AI status and plans at KIPO

IP5 WG2 Virtual Meeting | February-March 2021

Korean Intellectual Property Office

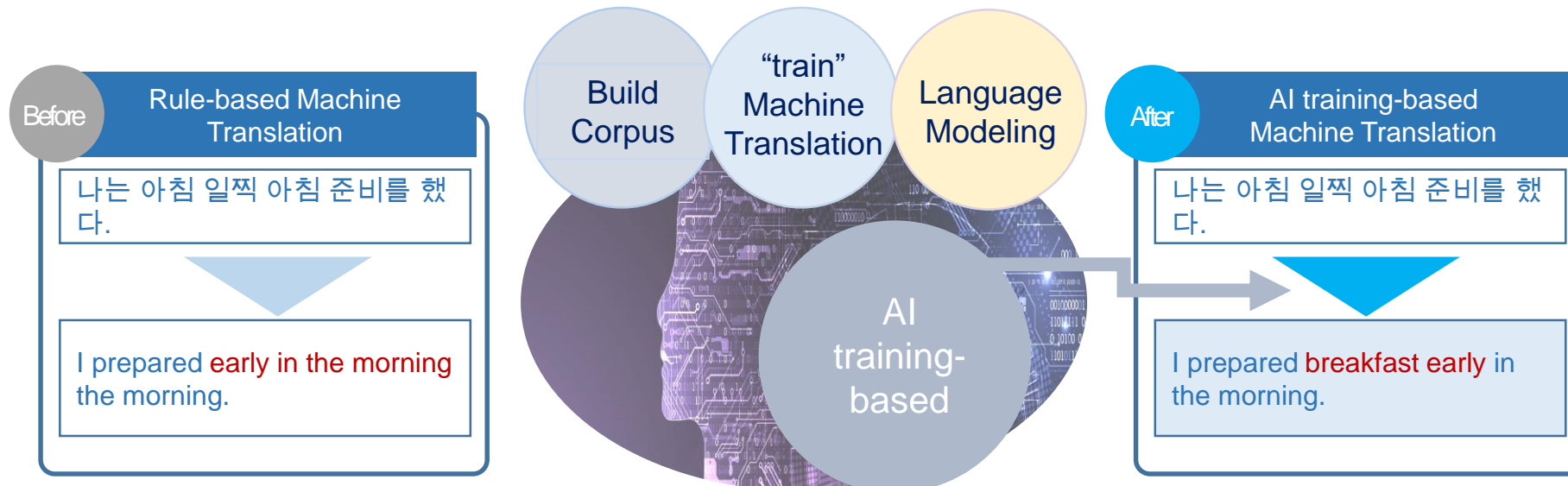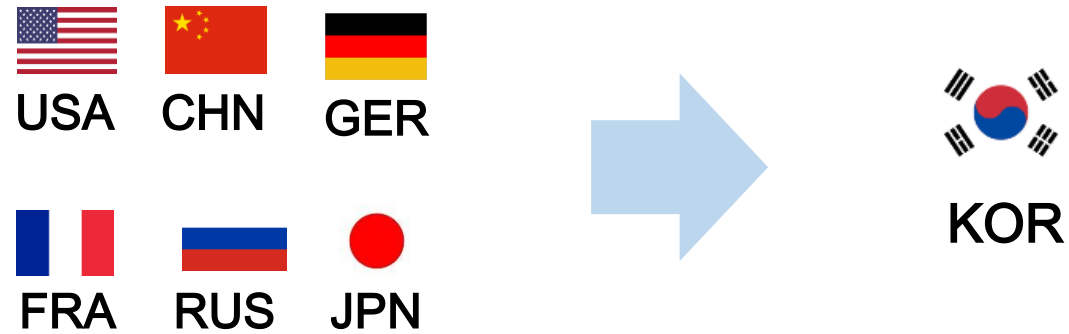# AI Status and Plan at KIPO (Overall)

❖ **Status**

- ✓ **Machine Translation : Initiated from 2020**

- ✓ **Chat-bot (for counselor) : Developing from 2020**

- ✓ **Image Search : POC from 2019, Developing from 2020**

❖ **Plan**

- ✓ **Classification (Patent/Trademark) : POC from 2019, Developing in 2021**

- ✓ **Similar Patent Search : POC from 2021**

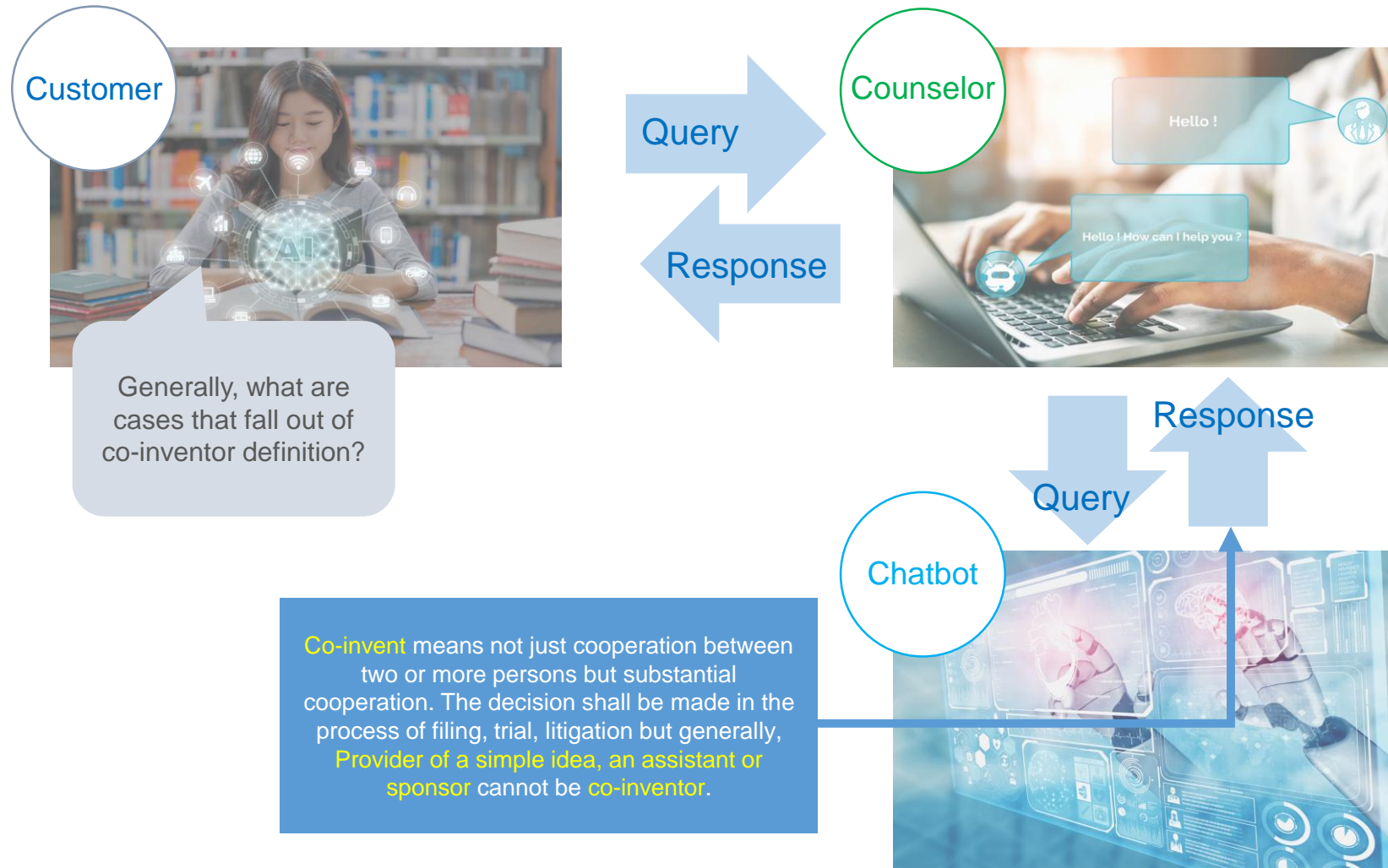- ✓ **Formality Check Support : Pilot test in near future**

AI Status at KIPO (Machine Translation)

❖ **AI-based high-quality machine translation provide access to foreign language literature and enhances examination efficiency**

USA CHN GER

FRA RUS JPN

→ KOR

Build Corpus

"train" Machine Translation

Language Modeling

AI training-based

Before — Rule-based Machine Translation

나는 아침 일찍 아침 준비를 했다.

↓

I prepared early in the morning the morning.

After — AI training-based Machine Translation
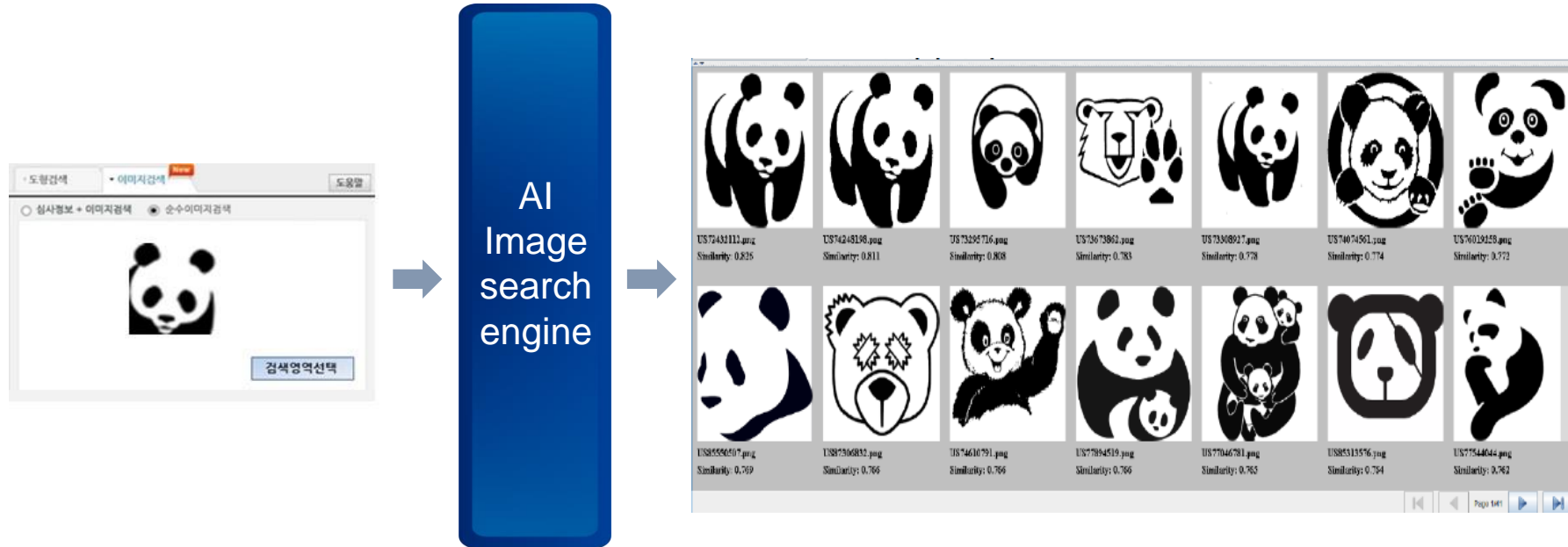
나는 아침 일찍 아침 준비를 했다.

↓

I prepared breakfast early in the morning.

AI Status at KIPO (Chat-bot)

❖ **Rapid, accurate responses lead to enhanced customer satisfaction in IP administration**

Customer

Generally, what are cases that fall out of co-inventor definition?

Query

Response

Counselor

Hello !

Hello ! How can I help you ?

Response

Query

Chatbot

Co-invent means not just cooperation between two or more persons but substantial cooperation. The decision shall be made in the process of filing, trial, litigation but generally, Provider of a simple idea, an assistant or sponsor cannot be co-inventor.
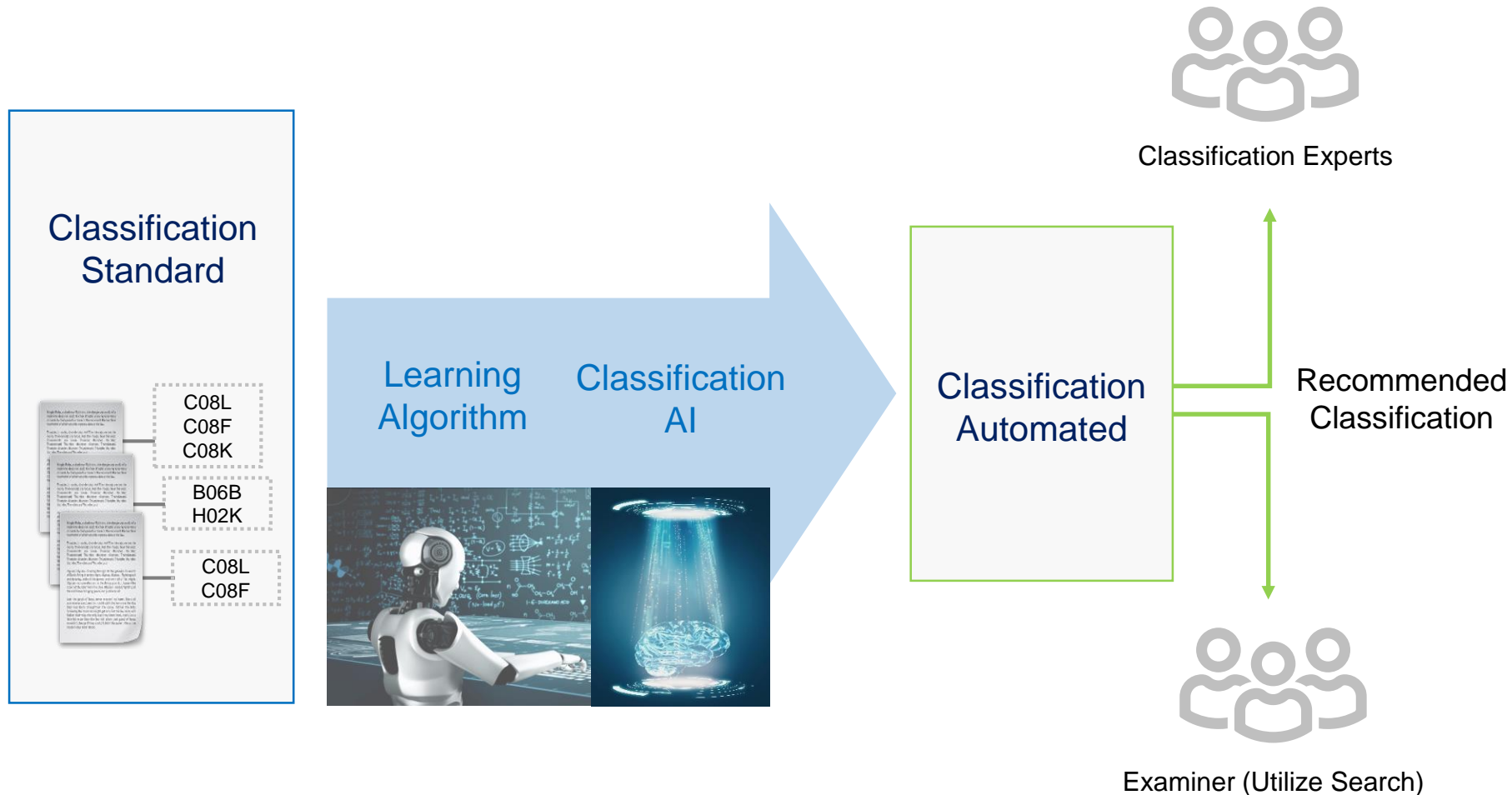
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AI Status at KIPO (Image Search)

❖ **KIPO is developing AI-based image search system from 2020**

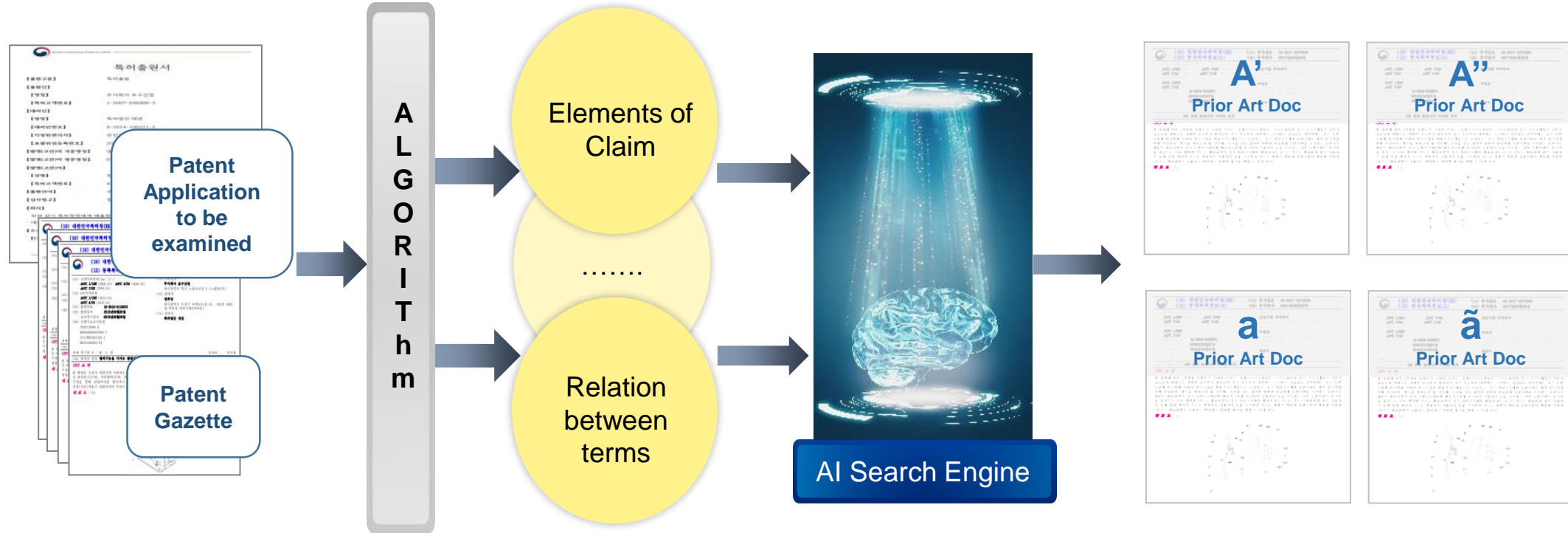❖ **The system will provides a function displaying similar images with the ones in references**

AI Plan at KIPO (Classification for Patent/Trademark)

❖ **Through providing support to classification experts and examiners, classification time will be shortened and quality enhanced**
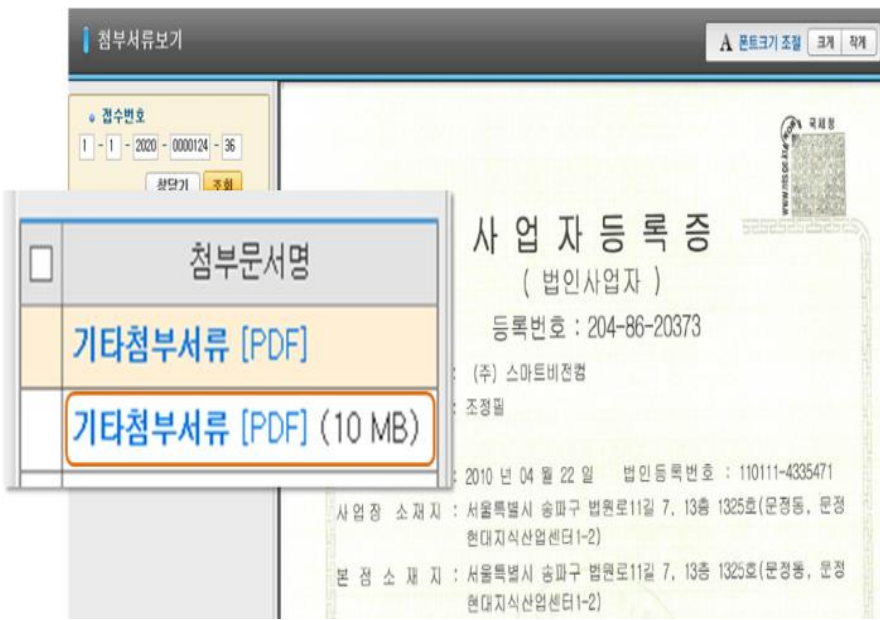

Classification Standard

C08L
C08F
C08K

B06B
H02K

C08L
C08F

Learning Algorithm

Classification AI

Classification Automated

Classification Experts

Recommended Classification

Examiner (Utilize Search)

AI Plan at KIPO (Patent Search)

❖ **KIPO plans to conduct POC for AI-based patent search system**
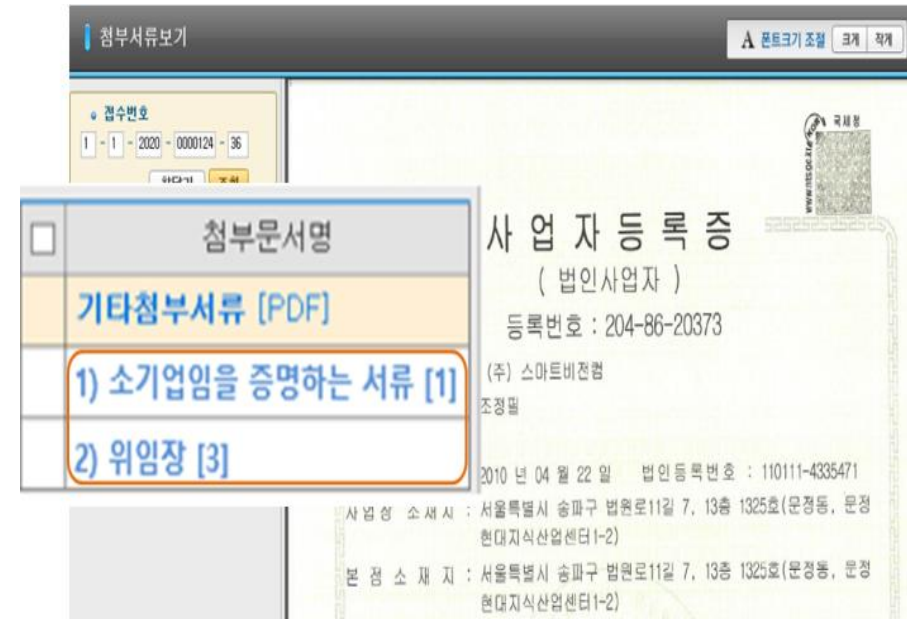❖ **The system will provide a function displaying similar patents with the ones in references**

AI Plan at KIPO (Formality Check Support)

❖ **As documents enclosed in the application are image file(e.g. PDF), they cannot be identified before being opened.**

❖ **If the AI-based system can recognize the title in those documents and classify them by title, formality examiners in KIPO may work more efficiently**

(Before) only "enclosed document"　　　　　**(After) classified by title such as POA**

Korean Intellectual Property Office

Thank you!