AI in Trademarks

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Let’s talk about “cat recognizer”!

![Cat Image]
Traditional Rule-Based Software

RULES:
1) One round face
2) Two triangle ears
3) One pink nose
   etc.
Traditional Rule-Based Software

RULES:
1) One round face
2) Two triangle ears
3) One pink nose
   etc.

Yes, it is a cat!
Traditional Rule-Based Software

INPUT

OUTPUT

RULES:
1) One round face
2) Two triangle ears
3) One pink nose
   etc.

No, it is not a cat!
eh... maybe the rules are too specific

Let's change to broader rules:
1) One **round** face
2) Two **triangle** ears
3) One **pink** nose
   • etc.
Traditional Rule-Based Software

RULES:
1) One face
2) Two ears
3) One nose
   etc.

INPUT

OUTPUT

They are two twin cats!
Traditional Rule-Based Software

INPUT

OUTPUT

Are you kidding me?!

RULES:
&#@^?!@#$%^&()~*
So, what is the difference?

Human brain can learn from experience.
Here comes AI…

• Step 1, we need big data (experience)
AI Deep Learning

• Step 2, we need to train the model *(feed the robot)*
AI Deep Learning

• Step 3, test the result *(magic happens!)*
Training the Machine to Find Similar Marks

1) Feature Recognition

2) Official Decisions

3) Test & Feedback
Let’s Search for Similar Marks to
Step 1: Upload the Picture

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Step 2: Select the Class(es)
Step 3: Click “Search”
Here are the search results
How to Further Improve

- Bigger data with good quality
- More test & feedback by trademark professionals
What Else Can AI Do for Trademark

- Prediction of case results (registration, opposition, invalidation)
  - distinctiveness?
  - reputation?
  - bad faith?
  - likelihood of confusion?
What Else Can AI Do for Trademark

• Logo Design
  - if my logo cannot be registered due to prior marks, how should I revise it to overcome?

  - or maybe, design a fresh new logo
Thank you!