

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TWINSTRAND BIOSCIENCES, INC.
Petitioner,

v.

GUARDANT HEALTH
Patent Owner.

Inter Partes Review Case No. IPR2022-01116

U.S. Patent No. 10,889,858

DECLARATION OF PAUL T. SPELLMAN, Ph.D.

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7. (d) determining, based at least on sequence information from the molecular barcodes, individual double-stranded cfDNA molecules from among the tagged parent polynucleotides for which either (1) both a Watson strand and a Crick strand of the individual double-stranded cfDNA molecule are detected or (2) only one of a Watson strand or a Crick strand of the individual double-stranded cfDNA molecule is detected from a plurality of sequencing reads from the set of sequencing reads. 94

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