

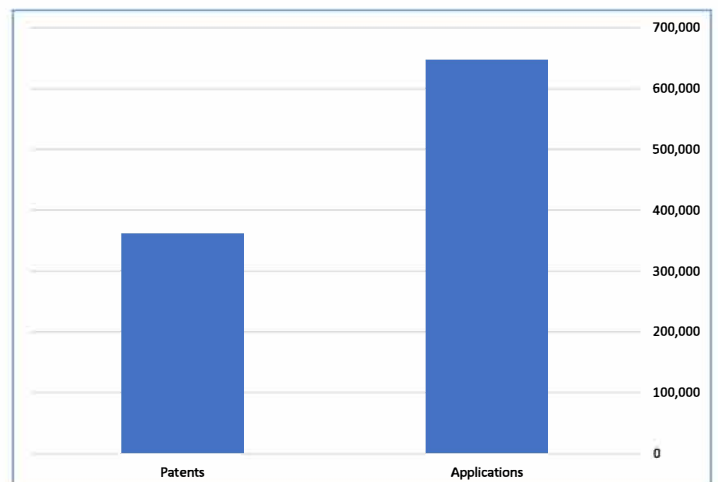
# IP Considerations For Generative AI

*Patrick Njeim, November 2, 2023*

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## Let's start with numbers

- How many patent applications were filed in 2021?
  - 646,855
- How many patents were issued in 2021?
  - 360,625
- How many AI patent applications were filed in 2021?
  - 13,898
- Average annual growth rate?
  - 38%- highest across technology areas
- 2023 and on should see higher growth rate in view of generative AI



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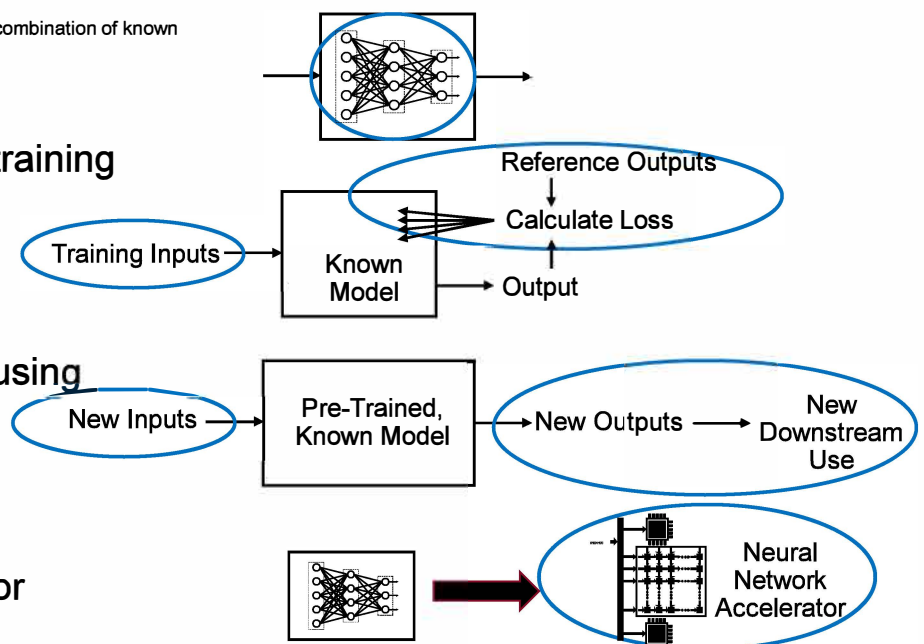
# Example AI: “self-learning”

- DeepMind (acquired in 2015 by Alphabet/Google)
- Video shows AI-powered robots playing football
  - No human programming
  - Motion capture data to teach robots how to move like humans
  - Then robots given goal: score goals
  - Robots self-learned moves to play the game by testing different moves over 2 weeks

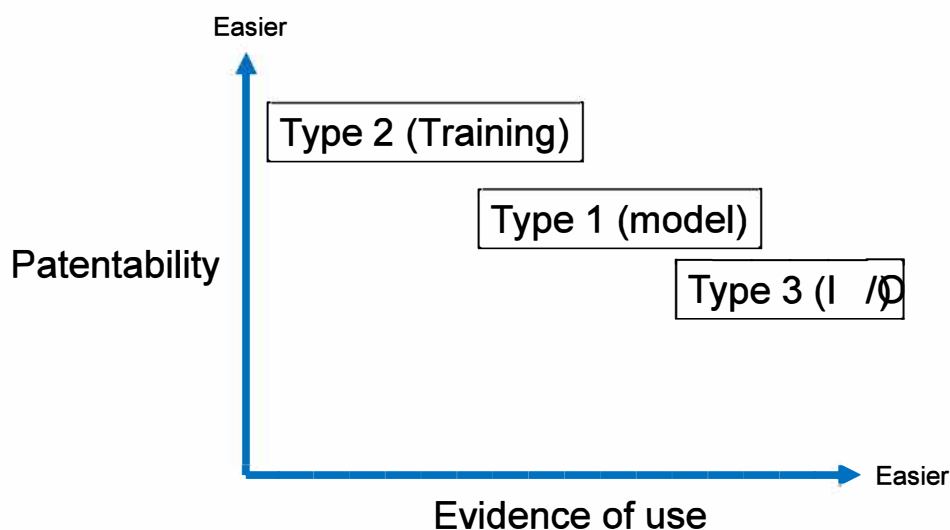


## Areas of protection

- Type 1 – New model (can be combination of known models)
- Type 2 – New method of training model
- Type 3 – New method of using model
- Type 4 – New hardware for runtime/training

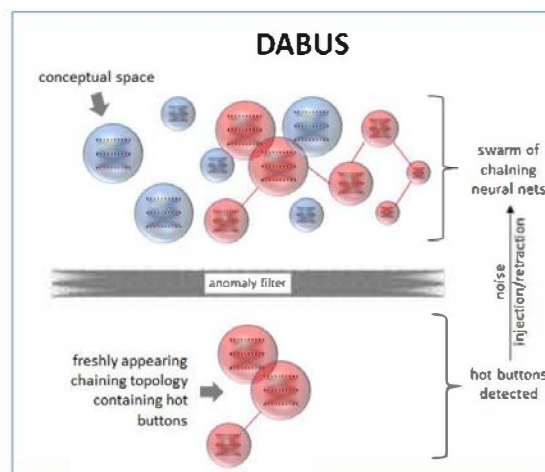


# The balance in the software space



## Can an AI model be an inventor? Short answer: no.

- DABUS: Device for the Autonomous Bootstrapping of Unified Sentence
  - AI model developed by Thaler
- DABUS named as sole inventor:
  - US 16/524,350 (light beacon that flashes in a new and inventive manner to attract attention)
  - US 16/524,532 (beverage container based on fractal geometry)
- USPTO found application incomplete for not naming an inventor per patent act (35 U.S.C. § 100(f))
- On appeal, Federal circuit found AI cannot be inventor
  - 35 U.S.C. § 100(f): inventor is "individual or, if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention"
  - although "individual" not defined, it is clear from the language of the statute that an "individual" is a natural person



See US 2015/0379394

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## Title search: IP Considerations for Generative AI

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

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