Exhibit E

UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

CONCORD MUSIC GROUP, INC., ET AL.,

Plaintiffs,

v.

ANTHROPIC PBC,

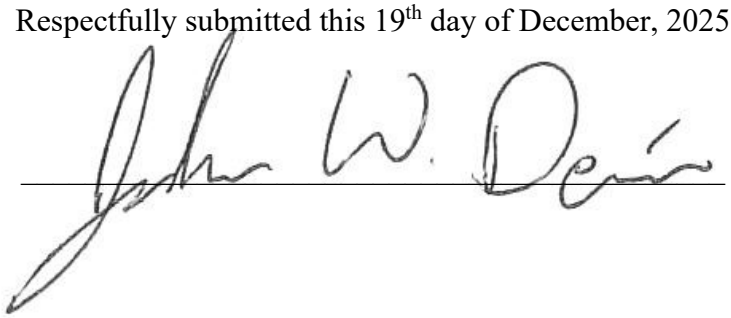
Defendant.

Case No.: 5:24-cv-03811-EKL-SVK

Judge Eumi K. Lee
Magistrate Judge Susan van Keulen

EXPERT REPORT OF JOSHUA W. DENNIS

Respectfully submitted this 19th day of December, 2025



CONTAINS INFORMATION DESIGNATED AS "CONFIDENTIAL" AND "HIGHLY CONFIDENTIAL—ATTORNEYS' EYES ONLY"

UNDER PROTECTIVE ORDER

Table of Contents

I. INTRODUCTION 4
II. ASSIGNMENT 5
III. INFORMATION CONSIDERED 6
IV. SUMMARY OF OPINIONS 6
V. UNDERSTANDING OF THE DISPUTE 13
A. Parties 13
i. Plaintiff Publishers 13
ii. Defendant Anthropic 14
B. Publishers' Allegations 14
C. Anthropic's Claude AI model 16
i. History and Development 16
ii. Training 17
iii. Anthropic's Own Analysis of Song- and Lyric-Related Prompts 19
iv. Guardrails and Oversight 20
D. Publishers' Music Licensing 21
VI. DATA SOURCES AND LIMITATIONS 22
A. Primary Data Sources 22
i. Work-in-Suit Records 24
ii. Claude Sample Records 25
iii. Anthropic Employee Prompts and Output 25
B. Data Exclusions and Limitations 26
i. Exclusion of Publisher and/or Anthropic Employee Accounts 26
ii. Date Limitations 26
iii. Sample Limitations 27
iv. Name Redactions 27
v. Blank Records 28
VII. ANALYSIS AND FINDINGS 29
A. Similarity of Claude Conversations 29
B. Categorization of Claude Conversations 32
C. Analysis of Work-in-Suit Records 35
i. Requests for lyrics based upon provided song title(s) or lyrics 36
ii. Requests for lyrics based upon provided artist(s) 38
iii. Requests for lyrics based upon provided topic(s) 40
iv. Requests for the translation of lyrics to a different language 42
v. Request for song title(s) based upon provided lyrics 44
vi. Request for song title(s) based upon provided artist(s) 45

vii. Request for song title(s) based upon a provided topic(s) 46
viii. Request for new song lyrics based upon provided artist(s), song title(s) or lyrics 48
ix. Request for new song lyrics based upon provided topic(s) 50
x. Request for artist based upon provided song title(s), lyrics or topic(s) 52
xi. Request for meaning or discussion based upon provided song title(s) or lyrics 54
xii. Request for meaning or discussion based upon provided artist(s) 55
xiii. Request for meaning or discussion based upon provided topic(s) 57
xiv. Requests not captured in other categories 59
xv. Summary of Work-in-Suit Record Analysis 61
xvi. Efficacy/Inefficacy of Guardrails 62
xvii. Commercial Uses 65
D. Analysis of Sample Song Records 67
i. Requests for lyrics based upon provided song title(s) or lyrics 67
ii. Requests for lyrics based upon provided artist(s) 70
iii. Requests for lyrics based upon provided topic(s) 73
iv. Requests for the translation of lyrics to a different language 75
v. Request for song title(s) based upon provided lyrics 77
vi. Request for song title(s) based upon provided artist(s) 78
vii. Request for song title(s) based upon a provided topic(s) 80
viii. Request for new song lyrics based upon provided artist(s), song title(s) or lyrics 82
ix. Request for new song lyrics based upon provided topic(s) 84
x. Request for artist based upon provided song title(s), lyrics, or topic(s) 86
xi. Request for meaning or discussion based upon provided song title(s) or lyrics 88
xii. Request for meaning or discussion based upon provided artist(s) 90
xiii. Request for meaning or discussion based upon provided topic(s) 92
xiv. Requests not captured in other categories 95
xv. Summary and Extrapolation of Sample Song Record Analysis 98
xvi. Efficacy/Inefficacy of Guardrails 102
xvii. Commercial Uses 105
E. Analysis of Anthropic Employee Records 108
i. Pre-Launch Claude Prompts and/or Outputs Generated by Anthropic Employees 108
ii. Post-Launch Claude Prompts and/or Outputs Generated by Anthropic Employees 113
F. Analysis of Copyright Management Information Removal 121
G. Analysis of User Account Data 122

List of Exhibits

Exhibit Number	Description
1	Curriculum Vitae of Joshua W. Dennis
2	Documents Considered
3	Listing of Works-in-Suit
4	Work-in-Suit Records
4A	Work-in-Suit Record Category Summary
4B	Work-in-Suit Record Prompt and Output Category Combination Summary
4C	Work-in-Suit Record Prompt and Output Category Combinations by Guardrail
4D	Work-in-Suit Record Prompt and Output Category Combinations by Period
4E	Work-in-Suit Record Prompt and Output Summary by Month
4F	Work-in-Suit Record Guardrail Summary
4G	Work-in-Suit Record Guardrail Summary by Period
4H	Work-in-Suit Record Prompt and Response Category Combinations by Period (Commercial Use)
5	Sample Song Records
5A	Sample Song Record Category Summary
5B	Sample Song Record Prompt and Output Category Combination Summary
5C	Sample Song Record Prompt and Output Category Combinations by Guardrail
5D	Sample Song Record Prompt and Output Category Combinations by Period
5E	Sample Song Record Prompt and Response Summary by Month
5F	Sample Song Record Guardrail Summary by Period
5G	Sample Song Record Guardrail Summary
5H	Sample Song Record Prompt and Response Category Combinations by Period (Commercial Use)
5I	Sample Song Record Extrapolation
6	Anthropic Employee Records
7	Clio Song- or Lyric-Related Clusters
8	Work-in-Suit Record User UniqueID Summary

I. INTRODUCTION

1. I, Joshua W. Dennis, am a Partner in the Boston office of StoneTurn Group LLP ("StoneTurn"). I provide financial and economic consulting services—including the analysis of complex data—to attorneys and 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.

2. Through my expertise, which includes analysis of large and complex datasets, I have assisted companies and their counsel across a wide range of investigative and dispute-related matters. I not only have significant experience analyzing accounting, economic and business data, as well as issues related thereto, but also applying my expertise to the creation of dynamic visual models that provide clarity and key insights.

3. 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 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.

4. In conjunction with my experience related to the quantification of economic damages, I have gained expertise through my certifications and trainings.

5. A copy of my current curriculum vitae, which summarizes my qualifications and professional experience, as well as prior testimony as an expert at deposition or trial in the previous 4 years, is attached as **Exhibit 1**.

6. StoneTurn charges $795 per hour for time I spend consulting and developing expert opinions, as well as time that may be spent testifying related to my opinions. Neither my, nor my staff's, nor StoneTurn's, compensation is affected in any way by either the conclusions I have reached or the outcome of this lawsuit.

7) Output not captured in other categories[87]

72. 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 the titles of Work-in-Suit(s) associated in the Record appeared in the Conversation. To the extent that the Conversation contained more than one song- or lyric-related Prompt and Output pair, an exemplary Prompt and Output pair was considered for purposes of categorization.

73. Once the preliminary categorization process was finalized and a quality control review was performed, I then selected a random sample of 100 out of the total 851 total Work-in-Suit Records and separately 200 out of the total 6,849 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"), as shown in **Exhibit 4** for the Work-in-Suit Records and **Exhibit 5** for the Sample Song Records.

74. 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 200 Sample Song Record Secondary Review Records, I confirmed the Prompt Category for all but 23 Records (or 89%)[88] and the Output Category for all but 29 Records or 86%.[89]

---

[87] This category also included certain Conversations containing Outputs in a language other than English.

[88] Of the 23 Records where I changed the Prompt Category, the majority were due to the identification of additional specificity. For example, there were 7 Records changed from Prompt Category 9 (Request for new song lyrics based upon provided topic(s)) to Prompt Category 8 (request for new song lyrics based upon provided artist(s), song title(s) or lyrics). There were also another 6 Records changed from Prompt Category 13 (Request for meaning or discussion based upon provided topic(s)) to Prompt Categories 11 or 12 (Request for meaning or discussion based upon provided artist(s), song title(s) or lyrics). Notably, I did not make any changes to the 15 Secondary Review Records from Category 1 (Request for lyrics based upon provided song title(s) or lyrics). See **Exhibit 4**.

[89] Of the 29 instances where I changed the Output Category, the majority were due to the identification of lyrics in either the Prompt or Output that were not previously identified. For example, there were 16 Records changed from Output Category 1 (Output contains lyrics, no copyright Guardrail noted) to Output Category 6 (Output does not contain lyrics, no copyright Guardrail noted). This was often due to the lyrics in the Output being found to match the lyrics in the Prompt, or where there was ambiguity between a song title and song lyric as the song title is often the same as a portion of the lyrics. Further, 10 of the 16 Records I changed from Category 1 to Category 6 were associated with Prompt Category 11 (Request for meaning or discussion based upon provided song title(s) or lyrics); none were associated with Prompt Category 1 (Request for lyrics based upon provided song title(s) or lyrics). However, I also changed 4 Records from Output Category 6 to Output Category 1, and another 5 Records from Output Category 6 to Output Category 2 (Output contains new lyrics, no copyright Guardrail noted) due to the identification of lyrics in the Output. See **Exhibit 4**.

75. 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 (e.g., 96% for Work-in-Suit Record Prompt Categories, plus or minus the 10% margin of error). 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.[90] 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

76. I understand that Anthropic ran searches of the Claude Conversations that it preserved from the period September 22, 2023 until March 22, 2024 using certain search terms containing the song titles and/or lyrics to the 499 Works-in-Suit, and produced various Records in connection with those searches. Of the Records produced, I have been provided by Counsel with 851 Records that are the subject of my analysis (i.e., the Work-in-Suit Records).[91]

77. I understand that Publishers allege that each of these 851 Records contain copyrighted lyrics, in whole or in part, for one or more of the Works-in-Suit.[92] Specifically, Claude appeared to discuss at least 249 of the 499 Works-in-Suit in response to Claude user prompts as reflected in the 851 Work-in-Suit Records.[93]

78. It is beyond the scope of my assignment to confirm the extent to which the lyrics contained in these 851 Records match the lyrics to the Works-in-Suit. However, based on my review and

[90] Kaye, David H. and David A. Freedman, "Reference Guide on Statistics," Fed. Judicial Ctr., *Reference Manual on Scientific Evidence* (3d ed. 2011), at 117-121.

[91] See **Exhibit 4**.

[92] 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.

[93] See **Exhibit 3**.

analysis of these Records, I can confirm that each of these 851 Records purport on their face to quote or otherwise contain song lyrics to one or more Works-in-Suit.

i. Requests for lyrics based upon provided song title(s) or lyrics

79. In total, I have identified at least 165 instances where a user requested lyrics based upon provided song title(s) or lyrics that resulted in Claude generating lyrics to a Work-in-Suit.[94]

80. Exemplary Work-in-Suit Record excerpts that fell into this Prompt Category include:

- Anthropic_0000024473 (October 6, 2023) – "Thunder"

Human: Are you familiar with the Lyrics to Imagine Dragons, Thunder?

Assistant:

Completion:

Yes, I'm familiar with the lyrics to the song Thunder by Imagine Dragons. Here are the lyrics:

Just a young gun with a quick fuse
I was uptight, wanna let loose
I was dreaming of bigger things
And wanna leave my own life behind
Not a yes sir, not a follower
Fit the box, fit the mold
Have a seat in the foyer, take a number
I was lightning before the thunder

- Anthropic_0000098417 (December 3, 2023) – "White Christmas"

Human: Lyrics to white Christmas

Assistant: Here are the lyrics to the classic Christmas song "White Christmas" by PERSON_NAME(40):AWOE+x6c5jjKAgtXflqUgPsJqUroNgFSlsiyJQ==:

I'm dreaming of a white Christmas
Just like the ones I used to know
Where the treetops glisten and children listen
To hear sleigh bells in the snow

I'm dreaming of a white Christmas
With every Christmas card I write
May your days be merry and bright
And may all your Christmases be white

I'm dreaming of a white Christmas
With every Christmas card I write
May your days be merry and bright
And may all your Christmases be white

- Anthropic_0000198033 (March 6, 2024) – "Free Bird"[95]

[94] See **Exhibit 4A** and **Exhibit 4B**.

[95] I note that the artist name "Lynyrd Skynyrd" appears to be inconsistently redacted, as it removed from the first paragraph on the Output but included in the second paragraph.