

# Inventing Tomorrow: A Guide to Claiming and Patenting AI Creations

28th Annual Advanced Patent Law Institute

**Charlene Liu**  
**Hong Shi**

haynesboone

© 2023 Haynes and Boone, LLP

1



haynesboone

© 2023 Haynes and Boone, LLP

Image Courtesy of Bing Image Creator. Prompt: "Inventing Tomorrow: A Guide to Claiming and Patenting AI Creations"

## Agenda

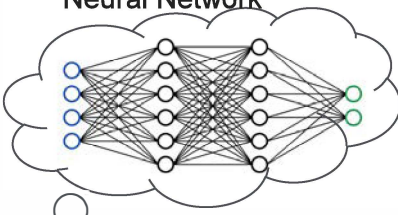
- **Introduction**
  - *Example AI-related Inventions*
- **Enforceability: Invisible vs. Visible**
- **Split Infringement: Inference vs. Training**
- **Eligibility**
- **Generative AI Case Study**

2


2

# Introduction

**Neural Network**



Mimic Human Intelligence



- Speech:** text to speech, speech to text
- Vision:** machine vision, image recognition
- Language Processing:** translation, Q&A
- Learning:** predictive analytics, deep learning
- Planning:** optimization, prediction ...
- Robotics:** control, detection ...

...

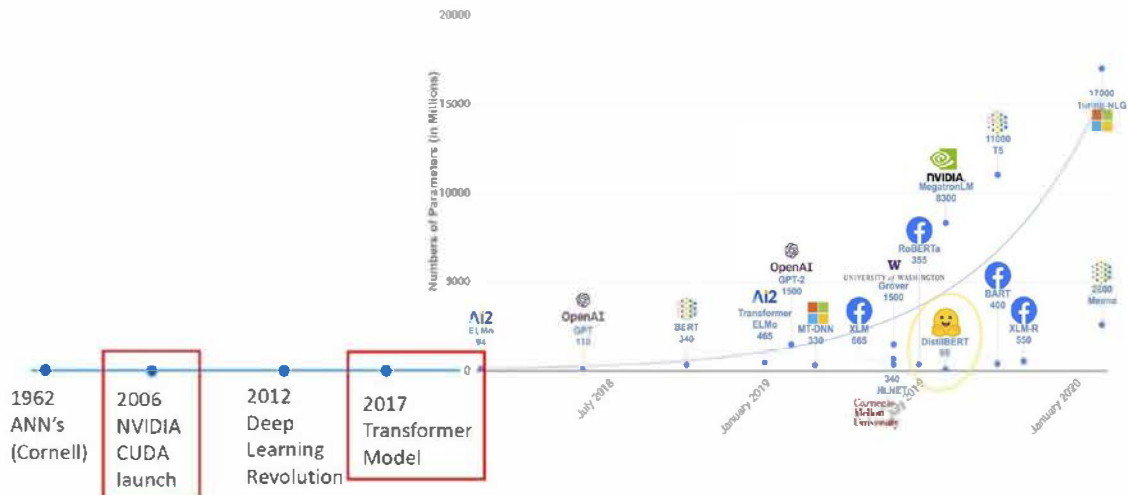
haynesboone

© 2023 Haynes and Boone, LLP

3

# Generative AI: Where Are We?

## Generative AI Timeline



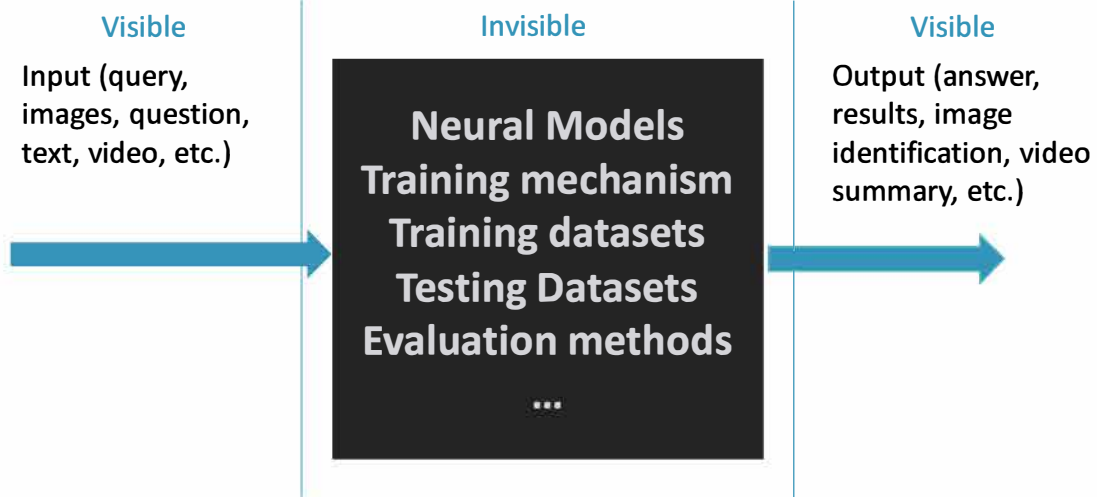
<https://research.aimultiple.com/gpt/>

haynesboone

© 2023 Haynes and Boone, LLP

4

## Enforceability: Invisible vs. Visible



**Are AI Patents enforceable?**

haynesboone

© 2023 Haynes and Boone, LLP

5

5

## Enforceability? Fun Chat with GPT-3.5

Do you use Google's Transformer architecture

As an AI language model, I am based on OpenAI's GPT (Generative Pre-trained Transformer) architecture, not Google's Transformer architecture. GPT is a variant of the original Transformer model introduced by Google in the paper "Attention Is All You Need" in 2017. GPT takes the Transformer architecture and adapts it for language generation tasks, using a decoder-only structure and pre-training on a vast amount of text data to achieve impressive language understanding and generation capabilities.

That means you use the attention mechanism invented by Google?

Yes, that's correct. The attention mechanism, originally introduced in the Transformer model by Google, is a fundamental component of the GPT architecture that I am based on.

haynesboone

© 2023 Haynes and Boone, LLP

6

6

Find the full text of this and thousands of other resources from leading experts in dozens of legal practice areas in the [UT Law CLE eLibrary \(utcle.org/elibrary\)](https://utcle.org/elibrary)

## Title search: *Inventing Tomorrow: A Guide to Claiming and Patenting AI Creations*

Also available as part of the eCourse

[IP and AI: Navigating Implications for Patentability, Licensing, and the Practice of Law](#)

First appeared as part of the conference materials for the  
28<sup>th</sup> Annual Advanced Patent Law Institute session

"*Inventing Tomorrow: A Guide to Claiming and Patenting AI Creations*"