

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

QIAGEN SCIENCES, LLC,
Petitioner, v.

TECAN GENOMICS, INC.,
Patent Owner.

IPR2025-00028

IPR2025-00029

U.S. Patents 10,036,012 and 10,876,108

**PETITIONER'S OBJECTIONS TO
ADMISSIBILITY OF EVIDENCE SUBMITTED BY PATENT OWNER**

Pursuant to 37 C.F.R. § 42.64(b) and the Federal Rules of Evidence (“FRE”), Petitioner QIAGEN Sciences, LLC (“QIAGEN”), hereby objects as follows to the admissibility of evidence filed by Patent Owner Tecan Genomics, Inc. in conjunction with the Patent Owner Responses, filed on August 20, 2025.

Exhibit	Objections
<p>Ex.2001 - <i>Affymetrix® Genome-Wide Human SNP Array 6.0</i>, Affymetrix, Inc. (2007).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner’s response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2002 - <i>Introduction to Affymetrix Microarrays</i>, GENSTAT, https://genstat.kb.vsnl.co.uk/knowledge-base/affymetrix-introduction/ (last visited February 19, 2025)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner’s response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37</p>

	<p>C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2003 - <i>Microarray Affymetrix Chips</i>, GENSTAT, https://genstat.kb.vsni.co.uk/knowledge-base/affymetrix-chips/ (last visited February 19, 2025).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>

	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2004 - Dennise D. Dalma-Weiszhausz et al., <i>The Affymetrix GeneChip® Platform: An Overview</i>, 410 METHODS IN ENZYMOLOGY 3 (2006).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, Exhibit 2004 constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2005 - Mark F. Evans, <i>The Polymerase Chain Reaction and Pathology Practice</i>, 15 DIAGNOSTIC HISTOPATHOLOGY 344 (2009).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, Exhibit 2005 constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2006 - <i>The Cost of Sequencing a Human Genome</i>, NATIONAL HUMAN GENOME RESEARCH INSTITUTE, https://www.genome.gov/about-genomics/fact-sheets/Sequencing-Human-</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and</p>

<p>Genome-cost (last visited February 19, 2025).</p>	<p>incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 106: The exhibit is incomplete and ought to be considered, in fairness, at the same time as the remainder of the source from which it originates.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, Exhibit 2006 constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2007 - Sara Goodwin et al., <i>Coming of Age: Ten Years of Next-Generation</i></p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground</p>

<p><i>Sequencing Technologies</i>, 17 NAT. REV. 333 (2016).</p>	<p>upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2008 - Elaine R. Mardis, <i>DNA Sequencing Technologies: 2006-2016</i>, 12 NAT. PROTOC., 213 (2017).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and</p>

	<p>incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, Exhibit 2008 constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2009 - <i>Bringing Cost and Process Efficiency to Next Generation Sequencing</i>, DRUG DISCOVERY WORLD, https://www.ddw-online.com/bringing-cost-and-process-efficiency-to-next-generation-sequencing-731-200908/ (last visited February 19, 2025)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>

	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p>
<p>Ex.2010 - Coren A. Milbery et al., <i>PCR-Based Methods for the Enrichment of Minority Alleles and Mutations</i>, 55 CLIN. CHEM. 632 (2009).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>

	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2011 - Lira Mamanova et al., <i>Target-Enrichment Strategies for Next-Generation Sequencing</i>, 7 NAT. METHODS 111 (2010).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, Exhibit 2011 constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 401 and 402: The exhibit is not cited in petitioner's preliminary response or any other paper and therefore is not relevant. Exhibits and</p>

	arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i> , 70 F.4th 1365, 1371 (Fed. Cir. 2023).
Ex.2012 - Todd J. Treangen et al., <i>Repetitive DNA and Next-Generation Sequencing: Computational Challenges and Solutions</i> , 13 NAT. REV. 36 (2012).	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 106: The exhibit is incomplete and ought to be considered, in fairness, at the same time as the published correction, dated January 17, 2012.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, Exhibit 2012 constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>

	<p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 401 and 402: The exhibit is not cited in petitioner's preliminary response or any other paper and therefore is not relevant. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>
<p>Ex.2013 - Shadi Shokralla et al., <i>Next-Generation Sequencing Technologies for Environmental DNA Research</i>, 21 Mol. ECOL. 1794 (2012).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>

	<p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2014 - QIAGEN® Multiplex PCR Handbook, QIAGEN (2010).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2015 - Sangjo Han et al., <i>AtRTPrimer: Database for Arabidopsis Genome-Wide Homogeneous and Specific RT-PCR Primer-Pairs</i>, 7 BMC BIOINFORMATICS 179 (2006).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2016 - Mikhail V. Matz et al., <i>Amplification of cDNA Ends Based on Template-Switching Effect and Step-out PCR</i>, 27 NUCLEIC ACIDS RES. 1558 (1999).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus</i></p>

	<p><i>Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2017 - D. Bru et al., <i>Quantification of the Detrimental Effect of a Single Primer-Template Mismatch by Real-Time PCR Using the 16S rRNA Gene as an Example</i>, 74 APPL. ENVIRON. MICROBIOL. 1660 (2008).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2018 - Stephen A. Bustin et al., <i>Quantitative Real-time RT-PCR – A Perspective</i>, 34 J. MOL. ENDOCRINOL. 597 (2005).</p>	<p>FRE 401 and 402: The exhibit is not cited in petitioner's preliminary response or any other paper and therefore is not relevant. Exhibits and</p>

	<p>arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2019 - Eric J. Duncavage et al., <i>Hybrid Capture and Next-Generation Sequencing Identify Viral Integration Sites from Formalin-Fixed, Paraffin-Embedded Tissue</i>, 13 J. MOL. DIAGNOSTICS. 325 (2011).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the</p>

	exhibit is what Patent Owner claims it is.
Ex.2020 - Jannine Brownie et al., <i>The Elimination of Primer-Dimer Accumulation in PCR</i> , 25 J. NUCLEIC ACIDS RES. 3235 (1997).	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2021 - Florian Mertes et al., <i>Targeted Enrichment of Genomic DNA Regions for Next-Generation Sequencing</i> , 10 BRIEF. FUNCT. GENOM. 374 (2011).	<p>FRE 401 and 402: The exhibit is not cited in petitioner's preliminary response or any other paper and therefore is not relevant. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2022 - Zhiyong Shen et al., MPrimer: <i>A Program for Reliable Multiplex PCR Primer Design</i>, 11 BMC BIOINFORMATICS FUNCT. GENOM. 143 (2010).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 401 and 402: The exhibit is not cited in petitioner's preliminary response or any other paper and therefore is not relevant. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p>

	<p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2023 - Ulla Deutsch et al., <i>Streamlining Multiplex PCR Analysis</i>, GENETIC ENGINEERING & BIOTECHNOLOGY, Dec. 1, 2011, https://www.genengnews.com/insights/streamlining-multiplex-pcr-analysis/.</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2024 - Ryan Tewhey et al., <i>Microdroplet-based PCR Enrichment for Large-Scale Targeted Sequencing</i>, 27 NAT. BIOTECHOL. 1025 (2009).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>

	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, Exhibit 2024 constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2025 - Prosecution History of U.S. Patent Application No. 13/750,768</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 702, 703, and 705: To the extent Tecan relies on the Declaration of Dr. Andrew Brooks, it is inadmissible expert evidence. The testimony is not based on sufficient facts or data, the product of reliable principles and methods, and/or a reliable application of the principles and methods to the facts. Further, Dr. Brooks is not available for cross-examination.</p> <p>37 C.F.R. § 42.65: Patent Owner objects to any reliance on the Declaration of Andrew Brooks as improper expert testimony under 37 C.F.R. § 42.65.</p>
<p>Ex.2026 - Prosecution History of U.S. Patent Application No. 15/471,785</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 702, 703, and 705: To the extent Tecan relies on the Declaration of Dr. Andrew Brooks, it is inadmissible expert evidence. The testimony is not based on sufficient facts or data, the product of reliable principles and methods, and/or a reliable application of the principles and methods to the facts. Further, Dr. Brooks is not available for cross-examination.</p> <p>37 C.F.R. § 42.65: Patent Owner objects to any reliance on the Declaration of Andrew Brooks as improper expert testimony under 37 C.F.R. § 42.65.</p>
<p>Ex.2027 - Prosecution History of U.S. Patent Application No. 16/017,340</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 702 and 703: To the extent Tecan relies on the Declaration of Dr. Andrew Brooks, it is inadmissible expert evidence. The testimony is not based on sufficient facts or data, the product of reliable principles and methods, and/or a reliable application of the principles and methods to the facts. Further, Dr. Brooks is not available for cross-examination and relies on exhibits that are not admissible as described herein.</p> <p>37 C.F.R. § 42.65: Patent Owner objects to any reliance on the Declaration of Andrew Brooks as improper expert testimony under 37 C.F.R. § 42.65.</p>
<p>Ex.2028 - Declaration of Carlos D. Bustamente, Ph.D.</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>

	<p>FRE 401, 402, and 403: To the extent that the declaration relies on exhibits not available by the priority date or not cited in the substantive paper of Patent Owner, as described herein.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 702 and 703: The testimony offered in paragraphs 31–179 is not based on sufficient facts or data, the product of reliable principles and methods, and/or a reliable application of the principles and methods to the facts. Dr. Bustamante further relies on exhibits that cannot be considered as evidence for the reasons described herein.</p> <p>37 C.F.R. § 42.65: Patent Owner objects to this exhibit as improper expert testimony under 37 C.F.R. § 42.65.</p> <p>Right to Cross-Examine: Petitioner reserves the right to cross-examine the declarant or else seek to exclude the exhibit as hearsay.</p>
<p>Ex.2029 - Ken Garber, <i>Fixing the Front End</i>, 26 NAT. BIOTECHNOL. 1101 (2008).</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2030 - <i>TruSeq® DNA Library Prep Kits</i>, Illumina, Inc. (2014).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted</p>

	is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.
<p>Ex.2031 - Hajime Matsuzaki et al., <i>Parallel Genotyping of Over 10,000 SNPs Using a One-Primer Assay on a High-Density Oligonucleotide Array</i>, 14 GENOME RES. 414 (2004).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2032 - Clay Risen, <i>Andrew Brooks, Who Developed a Rapid Covid Test, Dies at 51</i>, N.Y. TIMES, Jan. 31, 2021, https://www.nytimes.com/2021/01/31/science/andrew-brooks-dead.html.</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>

	<p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2033 - <i>GeneChip® Human Mapping 10K Array and Assay Kit</i>, Affymetrix, Inc. (2003).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2034 - Chipping out Our Differences, 449 NATURE 629 (2007).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2035 - Giulia C. Kennedy et al., <i>Large-Scale Genotyping of Complex DNA</i>, 421 NAT. BIOTECHNOLOGY 1233 (2003).</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus</i></p>

	<p><i>Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this Exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2038 - Unknown	<p>FRE 401 and 402: The exhibit is cited in patent owner's response, but patent owner did not list this exhibit in its exhibit list. Patent Owner also did not file, serve, or otherwise disclose a copy of this exhibit. Accordingly, the exhibit is not relevant to the proceeding.</p>
Ex.2040 - K.Mullis et al., Specific Enzymatic Amplification of DNA In Vitro: The Polymerase Chain Reaction, 51 COLDSPRING HARBOR SYMPOSIA QUANTITATIVE BIOL. 1(1986)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p>

	<p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2041 - Takahiro Kanagawa, Bias and Artifacts in Multitemplate Polymerase Chain Reactions (PCR), 96 J. BIOSCI. & BIOENG 4 (2003)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2042 - Daniel Aird et al., Analyzing and minimizing PCR amplifications bias in Illumina sequencing libraries, 12 GENOME BIOL. (2011)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2043 - A. Chenchik et al., Full-Length cDNA Cloning and Determination of</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and</p>

<p>mRNA 5' and 3' Ends by Amplification of Adaptor-Ligated cDNA, 21 BIOTECHNIQUES 3 (1996)</p>	<p>therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2044 - Rebecca S. Devon et al., Splinkerettes—improved vectorettes for greater efficiency in PCR walking, 23 NUCLEIC ACIDS RES. 9 (1995)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification</p>

	sufficient to support a finding that the exhibit is what Patent Owner claims it is.
Ex.2045 - Linas S. Padegimas & Nancy A. Reichert, Adaptor Ligation-Based Polymerase Chain Reaction-Mediated Walking, 260 ANALYTICAL BIOCHEMISTRY (1998)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2046 - C. Arnold & I.J. Hodgson, Vectorette PCR: A Novel Approach to Genomic Walking, PCR METHODS & APPLICATIONS (1991)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2047 - Fumihito Miura et al., A novel strategy to design highly specific PCR primers based on stability and uniqueness of 3'-end subsequences, 21 BIOINFORMATICS 24 (2005)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2048 - Georgios Tsoktouridis et al., Adaptor Long-Range PCR Procedure for Clone-Specific Characterization and Chromosomal Localization, 38 BIOTECHNIQUES 6 (2005)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2049 - Neil I. Bower & Ian A. Johnston, Targeted rapid amplification of cDNA ends (T-RACE)—an improved RACE reaction through degradation of non-target sequences, 38 NUCLEIC ACIDS RES. 21 (2010)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>

	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2050 - Jung-Hoon Sohn, A Novel Genome Walking Method for Cloning of Unknown DNA Sequences Adjacent to Known Sequence, Application No. WO 2011/004994</p>	<p>FRE 106: The exhibit is incomplete and ought to be considered, in fairness, at the same time as the remainder of the file history of published International application WO2011/004994 A2.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2051 - Rowida Almomani et al., Experiences with array-based sequence capture; toward clinical applications, 19 EURO. J. HUMAN GENETICS (2011)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>

<p>Ex.2052 - Samuel Myllykangas et al., Targeted sequencing library preparation by genomic DNA circularization, 11 MCB BIOTECH. 122 (2011)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2053 - Michael A. Quail et al., A large genome center's improvements to the Illumina sequencing system, 5 NAT. METHODS 12 (2008)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2054 - Iwanka Kozarewa et al., Amplification-free Illumina sequencing-library preparation facilitates improved mapping and assembly of (G+C)-biased genomes, 6 NAT. METHODS 4 (2009)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2056 - Haiying Gruenwald et al., Rapid, high-throughput library preparation for next-generation sequencing, NAT. METHODS (2010)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the</p>

	exhibit is what Patent Owner claims it is.
Ex.2057 - Travis C. Glenn, Field guide to next-generation DNA sequencers, MOLECULAR ECOLOGY RES. (2011)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2060 - Thomas P. Niedringhaus, Landscape of Next-Generation Sequencing Technologies, 83 ANALYTICAL CHEMISTRY (2011)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2063 - Jodi Irwin et al., Assessing the potential of next generation sequencing technologies for missing persons identification efforts, 3 FORENSIC SCI. J. (2011)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2064 - Julia Lange, Targeted resequencing for large-scale genomic studies: accelerating NGS throughput using molecular barcodes, NAT. METHODS (2010)</p>	<p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the</p>

	<p>danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2065 - Lorenzo Barchi, Single Primer Enrichment Technology (SPET) for High-Throughput Genotyping in Tomato and Eggplant Germplasm, 10 FRONTIERS IN PLANT SCI. (2019)</p>	<p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>

<p>Ex.2066 - Andreas Gnirke et al., Solution Hybrid Selection with Ultra-Long Oligonucleotides for Massively Parallel Targeted Sequencing, 27 NAT. BIOTECH. 182 (2009)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2067 - Caitlin Smith, Growing Options for Enriching Target DNA, FUTURELABS, June 17, 2021, https://www.biocompare.com/Editorial-Articles/576645-Growing-Options-for-Enriching-Target-DNA/.</p>	<p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2068 - Davide Scaglione et al., Single primer enrichment technology as a tool for massive genotyping: a benchmark on black poplar and maize, 124 ANNALS OF BOTANY (2019)</p>	<p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2069 - Jacquelynn Benjamino et al., Genome-Based Targeted Sequencing as a Reproducible Microbial Community Profiling Assay, 6 MSPHERE 2 (2021)</p>	<p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's</p>

	<p>probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2071 - Michael A. Quail et al., Optimal enzymes for amplifying sequencing libraries, 9 NAT. METHODS 1 (2012)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing</p>

	the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.
Ex.2075 - International Publication No. WO 2013/123442 A1	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 106: The exhibit is incomplete and ought to be considered, in fairness, at the same time as the remainder of the file history of published International application WO 2013/123442 A1.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's</p>

	<p>probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p>
<p>Ex.2082 - Accelerating Genomics with Advanced Sample Preparation Solutions, NATURE RESEARCH CUSTOM MEDIA</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 106: The exhibit is incomplete and ought to be considered, in fairness, at the same time as the remainder of the source from which it originates.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability.</p>

	<p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p>
<p>Ex.2083 - Jonathan A. Scolnick et al., An Efficient Method for Identifying Gene Fusions by Targeted RNA Sequencing from Fresh Frozen and FFPE Samples, PLOS ONE (2015)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability. The exhibit is not relevant to any ground upon which trial was instituted, including because the exhibit was not cited in the Patent Owner's Response and because the exhibit is a post-priority document.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time,</p>

	<p>or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2084 - Priya Balachandran, NuGEN Announces Issuance of U.S. Patent For Its Single Primer Target Enrichment Technology (SPET) For Next Generation Sequencing Applications, BIOSPACE, https://www.biospace.com/nugen-announces-issuance-of-u-s-patent-for-its-single-primer-target-enrichment-technology-spet-for-next-generation-sequencing-applications (last visited July 18, 2025)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner’s response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability. The exhibit is not relevant to any ground upon which trial was instituted, including because the exhibit was not cited in the Patent Owner’s Response and because the exhibit is a post-priority document.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit’s probative value with respect to any ground upon which trial was instituted</p>

	<p>is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is</p>
<p>Ex.2085 - Allegro® Targeted Genotyping V2 Product Sheet, TECAN GENOMICS, INC. (2019)</p>	<p>FRE 106: The exhibit is incomplete and ought to be considered, in fairness, at the same time as the remainder of the source from which it originates.</p> <p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p>

	<p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2107 - Declaration of Carlos D. Bustamante, Ph.D.</p>	<p>FRE 401 and 402: For each paragraph not cited in Patent Owner's Response, the exhibit is not relevant to any ground upon which trial was instituted.</p> <p>FRE 106, 401, 402, and 403: The testimony offered in paragraphs 35-322 is misleading, incomplete, and irrelevant, including because the testimony offered lacks support, mischaracterizes the '012 and '108 patent, and mischaracterizes the prior art.</p> <p>Therefore, the proffered testimony's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p> <p>FRE 702 and 703: The testimony offered in paragraphs 35-22 is not based on sufficient facts or data, the product of reliable principles and methods, and/or a reliable application of the principles and methods to the facts.</p> <p>Right to Cross-Examine: Petitioner reserves the right to cross-examine the</p>

	declarant or else seek to exclude the exhibit as hearsay.
Ex.2108 - Transcript for the July 31, 2025 Deposition of Dr. Michael L. Metzker	<p>Petitioner hereby preserves and renews all objections made on the record during the July 31, 2025 Deposition of Michael L. Metzker.</p> <p>FRE 106: This exhibit may be an incomplete and/or inaccurate transcript of the July 31, 2025 deposition because the transcript does not include any forthcoming errata sheet. To the extent the witness submits an errata sheet, it must in fairness be considered at the same time as the exhibit.</p> <p>FRE 401/402: The parties agreed by email that the parties would not use Dr. Metzker's July 31, 2025, which concerned IPR2025-00026; however, Tecan cited the exhibit regardless.</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay because Dr. Metzker's July 31, 2025 deposition was an out of court statement for purposes of this deposition.</p>
Ex.2109 - Transcript for the August 1, 2025 Deposition of Dr. Michael L. Metzker	Petitioner hereby preserves and renews all objections made on the record during the August 1, 2025 Deposition of Michael L. Metzker.

	<p>FRE 106: This exhibit may be an incomplete and/or inaccurate transcript of the August 1, 2025 deposition because the transcript does not include any forthcoming errata sheet. To the extent the witness submits an errata sheet, it must in fairness be considered at the same time as the exhibit.</p>
<p>Ex.2110 - JC Glaszmann et al., Accessing Genetic Diversity for Crop Development, 13 CURRENT OPINION IN PLANT BIOLOGY 167 (2010)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2111 - Stephen I. Wright et al., The Effects of Artificial Selection on the Maize Genome, 308 SCIENCE 1310 (2005)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37</p>

	<p>C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2112 - CGAIR, General Terms of Reference for the Final Review of the Generational Challenge Program 2004-2014, https://www.genengnews.com/insights/streamlining-multiplex-pcr-analysis/ (last visited Aug. 20, 2025)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant</p>

	<p>to any question of patentability. The exhibit is not relevant to any ground upon which trial was instituted, including because the exhibit was not cited in the Patent Owner's Response and because the exhibit is a post-priority document.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p>
<p>Ex.2113 - Peter J. Park, ChIP-seq: Advantages and Challenges of a Maturing Technology, 10 NAT. REV. 669 (2009)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>

<p>Ex.2114 - Kerstin Kaufmann et al., Target Genes of the MADS Transcription Factor SEPALLATA3: Integration of Developmental and Hormonal Pathways in the Arabidopsis Flower, 7 PLOS BIOLOGY 854 (2009)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2115 - Kerstin Kaufmann et al., Orchestration of Floral Initiation by APETALA 1, 328 PLOS SCIENCE 85 (2010)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p>

	<p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2116 - CBOL Plant Working Group, A DNA Barcode for Land Plants, 106 PNAS 12794 (2009)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2117 - Xuehui Huang., High-Throughput Genotyping by Whole-Genome Sequencing, 328 GENOME RSCH. 1068 (2009)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>

<p>Ex.2118 - Eli Meyer et al., Sequencing and De Novo Analysis of a Coral Larval Transcriptome Using 454 GSFlx, 10 BMC GENOMICS 219 (2009)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2119 - Christopher S. Barker et al., Increased DNA Microarray Hybridization Specificity Using sscDNA Targets, 6 BMS GENOMICS 57 (2005)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2120 - Vigdis Nygaard et al., Options Available for Profiling Small Samples: A Review of Sample Amplification Technology When Combined with Microarray Profiling, 34</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly</p>

NUCLEIC ACID RSCH. 996 (2010)	<p>prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2121 - Hajime Matsuzaki et al., Genotyping Over 100,000 SNPs on a Pair of Oligonucleotide Arrays, 1 NATURE METHODS 109 (2004)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2122 - Data Sheet Genome-Wide Human SNP Array 6.0,</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and</p>

<p>Affymetrix, Inc. (2009).</p>	<p>therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2123 - Ning Jiang et al., Methods for Evaluating Gene Expression from Affymetrix Microarray Datasets, 410 BMS BIOINFORMATICS 284 (2008)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification</p>

	sufficient to support a finding that the exhibit is what Patent Owner claims it is.
Ex.2124 - Dennise D. Dalma-Weiszhausz al., The Affymetrix Genechip® Platform: An Overview, 9 METHODS IN ENZYMOLOGY 3 (2006)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2125 - GeneChip® Human Genome U133 Arrays, Affymetrix, Inc. (2007).	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2126 - Fredrik Dahl et al., Multiplex Amplification Enabled by Selective Circularization of Large Sets of Genomic DNA Fragments, 33 NUCLEIC ACID RSCH. 1 (2005)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2127 - Ivor J. Benjamin et al., Learning from Failure: Congestive Heart Failure in the Postgenomic Age, 115 J. CLIN. INVEST. 495 (2005)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the</p>

	exhibit is what Patent Owner claims it is.
Ex.2128 - Guo-Hua Zhou et al., Multiplex SNP Typing by Bioluminometric Assay Coupled with Terminator Incorporation (BATI), 33 NUCLEIC ACID RSCH. 15 (2005)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2129 - Mostafa Ronaghi et al., Single Nucleotide Polymorphisms: Discovery, Detection, and Analysis, 2 PERSONALIZED MED. 996 (2005)	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2130 - W. Mathias Howell et al., Detection and Techniques for Single Nucleotide Polymorphisms, 6 NUCLEIC ACID TESTING FOR HUMAN DISEASE 139 (2006)	FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.

	<p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2131 - Li Li et al., SNP Genotyping by Multiplex Amplification and Microarrays Assay for Forensic Application, 162 FORENSIC SCI. INTL. 74 (2006)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2132 - Wei-peng Wang et al., Multiplex Single Nucleotide Polymorphism Genotyping by Adapter Ligation-Mediated Allele-Specific Amplification, 355 ANALYTICAL BIOCHEMISTRY 240 (2006)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p>

	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2133 - Wei-peng Wang et al., Association of IL1B Polymorphisms with Gastric Cancer in a Chinese Population, 40 CLINICAL BIOCHEMISTRY 218 (2006)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2134 - David Loakes, Nucleotides and Nucleic Acids; Oligo- and Polynucleotides, 36 ORGANOPHOSPHORUS CHEM. 232 (2007)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly</p>

	<p>prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2135 - Phillip A. Morin et al., Highly Accurate SNP Genotyping from Historical and Low-Quality Samples, 7 MOLECULAR ECOLOGY NOTES 937 (2007)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2136 - Linda Stromqvist Meuzelaar et al., MegaPlex PCR: A Strategy for</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and</p>

<p>Multiplex Amplification, 4 NATURE METHODS 835 (2007)</p>	<p>therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2137 - Natalia V Zakharova et al., Simultaneous Qualitative and Quantitative Identification of Multiple Targets by Polymerase Chain Reaction on Microarray, OLIGONUCLEOTIDE ARRAY SEQUENCE ANALYSIS Chapter 12 (2008)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification</p>

	sufficient to support a finding that the exhibit is what Patent Owner claims it is.
Ex.2138 - Minh Bui et al., Simple Allele-Discriminating PCR for Cost-Effective and Rapid Genotyping and Mapping, 5 PLANT METHODS 1 (2009)	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2139 - Maria Palka-Santini et al., Large Scale Multiplex PCR Improves Pathogen Detection by DNA Microarrays, 9 BMC MICROBIOLOGY 1 (2009)	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2140 - Tao Jin et al., Molecular Basis for Resistance to Tribenuron in Shepherd's Purse (<i>Capsella Bursa-Pastoris</i> (L.) Medik.), 100 PESTICIDE BIOCHEMISTRY AND PHYSIOLOGY 160 (2011)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p>

	<p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2141 - Jing Liu et al., An Improved Allele-Specific PCR Primer Design Method for SNP Marker Analysis and Its Application, 8 PLANT METHODS 34 (2012)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2142 - Ying Liu et al., Multiplex Asymmetric PCR by Combining the Amplification Refractory Mutation System with the Homo-Tag-Assisted Nondimer System, 96 ANAL. CHEM. 9200 (2024)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>

<p>Ex.2143 - QIAseq Targeted DNA Panels, QIAGEN,https://www.qiagen.com/us/products/discovery-and-translational-research/next-generation-sequencing/dna-sequencing/somatic-panels/qiaseq-targeted-dna-panels (last visited Aug. 20, 2025)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner’s response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2144 - QIAseq Targeted RNAscan Panels, QIAGEN, https://www.qiagen.com/us/products/discovery-and-translational-research/next-generation-sequencing/rna-sequencing/rna-fusions/qiaseq-targeted-rnascan-panel (last visited Aug. 20, 2025)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner’s response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p>

	<p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2146 - Exploring New Frontiers with Next-Generation Sequencing, QIAGEN (2016)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2147 - QIAseq and Single Primer Extension Chemistry: Redefining Aplicon-Based NGS, QIAGEN (2018)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>

<p>Ex.2148 - QIAseq™ SPE Technology for Illumina®: Redefining Amplicon Sequencing, QIAGEN (2018)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2149 - Issues with Primer Dropouts, QIAGEN (2018)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2150 - Fei Lu et al., Comparative Sequence Analysis of MONOCULM1-Orthologus Regions in 14 Oryza Genomes, 106 PNAS 2071 (2009)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification</p>

	sufficient to support a finding that the exhibit is what Patent Owner claims it is.
Ex.2151 - Applied Biosystems 3770/3730x/ DNA Analyzers and 3130/3130x/ Genetic Analyzers, Applied Biosystems (2005)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2152 - Jetty S.S. Ammiraju et al., Dynamic Evolution of Oryza Genomes is Revealed by Comparative Genomic Analysis of a Genus-Wide Vertical Data Set, 20 THE PLANT CELL 3191 (2008)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2153 - Gregory J. Porreca et al., Multiplex Amplification of Large Sets of Human Exons, 4 NATURE METHODS 931 (2007)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2155 - Iraad F. Bronner et al., Improved Protocols for Illumina Sequencing, CURR PROTOC HUM GENET. 1 (2009)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the</p>

	exhibit is what Patent Owner claims it is.
Ex.2165 - Supplemental Material to EX2111	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2166 - Hanni Willenbrock et al., Quantitative miRNA Expression Analysis: Comparing Microarrays with Next-Generation Sequencing, 15 RNA 2028 (2009)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2167 - Supplementary Methods to EX2121	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2168 - L. Boutrand et al., Variations in Primer Sequences are the Origin of the Allele Drop-Out at Loci D13S317 and CD4, 114 INT. J. LEGAL. MED. 295 (2000)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus</i></p>

	<p><i>Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2169 - Sowmiya Moorthie et al., Review of Massively Parallel DNA Sequencing Technologies, 5 HUGO J 1 (2011)	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2170 - QIAGEN Sciences, LLC et al., Answer and Defenses to Tecan Genomics, Inc.’s Complaint in a related proceeding (Case No. 23-1115-GBW, D. Del.)	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2171 - U.S. Patent Application Publication No. 2013/0231253	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p>

	<p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability. The exhibit is not relevant to any ground upon which trial was instituted, including because the exhibit was not cited in the Patent Owner's Response and because the exhibit is a post-priority document.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p>
<p>Ex.2172 - QIAseq Targeted DNA Panels, QIAGEN,https://www.qiagen.com/us/products/next-generation-sequencing/dna-sequencing/somatic-panels/qiaseq-targeted-dna-panels/ (archived at https://web.archive.org/web/20200623202534/https://www.qiagen.com/us/products/next-generation-sequencing/dna-sequencing/somatic-panels/qiaseq-targeted-dna-panels/#orderinginformation) (June 23, 2020)</p>	<p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2173 - Thomas K. Wolfgruber et al., Maize Centromere Structure</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground</p>

<p>and Evolution: Sequence Analysis of Centromeres 2 and 5 Reveal Dynamic Loci Shaped Primarily by Retrotransposons, 5 PLOS GENETICS 1 (2009)</p>	<p>upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2174 - Supporting Information for EX2150</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the</p>

	exhibit is what Patent Owner claims it is.
Ex.2175 - Minh Bui, Leunig, Leunig Homolog, and Seuss are Transcriptional Co-Repressors that Regulate Flower Development, Mucilage Secretion, and Pathogen Resistance, UNIVERSITY OF MARYLAND (2009)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
Ex.2176 - Matthew J. Callow et al., Selective DNA Amplification from Complex Genomes Using Universal Double-Sided Adaptors, 32 NUCLEIC ACIDS RSCH. 1 (2004)	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter</p>

	<p>asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2177 - Johan Stenberg, Software Tools for Design of Reagents for Multiplex Genetic Analyses, 4 NATURE METHODS 835 (2006)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2178 - Rajdeep Kaur, Allele Specific Primer Designing for SNPs of ACHE Gene Related to Oxidative Stress, 5 J. OF EMERGING TECHS. AND INNOVATIVE RSCH. 291 (2018)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus</i></p>

	<p><i>Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p> <p>FRE 401 and 402: The exhibit is not prior art and therefore is not relevant to any question of patentability. The exhibit is not relevant to any ground upon which trial was instituted, including because the exhibit was not cited in the Patent Owner's Response and because the exhibit is a post-priority document.</p> <p>FRE 402 and 403: The exhibit is not prior art. Therefore, the exhibit's probative value with respect to any ground upon which trial was instituted is substantially outweighed by the danger of unfair prejudice, confusing the issues, undue delay, wasting time, or needlessly presenting cumulative evidence.</p>
<p>Ex.2179 - Scott T. Kelley et al., Comparative Analysis of Microbial Diversity in Longitarsus Flea Beetles (Coleoptera: Chrysomelidae), 139 GENETICA 541 (2011)</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and</p>

	<p>incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>
<p>Ex.2180 - List of publications referencing EX1006</p>	<p>FRE 401 and 402: The exhibit is not cited in patent owner's response and therefore is not relevant to any ground upon which trial was instituted. Exhibits and arguments that are not incorporated in papers are waived and incorporation by reference is strictly prohibited. 37 C.F.R. § 42.6(a)(3); 37 C.F.R. § 42.22; see also <i>Parus Holdings, Inc. v. Google LLC</i>, 70 F.4th 1365, 1371 (Fed. Cir. 2023).</p> <p>FRE 802: To the extent it is being offered to prove the truth of the matter asserted, this exhibit constitutes inadmissible hearsay.</p> <p>FRE 901: Patent Owner has not produced evidence or certification sufficient to support a finding that the exhibit is what Patent Owner claims it is.</p>

DATED: August 27, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on August 27, 2025, I caused a true and correct copy of the foregoing PETITIONER'S OBJECTIONS TO ADMISSIBILITY OF EVIDENCE SUBMITTED BY PATENT OWNER to be served on counsel for Patent Owner via email at:

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