

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

C.A. No. 19-1681-CFC

**The Trustees of Columbia University in the City  
of New York and QIAGEN Sciences, LLC**

*v.*

**Illumina, Inc.**

**Plaintiffs' Claim Construction Presentation**

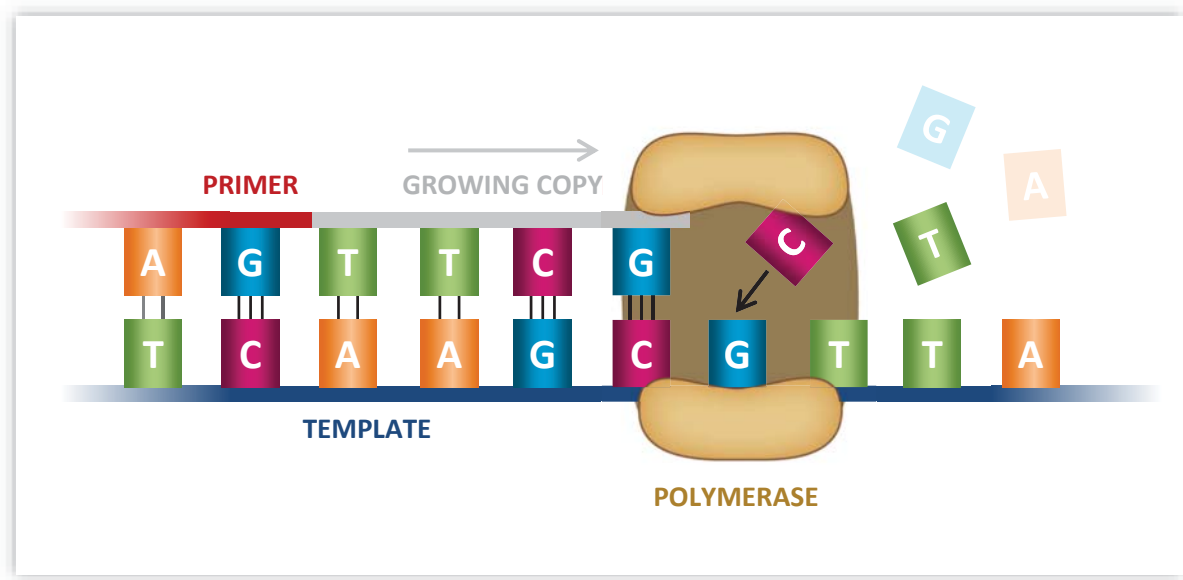
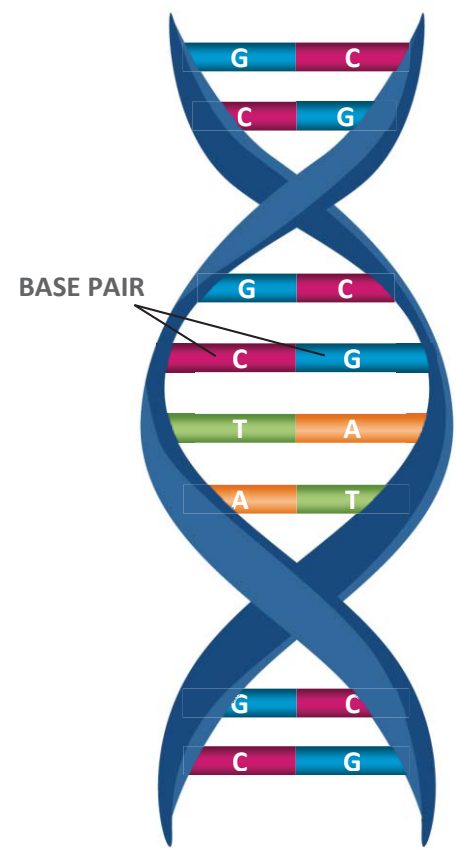
September 2, 2020

Composition Patents-in-Suit	Nucleotide base	Amended Complaint	Cite
U.S. Patent No. 10,407,458 ("458 Patent")	G	Count I	JA0001-21 (excerpts) D.I. 36-1
U.S. Patent No. 10,407,459 ("459 Patent")	A	Count II	D.I. 36-2
U.S. Patent No. 10,435,742 ("742 Patent")	T	Count IV	D.I. 36-3
U.S. Patent No. 10,457,984 ("984 Patent")	C	Count V	D.I. 36-4

Method Patent-in-Suit		Amended Complaint	Cite
U.S. Patent No. 10,428,380 ("380 Patent")		Count III	JA0022-27 (excerpts) D.I. 36-5

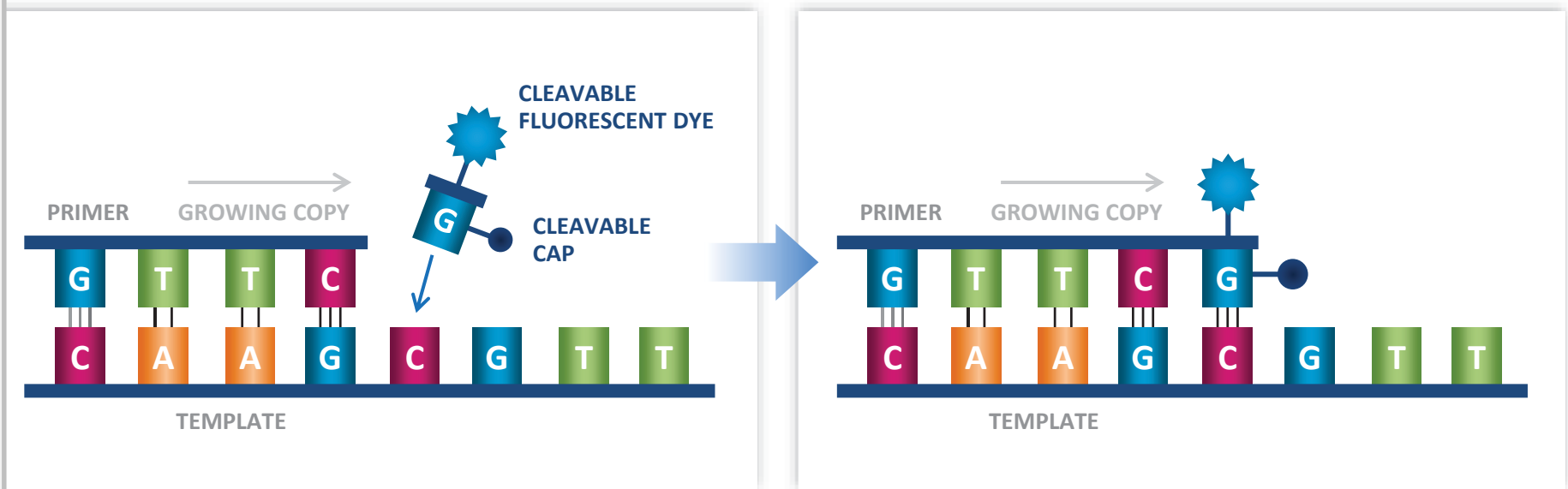
# Technology Background

# Double Stranded DNA, Made From Nucleotides



Source: Left image (demonstrative based on public information); right image (enhanced figure from Joint Claim Construction Br., p. 15).

## Modified Nucleotides and Sequencing-by-Synthesis (“SBS”)



Source: Demonstrative based on description of SBS in Joint Claim Construction Br., pp. 10-11, 16.

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