

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.,
Petitioner

v.

VEDANTI SYSTEMS LIMITED,
Patent Owner

Case IPR2016-00212¹
Patent 7,974,339 B2

**PETITIONER'S RESPONSE TO
PATENT OWNER'S MOTION FOR OBSERVATION OF THE
CROSS-EXAMINATION OF DR. JOHN R. GRINDON**

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

¹ Case IPR2016-00215 has been consolidated with this proceeding.

Google submits this response to Vedanti's *Motion For Observation Of Cross-Examination Of Dr. John R. Grindon* (Paper 31) pursuant to the *Scheduling Order* (Paper 9).

Response to Observation No. 1

Dr. Grindon testified during his cross examination that he has “extensive experience” with frequency transforms (Ex. 2025, 13:2-17) of which “DCT is a fine-tuned variant” (*id.*, 13:18-21, 15:1-7), and worked as a consultant assessing technology involving DCT (*id.*, 17:17-18:5). Dr. Grindon also testified that he had formal coursework in transform methods (*id.*, 42:11-43:2), which provides an understanding of “frequency transform methods of which the DCT is one” (*id.*, 10:18-11:8). Dr. Grindon testified that such DCT variants would be “immediately apparent to anyone with as extensive a background as I have but certainly also immediately apparent to someone with much less experience than I have.” (*Id.*, 15:13-23.) Vedanti does not point to any aspect of DCT which Dr. Grindon failed to understand or could not explain.

The above testimonies negate Vedanti's suggestion in its *Observation No. 1* that formal coursework specifically in DCT is necessary to understand Thyagarajan.

Response to Observation No. 2

Contrary to Vedanti's assertion in its *Observation No. 2*, Dr. Grindon testified that he specifically has experience with DCT image compression working as a consultant (Ex. 2025, 17:17-18:5). As discussed above with respect to Vedanti's *Observation No. 1*, Dr. Grindon also testified at length that he has an extensive background in frequency transforms, of which DCT is but one. Again, Vedanti does not point to any aspect of DCT image compression which Dr. Grindon failed to understand or could not explain.

Response to Observation No. 3

Dr. Grindon testified that he had formal coursework in "general compression" in his undergraduate (University of Missouri) and graduate studies (M.I.T. and Washington University). (Ex. 2025, 42:4-43:5; Ex. 1004 (Dr. Grindon's CV)). Dr. Grindon testified that he also had formal coursework in transform methods, sample data systems, communications theory, information theory and statistical processes (Ex. 2025, 42:4-43:5), which "are the building block technologies of compression" (*id.*, 43:6-20). Dr. Grindon further testified that aside from perhaps information theory, he has work experience as an engineer in all of the above technologies including "image compression." (*Id.*, 19:19-20:7 (referring to his declaration, Ex. 1030, ¶ 16).)

Given that Vedanti's POSA standard only requires either coursework or work experience in general compression (Paper 15, p. 12), the above testimonies negate Vedanti's suggestion that Dr. Grindon is somehow not a POSA under Vedanti's POSA standard (Paper 31, Observation No. 3).

Response to Observation No. 4

Contrary to Vedanti's assertion, when Dr. Grindon was asked whether he was suggesting the use of "some different algorithm or approach to subdividing than is taught in Thyagarajan" in combining Belfor and Thyagarajan, Dr. Grindon answered, "No." (Ex. 2025, 35:15-20.) Dr. Grindon explained how Belfor is combined with Thyagarajan in his initial declaration (Ex. 1029) at, for example, paragraphs 88-99, and provided additional clarification in his supplemental declaration (Ex. 1030) at, for example, paragraphs 71-85. As Dr. Grindon testified during cross examination, "in Thyagarajan we have the frame division ... Then applying that division approach to Belfor would allow Belfor to use non-uniform blocks." (Ex. 2025, 35:7-14.)

The above testimonies refute Vedanti's allegation that Dr. Grindon is somehow suggesting that something different is needed than what is described in his declarations to combine Belfor and Thyagarajan (Paper 31, Observation No. 4).

Response to Observation No. 5

Vedanti offers a vague suggestion in its *Observation No. 5* that a frame subdivision performed by the methods of Thyagarajan or Golin as combined with Belfor would not produce regions having similar spatial frequency. But Vedanti fails to point to any evidence to show that would be the case. And, Vedanti has not identified any specific contradictions between Dr. Grindon's cross examination testimony and his declarations for how Belfor would be combined with Thyagarajan as well as with Golin.

Vedanti's *Observation No. 5* simply does not support its suggestion that Thyagarajan's or Golan's subdivision approach cannot be simply substituted with Belfor's subdivision approach.

Respectfully submitted,
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

/ Michael Messinger /

Michael V. Messinger, Reg. No. 37,575
Michelle K. Holoubek, Reg. No. 54,179
Attorneys for Petitioner

Date: January 24, 2017

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.