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ILLUMINA, INC.							
BEFORE THE PATENT TRIAL AND APPEAL BOA	RD						
UNITED STATES PATENT AND TRADEMARK OFF	FICE						

Petitioner,

v.

TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

Patent Owner.	

IPR2020-01177 Patent 10,435,742

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 10,435,742



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2.	Limitation R(a): "wherein R(a) represents a small, chemically cleavable, chemical group capping the oxygen at the 3' position of the deoxyribose of the deoxyribonucleotide analogue"
3.	Limitation R(b): "wherein R (b) does not interfere with recognition of the analogue as a substrate by a DNA polymerase"
4.	The Stability Limitations: "wherein R (c) is stable during a DNA polymerase reaction" and "wherein the covalent bond between the 3'-oxygen and R is stable during a DNA polymerase reaction"
5.	The Provisos: "wherein R (d) does not contain a ketone group, and (e) is not a –CH ₂ CH=CH ₂ group" and "wherein OR is not a methoxy group or an ester group"
6.	The Tag Limitation: "wherein tag represents a detectable fluorescent moiety"
7.	Limitation Y: "chemically cleavable, chemical linker"
8.	Limitations Y(a) and (b): "wherein Y (a) does not interfere with recognition of the analogue as a substrate by a DNA polymerase" and "wherein Y (b) is stable during a DNA polymerase reaction"
9.	Limitation i): "wherein the thymine deoxyribonucleotide analogue: i) is recognized as a substrate by a DNA polymerase"



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