. On February 8, 2010, Solexa was merged into Illumina.

- 5. Upon information and belief, Complete Genomics is a Delaware corporation with a principal place of business at 2071 Stierlin Court, Mountain View, California, 94043.
- 6. Upon information and belief, Complete Genomics has been and is in the business of offering genome-sequencing services to customers throughout the United States.

JURISDICTION AND VENUE

- 7. This Court has subject-matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- 8. This Court has personal jurisdiction over Complete Genomics due to Complete Genomics being incorporated in Delaware and thereby having availed itself of the rights, protections, and benefits of Delaware law.
 - 9. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400(b).

COUNT I

(INFRINGEMENT BY COMPLETE GENOMICS OF U.S. PATENT NO. 6,306,597)

- 10. Plaintiffs reallege and incorporate by reference the allegations of paragraphs 1-9 of this Complaint.
- 11. United States Patent No. 6,306,597, entitled "DNA Sequencing by Parallel Oligonucleotide Extensions" (hereinafter, "the '597 patent") (a copy of which is attached hereto as Exhibit A), was duly and legally issued on October 23, 2001, and is not currently set to expire any earlier than April, 2015.
- 12. On March 2, 2010, the United States Patent and Trademark Office issued an Ex Parte Reexamination Certificate in regard to U.S. Patent No. 6,306,597, which added new claims 9-20. A copy of the re-examination certificate for the '597 patent is attached hereto as Exhibit B.
- 13. The '597 patent contains claims (including the claims issued as a result of the reexamination) encompassing methods in which, among other things, an initializing ("anchor")

oligonucleotide is hybridized to a target polynucleotide, a labeled oligonucleotide probe is ligated to the initializing oligonucleotide to form an extended duplex, and one or more nucleotides of the polynucleotide are identified based on the label associated with the probe.

- 14. Plaintiffs own all right, title, and interest in the '597 patent.
- 15. On information and belief, Complete Genomics has been and is making, using, selling, and/or offering for sale products, services, methods and/or systems, under the moniker "Complete Genomics Analysis Platform" or "CGA Platform."
- 16. On information and belief, as part of the "Complete Genomics Analysis Platform" services offered and sold to customers throughout the United States, Complete Genomics has been practicing and continues to practice a method, which it refers to as "Combinatorial Probe-Anchor Ligation" (or "cPAL") "read technology," in which, among other things, an initializing ("anchor") oligonucleotide is hybridized to a target polynucleotide, a labeled oligonucleotide probe is ligated to the initializing oligonucleotide to form an extended duplex, and one or more nucleotides of the polynucleotide are identified based on the label associated with the probe.
- 17. Complete Genomics's practice of the "Complete Genomics Analysis Platform," and in particular its practice of the "cPAL read technology" method, directly, indirectly, and/or contributorily infringes, literally or by equivalence, one or more claims of the '597 patent under 35 U.S.C. § 271.
- 18. Plaintiffs have suffered and continue to suffer damages as a result of Complete Genomics's infringement of one or more claims of the '597 patent.
- 19. Complete Genomics will continue to infringe one or more claims of the '597 patent unless and until enjoined by this Court.

- 20. Plaintiffs will suffer irreparable harm due to Complete Genomics's continuing infringement of one or more claims of the '597 patent.
- 21. Plaintiffs have no adequate remedy at law for Complete Genomics's past and continuing infringement of one or more claims of the '597 patent, and are entitled to a preliminary and permanent injunction against further infringement.

COUNT II

(INFRINGEMENT BY COMPLETE GENOMICS OF U.S. PATENT NO. 7,232,656)

- 22. Plaintiffs reallege and incorporate by reference the allegations of paragraphs 1-21 of this Complaint.
- Use in Sequencing" (hereinafter, "the '656 patent") (a copy of which is attached hereto as Exhibit C), was duly and legally issued on June 19, 2007, and is not currently set to expire any earlier than July, 2019.
 - 24. Plaintiffs own all right, title, and interest in the '656 Patent.
- 25. The '656 Patent contains claims directed to, for example (Claim 1), "A method for analysing genome wide variation in an individual comprising: i) randomly fragmenting a genome of said individual; ii) generating sequence reads of multiple bases on all fragments of said genome; iii) aligning the sequence reads with a known genomic reference sequence; and iv) analysing variations between the sequence reads derived from the genome of the individual and the known genomic reference sequence."
- 26. Complete Genomics's practice of the "Complete Genomics Analysis Platform" directly, indirectly, and/or contributorily infringes, literally or by equivalence, one or more claims of the '656 patent under 35 U.S.C. § 271.

- 27. Plaintiffs have suffered and continue to suffer damages as a result of Complete Genomics's infringement of one or more claims of the '656 patent.
- 28. Complete Genomics will continue to infringe one or more claims of the '656 patent unless and until enjoined by this Court.
- 29. Plaintiffs will suffer irreparable harm due to Complete Genomics's continuing infringement of one or more claims of the '656 patent.
- 30. Plaintiffs have no adequate remedy at law for Complete Genomics's past and continuing infringement of one or more claims of the '656 patent, and are entitled to a preliminary and permanent injunction against further infringement.

COUNT III

(INFRINGEMENT BY COMPLETE GENOMICS OF U.S. PATENT NO. 7,598,035)

- 31. Plaintiffs reallege and incorporate by reference the allegations of paragraphs 1-30 of this Complaint.
- 32. United States Patent No. 7,598,035, entitled "Method and Compositions for Ordering Restriction Fragments" (hereinafter, "the '035 patent") (a copy of which is attached hereto as Exhibit D), was duly and legally issued on October 6, 2009, and is not currently set to expire any earlier than February, 2018.
 - 33. Plaintiffs own all right, title, and interest in the '035 Patent.
- 34. The '035 Patent contains claims directed to, for example (Claim 3), "A method of forming linearized vectors having pairs of segments from a population of polynucleotide fragments, the method comprising the steps of: i) inserting each of said polynucleotide fragments from said population into a vector having two type IIs restriction endonuclease recognition sites and forming vectors containing said polynucleotide fragments such that each of the vectors containing said polynucleotide fragments comprises a fragment from said population of

polynucleotide fragments, one of said type IIs restriction endonuclease recognition sites in each of the vectors containing said polynucleotide fragments is adjacent to one end of the fragment and another of said type IIs endonuclease recognition sites in each of the vectors containing said polynucleotide fragments is adjacent to another end of the fragment, and one or more type IIs restriction endonucleases recognizing said type IIs restriction endonuclease recognition sites have two cleavage sites within the interior of the fragment; and ii) treating each of the vectors containing said polynucleotide fragments with said one or more type IIs restriction endonucleases recognizing the type IIs restriction endonuclease recognition sites and producing linearized vectors having pairs of segments wherein each of said linearized vectors having pairs of segments has a pair of segments of the fragment, one of said pair of segments is located at one end of each of the linearized vectors, and another of said pair of segments is located at another end of each of the linearized vectors."

- 35. Complete Genomics's practice of the "Complete Genomics Analysis Platform," and in particular its practice of the "cPAL read technology" method, directly, indirectly, and/or contributorily infringes, literally or by equivalence, one or more claims of the '035 patent under 35 U.S.C. § 271.
- 36. Plaintiffs have suffered and continue to suffer damages as a result of Complete Genomics's infringement of one or more claims of the '035 patent.
- 37. Complete Genomics will continue to infringe one or more claims of the '035 patent unless and until enjoined by this Court.
- 38. Plaintiffs will suffer irreparable harm due to Complete Genomics's continuing infringement of one or more claims of the '035 patent.

- 39. Plaintiffs have no adequate remedy at law for Complete Genomics's past and continuing infringement of one or more claims of the '035 patent, and are entitled to a preliminary and permanent injunction against further infringement.
- 40. This is an exceptional case, and Plaintiffs are entitled to an award of attorneys' fees, under 35 U.S.C. § 285.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray that this Court grant the following relief:

- A. Declaring that the '597 patent, the '656 patent, and the '035 patent are each valid and enforceable:
- B. Preliminarily and permanently enjoining Complete Genomics, its subsidiaries, agents, officers, employees, directors, licensees, servants, successors, assigns and all others acting in privity or in concert with them, from infringing the '597 patent, the '656 patent, and the '035 patent in any manner, including by inducing or contributing to the infringement of others;
- C. Ordering Complete Genomics to deliver to Plaintiffs, for destruction at Plaintiffs' option, all products, systems, and materials relating to services and/or methods that infringe the '597 patent, the '656 patent, and/or the '035 patent in any manner;
- D. Awarding Plaintiffs damages adequate to compensate them for the foregoing infringement, along with an award of pre-judgment and post-judgment interest and costs, in accordance with 35 U.S.C. § 284;
- E. Finding that this is an exceptional case under 35 U.S.C. § 285 and ordering Complete Genomics to reimburse Plaintiffs for their attorney fees and costs incurred in connection with this action; and
- F. Granting Plaintiffs such other and further relief as this Court deems just and reasonable under the circumstances.

JURY DEMAND

Pursuant to Fed. R. Civ. P. 38(b), Plaintiffs request a trial by jury on all issues so triable.

ASHBY & GEDDES

/s/ Steven J. Balick

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