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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

CONCORD MUSIC GROUP, INC., ET AL.,

Plaintiffs,

v.

ANTHROPIC PBC,

Defendant.

Case Number: 5:24-cv-03811-EKL-SVK

DECLARATION OF JOSHUA DENNIS IN SUPPORT OF PLAINTIFFS' MOTION FOR PARTIAL SUMMARY JUDGMENT

Judge Eumi K. Lee
Magistrate Judge Susan van Keulen

I, Joshua Dennis, hereby declare pursuant to 28 U.S.C. § 1746:

1. I submit this declaration in connection with Plaintiffs' Motion for Partial Summary Judgment filed by Plaintiffs Concord Music Group, Inc., Capitol CMG, Inc., Universal Music Corp., Songs of Universal, Inc., Universal Music – MGB NA LLC, Polygram Publishing, Inc., Universal Music – Z Tunes LLC, and ABKCO Music, Inc. (collectively, "Publishers"), in their case against Defendant Anthropic PBC ("Anthropic," collectively with Publishers, "Parties").

2. My statements set forth below are based on my specialized knowledge, education, and experience, as applied to the facts and circumstances of this case. If called upon, I would and could competently testify as to the matters contained herein.

I. Background

3. I am a Partner in the Boston office of StoneTurn Group LLP ("StoneTurn"). I provide financial and economic consulting services—including analysis of complex data—to companies. I have more than 20 years of experience working with clients and counsel on matters requiring complex data analysis, such as economic damages, forensic accounting, compliance monitoring, and valuation engagements.

4. I have assisted companies and their counsel across a wide range of investigative and dispute-related matters. I have significant experience analyzing a variety of large and complex datasets, including accounting, economic and business data and issues related thereto. I also have extensive experience applying my understanding of these datasets and my expertise to the creation of dynamic visual models that provide clarity and key insights to lay audiences.

5. In addition to experience in the collection, mining, sampling, anomaly detection, and reporting of structured and unstructured data, I have extensive expertise in financial modeling on both a historical and prospective basis to quantify and assess lost profits, diminution of business value, and other areas of economic loss. My analyses also frequently include evaluations related to data sufficiency and integrity testing, integration of disparate datasets, data exploration, and visual modeling.

6. My analyses also frequently require the generation and application of data classifications or taxonomies for the purpose of distilling complex datasets into clear and accurate summaries for clients, counsel or the trier of fact. I have employed methods of classifications both on a programmatic basis, as well as through the supervision of review teams tasked with manual review of relevant information, depending on the specific facts and circumstances.

7. I am a Certified Valuation Analyst and earned a Certificate in Intellectual Property Law from Suffolk University.

8. My full curriculum vitae, which summarizes my qualifications and professional experience, as well as my prior testimony as an expert at deposition or trial in the previous 4 years, is attached to this declaration as **Exhibit 1.**

9. I have been retained by Publishers as an independent expert witness in this case. I authored and caused to be served in this case three expert reports, including an opening report dated December 19, 2025, a rebuttal report dated January 23, 2026, and a reply and supplemental report dated February 13, 2026. I also gave a deposition on March 9, 2026.

10. In my work on this matter, I have reviewed and utilized a variety of large data sources and other information produced by the parties in this case, including the 5 million Claude Sample Records, Claude prompt and output records relating to the Works-in-Suit, and interrogatory responses submitted by the Parties.[1] I am also relying on my experience, training, and background as described above.

II. Third-Party Usage of Anthropic's Claude

11. Publishers asked me to analyze and assess how Claude users have used Claude for lyric- and song-related tasks, including specifically in connection with Publishers' Works-in-Suit, based on various Claude prompt and output records produced by Anthropic as part of this litigation.

[1] This sentence uses terms defined elsewhere in this Declaration.

A. Overview of Claude Records Reviewed

12. I understand Publishers brought this action in connection with the alleged infringement of their copyrighted song lyrics by Anthropic. I further understand the 499 works listed in Exhibit A to Plaintiffs' First Amended Complaint are Publishers' copyrighted works that Anthropic has allegedly infringed ("Works-in-Suit").

13. As part of my assignment in this matter, I have been asked to assess how Claude users used Claude for lyric- and song-related tasks, as reflected in the Claude prompt and output records produced in this case and provided to me.

14. I understand that Anthropic has produced various Claude prompt and output records to Publishers as part of this litigation, including in response to specific search terms relating to Publishers' Works-in-Suit and as part of a statistically significant, randomly selected sample production of 5 million Claude prompt and output records that Anthropic was ordered to produce. *See, e.g.*, ECF No. 377, at 5-6. I explain these two categories of records, which I reviewed as part of my analysis in this case, in more detail below.

1. Work-In-Suit Records

15. As part of discovery in this matter, Publishers sought production of certain Conversations related specifically to the Works-in-Suit. In response to this request, Anthropic performed searches of prompts and outputs from the Record Period (i.e., September 22, 2023 to March 22, 2024) based on certain song titles or lyric excerpts for the Work-in-Suit Records. Out of the broader set of Records that Anthropic produced in connection with those searches, I have been provided 814 Records that were produced based on those searches and that are the primary subject of my analysis ("Work-in-Suit Records").

16. I understand that [redacted] and that Anthropic has not searched or produced such records for the period after March 22, 2024 through the present (though it has continued to make various versions of Claude available to the public during this time).

17. I understand that the provided Work-in-Suit Records exclude Records known to correspond to Claude accounts associated with Publishers, their counsel, and their investigators, and/or Anthropic and its counsel. I have also confirmed that [redacted] Thus, I understand the Work-in-Suit Records reflect interactions between unaffiliated third parties and Claude.

2. Claude Sample Records

18. Anthropic [redacted] I understand that, based on Anthropic's representations, the Record Period is [redacted]

19. As part of its discovery in this matter, Publishers sought and the Court ordered the production of a statistically significant sample of Claude prompt and output records from the Record Period (i.e., September 22, 2023 to March 22, 2024).[2] Specifically, the Court ordered Anthropic to produce 5 million such Records from the Record Universe, with 2.5 million Records from the Pre-Suit Period and 2.5 million Records from the Post-Suit Period ("Sample Records").[3]

20. Of that population of 5 million Sample Records, I have been provided by Counsel with 3,277 Conversations relating to songs and lyrics that are the primary subject of my analysis ("Sample Song Records").[4]

21. I understand that the provided Sample Song Records exclude Records known to correspond to Claude accounts associated with Publishers, their counsel, and their investigators,

[2] ECF No. 377 at 6.
[3] ECF No. 377 at 6.
[4] I was originally provided by counsel with 6,849 Sample Song Records. After focusing my analysis on the last prompt and output only, I focused on 3,277 Sample Song Records.

and/or Anthropic and its counsel. I have also confirmed that [redacted]. Thus, I understand the Sample Song Records reflect interactions between unaffiliated third parties and Claude.

B. Categorization of Claude Conversations

22. As an initial step in my analysis, and based on my preliminary review of the Records provided to me, I created a taxonomy that could be applied to Claude user prompts, as well as a separate taxonomy that could be applied to Claude Outputs. With respect to prompts, the taxonomy was comprised of fourteen categories, with each focusing on a unique combination of what information was sought by the user and what identifiers the user provided ("Prompt Categories"). The Prompt Categories include the following:

1. Request for lyrics based upon provided song title(s) or lyrics
2. Request for lyrics based upon provided artist(s), but not song title(s)
3. Request for lyrics based upon provided topic(s)
4. Request for translation of lyrics based upon provided song title(s) or lyrics
5. Request for song title(s) based upon provided lyrics
6. Request for song title(s) based upon provided artist(s)
7. Request for song title(s) based upon provided topic(s)
8. Request for new song lyrics based upon provided artist(s), song title(s), or lyrics
9. Request for new song lyrics based upon provided topic(s)
10. Request for artist based upon provided song title(s), lyrics, or topic(s)
11. Request for meaning or discussion based upon provided song title(s) or lyrics
12. Request for meaning or discussion based upon provided artist(s)
13. Request for meaning or discussion based upon provided topic(s)
14. Request not captured in other categories

23. With respect to the Claude Outputs, the taxonomy was comprised of seven categories with each focusing on a unique combination of what lyric-related information was

generated as output by Claude and to what extent a copyright Guardrail was noted ("Output Categories"). The Output Categories include the following:

1. Output contains lyrics (no copyright Guardrail noted)
2. Output contains new lyrics (no copyright Guardrail noted)
3. Output contains lyrics and copyright Guardrail noted
4. Output contains new lyrics and copyright Guardrail noted
5. Output does not contain lyrics and copyright Guardrail noted
6. Output does not contain lyrics (no copyright Guardrail noted)
7. Output not captured in other categories

24. My taxonomy is clearly defined and was applied in a manner consistent with these definitions.

25. Once the taxonomy was established, the Conversations comprising the Work-in-Suit Records and Sample Song Records were reviewed and assigned both a Prompt and Output Category. For the Work-in-Suit Records, I also confirmed that [redacted]

26. To the extent that a Work-in-Suit Record [redacted] For the Sample Song Records, I originally analyzed [redacted] However, based on representations by Dr. Bray regarding his understanding that [redacted]

27. Once the preliminary categorization process was finalized and a quality control review performed, I then selected a random sample of 100 out of the total 814 total Work-in-Suit Records and separately 100 out of the total 3,277 Sample Song Records. Due to the manual nature of the categorization process, these Conversation sample sets were then subjected to a

secondary review with any changes to either the Prompt Category or Output Category noted ("Secondary Review Records"). Out of the 100 Work-in-Suit Secondary Review Records, I confirmed the Prompt Category for all but 4 Records (or 96%) and the Output Category for all but 2 Records (98%). Out of the 100 Sample Song Record Secondary Review Records, I confirmed the Prompt Category for all but 7 Records (or 93%) and the Output Category for all but 7 Records (or 93%).

28. The Record sample sizes were designed to support the estimation of error rates at a confidence level of at least 95% with a 10% margin of error. The confidence level measures the likelihood that in repeated sampling the unknown population parameter (e.g., percent of records where the Prompt or Output Category would change based upon a secondary review) falls in the interval calculated from the sample. For example, a 95% confidence level means that in 100 samples of the same size from the same population the resulting confidence intervals (i.e., the calculated error rate plus or minus the margin of error) will contain the unknown population parameter approximately 95 times. This provides a reasonable degree of statistical reliability to ensure that the categorization process was performed in a consistent and accurate manner, and thus my categorization process provides a reasonable and reliable basis from which to assess how Claude users used Claude for lyric- and song-related tasks.

C. Analysis of Work-in-Suit Records

29. I understand that Publishers allege that [redacted].[5] Specifically, Claude appeared to [redacted].

30. It is beyond the scope of my assignment to confirm the extent to which [redacted]. However, based on my review and analysis of these Records, I can confirm that [redacted]

[5] I understand that, for purposes of this analysis, a Record was not considered to be a reproduction of a Work-in-Suit by Claude if Claude only reproduced lyrics that were provided to it by the user.

[redacted]

Specifically, I have confirmed that [redacted]. I further understand that Dr. Robert Leonard, a professor of Comparative Literature, Languages, and Linguistics at Hofstra University, has reviewed a sample of these Work-in-Suit Records, [redacted]

31. The number of Work-in-Suit Records associated with each Prompt and Output Category are shown in the table below:

[redacted]

32. I also charted the relative proportion of Prompt and Output Categories by month, which [redacted] as shown in the table below:

[redacted]

D. Analysis of Claude Sample Song Records

33. The number of Sample Song Records associated with each Prompt and Output Category are shown in the table below:



34. I also charted the relative proportion of Prompt Categories and Output Categories by month, [redacted], as shown in the tables below.

[redacted]

35. I understand that Magistrate Judge van Keulen ruled that the 5 million Sample Records were statistically significant such that the parties could draw conclusions based on the sample regarding the broader uses of Claude. In particular, Magistrate Judge van Keulen "adopt[ed] the values of a 95% confidence level corresponding to a 'Z-score' of 1.96 and an expected prevalence of 0.0006." ECF No. 377, at 6. The Court further found that "a margin of error of approximately 11.3% is within the range that will yield a representative sample and will appropriately balance the associated burden against the needs of the case."[6]

[6] ECF No. 377, at 6.

36. The Sample Records are effectively comprised of two separate sub-samples: 2.5 million Sample Records reflect [redacted] (i.e., September 22, 2023 to October 18, 2023); and 2.5 million Sample Records reflect [redacted] (i.e., October 19, 2023 to March 22, 2024). Using these ratios [redacted], I can extrapolate the results of my Sample Song Record analysis to the broader population for Records in the Pre-Suit Period and Post-Suit Period, as shown in the tables below:[7]

[redacted]

[7] Because I did not review and categorize all 5 million Sample Records, these results may [redacted]

[redacted]

37. In total, I identified [redacted] in the Claude sample, which, when extrapolated across the full set of Claude prompt and output records from September 22, 2023 to March 22, 2024, reflect [redacted] such prompts and output during that six-month period.

38. Considering only the last prompt and output in each record, I have identified at least [redacted] When considering the full records provided to me, I identified [redacted]

39. Based on these figures and Magistrate Judge van Keulen's finding that the 5 million Sample Records were statistically significant such that the parties could draw conclusions based on the sample regarding the broader uses of Claude, I conclude, based solely on the last prompt and output for each record in the Sample Song Records, that [redacted]

40. Considering only the last prompt and output in each record, I also identified in the Sample Song Records [redacted] When considering the full records provided to me, I identified [redacted]

41. Users also prompted Claude to [redacted], including the examples below:

- Anthropic_0000035983 – [redacted]

[redacted]

[redacted]

- Anthropic_0000098400 – [redacted]

[redacted]

42. Based on the figures generated after considering only the last prompt and output in each record, I conclude that there were [redacted]. The [redacted]

[redacted]

E. Anthropic Guardrails

43. The Records I analyzed support the conclusion that [redacted] as shown in the chart below:

- Work-in-Suit Records

[redacted]

- Sample Song Records

[redacted]

44. Anthropic's expert Dr. Andrew Bray has stated his opinion that [redacted][8]

However, this is not the case as shown in the example last Output excerpts below:

- ANTH_SAMPLE000043934 at 942-943 (DOC 04326451) – [redacted]

[redacted]

[8] Opening Expert Report of Dr. Andrew Bray at 42 (Dec. 19, 2025).

[redacted]

45. Dr. Bray also did not consider prompts and outputs produced by Anthropic outside of the Sample Records, including for example, the Works-in-Suit Records. These records reflect [redacted]

- ANTH_SAMPLE000292667; ANTH_SAMPLE000293494 – [redacted]

[redacted]

[redacted]

46. Based on the Records I have analyzed, [redacted]

[redacted]

III. Anthropic Employee Claude Usage

47. As part of its discovery in this matter, Publishers separately sought production of certain Conversations involving Anthropic employees [redacted]. In response to these requests, Anthropic produced various Prompts and Outputs from Anthropic employee Claude accounts registered under @anthropic.com email addresses and (as ordered by the Court) certain Anthropic employee Claude accounts registered under non-@anthropic.com email addresses, based on specific search terms ("song" OR "songs" OR "lyric" OR "lyrics"), within the Record Period (i.e., September 22, 2023 to March 22, 2024) and in certain cases outside this period.

48. Anthropic separately produced certain records from prior to its launch of Claude to the public on March 14, 2023, which [redacted]

49. Publishers also asked me to assess how Anthropic employees have used Claude for lyric- and song-related tasks. I have been provided by Counsel with 65 documents containing Records from Anthropic employees that are the subject of my analysis ("Employee Records").

50. The Employee Records reflect Anthropic employees' [redacted] My analysis of these records has confirmed that [redacted]

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my personal knowledge and belief.

Executed in Boston, MA, this 22th day of March, 2026.

Joshua Dennis

SIGNATURE ATTESTATION PURSUANT TO CIVIL L.R. 5-1(h)

Pursuant to Civil L.R. 5-1(h), I hereby attest that concurrence in the filing of this document was obtained from the signatory of this document. I declare under penalty of perjury that the foregoing is true and correct.

Dated: March 23, 2026

/s/ Michelle Gomez-Reichman
Michelle Gomez-Reichman