



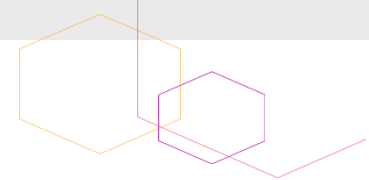
# How to Add AI Technology in **Your** Work

In this presentation, we'll discuss how to integrate AI into your existing IT system.  
Specifically, we'll explore AI technology offered by WIPS, a leading IP service provider  
in Korea.



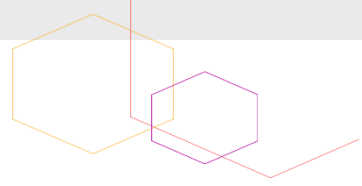
Kim Ki Tae





**WIPS CO., LTD.**

# Introduction WIPS



*IP Total service provider*

*No.1 market share in Korea*



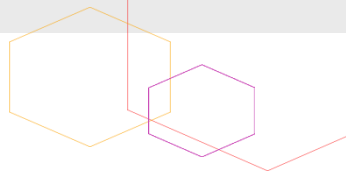
Seoul Sangam, KOREA

## About WIPS

WIPS is the leading IP total service provider in Korea, with a strong track record of providing comprehensive IP solutions.

- **Company** : WIPS Co., Ltd
- **Starting from** : August, 1999
- **Headquarter** : Seoul , Korea

# Introduction WIPS



**Established**

**1999**



**Employees**

**500+**



**Enterprise  
Customer**

**5000+**



**IP Date**

**200 M+**



**Awards**

**30+**

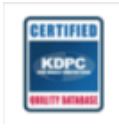
# Introduction WIPS



**Digital Content Award by the Ministry of Information and Communication**



**DB Quality Grand Prize by the Ministry of Information and Communication**



**Certified Highest Quality DB by Korea Database Agency**



**Certified ISO/IEC 27001:2005 Information Security Management System for KIPO**



**Designated as “World Class Product” Service by Ministry of Knowledge Economy**

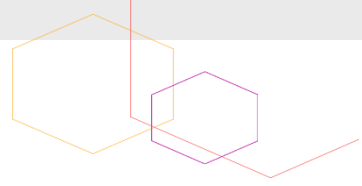


**Authorized Prior Art Search Institute by KIPO**

◆ **Top Market Share in Korea**

◆ **WIPO ASPI Access to Specialized Patent Information**

# Introduction WIPS



## WIPS partnering with KIPO

### ➤ Authorized Prior Art Search Institute By KIPO

Patent Prior Art Search: 10,000 per year

98% of Search Reports cited by KIPO Patent Examiners

### ➤ Authorized PCT Prior Art Search Institute By KIPO

PCT Prior Art Search: 3,000 per year

### ➤ Authorized Trademark & Design Art Search Institute By KIPO

Trademark Prior Art Search: 20,000 per year

Design Prior Art Search: 13,000 per year



## Patent Database Today !

**“ How is AI being leveraged in IP work ? ”**

WIPS Today !

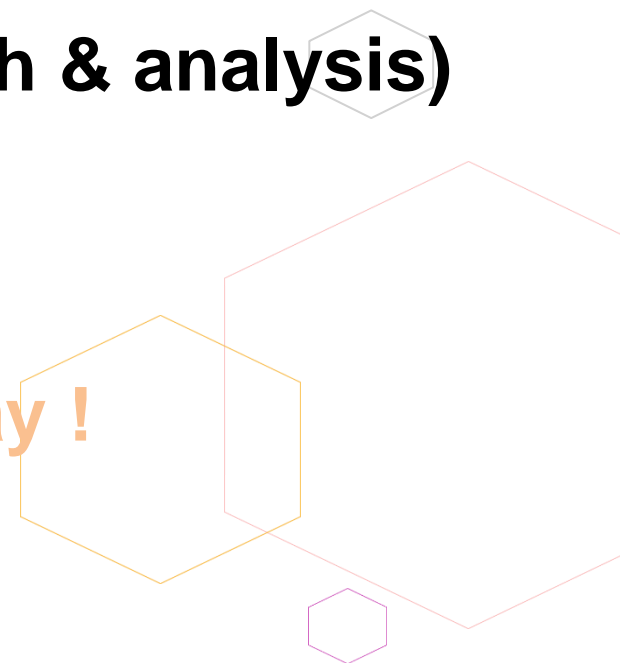
A decorative graphic in the bottom right corner consisting of several overlapping hexagons in various colors (orange, red, purple, grey) and sizes, arranged in a cluster.

# Patent Database Today !

## CONTENTS >

- **sLLM (smaller Large Language Model)**
- **WIPS Global (patent search & analysis)**

**WIPS Today !**



# WIPS sLLM

## sLLM: A Specialized AI Engine

sLLM stands for Smaller Large Language Model.

This type of AI is designed for **specific areas** and provides greater control, **security**, and **accuracy** compared to larger, general-purpose AI models.



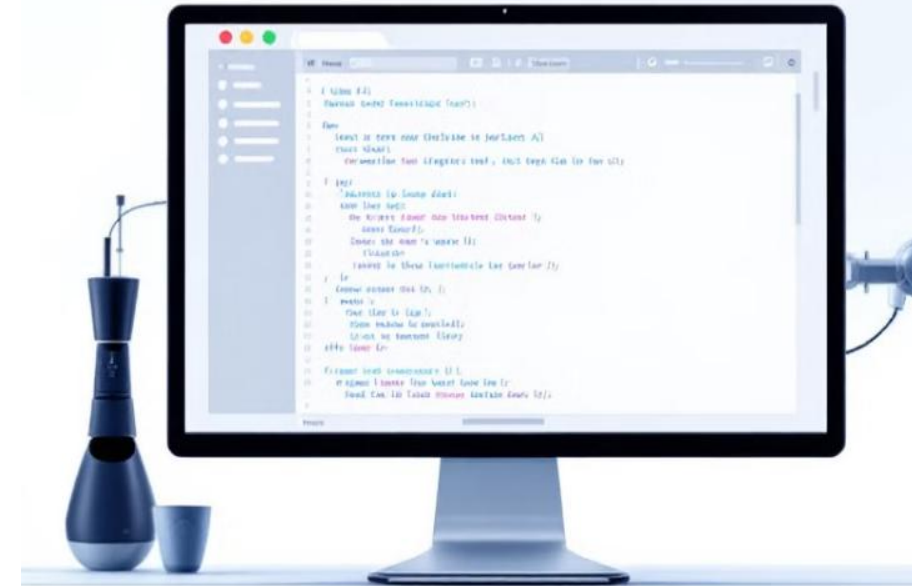
# sLLM

(smaller Large Language Model)

VS

# AGI

(Artificial General Intelligence, LLM)



## Advantage of sLLM

1

**Create specialized AI engine**

---

2

**Advantage of Security**

---

3

**Accuracy**

---

4

**Scalability**

---



1

**Specialized AI engine trained by patent big data**

---

2

**Security : working with in house system**

---

3

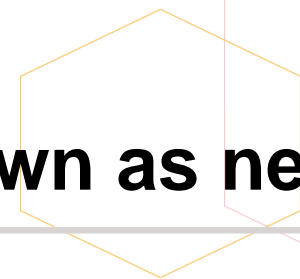
**Accuracy : specialized about patent document**

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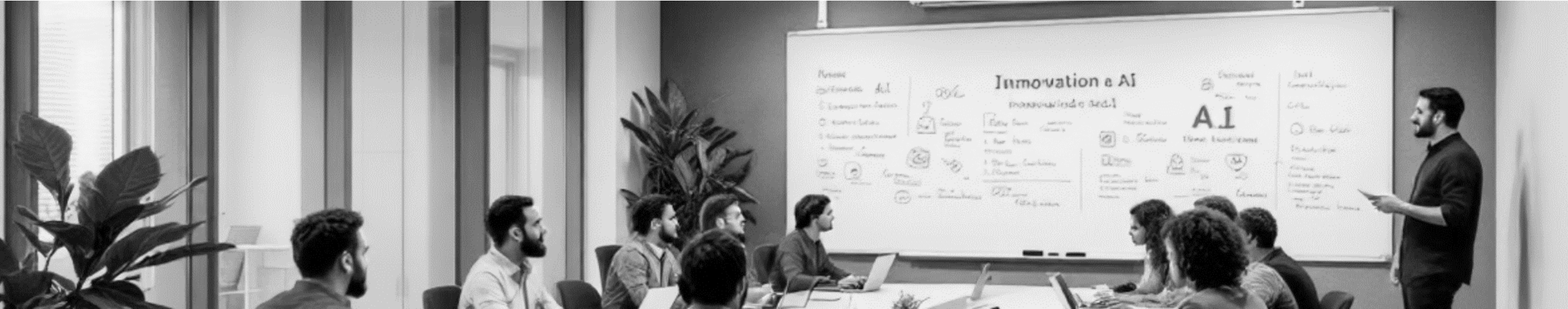
4

**Scalability : can be scaled up or down as needed**

---







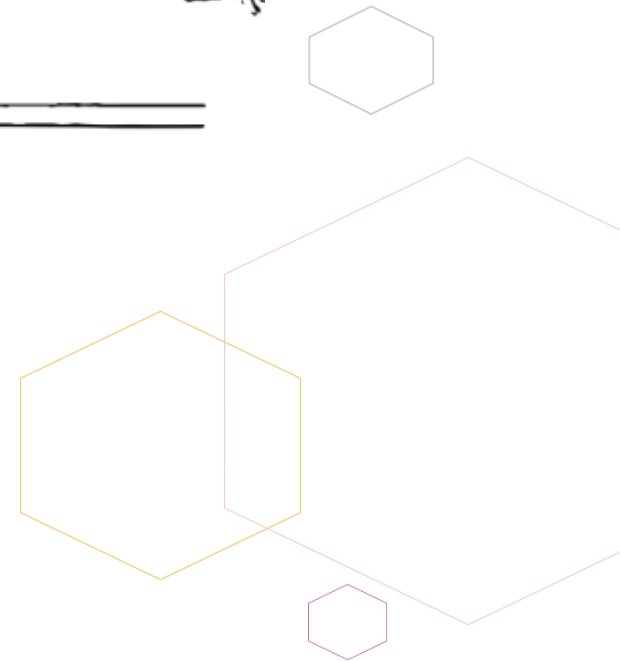
**WIPS AI Technology >**

**Simple & Easy & Accurate**



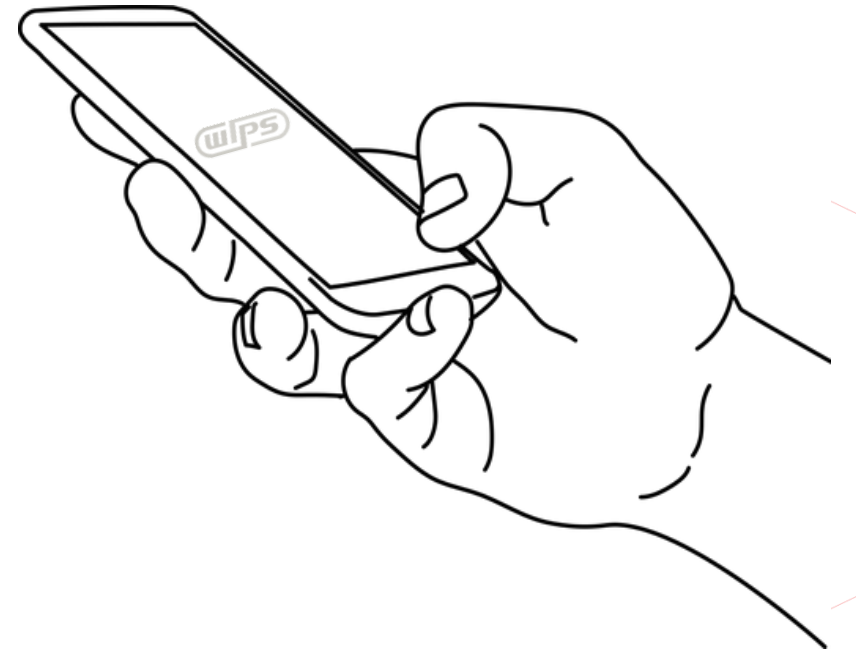
Biggest AI advantage >

# Break Huddle



Biggest AI advantage >

# Break Huddle





## ❖ WIPS AI Technology – AI search

Semantic search

Count frequency keyword

Sentence search

Paragraph search

Phrase search

Text mining

**Not enough**  
**Technology (Deep learning)**

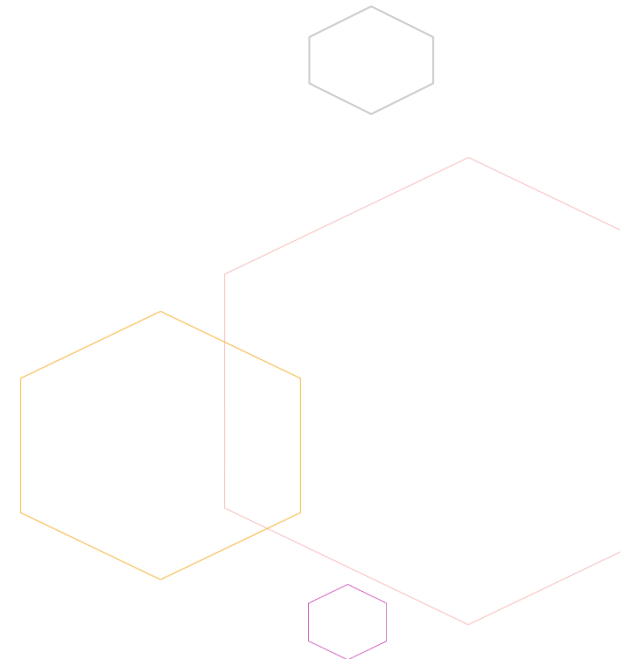
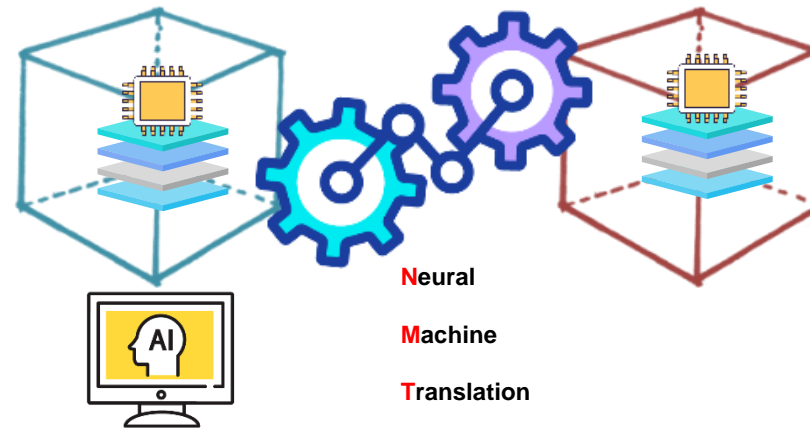
**Not enough**  
**Big & Optimized Data**



❖ WIPS AI Technology – AI search

**Technology (Deep learning)**  
: AI tech is growing up fast

**Big & Optimized Data**  
: Big data + NMT + Optimized Condition



# ❖ WIPS AI Technology – AI search



## AI Search



Multi Language searchable - English / Japanese / Chinese / Korean

Technical classification ▾

All

Sentence / file

123 Number

Split, pit, slice and scoop avocados safely and effectively with the OXO Good Grips 3-in-1 Avocado Slicer. This tool features a comfortable, non-slip grip and a blade that easily cuts avocados to their core without being sharp to the touch. The stainless steel center removes the pit with one quick twist. Use the fan blade to cut the ripe, delicious fruit into seven perfect pieces. Green body. Top-rack dishwasher safe.



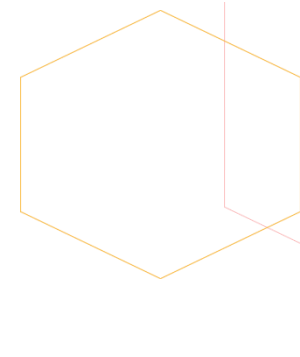
421 characters

Example

X Clear

Search

**Human Text, Language**  
**: Invention note, Journal, Article, Paper, Product**  
**description etc.**



# ❖ WIPS AI Technology – AI search

## AI Search

Multi Language searchable - English / Japanese / Chinese / Korean

Technical classification All

Sentence / file 1,23 Number

The present disclosure generally relates to the field of unmanned aerial vehicle and, more particularly, relates to a wearable unmanned-aerial-vehicle control device, and a system thereof. Unmanned aerial vehicle (UAV), as a new flying device, has been widely applied in a variety of fields such as entertainment, agriculture, geology, meteorology, power supply, emergency rescue, disaster relief, etc. At present, the remote control of UAV is mainly realized through a hand-held remote-control device for wireless communication with UAV, which has many disadvantages such as large size, inconvenience in carrying, etc. In the meantime, the adjustment of the UAV's flight status and the angle captured from the imaging device mounted on the UAV remains dependent on visually remote control by an operator. This requires considerable experience from the operator and high proficiency in operation of the hand-held remote-control terminal. In accordance with the disclosure, there is provided a wearable device for controlling an unmanned aerial vehicle (UAV). The wearable device includes one or more sensors configured to detect first status information of the wearable device, a communication circuit configured to transmit the first status information to the UAV and receive second status information of the UAV from the UAV, and a processor configured to generate a control instruction according to at least one of the first status information or the second status information, and control the communication circuit to transmit the control instruction to the UAV to control the UAV. FIG. 1 illustrates a schematic diagram of an exemplary unmanned aerial vehicle system consistent with disclosed embodiments. FIG. 2 illustrates a schematic block diagram of an exemplary wearable device consistent with disclosed embodiments. FIG. 3 illustrates a schematic block diagram of an exemplary unmanned aerial vehicle consistent with disclosed embodiments. FIG. 4 illustrates a schematic diagram showing control of an exemplary unmanned aerial vehicle in

15,926 characters

Example X Clear Search



### ! AI Search

- AI Search suggests documents with high similarity by entering sentence based on artificial neural networks.
- AI search is available for Sentence / File / Number.
- Analyzes the language of the entered sentence and searches for similar documents by automatic translating. (Automatic translating may take some time.)

- AI search - Multi language support. EN, JP, CN and KR
- Human Text, Language search : Invention note, Journal, Article, Paper, Product description etc.

## ❖ WIPS AI Technology – AI search

### Search



Field  
Number  
Step  
AI  
Drawing Text

### Theme



Trial & Appeal  
Litigation  
Family  
Legal

### IP Expert



Insight Plus  
Invalidation Advisor  
FTO Generic  
Chem Sight

**Brainy** | Sentence | Keyword | Number

Brainy  
Hello! I'm **Brainy**, WIPS AI patent search.  
Please ask about patent keywords or any problem you want to solve. Let me help you.

Frame interpolation meth

Ask about patent keywords you need or problems you want to solve. **Ask** Guide

Example : **Method to improve battery efficiency in electric vehicles** **Methods to minimize the delay of the clock of low drivers in display devices**

# ❖ WIPS AI Technology – AI search

**Filters** ✓ Refine ↻ Reset

**Core keywords**

**Technical Classification(Main)**

- Computer t.
- IT methods..
- Digital co..
- Medical te..
- Audio
- Etc.

**Major Applicants(TOP.7)**

|            |    |
|------------|----|
| ELECTRON.. | 59 |
| KOREA UN.. | 33 |
| KAIST      | 31 |
| URP CO,..  | 28 |
| KT CORPO.. | 23 |
| KOREA IN.. | 22 |
| NAVER CO.. | 22 |

**Status**

- Granted
- Pending
- Rejected
- Expired
- Withdrawn
- Filed
- Abandoned

**The application date trend**

US EP PCT JP **KR** CN ?

Total 1,000 🔍 Re-search 📜 History
SmartAngle Easy Viewer Dual Viewer My Folder Report Download SmartCloud Insight Plus
☰ ☱ ⚙️ Display Setting

| <input type="checkbox"/> | No | Similarity | Status | Title            | Date       | Appl.No.        | Appl. Date | Applicant      | IPC(Main)   |
|--------------------------|----|------------|--------|------------------|------------|-----------------|------------|----------------|-------------|
| <input type="checkbox"/> | 1. | 98.79      | GRT    | KR 10-2527937 B1 | 2023.04.26 | 10-2020-0168552 | 2020.12.04 | WIPS CO., LTD. | G06N-003/08 |

**1. GRT** 🔍 Re-search

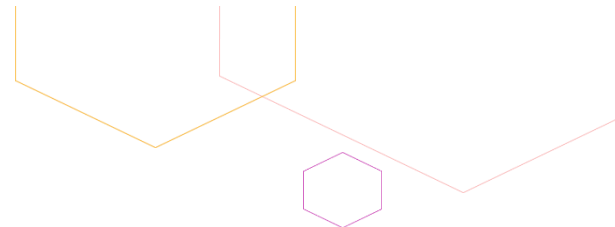
**A METHOD FOR SEARCHING THE SIMILAR PATENTS BASED ON ARTIFICIAL INTELLIGENCE AND AN APPARATUS THEREOF (인공 지능 기반의 유사 특허 검색 방법 및 그 장치)**

Disclosed is a similar patent search method based on an artificial intelligence. The method may comprise: a step of preprocess-constructing a patent document; a step of learning the data of the patent document preprocess-constructed with a deep learning algorithm; and a step of searching and providing a similar patent document for a search query, based on the data of the patent document learned by the deep learning algorithm. Therefore, the present invention is capable of allowing the similar patent document with significantly improved accuracy to be provided to a user.

Date : 2023.04.26 | Appl. No : 10-2020-0168552 | Appl. Date : 2020.12.04 | Applicant : WIPS CO., LTD. | IPC(Main) : G06N-003/08 |  
 Technical classification(Main) : Electrical engineering-Computer technology |

🔍 Core keywords

- Search result – 1,000 search result list with relevant score



# ❖ WIPS AI Technology – AI search

WIPS Global Similar Patent

Provide 30 patents, which are similar to US 12162470 B2 [?](#) [More 'Similar Patents'](#)

Total 30 | My folder

KR JP **US** EP CN PCT

- 1. **US 11891045 B2** 78.70  
 Power transmission device for vehicle
- 2. **US 7758467 B2** 78.69  
 Hybrid vehicle control apparatus
- 3. **US 11173915 B2** 78.68  
 Hybrid vehicle drive apparatus
- 4. **US 12024020 B2** 78.66  
 Power transmission device
- 5. **US 2024-0343105 A1** 78.65  
 HYBRID VEHICLE CONTROL APPARATUS
- 6. **US 2022-0314962 A1** 78.64  
 VEHICLE CONTROL APPARATUS
- 7. **US 2024-0300476 A1** 78.63  
 DRIVE CONTROL APPARATUS FOR ELECTRIC VEHICLE
- 8. **US 2024-0101103 A1** 78.62  
 HYBRID VEHICLE
- 9. **US 11951973 B2** 78.60  
 Technical field of method of controlling electric vehicle and driv...
- 10. **US 11865912 B2** 78.59  
 Transfer for four wheel drive vehicle

GRT **US 11891045 B2**

Power transmission device for vehicle

**Abstract/Claim** Description

Drawings  ON Highlighter

Core Keywords

**Bibliographic** Application Date : 2018.09.10 | IPC(Main) : B60W-020/20 | 1st Standardized Applicant : NISSAN MOTOR CO LTD

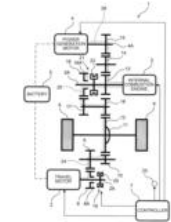
**Abstract**

A power transmission device of the present invention is a power transmission device for a vehicle, including: a generator configured to be driven by power of an internal combustion engine; a travel motor configured to be driven by electric power generated by the generator and to drive a drive wheels; and the drive wheels configured to be driven by the power of the internal combustion engine or power of the travel motor. The power transmission device includes: a first power transmission path configured to transmit power between the travel motor and the drive wheels; and a first clutch mechanism configured to allow or interrupt power transmission through the first power transmission path.

**Claims**

**Claim 1 (Exemplary Claim)**

1. A power transmission device for a vehicle, the vehicle including:  
 a generator configured to be driven by power of an internal combustion engine;  
 a travel motor configured to be driven by electric power generated by the generator and to drive a drive wheels; and  
 the drive wheels configured to be driven by the power of the internal combustion engine or power of the travel motor,  
 wherein the power transmission device comprises:  
 a first power transmission path configured to transmit power between the travel motor and the drive wheels;  
 a first dog clutch mechanism configured to allow or interrupt power transmission through the first power transmission path;  
 a second power transmission path configured to mechanically transmit the power of the internal combustion engine to the drive wheels;



Rep. Drawing

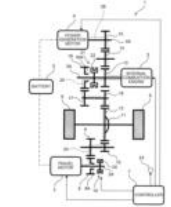


FIG. 1  
Fig. 1

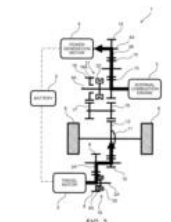


FIG. 2  
Fig. 2

+6

• Find similar patent with core keyword

# ❖ WIPS AI Technology – AI D-structure summary

US 12162470 B2

Control method and control device for **hybrid vehicle**  
混合动力汽车的控制方法及控制装置

Similar Patent

**Bibliographic**

Current Assignee

Standardized Applicant of the current assignee (Code)

Application History

Description
Legal Info.
Evaluation Grade
Trial&Appeal
Litigation
Chemical
SEPs

Claim
Citation
Family
My Folder
Report
Download
File Wrapper

NISSAN MOTOR CO., LTD. Yokohama

Nissan Motor Co Ltd (UN000163)

|                          |              |                           |             |            |            |
|--------------------------|--------------|---------------------------|-------------|------------|------------|
| 2021.03.18               | 2022.09.22   | 2023.09.15                | 2024.05.16  | 2024.12.10 | 2041.03.19 |
| Application              | PCT Pub.(WO) | Submission of Translation | Publication | Grant      | Terminated |
| Prior app.(WO-PCT Appl.) |              |                           |             |            |            |
| PCT App.(JP)             |              |                           |             |            |            |

**Abstract**

A **hybrid vehicle** includes two drive sources and two clutches, and is switchable between a neutral mode and a parallel mode during **vehicle** traveling. The two drive sources are both disconnected from drive wheels in the neutral mode, and are both connected to the drive wheels in the parallel mode. A control method for the **hybrid vehicle** includes implementing at least one of a first switching control and a second switching control. The first switching control includes, upon switching from the neutral mode to the parallel mode, implementing two synchronization controls on rotational speeds before and after the two clutches, concurrently during at least a partial period. The second switching control includes, upon switching from the parallel mode to the neutral mode, implementing two controls to cause transmitted torques of the two clutches to respectively approach zero, concurrently during at least a partial period.

混合动力车辆包括两个驱动源两个离合器，并且在车辆行驶期间可在空档模式并联模式之间切换。两个驱动源在空档模式下均与驱动轮断开，在并联模式下均与驱动轮连接。一种用于混合动力车辆的控制方法，包括实现第一切换控制第二切换控制中的至少一个。第一切换控制包括，在从空档模式切换到并联模式时，在至少部分时间段期间同时对两个离合器之前之后的转速执行两个同步控制。第二切换控制包括，在从并联模式切换到空档模式时，执行两个控制，以使两个离合器的传递转矩在至少部分时间段内同时分别接近零。

! AI translation(Eng → Chi) is being processed in real-time

[View Description](#)

**AI Summary** ?

**Tech Field** The invention relates to a control method and a control device for a hybrid vehicle that includes a first drive source, a second drive source, and two clutches, and may be applied to a four-wheel-drive hybrid vehicle.

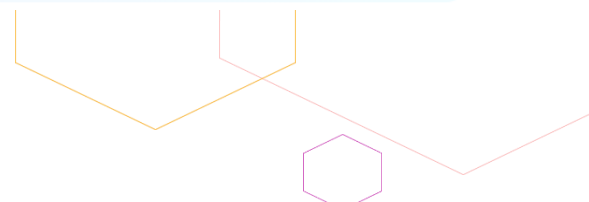
**Tech Problem** The invention seeks to solve the issue of slow responsiveness to mode switching in hybrid vehicles, particularly when transitioning between neutral and parallel modes, as compared to the prior art which implements switching controls on clutches in sequence.

**Tech Solution** The invention comprises a first drive source, a second drive source, a first clutch, a second clutch, and a power train controller configured to control the entire power train.

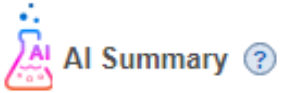
**Key feature** The main feature here is the concurrent implementation of synchronization controls on both clutches during mode switching, which enhances the responsiveness of the vehicle.

**Effect** The invention thereby improves the acceleration responsiveness of the vehicle during mode switching, particularly from neutral to parallel mode, by reducing the time taken for the transition.

- AI deep structure summary

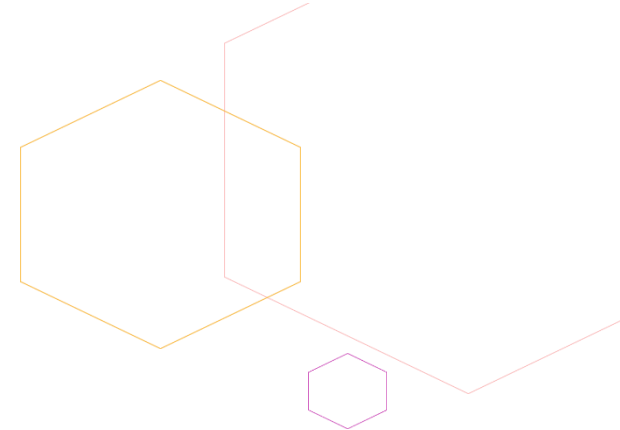


## ❖ WIPS AI Technology – AI D-structure summary



|                      |   |
|----------------------|---|
| <b>Tech Field</b>    | The invention relates to a document search method and system for retrieving documents from a large database based on an input search query.   |
| <b>Tech Problem</b>  | The invention seeks to solve the issue of retrieving not only documents that match a search keyword but also those that are semantically relevant, addressing the limitations of conventional search methods that often fail to provide the desired information to users. |
| <b>Tech Solution</b> | The invention comprises a document search method that includes steps for retrieving document data, interpreting semantic content, specifying relevant locations within documents, and displaying the results.   |
| <b>Key feature</b>   | The main feature here is the ability to interpret the semantic content of documents and specify highly relevant locations within them based on the input search query.  |
| <b>Effect</b>        | The invention thereby improves the user experience by allowing users to quickly grasp relevant information without needing to sift through entire documents, enhancing the efficiency of document retrieval.  |

- Easy and deep structure summary about patent document



# ❖ WIPS AI Technology – InsightPlus

WIPS Global *Insight Plus* “ Semiconductor 01 ” 2023.07.06 am 11:46 + Add Target English

806 / Family group 527

**AI Classify**

Tech Tree + Statistics

|                   | Sum | Trained | AI |
|-------------------|-----|---------|----|
| A CVD             | 60  | 60      | 0  |
| B Etching         | 175 | 175     | 0  |
| C Exposure Tr...  | 37  | 37      | 0  |
| D Heat Treatment  | 52  | 52      | 0  |
| E Measuremen...   | 122 | 122     | 0  |
| F Packaging       | 95  | 95      | 0  |
| G Polishing (C... | 161 | 161     | 0  |
| H Washing         | 34  | 34      | 0  |
| - Unclassified    |     |         | 70 |

All > Unclassified 70 Selected 2 cases

- 1. ★ DEPOSITION APPARATUS INCLUDING AN ISOTHERMAL PROCESSING ZONE (반도체 공정용 증착 장치)
  - Unclassified KR 10-2391608 B1 (2022.04.25) | 10-2021-007416
  - 1-1. Deposition apparatus including an isothermal processing zone  
US 10808317 B2 (2020.10.20) | 13/934624 (2013.07.03) | C23C-016
  - 1-2. Plasma processing apparatus including an isothermal processing zone  
CN 104282530 B (2018.11.16) | 2014-10317527 (2014.07.03) | H01L-021/44
  - 1-3. DEPOSITION APPARATUS INCLUDING AN ISOTHERMAL PROCESSING ZONE  
KR 10-2264728 B1 (2021.06.08) | 10-2014-0083260 (2014.07.03) | H01L-021/44
- 2. ★ METHODS AND APPARATUS FOR SELECTIVE DEPOSITION OF COBALT IN SEMICONDUCTOR PROCESSING (반도체 프로세싱에서 코발트의 선택적 증착 방법 및 장치)
  - Unclassified KR 10-2343235 B1 (2021.12.21) | 10-2015-0017043 (2015.02.03) | C23C-016/18 | LAM RESEARCH
  - 2-1. Methods and apparatus for selective deposition of cobalt in semiconductor processing  
US 9153482 B2 (2015.10.06) | 14/171483 (2014.02.03) | H01L-021/44 | LAM RESEARCH
- 3. ★ How to carry out electroplating on the electroplating device for depositing metal on a wafer board, and a wafer board (웨이퍼 기판에 금속을 증착시키기 위한 전기めっき 장치 및 웨이퍼 기판에 전기めっき하는 방법)
  - Unclassified JP 6427316 B2 (2018.11.02) | 2013-239467 (2013.11.20) | C25D-017/10 | LAM RESEARCH

A CVD  
 B Etching  
 C Exposure Treck  
 D Heat Treatment  
 E Measurement Ana...  
 F Packaging  
 G Polishing (CMP)  
 H Washing  
 - Unclassified

• AI classification

WIPS Global *Insight Plus*
Semiconductor 01

No Title

Web report ⬇

Charts List Style
Undo Redo
Text Arrange to front Arrange to back
Colors
⏪

### Headline

## Enter the subject

Style  Background color  Underline

Font: Arial, Largest

Chart title: Application Trend of Maj...

Sort No.  No  1. Chart title

Font: Arial, Large

Textbox: Analyze the application increase ...

Font: Arial, Normal

Apply Reset

### Enter the subject

#### Application Trend of Major Applicant

2023.07.06 pm 03:38

#### IP Competitive power of Major applicants

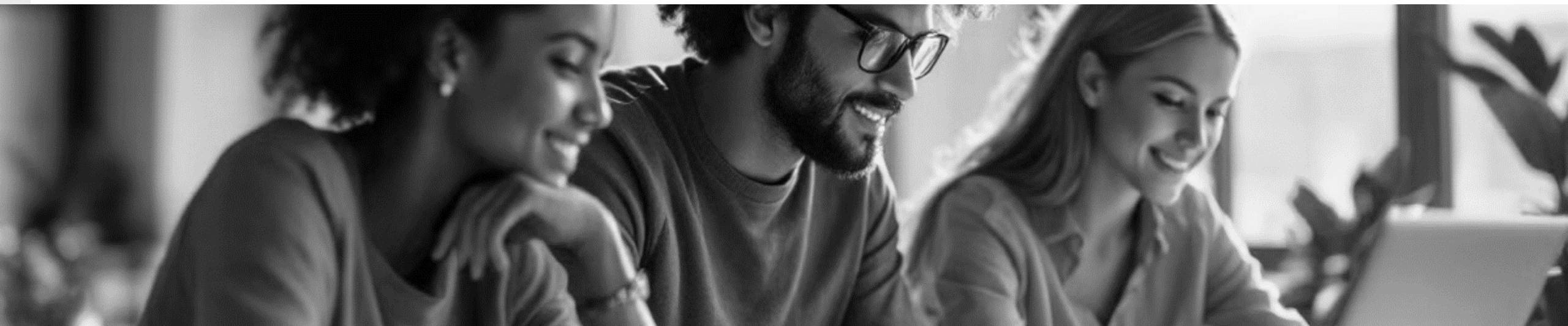
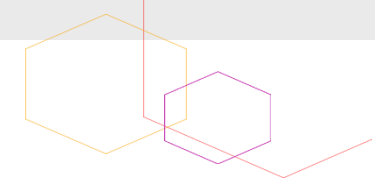
2023.07.06 pm 03:38

Analyze the application increase rate and new entrants (applicants with the first patent application within the last 5 years) by comparing quantitative trends of major top applicants leading the R&D technology field from the past to the present.

\* Identify the commercial technology level along with the qualitative level of the Major applicant.  
 \* Technology influence (CPP): means the higher forward citation index, the applicants (applicant's nationality) has the more important/ original patents in terms of technology development.  
 \* Market Power(PFS): means the larger patent family size, the higher the commercial value of the technology. The applicant with the higher PFS is interpreted as securing multiple global markets.

- Easy analysis and Create report





# WIPS AI Technology

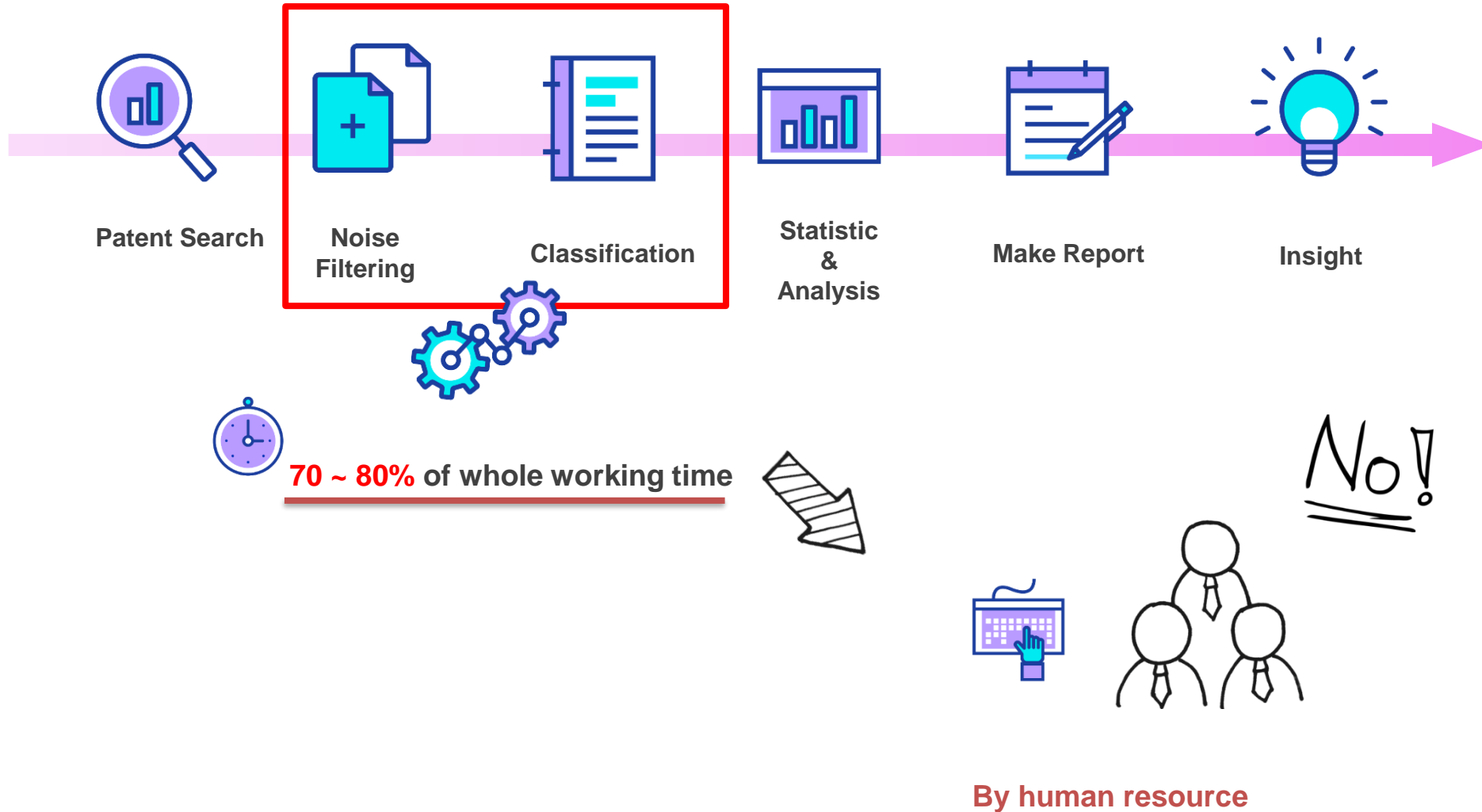
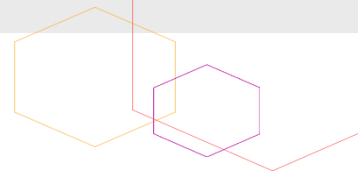


# AI tech Classification

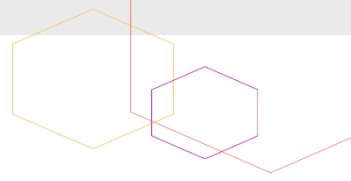
with

# Prism

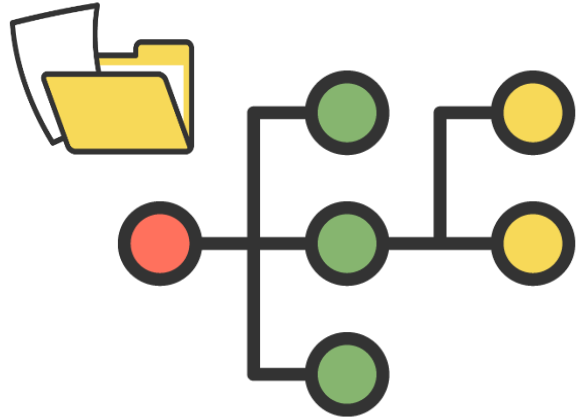
# AI tech Classification - Prism



# AI tech Classification - Prism



The answer is AI classifier.



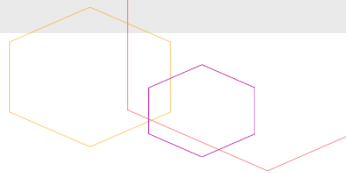
To Save

**Much Time**

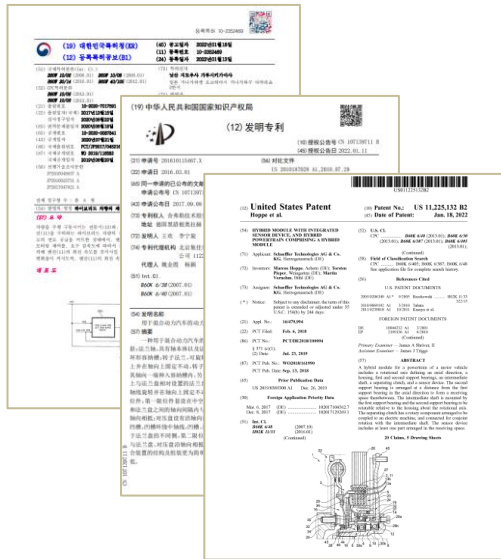
**Much Effort**

**Much Cost**

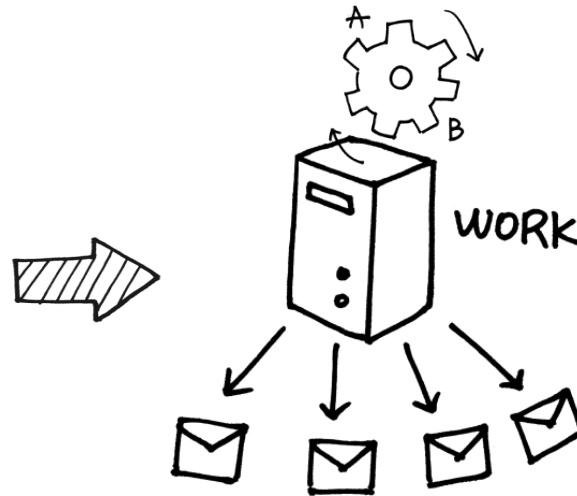
# AI tech Classification - Prism



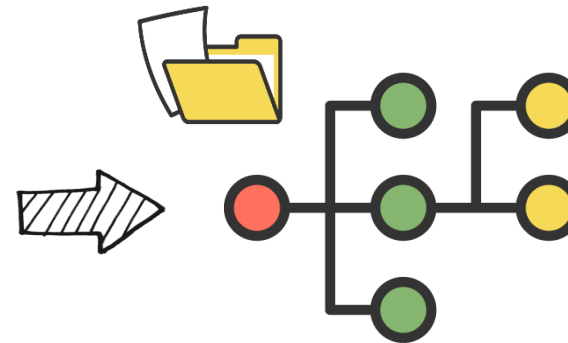
What we want ?



Unclassified  
Patents Documents

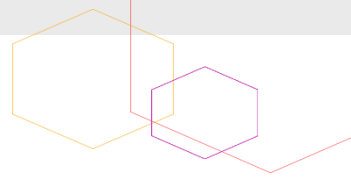


AI classifier



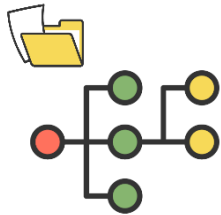
Automatic  
AI classification

# AI tech Classification - Prism



However, There is no standard.  
Every single user have various purpose and categorization they want.

Ex > *Robotic vacuum cleaner*



| Depth 0                | Depth 1      |
|------------------------|--------------|
| Robotic vacuum cleaner | suction part |
|                        | sensing unit |
|                        | camera       |
|                        | drive part   |
|                        | battery      |
|                        | control      |

Classification Tree 1  
(structure)

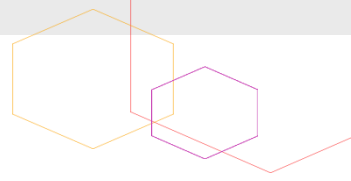
| Depth 0                | Depth 1               |
|------------------------|-----------------------|
| Robotic vacuum cleaner | complex method        |
|                        | brush method          |
|                        | vacuum suction method |
|                        | □                     |
|                        | □                     |
|                        | □                     |

Classification Tree 2  
(method)

| Depth 0                | Depth 1                                 |
|------------------------|---|
| Robotic vacuum cleaner | Obstacle recognition technology         |
|                        | Self-Location Recognition Technology    |
|                        | Floor recognition technology            |
|                        | Cleaning condition detection technology |
|                        | □                                       |
|                        | □                                       |

Classification Tree 3  
(technology)

# AI tech Classification - Prism



**Solution ??**

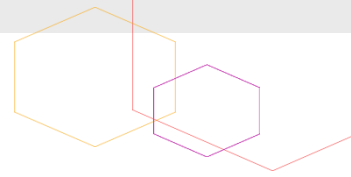


The answer is  
Optimized, Custom trained AI classifier

There is no Standard classifier

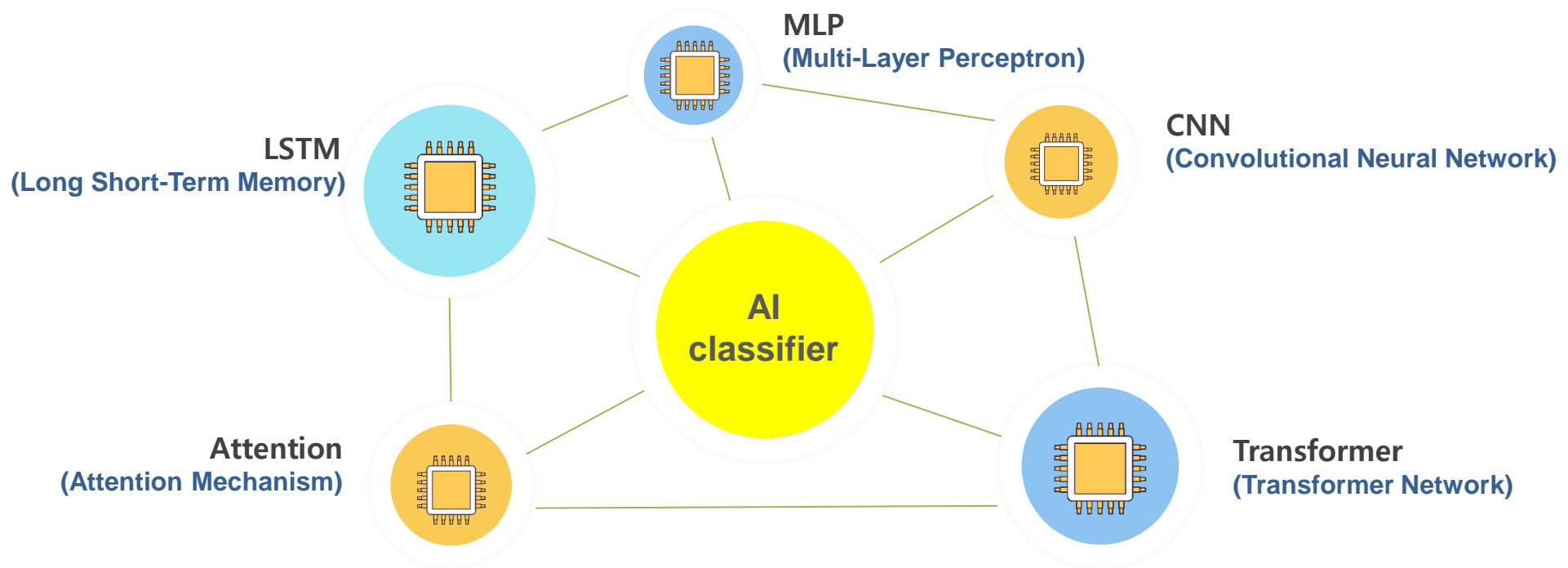
Want to have **my own classifier**  
which is **trained by my data**

# AI tech Classification - Prism

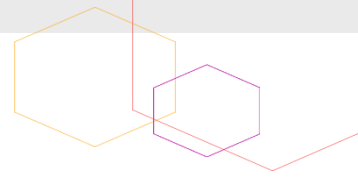


How we use AI ?

We use 5 different AI to make best performance.

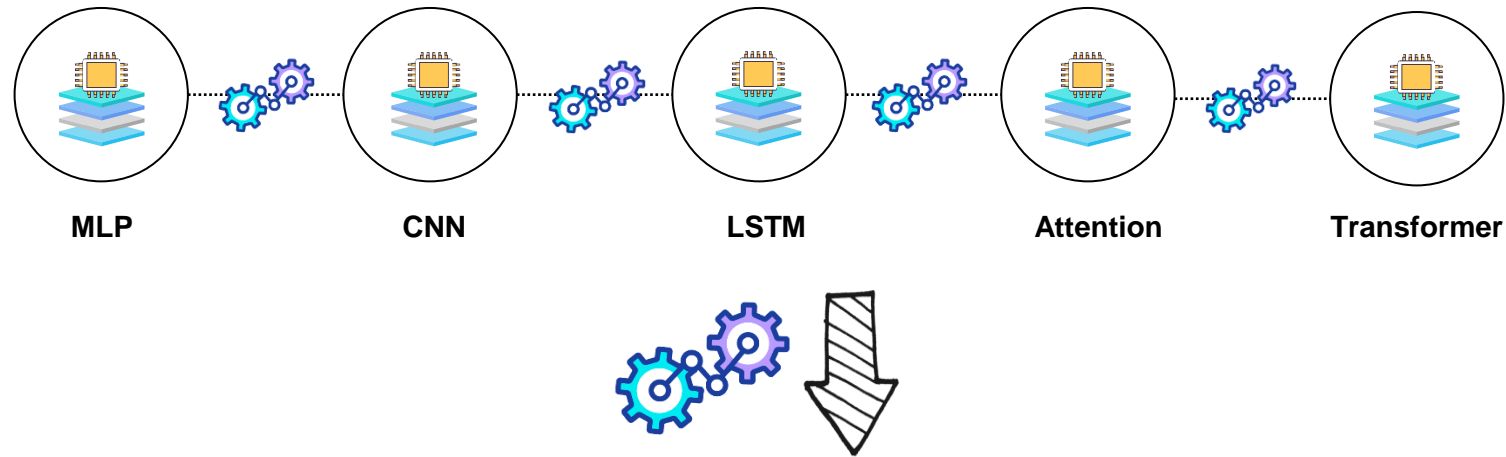


# AI tech Classification - Prism

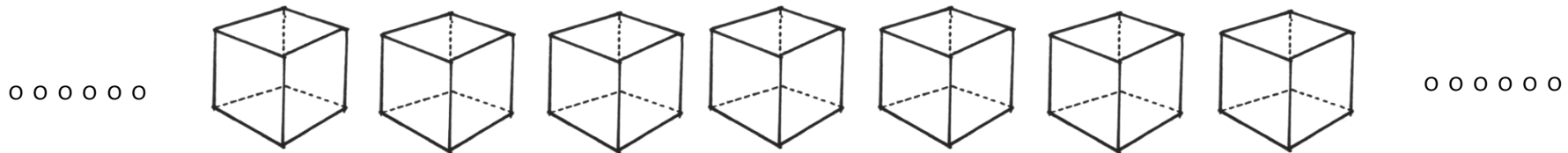


How It works ?

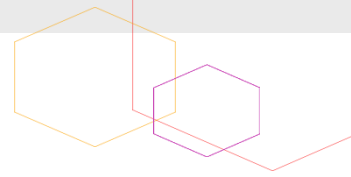
5 different AI makes



Create 70 INDUCER \* INDUCER is not trained model

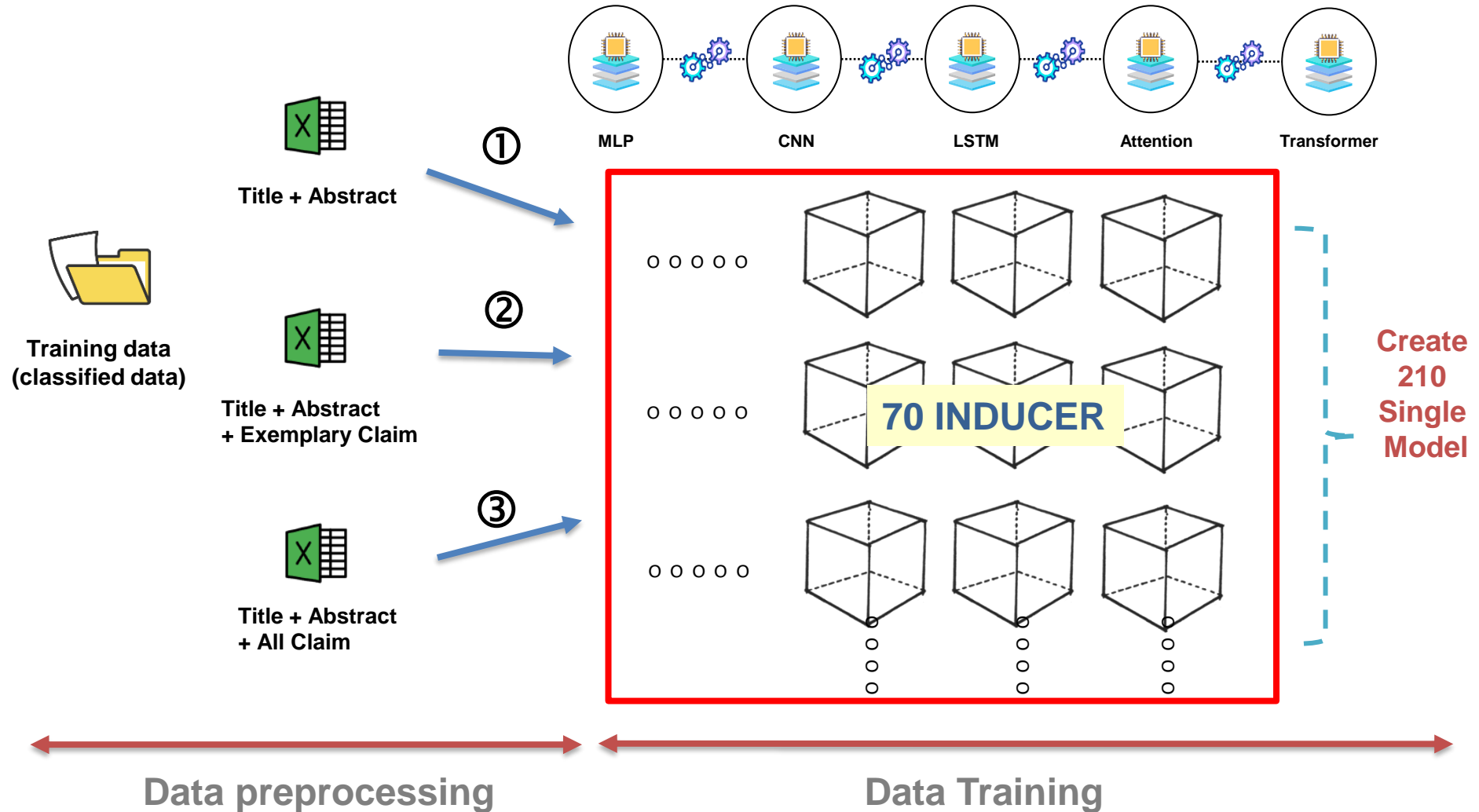


# AI tech Classification - Prism

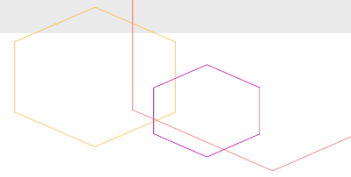


## How It works – Making Model

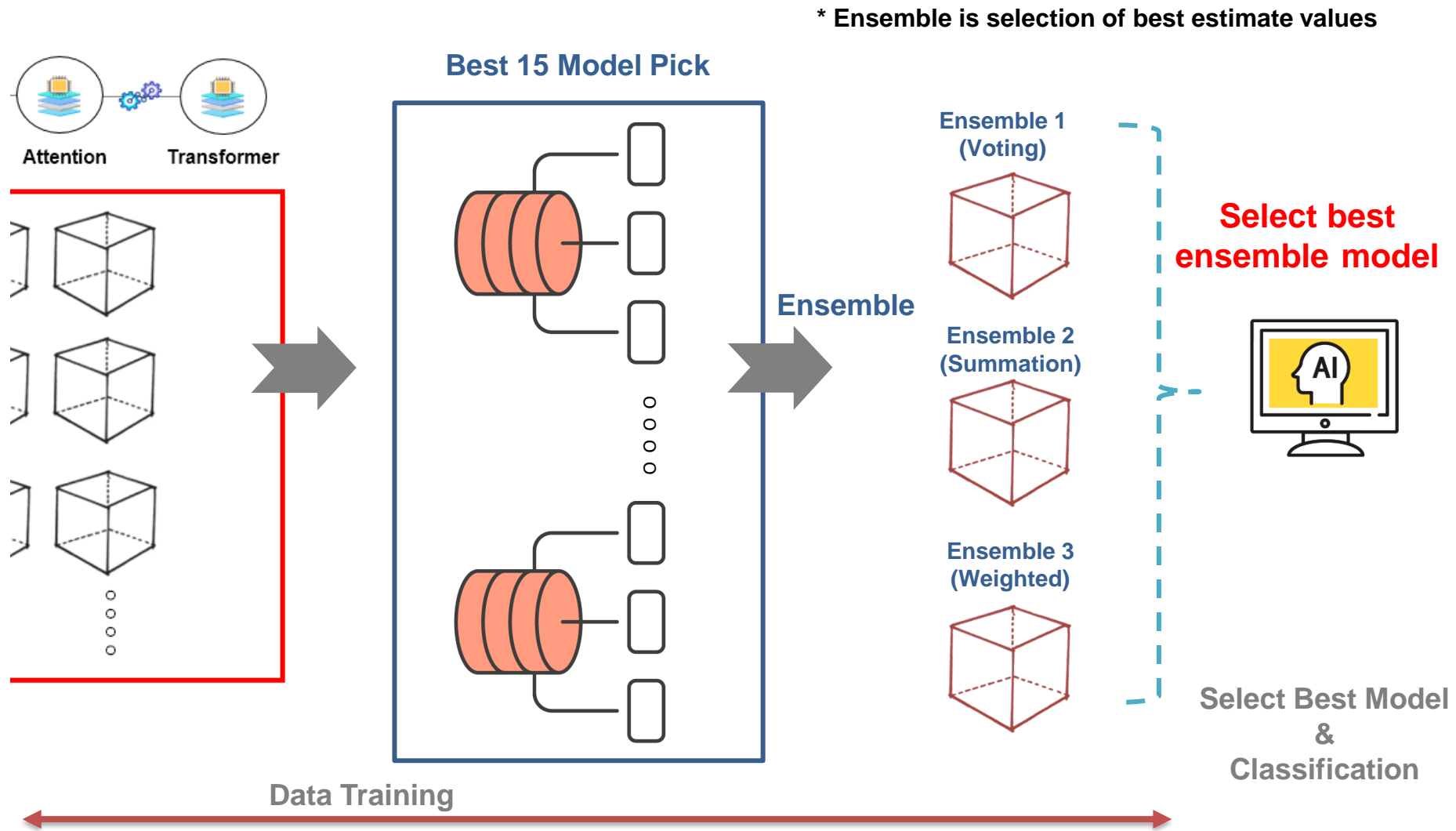
## Training with 3 different way



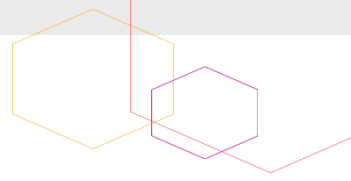
# AI tech Classification - Prism



## How It works – Making Model



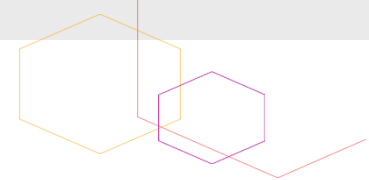
# AI tech Classification - Prism



**Solution !!**



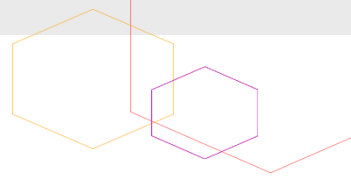
Now,  
have **my own classifier** which is  
**trained by my data.**



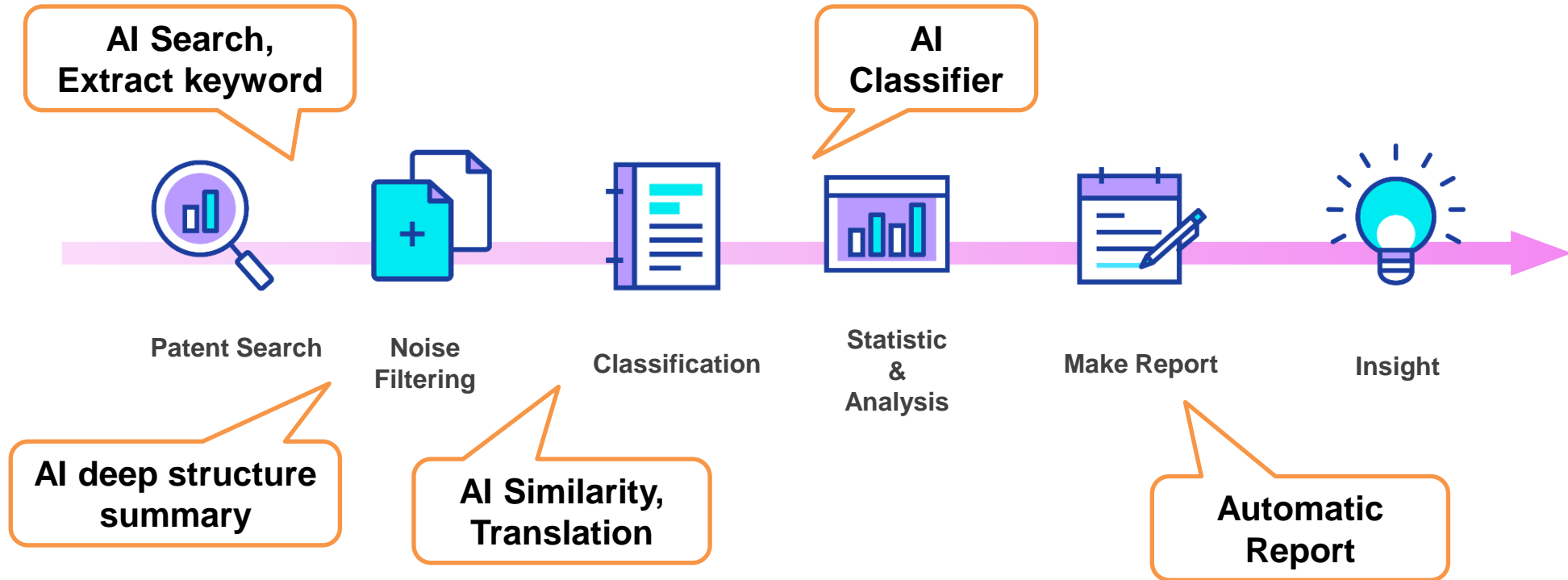
**Worldwide patent search & analysis**

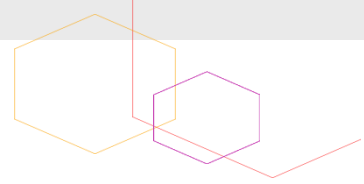
**WIPS Global**

# General IP Working Process



❖ Patent search & analysis working process.





# Insight

Newsletters

## KIPO Establishes New Examination Bureau for Semiconductor Technologies

2023.07.20



The Korean Intellectual Property Office (KIPO) has continued to make efforts to improve its examination system for semiconductor patent applications and bolster the competitiveness of Korea's semiconductor industry by establishing a new examination bureau dedicated to semiconductor technologies and recruiting additional examiners with substantial industry experience in the semiconductor field.

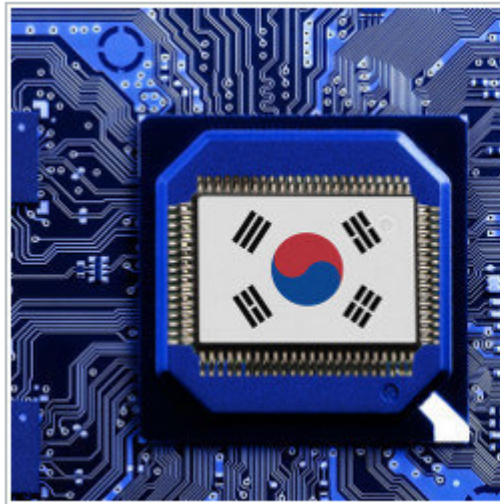
- From KIM&CHANG Newsletter



# Insight

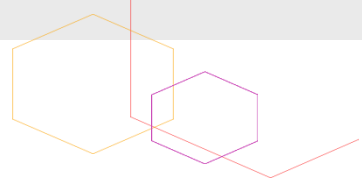
EAST ASIA AND OCEANIA REGION SPECIAL SECTION: BIG TRENDS

## South Korea's Nationwide Effort for AI Semiconductor Industry



As global competition in the semiconductor industry has intensified with trade conflicts and semiconductor shortages, major countries worldwide have started to work on their government policy and investment plan to win technological hegemony. South Korea's semiconductor industry, which makes up almost 20% of the nation's gross domestic product (GDP), is heavily concentrated on the memory semiconductor sector.<sup>5</sup> It dominates the global memory semiconductor market with a 56.9% share but has little influence on the other sectors of the industry, including logic, analog, and optical discrete, where it has less than a 3% market share. To grow the nation's biggest industry further, South Korea has put a priority on non-memory sectors. The emerging AI chip market is an especially great

- From COMMUNICATION OF THE ACM



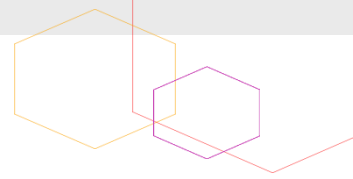
# Insight

## South Korean Government to Plan on National Semiconductor Mega Project

South Korea is looking to start national semiconductor R&D project that are going to need \$2.2 billion (2.5 trillion KRW) of investments very soon in order to grab an upper hand in next-generation semiconductor industries that will lead Industry 4.0 and to maintain its position as the powerful nation of semiconductors.

Ministry of Science and ICT (MSIT) and Ministry of Trade, Industry and Energy (MOTIE) are currently planning national semiconductor R&D project, which have duration of planning of 10 years, that cover every department. Semiconductor experts from government research institutes such as Electronics and

- From Korea IT News



# Insight

## Korea's new push in semiconductors



*Samsung Electronics, SK Hynix Create 200 Million Won Fund for Semiconductor Industry. (Image: Yonhap)*

- From Korea's Information Society

## Patent Database Today !

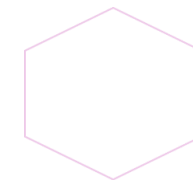
**“ How is AI being leveraged in IP systems ? ”**

- **For review technology and its analysis – System**
- **In house data (specific) – Patent database**
- **Using AI technology – Customized AI SLLM**

**WIPS Today !**



# WIPO 8th ASEAN IP Register Regional Coordinators Meeting



# Thank you

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