

## CASE STUDY

# Revolutionized Patent Analysis with GPT-4 for an IP Firm



## OVERVIEW

The client is a service-oriented law firm, headquartered at North Dakota, US.

## CHALLENGE

The manual nature of the client's current processes led to inefficiencies, time wastage, and potential inaccuracies in patent analysis. Challenges included:

**Reference Search** - The client's reference search relied heavily on keyword analysis and manual review, resulting in information noise and substantial time consumption. The need for creativity in thinking of all possible keywords further complicated the process.

### INDUSTRY

- Intellectual Property
- Patent Law

### SERVICES

- Process Automation

### TECHNOLOGY

- Open AI
- LLM



**FTO Analysis** - To determine whether their products infringed on competitors' patents or if they had comprehensive coverage with their own intellectual property, the client had to manually sift through patents, create concepts, and map them—a time-consuming and labor-intensive task.

## **SOLUTION**

Utilizing the powerful GPT-4 model, we transformed the reference search process. Instead of relying on keyword-based searches, we employed the GPT API to generate concepts from claim texts. This automated mapping of concepts to claims streamlined the analysis, overcoming the limitations of keyword-based searches where concepts might exist semantically without explicit keywords.

Our solution also involved automating the mapping of every claim in the entire patent database using the GPT API. By leveraging the capabilities of the GPT-4 model, we made the process efficient and accurate. This automation facilitated easy analysis based on concepts, eliminating the need for manual concept creation and mapping.

## **BENEFIT**

Contata's innovative use of the GPT-4 model revolutionized the client's patent analysis processes, providing substantial benefits in terms of cost savings, efficiency, and accuracy. The transition from manual keyword searches to automated concept-based analysis marked a significant leap forward in the client's intellectual property management strategy.

- **Cost Savings** - Significant reduction in valuable attorney time, estimated at \$400 - \$500 per hour. Reduction in the overall hours required for patent analysis.
- **Efficiency & Accuracy** - Drastic reduction in processing time for new patent applications. Improved ability to find relevant references, leading to faster processing times for new applications.



- **Increased Approval Rates** - Higher approval rates for new patents, as automated analysis enhances the accuracy and thoroughness of FTO assessments.

## About Contata

Contata Solutions is a trusted leader in technology and digital innovation. Through our work in data engineering, data analytics, machine learning, marketing automation and app development, we deliver solutions that address complex problems in ways that are simple, insightful and impactful.

Our promise and value proposition to our customers is simple: we leverage our deep technical expertise and global presence to bring software products and data-driven decision capabilities to life.

Founded in 2000, Contata is a privately-held company headquartered in Minneapolis that serves clients globally from offices in the United States and India.