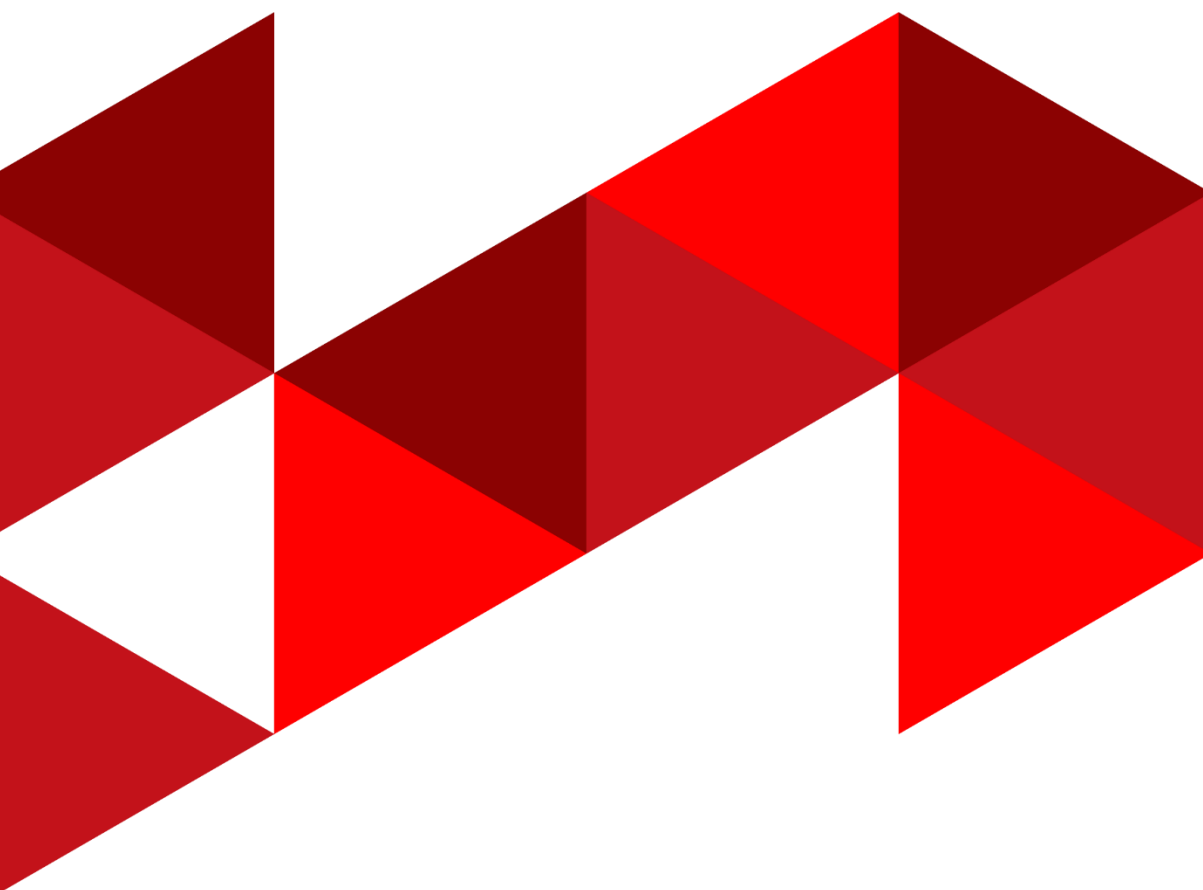


Novelty Checker LLM

User Manual



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1. Login

Go to <https://next.xlscout.ai/> to access the tool

The image shows a composite of two screenshots from the XLSCOUT website. On the left is a blog post titled "AI and Natural Language Processing: Untapping the tools for Innovation" by Komal Sharma Talwar. On the right is the login page, which includes a "Welcome back" message, input fields for "User Email" (containing "sakat.beniwal@xlscout.com") and "Password", a "Remember me" checkbox, a "Forgot your password?" link, a red "Login" button, a "Sign up now" link, and an "OR" section with a "Login with Institutional Access" button. A red arrow points from the "User Email" field to a text box below.

Recent Activity: **Blog**

AI and Natural Language Processing
Untapping the tools for innovation
REC
xlpot | CONSULTANTS

**AI and Natural Language Processing:
Untapping the tools for Innovation**

A podcast that we all would love to listen to: Talks about tech and the "not so common aspects" Starting up early Being a first-gen entrepreneur straight out of college. High risks? Indeed! "But the high...

[Read More](#)

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<< Back to Home

xlscout

Welcome back,
Good to see you again.

User Email *
sakat.beniwal@xlscout.com

Password *

☒ Remember me [Forgot your password?](#)

Login

Don't have an account? [Sign up now](#)

OR

Login with Institutional Access

Insert your Email ID and Password

2. Home Page

- Click on “Run module” to access the Novelty Checker LLM

xlscout

English

Welcome,
Saket Beniwal


TECH SCAPER
[Run module](#)


COMPANY
EXPLORER
[Run module](#)


EXPERT
PATENT SEARCH
[Run module](#)


NOVELTY CHECKER LLM[®]
&
IDEACUE
[Run module](#)


INVALIDATOR LLM
[Run module](#)


ClaimChart LLM
[Run module](#)

3. Novelty Checker LLM

3.1 Input Page

Describe the **problem your disclosure aims to solve** in (2–100 Words).

Novelty Credits: 1 Credit is used each time a new novelty search is performed.

AI-assisted, user supervised platform for novelty search, idea generation and patent drafting.

Problem you are trying to solve *Min - 2 | Max - 100 Words Allowed 0/100
Enter your problem

Technology Domain *Min - 2 | Max - 50 Words Allowed 0/50
Enter your title/domain

Disclosure *Min - 5 | Max - 600 Words Allowed 0/600
Enter disclosure

OR

Upload Disclosure Form here
Browse File
PDF or DOC

Proceed > Supervise ⚙️

Novelty Credits: 8 left Advanced Features History

Enter the **Technology Domain** of the disclosure in (2–50 Words). A title/domain helps system conduct a structured search.

Provide a crisp, detailed and to-the-point **Disclosure** in (5-600 Words). A well-structured and focused input helps the system deliver more accurate and relevant results.

Click **Proceed** to start auto-search and view results in History. Use **Supervise** to customize key features, concepts, and classifications. (See sections 3.2–3.5)

Users can now upload their disclosures directly in **PDF or Word (DOC) formats (up to 3MB)**. The system intelligently parses the uploaded files and extracts relevant text sections.

3.2 Key Features

- This step is enabled when user selects **Supervise** search, here the system automatically parses the disclosure into key features (Maximum 12).

User can edit the **problem** statement and the **Technology domain** of the disclosure.

Add up to **2 sub-features** for any key feature by clicking the '+' icon. Further the Key feature can also be deleted.

The screenshot shows a web interface for selecting key features. On the left, there are two text boxes: 'Problem you are trying to solve' and 'Technology Domain', both containing the same text: '1. A computer implemented method to extract description of reference numerals in images, text from images, and facilitate keyword-based searching in images, the method comprising: 2. retrieving an image from a first database; 3. retrieving a description document from a second database.' Below these is a red 'Add +' button. On the right, a list titled '# Key features (Maximum 12 Allowed)' contains four items. Each item has a star icon, a text input field, and a character count. Item 1: 'A computer implemented method to extract description of reference numerals in images, text from images, and facilitate keyword-based searching in images, the method comprising:' (24/50). Item 2: 'retrieving an image from a first database;' (7/50). Item 3: 'retrieving a description document from a second database, wherein the description document corresponds to the image;' (16/50). Item 4: 'processing the image to extract a first set of one or more reference numerals, wherein processing the image to extract the first set of one or more reference numerals comprises' (30/50). Each item has a red '+' icon and a red trash icon. At the bottom right, there is a red 'Next' button and a note: 'A minimum of 1 invention feature should be entered'.

Click here to **add** a new Key Feature

Select up to **3** key features using the **star mark** to indicate special focus or novelty in the disclosure.

Add at least **1** key feature to proceed with the search, by clicking **Next**.

User can edit the **problem** statement and the **Technology domain** of the disclosure.

Note: On this page user can edit or update the problem, Technology domain, or any of the feature/sub features.

3.3 Key Concepts

- In this step, user can reject any unwanted key concepts and add new key concepts that is not picked up by the system. Further, user can incorporate Technical Variations/synonyms (max 4 per key concept) for any of the Key Concept.

Key Concepts.

Supervise the Machine by Selecting the Technical Variations for the Key Concepts.

Extracted key concepts from your Input.

window cleaning ✕	time consuming ✕	help move ✕
expensive ✕	dangerous ✕	window ✕
cleaning ✕	labour ✕	extensive ✕
time ✕	consuming ✕	buildings ✕
drones ✕	designed ✕	computer ✕
controls ✕	movements ✕	ropes ✕
cables ✕	drone ✕	propellers ✕
push ✕	building ✕	section ✕

Want to Add a new key concept?

Add key Concept

Technical variations from the Corpus. ⓘ

No Data

Want to Add more technical variations?

Add Technical Variations

Clicking on any key concept will provide a list of technical variations/synonyms.

The user can also add any key concept manually as per choice.

Key Concepts.

Supervise the Machine by Selecting the Technical Variations for the Key Concepts.

Extracted key concepts from your Input.

window cleaning ✕	time consuming ✕	help move ✕
expensive ✕	dangerous ✕	window ✕
cleaning ✕	labour ✕	extensive ✕
time ✕	consuming ✕	buildings ✕
drones ✕	designed ✕	computer ✕
controls ✕	movements ✕	ropes ✕
cables ✕	drone ✕	propellers ✕
push ✕	building ✕	section ✕

Want to Add a new key concept?

Add key Concept

Technical variations from the Corpus. ⓘ

uavs	aerial vehicles	unmanned vehicles
unmanned	aerial drones	uav flight
multiple unmanned	manned	surveillance platfor...
uas	uav's	multiple aircraft
aerial systems	mobile robots	robotic vehicles
unmanned aircraft	target aerial	swarm
missions	child drone	Show more

Want to Add more technical variations?

Add Technical Variations

User can remove any unwanted key concepts by simply clicking on the “x” button.

The user can select up to **4 technical variations** from the corpus, or add any technical variation/synonym manually using “Add” button.

3.4 Selecting Major Technology Fields (Optional)

- User can select or add additional IPC/CPC Classifications to assist the system

Here for example: searching 'drone' shows relevant CPC classes. Double-click a class to view its ancestor tree in detail.

Search by keywords or IPC/CPC codes in the search bar to find the relevant IPC/CPC classifications.

The interface displays a list of 12 CPC classes under the heading 'Supervise the Machine by Selecting the Major Technology Fields.' The selected class is A47L3/00. The 'IPC/CPC helper' window is open, showing search results for 'drone' and an ancestor tree for A01K57/00.

IPC/CPC helper ☐ IPC ☒ CPC

Search: drone

Results

- ☒ A01K57/00 Appliances for providing, preventing or catching swarms; Drone-catching devices

Ancestors tree for A01K57/00

- A HUMAN NECESSITIES
 - A01 AGRICULTURE
 - A01 AGRICULTURE; FORESTRY; ANIMAL HUSBANDRY; HUNTING; TRAPPING; FISHING
 - A01K ANIMAL HUSBANDRY; CARE OF BIRDS, FISHES, INSECTS; FISHING; REARING OR BREEDING ANIMALS, NOT OTHERWISE PROVIDED FOR; NEW BREEDS OF ANIMALS
 - A01K57/00 Appliances for

Cancel Clear Submit

Mark/select Technology Field relevant to your search.

User can select any classification manually from the ancestors' tree search.

The 'IPC/CPC helper' window shows search results for A47L3/04 and an ancestor tree for A47L3/04.

IPC/CPC helper ☐ IPC ☒ CPC

Search: A47L3/04

Results

- ☒ A47L3/04 Safety ropes

Ancestors tree for A47L3/04

- A HUMAN NECESSITIES
 - A47 FURNITURE; DOMESTIC ARTICLES OR APPLIANCES; COFFEE MILLS; SPICE MILLS; SUCTION CLEANERS IN GENERAL
 - A47L DOMESTIC WASHING OR CLEANING; SUCTION CLEANERS IN GENERAL
 - A47L3/00 Safety devices for use in window-cleaning
 - A47L3/04 Safety ropes

Cancel Clear Submit

3.5 Advanced Features

Add Focus/Relevant Keyword or a phrase (Max. 3 words) to generate focused results.

Add noise or non-relevant keywords (max. 3 words) to filter out unwanted results.

Click here to apply **Advanced Features**. These help refine the search using filters such as date range, assignees, inventors, and jurisdictions (excluding the 'Relevant Patents' option). Use them to tailor results to your specific needs.

The screenshot shows a web interface titled "Supervise the Machine by Select". On the left, there is a list of 10 patent entries, each with a checkbox and a description. On the right, an "Advanced Features" modal is open, allowing users to refine their search. The modal includes sections for "Focus Keyword", "Date Range", "Names", "Relevant Patents", and "Publication Country". It also has input fields for "Include Keyword" and "Exclude Keyword", a "Publication Date" range selector, an "Assignee" dropdown, and a "Validate" button. At the bottom of the modal are "Cancel" and "Save" buttons. A "Run" button with a gear icon is located at the bottom right of the main interface.

	Focus Keyword	Date Range	Names	Relevant Patents	Publication Country
1	☐	☐	☐	☐	☐
2	☐	☐	☐	☐	☐
3	☐	☐	☐	☐	☐
4	☐	☐	☐	☐	☐
5	☐	☐	☐	☐	☐
6	☐	☐	☐	☐	☐
7	☐	☐	☐	☐	☐
8	☐	☐	☐	☐	☐
9	☐	☐	☐	☐	☐
10	☐	☐	☐	☐	☐

Use filters like **Date Range**, **Assignee/Inventor name**, and **Publication country** to narrow down the search.

User can enter up to five known prior arts, and the system will perform a semantic search on those patents, further refining the result set.

Click here to **save** or cancel the changes in the advanced features.

Click '**Run**' to start the search. It takes 40–60 minutes, and you'll be notified by email once it's complete.

Your search has been submitted. You will get a search completion alert on your email within 40-60 minutes

OK

Note: Operators like AND, OR, NOT, and NEAR are not allowed in 'Focus' or 'Exclude' keywords.

4. History

‘In-Progress’ indicates that the novelty search has started and is under processing.

The Status ‘Collating-Data’ (not shown here) indicates that the ranking stage of the result set has begun, and the results shall be completed in a short while.

#	Last Updated Date	Search Details	Action  Drafting Credits: 2 left
1	11 Jul 2025, 5:42:24 PM	Search Type : Simple Search Status : collating-data Problem Text : 1. A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end; Domain/Title : 1. A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end; Key Features 1. 1.A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and	Novelty Results New Ideacue Drafting LLM Re Run 
2	11 Jul 2025, 5:39:43 PM	Search Type : Simple Search Status : collating-data Problem Text : The NPLs are divided into 2 Sections: Web Results and Publications; with the Titles being Hyperlinked to the Source Domain/Title : The NPLs are divided into 2 Sections: Web Results and Publications; with the Titles being Hyperlinked to the Source Key Features 1. The NPLs are divided into 2 Sections: Web Results and Publications; with the Titles being Hyperlinked to the Source.	Novelty Results New Ideacue Drafting LLM Re Run 
3	11 Jul 2025, 5:41:32 PM	Search Type : Simple Search Status : collating-data Problem Text : 1. A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end; Domain/Title : 1. A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end; Key Features 1. 1.A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. 2.second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end ;	Novelty Results New Ideacue Drafting LLM Re Run 
4	11 Jul 2025, 5:45:42 PM	Search Type : Simple Search Status : completed Problem Text : 1. A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end; Domain/Title : 1. A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end; Key Features 1. 1.A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and	Novelty Results Ideacue Drafting LLM Re Run 

Shows all the parameters (Keywords, Technical variations, Classification, Focus Keywords, Excluded Keywords, Date Range, Names (Assignee/Inventor), and Country) selected by the user.

The Status displays “Completed” once the result set is ready. The option for **Show Report** and **Ideacue** becomes accessible after this stage. Further, the option for **Drafting LLM** is available for users having access to Drafting LLM.

4.1 Re- Run option will consume new credits:

- Each new novelty search deducts one credit from the user's available balance. However, if the user wishes to refine or iterate on a search, they can use the Re-Run option available in the History page.
- Re-Running a search from the History tab **consume new credit**. This includes changes such as updating key concepts, adding or modifying CPC/IPC classifications, or applying NOT filters.
- When a user chooses to Re-Run a case, the system navigates back to the initial step. The user can then proceed through all the standard steps of the Novelty Checker—such as refining key concepts, specifying technical variations, or updating classifications—with the flexibility to edit any step as needed.

2	11 Jul 2025, 5:39:43 PM	Search Type: Simple Search Status: collating-data Problem Text: The NPLs are divided into 2 Sections: Web Results and Publications; with the Titles being Hyperlinked to the Source Domain/Title: The NPLs are divided into 2 Sections: Web Results and Publications; with the Titles being Hyperlinked to the Source Key Features 1. The NPLs are divided into 2 Sections: Web Results and Publications; with the Titles being Hyperlinked to the Source.	Novelty Results View Ideacue Drafting LLM Re Run
3	11 Jul 2025, 5:41:32 PM	Search Type: Simple Search Status: collating-data Problem Text: 1. A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end; Domain/Title: 1. A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end; Key Features 1. 1.A dual fiber type direct link LC adapter comprising: an adapter body portion defining first and 2. 2.second LC connector receiving regions at a pluggable connector end and defining first and second slots at a direct link end; .	Novelty Results Ideacue Drafting LLM Re Run

The user can **Re-Run** or **Delete** any case.

5. Novelty Checker Results

5.1 New Results Page

Click on the **publication number** to open the patent in a new tab containing all the details of the patent (including bibliographic data, title, abstract, claims, full description, images etc.)

Users now can **manually add more Prior Arts** to be analysed alongside system-found results. These will appear on the results page with full feature mapping included. Refer to section [5.2 for Manual Addition of Patents](#).

Refer section [6 for Ideacue](#)

Refer section [5.6 for Publications/Web Results](#)

IDEACUE									
Clear Filters									
Key Features									
Export in Excel									
Publication/Web Results									
Add More Prior Art									
Change View									
Para-Rank	Publication Numb...	Assignee	Mapping Summary	Title	Weighted Average	Application Date	Publication Date	Novelty Credits	History
1	US-10836508-B2	POLAR PRO FILTERS INC	1, 2, 3, 4, 5, 6	Camera drone	1.00	Feb 16, 2018	Nov 1	9 left	
2	IN-202411026927-A	GRAPHIC ERA DEEMED TO BE UNIVERSI TY	1, 2p, 3p, 4, 5, 6	ENHANCED DEVICES AND METHODS F OR REMOTE IMAGE CAPTURE WITH DR ONE- MOUNTED CAMERAS	0.86	Mar 31, 2024	May 3		
3	US-20190291864-A1	SZ DJI TECHNOLOGY CO LTD	1, 2, 3, 4p, 5p, 6	TRANSFORMABLE APPARATUS	0.81	Jun 11, 2019	Sep 21		
4	US-9765926-B2	SZ DJI OSMO TECHNOLOGY CO LTD	1, 2p, 3p, 4p, 5, 6p	Systems and methods for payload stabil ization	0.68	Apr 8, 2015	Sep 15		
5	US-20160139602-A1	NIXIE LABS INC	1, 2p, 3, 4p, 5p, 6p	LAUNCH-CONTROLLED UNMANNED A ERIAL VEHICLES, AND ASSOCIATED SYS TEMS AND METHODS	0.64	Jun 22, 2015	May 1		
6	CN-110006407-B	WUHAN UNIVERSITY WHU	1, 2, 3, 4n, 5p, 6p	Close-up photogrammetry method bas	0.63	Apr 16, 2019	Apr 10		
Rows: 600									
Novelty Report									

All the Input Patents are listed based on the Ranking which is calculated according to the **Mapping Summary**. User can view color-coded claim elements. Yellow color indicates partial mapped elements indicated by P, and red for not mapped elements indicated by N. User can also click to view the claim elements.

Weighted Average: The average score weighted based on the total number of mapped claim elements.

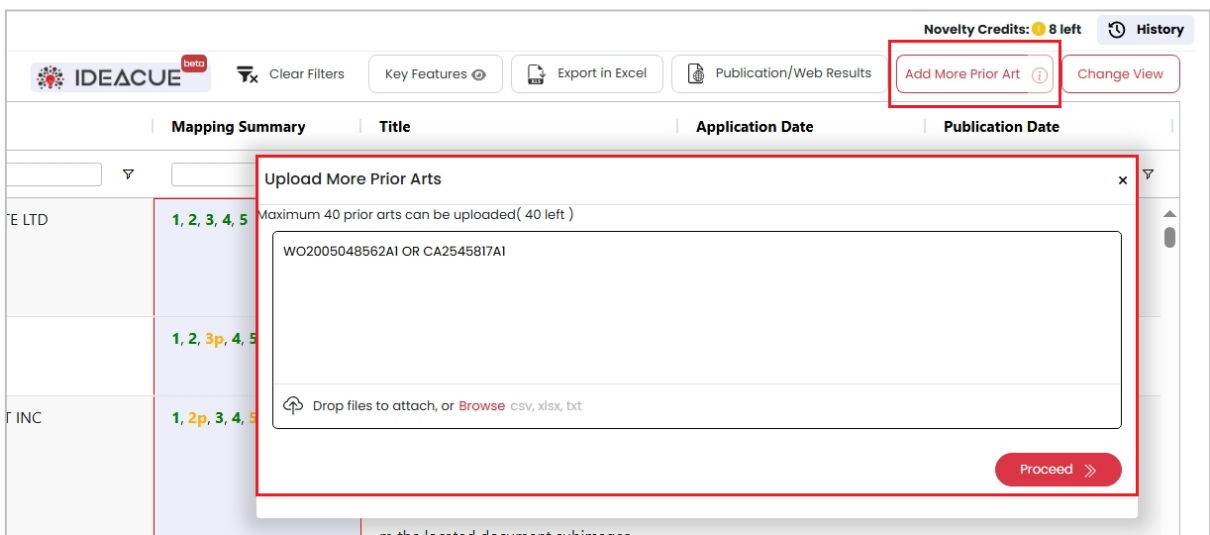
Key Features

1. This invention is a drone that can fly like a regular drone, and also be held in hand for ground filming.
2. Users can easily switch between flying the drone and holding it like a handheld camera.
3. The disclosed system comprises: Drone Body with Integrated Camera: A camera is securely mounted on the drone body and is capable of capturing high-quality video and images during both aerial and manual operation.
4. Display Interface on Drone Surface: At least one built-in display is provided on the drone surface to enable real-time monitoring or review of captured footage.
5. Dual Boom Handles for Manual Grip: Two ergonomically designed boom handles extend from the drone body allowing the user to securely hold and maneuver the drone during manual filming.
6. Integrated Command Inputs on Boom Handles: Each boom handle includes one or more user-input controls (e. g., buttons, touchpads, or joysticks) for adjusting camera settings.

Key Features: Complete key features can be seen here.

5.2 Manual Addition of Patents

- **Add more Prior-Art:** Users can add up to 10 additional prior-art patents (not present in existing list of 600), for which the system will generate mapping summaries. These newly added prior-arts will be integrated into the existing set of 600 results.



- These Manually added patents documents will appear on the results page with full feature mapping included as seen below along with updated ranking.

☐	460	WO-2005048562-A1 [M]	WILEY GEORGE A	1n, 2n, 3n, 4, 5n	HIGH DATA RATE INTERFACE WITH IMPROVED LINK CONTROL
☐	602	CA-2545817-A1 [M]	QUALCOMM INC	1n, 2n, 3n, 4n, 5n	HIGH DATA RATE INTERFACE WITH IMPROVED LINK CONTROL

Updated **Mapping Summary** of newly added prior-arts.

5.3 AI Based Patent summary

IDEACUE beta							
Clear Filters							
Key Features							
Export in Excel							
Publication/Web Results							
Add More Prior Art ⓘ							
Change View							
	Para-Rank	Publication Numbers	Assignee	Mapping Summary	Title	Application Date	Publication Date
☐	1	US-20230240531-A1	ALIVECOR INC	1, 2, 3, 4, 5, 6, 7	ELECTROCARDIOGRAM MONITORING S HOPPING CART	Jan 30, 2023	Aug 3, 2023
☐	2	US-20220338743-A1	SAMSUNG ELECTRONICS CO LTD	1, 2, 3, 4, 5, 6, 7	ELECTRONIC DEVICE AND METHOD FO R PROVIDING HEALTH INFORMATION B ASSED ON ELECTROCARDIOGRAM IN EL ECTRONIC DEVICE	Apr 4, 2022	Oct 27, 2022
☐	3	US-20230238134-A1	GE PRECISION HEALTHCARE LLC	1p, 2, 3, 4, 5, 6, 7	METHODS AND SYSTEM FOR CARDIAC ARRHYTHMIA PREDICTION USING TRA NSFORMER-BASED NEURAL NETWORK S	Jan 25, 2022	Jul 27, 2023
☐	4	US-20230099854-A1	ALIVECOR INC	1, 2, 3, 4, 5, 6, 7	METHODS AND SYSTEMS FOR ARRHYT	Oct 3, 2022	Mar 30, 2023

Rows: 20

When users click on any **Publication Number**, you'll be taken to a new page. This page will first display the **AI Summary** of the patent, followed by its **Bibliographic Data**.

US-20230240531-A1 Examination ELECTROCARDIOGRAM MONITORING SHOPPING CART

AI Summary

Bibliography

Abstract

Timelines

Images

Description

Claims

Family

Citations

Legal info

The **AI-Based Patent Summary** utilizes Artificial Intelligence to efficiently condense lengthy patent documents into quick overviews. By focusing on critical sections like the research area, background, and detailed description, the AI analyzes the core content to generate a concise summary. This allows users to rapidly grasp the patent's fundamental idea and key details

5.4 Search within the results

Click **Search** to find Publications as per the Boolean applied.

Novelty Credits: 9 left

IDEACUE

Publications / Web Results

History

Result of search: 600 Application Family

Search

Sorting

Change view

Publication Num	Title	Publication Date	Application Date	Standardized Current Assignee
1 US-10836508-B2	Camera drone	17 Nov 2020	16 Feb 2018	POLAR PRO FILTERS
2 IN-202411026927-A	ENHANCED DEVICES AND METHODS FOR REMOTE IMAGE CAPTURE WITH DRONE- MOUNTED CAMERAS	03 May 2024	31 Mar 2024	GRAPHIC ERA DEEMED TO BE UNIVERSITY, GRAPHIC ERA HILL UNIVERSITY DEHRADUN CAMPUS
3 US-20190291864-A1	TRANSFORMABLE APPARATUS	26 Sep 2019	11 Jun 2019	SZ DJI TECH
4 US-9765926-B2	Systems and methods for payload stabilization	19 Sep 2017	08 Apr 2015	SZ DJI OSMO TECH
5 US-20160139602-A1	LAUNCH-CONTROLLED UNMANNED AERIAL VEHICLES, AND ASSOCIATED SYSTEMS AND METHODS	19 May 2016	22 Jun 2015	NIXIE LABS
6 CN-110006407-B	Close-up photogrammetry method based on rotor unmanned aerial vehicle	10 Apr 2020	16 Apr 2019	WUHAN UNIVERSITY WHU
7 US-20230421732-A1	IDENTIFYING, RECORDING AND ASSESSING GEOSPATIAL ASSETS WITH DATA COLLECTION, IMAGE PROCESSING, AND SELECTIVE PRUNING	28 Dec 2023	11 Sep 2023	VISUAL DEFENCE
8 US-20240430573-A1	Camera Digital Gimbal System	26 Dec 2024	08 Sep 2024	INDIVIDUAL

Search within automated results

Authorities / Collections

Title

drone

Corpus

AND

All Assignee

Intel OR Google

Corporate tree

AND

Earliest priority date

dd/mm/yyyy

TO

dd/mm/yyyy

AND

Xlscout Family ID

AV60511657 OR AV44621142 OR AV76943182 OR AV84858259 OR AV89883248 OR AV96616205 OR AV97924354 OR AV68289435 OR AV38993961 OR AV8663113 OR AV60321667 OR AV74988317 OR AV58835948 OR AV46203427 OR AV48599814 OR AV19377890 OR AV70314929 OR AV83683529 OR AV34294067 OR AV71465603 OR AV83712871 OR AV77775726 OR AV19005159 OR AV48685930 OR AV77433279 OR AV71229196 OR AV82725025 OR AV97990632 OR AV94730283 OR AV90751039 OR AV97511917 OR AV72588181 OR AV80809793 OR AV79577609 OR AV18613068 OR AV91211188 OR AV67418652 OR AV83594975 OR AV74317795 OR AV1512854 OR AV47657757 OR AV77948745 OR AV97225180 OR AV38637118 OR AV60431348 OR AV92074167 OR AV30655926 OR AV48196717 OR AV82536778 OR AV25214968 OR AV58349332 OR AV59730320 OR AV76351448 OR AV17227505 OR

+ Add field

23 Patents Found

((tt:(drone)) AND xlpat-fam-id:(AV60511657 OR AV44621142 OR AV76943182 OR AV84858259 OR AV89883248 OR AV96616205 OR AV97924354 OR AV68289435 OR AV38993961 OR AV8663113 OR AV60321667 OR AV74988317 OR AV58835948 OR AV46203427 OR AV48599814 OR AV19377890 OR AV70314929 OR AV83683529 OR AV34294067 OR AV71465603 OR AV83712871 OR AV77775726 OR AV19005159 OR AV48685930 OR AV77433279 OR AV71229196 OR AV82725025 OR AV97990632 OR AV94730283 OR AV90751039 OR AV97511917 OR AV72588181 OR AV80809793 OR AV79577609 OR AV18613068 OR AV91211188 OR AV67418652 OR AV83594975 OR AV74317795 OR AV1512854 OR AV47657757 OR AV77948745 OR AV97225180 OR AV38637118 OR AV60431348 OR AV92074167 OR AV30655926 OR AV48196717 OR AV82536778 OR AV25214968 OR AV58349332 OR AV59730320 OR AV76351448 OR AV17227505 OR

Edit Search

Clear

Search

Select the legal status, type of the patent, and the Authorities can be selected

For reference, user can search any query in search field to filter the result set.

The screenshot shows a search interface with several components: a top bar with 'Authorities / Collections', a search bar with 'drone', and a list of filters including 'Corpus', 'Corporate tree', 'Earliest priority date', and 'Xlscout Family ID'. A red box highlights the 'Add field' button. A red box highlights the search results area, which displays a list of patent numbers and a red badge indicating '23 Patents Found'. A red box highlights the 'Search' button.

Authorities / Collections

Title

drone

Corpus

Corporate tree

AND

All Assignee

Intel OR Google

AND

Earliest priority date

dd/mm/yyyy

TO

dd/mm/yyyy

AND

Xlscout Family ID

AV60511657 OR AV44621142 OR AV76943182 OR AV84858259 OR AV89883248 OR AV96616205 OR AV97924354 OR AV68289435 OR AV38993961 OR AV8663113 OR AV60321667 OR AV74988317 OR AV58835948 OR AV46203427 OR AV48599814 OR AV19377890 OR AV70314929 OR AV83683529 OR AV34294067 OR AV71465603 OR AV83712871 OR AV77775726 OR AV19005159 OR AV48685930 OR AV77433279 OR AV71229196 OR AV82725025 OR AV97990632 OR AV94730283 OR AV90751039 OR AV97511917 OR AV72588181 OR AV80809793 OR AV79577609 OR AV18613068 OR AV91211188 OR AV67418652 OR AV83594975 OR AV74317795 OR AV1512854 OR AV47657757 OR AV77948745 OR AV97225180 OR AV38637118 OR AV92074167 OR AV60431348 OR AV30655926 OR AV48196717 OR AV82536778 OR AV25214968 OR AV58349332 OR AV59730320 OR AV76351448 OR AV17227505 OR

+ Add field

23 Patents Found

((ttl:(drone)) AND xlpat-fam-id:(AV60511657 OR AV44621142 OR AV76943182 OR AV84858259 OR AV89883248 OR AV96616205 OR AV97924354 OR AV68289435 OR AV38993961 OR AV8663113 OR AV60321667 OR AV74988317 OR AV58835948 OR AV46203427 OR AV48599814 OR AV19377890 OR AV70314929 OR AV83683529 OR AV34294067 OR AV71465603 OR AV83712871 OR AV77775726 OR AV19005159 OR AV48685930 OR AV77433279 OR AV71229196 OR AV82725025 OR AV97990632 OR AV94730283 OR AV90751039 OR AV97511917 OR AV72588181 OR AV80809793 OR AV79577609 OR AV18613068 OR AV91211188 OR AV67418652 OR AV83594975 OR AV74317795 OR AV1512854 OR AV47657757 OR AV77948745 OR AV97225180 OR AV38637118 OR AV92074167 OR AV60431348 OR AV30655926 OR AV48196717 OR AV82536778 OR AV25214968 OR AV58349332 OR AV59730320 OR AV76351448 OR AV17227505 OR

Edit Search

Clear

Search

Select the type of filter user want to apply. User can add new filed by clicking on "Add field" button

For e.g., a total of 23 patents are filtered by searching drone in title

Search within automated results

The screenshot shows a window titled 'Search within automated results' with a search bar containing 'drone'. A dropdown menu is open, showing a list of fields to search within. A red box highlights the 'Search' button. A red box highlights the '23 Patents Found' badge. A red box highlights the 'Add field' button.

Authorities / Collections

Title

drone

Corpus

Corporate tree

AND

All Assignee

Intel OR Google

AND

Earliest priority date

dd/mm/yyyy

TO

dd/mm/yyyy

AND

Xlscout Family ID

AV60511657 OR AV44621142 OR AV76943182 OR AV84858259 OR AV89883248 OR AV96616205 OR AV97924354 OR AV68289435 OR AV38993961 OR AV8663113 OR AV60321667 OR AV74988317 OR AV58835948 OR AV46203427 OR AV48599814 OR AV19377890 OR AV70314929 OR AV83683529 OR AV34294067 OR AV71465603 OR AV83712871 OR AV77775726 OR AV19005159 OR AV48685930 OR AV77433279 OR AV71229196 OR AV82725025 OR AV97990632 OR AV94730283 OR AV90751039 OR AV97511917 OR AV72588181 OR AV80809793 OR AV79577609 OR AV18613068 OR AV91211188 OR AV67418652 OR AV83594975 OR AV74317795 OR AV1512854 OR AV47657757 OR AV77948745 OR AV97225180 OR AV38637118 OR AV92074167 OR AV60431348 OR AV30655926 OR AV48196717 OR AV82536778 OR AV25214968 OR AV58349332 OR AV59730320 OR AV76351448 OR AV17227505 OR

+ Add field

23 Patents Found

((ttl:(drone)) AND xlpat-fam-id:(AV60511657 OR AV44621142 OR AV76943182 OR AV84858259 OR AV89883248 OR AV96616205 OR AV97924354 OR AV68289435 OR AV38993961 OR AV8663113 OR AV60321667 OR AV74988317 OR AV58835948 OR AV46203427 OR AV48599814 OR AV19377890 OR AV70314929 OR AV83683529 OR AV34294067 OR AV71465603 OR AV83712871 OR AV77775726 OR AV19005159 OR AV48685930 OR AV77433279 OR AV71229196 OR AV82725025 OR AV97990632 OR AV94730283 OR AV90751039 OR AV97511917 OR AV72588181 OR AV80809793 OR AV79577609 OR AV18613068 OR AV91211188 OR AV67418652 OR AV83594975 OR AV74317795 OR AV1512854 OR AV47657757 OR AV77948745 OR AV97225180 OR AV38637118 OR AV92074167 OR AV60431348 OR AV30655926 OR AV48196717 OR AV82536778 OR AV25214968 OR AV58349332 OR AV59730320 OR AV76351448 OR AV17227505 OR

Edit Search

Clear

Search

Text

Names

Numbers

Dates

Classifications

Country

Citations

Reassignment

Legal Status

Patent Type

Litigation

SEP

Problems(US Only)

Title

Abstract

Claims

Description

Full Text

Title or Abstract

Title, Abstracts or Claims

Click on the dropdown to choose from various fields

Click here to apply the filter

After clicking on “Apply” button, the filtered results will be shown as below

Click on the “Change view” icon to view the filtered results in the Results Page

NOVELTY CHECKER LTM

IDEACUE

Publications / Web Results

Generate Report

History

Result of search: **23 Xiscout Family**

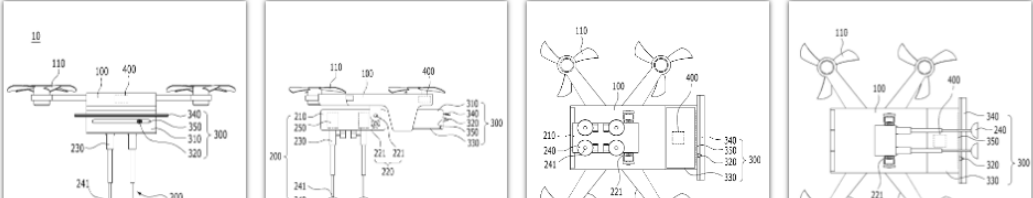
Search

Sorting

Change view

Publication Num	Title	Publication Date	Application Date	Standardized Current Assignee
1 TR-201901598-A2	Air and space vehicles, air and space capture and landing systems and robot drone application system	23 Nov 2020	03 Feb 2019	ALI RIZA EROGLU
Image not available				
2 WO-2019172700-A1	DRONE FOR CLEANING WINDOW GLASS OF HIGH-RISE BUILDING	12 Sep 2019	08 Mar 2019	LEE HAE GON

+



Expand

Click on “+” button to expand images for all patents

Click on “Expand” button to expand the images for a specific patent

Result of search: **600 Application Family**

Publication Num	Title	Publication Date	Application Date	Standardized Current Assignee
1 WO-2019172700-A1	DRONE FOR CLEANING WINDOW GLASS OF HIGH-RISE BUILDING	12 Sep 2019	08 Mar 2019	LEE HAE GON

The first result displays a grid of four technical drawings of a drone. A red box highlights the '+' button in the top right of the search bar area. Another red box highlights the 'Expand' button (a downward arrow) on the right side of the first result's image grid.

Click on “Filters” icon to hide and unhide the filters column. User can filter the results as per their use case

Result of search: **599 Xiscout Family**

Publication Num	Title	Publication Date	Application Date	Standardized Current Assignee
1 WO-2019172700-A1	DRONE FOR CLEANING WINDOW GLASS OF HIGH-RISE BUILDING	12 Sep 2019	08 Mar 2019	LEE HAE GON
2 US-20210325905-A1	COORDINATED LABOR ACTIVITIES USING DRONES	21 Oct 2021	07 Jan 2021	ECONNECT

The first result displays a grid of four technical drawings of a drone. The second result displays a grid of four technical drawings of a drone. A red box highlights the 'Filters' icon (a funnel) on the left side of the interface. The filters column is expanded, showing various filter categories like Delta, Assignees, Years, Authority/Country, Patent Type, Inventors, Classification, Legal Status, Litigation, SEP, and Taxonomy.

Click on “Apply” to apply the selected filters

The screenshot shows the IDEACUE interface with search results for 'Xiscout Family'. The filters panel on the left shows 'Delta' selected. The 'Apply' button is highlighted in the filters panel. The main table displays results for 'WO-2019172700-A1' and 'US-20210325905-A1'. The 'Apply' button is also highlighted in the top right corner of the interface.

Click here to clear the selected filters

Once user have applied the filters, “Reset All” option appears. Click on this option to delete all the applied filters

The screenshot shows the Filters panel with the 'Reset All' button highlighted. The panel includes sections for 'Delta', 'Assignees', 'Years', 'Authority/Country', 'Patent Type', 'Inventors', 'Classification', 'Legal Status', 'Litigation', and 'SEP'. The 'Taxonomy' section is also visible at the bottom.

Click here to access the Taxonomy Builder

User can also apply a custom highlighter. Click on “Apply” button to apply the filters

The screenshot shows the Highlighter dialog box with a custom highlighter configuration. The dialog includes a 'Template 0' dropdown, a list of rules with checkboxes, and 'Cancel' and 'Apply' buttons. The rules are: 'clean*', 'drone*', 'Text1, Text2,,,Text10', 'Text1, Text2,,,Text10', 'Text1, Text2,,,Text10', and 'Text1, Text2,,,Text10'.

Click on “Apply” button to apply the filters

Taxonomy Builder - Home

Step 1Step 2

Create your own multi-level taxonomy. System will categorize the results of search based on the keywords entered in the taxonomy. You can also define the fields for categorizing patents (Title, Abstract, Claims, Description). Templates are stored and can be used for different searches.

Create a new Template

User Templates

Search Within Templates

S.No	Template Name	Last Modified Date	Actions
1	vehicle cabin air purifier	30/05/2024, 12:01:55	
2	drone	29/05/2024, 17:04:56	
3	Window	24/07/2024, 16:59:12	

Click here to create a new template

User can create a multi-level taxonomy. User can edit, copy, or delete the template. Click on the tick icon to apply the template

<< Back to Home

Taxonomy Builder - Details

Step 1Step 2

Taxonomy Categorization Fields ⓘ

☒ Title

☒ Abstract

☒ Claims

☐ Description

Edit

window, window*, door*, glass*, pane*

clean

drone

+

Enter keywords/phrases for the category. Synonyms can be added from the corpus or by entering comma separated keywords/phrases. Search operators can not be used

Corpus

System Suggested Concepts ⓘ

Window Frame

Window-cleaning Machine

Window Cleaner

Window cleaning Equipment

Magnetic Force

Main Body

Cleaning Head

Washing Water

Control Module

Unmanned Aerial Vehicle

Guide Rod

Window Pane

Generate Sensor

Electronic Filing

Detection Sensor

Taxonomy Name

drone

Save

User can edit templates by adding desired key-concepts and synonyms with the help of corpus

Click here to confirm the selected keywords

The screenshot shows the 'Taxonomy Builder - Details' interface. At the top, there's a progress bar with 'Step 1' and 'Step 2'. Below it, a section titled 'Taxonomy Categorization Fields' includes checkboxes for 'Title', 'Abstract', 'Claims', and 'Description', along with an 'Edit' button. A text input field contains 'window, window*, door*, glass*, pane*'. To its right is a 'Corpus' button. Below the input field, a list shows 'clean' and 'drone' with a red '+' icon next to 'drone'. A tooltip explains: 'Enter keywords/phrases for the category. Synonyms can be added from the corpus or by entering comma separated keywords/phrases. Search operators can not be used'. On the right, 'System Suggested Concepts' lists various terms like 'Window Frame', 'Window-cleaning Machine', etc. At the bottom, the 'Taxonomy Name' is 'drone' and there is a 'Save' button.

Click on "Corpus" to access the corpus for synonyms

Select the synonyms by clicking on the keyword suggestions

This screenshot shows the 'Word Corpus' modal window. It has a search bar with 'drone' and an 'Analyze' button. Below, 'Keyword suggestions' are displayed in a grid. The first row includes 'drone' (highlighted in red), 'drone*', 'uav*', 'aerial*', 'satellite*', 'balloon*', 'airplane*', and 'bird eye*'. Other suggestions include 'helicopter*', 'nadir*', 'planar*', 'air craft*', 'aircraft*', 'air plane*', 'orthog*', 'air ship*', 'boat*', 'quad copter*', 'uas*', 'airship*', 'unmanned aerial vehicle*', 'sky*', 'air bus*', 'blimp*', 'air born*', 'fly*', 'vehicle*', 'plane*', 'aerial vehicle*', and 'car*'. At the bottom of the modal are 'Cancel', 'Clear', and 'Submit' buttons. The background shows the 'Taxonomy Builder - Details' interface with the 'Taxonomy Name' set to 'drone'.

Click on Submit to finalize the synonyms

Note: Up to ten synonyms can be selected for a keyword

[Click here to add a child category](#)

<< Back to Home

Taxonomy Builder - Details

Step 1Step 2

Taxonomy Categorization Fields ⓘ

☒ Title☒ Abstract☒ Claims☐ Description

Edit

window✎⊕🗑️

clean✎⊕🗑️

drone✎⊕🗑️

⊕

System Suggested Concepts ⓘ

Aerial vehicleMain bodyOuter WallWindow FrameWire RopeCleaning BrushModel BelongsAuxiliary assemblyWiping PlateMechanical ArmObservation windowAdjusting MechanismSuspension ArmPush RodPayload DeliverySpeed ReducerStorage Media

Taxonomy Name drone

Save

[Click here to add a parent category](#)

[Back to Home](#)

Taxonomy Builder - Details

Step 1

Step 2

Taxonomy Categorization Fields

☒ Title
 ☒ Abstract
 ☒ Claims
 ☐ Description

Edit

^

window

clean

scrub

drone

+

✎

+

🗑

✎

+

🗑

System Suggested Concepts

Aerial vehicle

Main body

Outer Wall

Window Frame

Wire Rope

Cleaning Brush

Model Belongs

Auxiliary assembly

Wiping Plate

Mechanical Arm

Observation window

Adjusting Mechanism

Suspension Arm

Push Rod

Payload Delivery

Speed Reducer

Storage Media

Taxonomy Name

drone

Save

Save the template by providing a taxonomy name which can be helpful for future use

5.5 Publications / Web Results

Web Results are gathered from various online sources.

User can also export the desired NPLs.

The screenshot displays the NOVELTY CHECKER LLM interface. The top navigation bar includes the logo, language selection (English), and user information (Welcome, Saket Beniwal). Below the navigation bar, there are tabs for 'Web Results' and 'Publications'. The 'Web Results' tab is active, showing a list of search results. The first result is titled 'Window cleaning drones' and includes a description and concepts (Drone, Buildings). To the right of the list, a 'Foam Tree' visualization is shown, which is a hexagonal grid of concepts. The 'Drone' concept (44) is highlighted with a red box. The 'Foam Tree' also includes a 'Concepts' tab and an 'Export' button.

Click on the title to redirect to the source page of the web result.

Foam Tree acts like a filter enabling user to visualize the NPLs based on the concepts. Double click on any

Click on "concepts" to show the ancestral tree structure. User can click on respective branch to apply and refine the results.

The screenshot shows the 'Concepts' tab in the NOVELTY CHECKER LLM interface. It features a list of concepts with checkboxes and a tree structure. The 'Apply' button is visible at the top left of the list. The concepts listed include: Other Topics, Removal, Moving, Drone, Time Consuming, Window Washing, Window Cleaning Services, Helping, Water, Window Cleaner, Commercial Window Cleaning, Control, Section, Design, and Code.



"Publications" includes scholarly articles, Journals, Research papers that are relevant to the disclosure.

Click on the filter icon to open the "filters" menu.

Click on the title to redirect to the source page of the web result.

The screenshot displays the 'NOVELTY CHECKER LLM' interface. The top navigation bar includes a home icon, the logo, a language selector set to 'English', and a user profile for 'Welcome, Saket Beniwal'. Below the navigation bar, there are tabs for 'Web Results' and 'Publications' (the latter is highlighted with a 'beta' badge). A 'Filters' icon is visible on the left. The main content area shows a list of three search results under the 'Publications' tab. The first result is 'Unmanned Aerial Vehicle for Cleaning the High Rise Buildings' with a description, citation count (9), and publication year (2019). The second result is 'A Switchable Unmanned Aerial Manipulator System for Window-Cleaning Robot Installation' with a description, citation count (28), and publication year (2021). The third result is 'Robot control system for window cleaning' with a description. To the right of the results is a 'Foam Tree' visualization showing a hierarchical structure of concepts related to the search results, including 'Window Cleaning (76)', 'Robot (65)', 'Drone (45)', 'Glass (33)', 'Air (11)', 'Selfcleaning (18)', 'Unmanned Aerial Vehicle (15)', 'Other Topics (13)', 'Removal (18)', 'Highrise Buildings (11)', 'R&D Data (3)', and 'Source (4)'. A 'Filters' menu is open on the left, showing options for 'Publication Year' (2002 to 2024) and 'Source' (listing various databases like IEEE, ScienceDirect, etc.).

The "Sources" menu in the Novelty Checker tool allows users to filter the non-patent literature search results based on the origin or repository of the publications.

Similarly, as web-results, user can visualize and select concept/sub-concepts from the foam tree and concepts option.

The results can also be filtered by a publication year range.

5.6 New Report Generation

- Users can now generate new novelty report as per discretion. On the bottom right side of the option to get LLM reports.
- The reports now come with an AI generated automatic summary report, this report is specially crafted for each novelty case and presents detailed analysis of the search.

The report can be downloaded for the selected publication numbers.

	Para-Rank	Publication Numbers	Assignee	Mapping Summary	Title	Application Date	Pub
	☐						
☒	1	WO-2014097309-A1	ASIAN PAINTS LTD	1p, 2p, 3, 4p, 5p, 6	STIMULI RESPONSIVE SELF CLEANING COATING	Feb 18, 2013	Ji
☒	2	US-11692109-B2	HRL LABORATORIES LLC	1p, 2p, 3, 4p, 5p, 6	Multiphase coatings with separated functional particles, and methods of making and using the same	Dec 29, 2021	Ji
☒	3	US-20250144270-A1	UNIVERSITY OF ALBERTA	1p, 2p, 3p, 4p, 5, 6	PROTEIN-BASED SURFACE COATINGS	Nov 8, 2024	N
☒	4	US-9683197-B2	PRESIDENT AND FELLOWS OF HARVARD COLLEGE	1p, 2p, 3, 4p, 5, 6p	Dynamic and switchable slippery surfaces	May 2, 2014	Ji
☒	5	US-20120264884-A1	QUEEN'S UNIVERSITY AT KINGSTON	1p, 2p, 3p, 4p, 5, 6	Amphiphobic Surfaces from Block Copolymers	Apr 12, 2012	C

AI generated report of top 15 results.

↓ Novelty Report Top 15 Selected

AI generated report of top 15 results.

↓ Novelty Report Top 15 Selected

Click on **Novelty Report** > **Top 15** button to download the LLM report for top ranked 15 publications. The report will be sent to your email.

Click on **Novelty Report** > **Selected** button to download the LLM report the selected publications. The report will be sent to your email.

6.Ideacue

6.1 Idea Playground

- Idea Playground is an ideation dashboard representing a visual concept map indicating the cluster around innovative concepts around the domain to disclosure. User can select any once concept from the visual concept chart to generate innovative ideas around them.

Click here to access the **IdeaCue**

Note: Publication Numbers with '[M]' are manually added patents.

IDEACUE

Clear Filters

Key Features

Export in Excel

Publication/Web Results

Add More Prior Art

Change View

Novelty Credits: 2 left

History

Para-Rank	Publication Numbers	Assignee	Mapping Summary	Title	Application Date
1	US-20140317097-A1 [M]	RELX INC	1, 2p, 3p, 4, 5n, 6p, 7, 8, 9	SYSTEMS AND METHODS FOR IMAGE SEARCHING OF PATENT-RELATED DOCUMENTS	Jul 3, 2014
2	US-9311553-B2	NANT HOLDINGS IP LLC	1p, 2, 3p, 4, 5, 6p, 7p, 8p, 9p	Image capture and identification system and process	Aug 25, 2014
3	JP-H06111083-A	OLYMPUS CORP	1p, 2, 3, 4p, 5n, 6p, 7, 8, 9p	VIDEO ID PHOTOSYSTEM	Sep 29, 1992
4	NO-315726-B1	NUGENESIS TECHNOLOGIES CORP	1p, 2, 3p, 4p, 5, 6p, 7, 8p, 9p	Computer-implemented process and computer system to capture the visual for	Aug 2, 2000

Rows: 601

NOVELTY CHECKER LLM

English

Welcome, Sakot Beniwal

IDEA PLAYGROUND

Idea Dashboard

IdeaCue: Step 1 - Select Inventive Concepts and Sub-Concepts

IdeaCue

Regenerate

Specialized Cleaning Zones

Chemical Cleaning

Automated Night Cleaning

Using an Intermediary

Preventive Measures

Scheduled Window Cleaning

Preventive Condition-Based Measures

Automated Cleaning Systems

Vibrations for Cleaning

Condition-Based Cleaning

Selective Cleaning

Weather Adaptability

Brainstorm Synergy

Click on “Brainstorm Synergy” Button for AI-generated ideas.

User can select any Inventive Concept and generate inventive idea generation. For instance, here we have selected “Automated Cleaning Systems”.

The screenshot displays the 'NOVELTY CHECKER LLM' interface. At the top, there's a header with the logo, language selection (English), and user information (Welcome, Saket Beniwal). Below the header, the 'IDEA DASHBOARD' is visible. The main section is the 'IDEA PLAYGROUND', which includes a sidebar with 'IdeaCue' and 'Regenerate' buttons. The central area shows a hexagonal grid of concepts: 'Specialized Cleaning Zones', 'Using an Intermediary', 'Preventive Condition-Based Measures', 'Weather Adaptability', 'Chemical Cleaning', 'Automated Cleaning Systems' (selected), 'Selective Cleaning', 'Preventive Measures', 'Scheduled Window Cleaning', 'Vibrations for Cleaning', and 'Condition-Based Cleaning'. To the right, a 'Brainstorm Synergy' button is highlighted, leading to a 'Step 2 - Click here for AI-generated Text' section. This section displays a 'Problem' statement: 'Window cleaning is often expensive, dangerous, labour extensive and time-consuming.' Below this, a list of 'Ideas' is shown, including 'Development of an autonomous cleaning unit with integrated AI that uses machine learning to identify different surfaces or objects requiring varying cleaning processes...' and 'Invention of a multifunctional autonomous cleaning drone capable of performing several cleaning tasks...'. At the bottom right, 'Check Novelty' and 'Drafting LLM' buttons are visible.

Double click on the Inventive Step to show the sub-concepts.

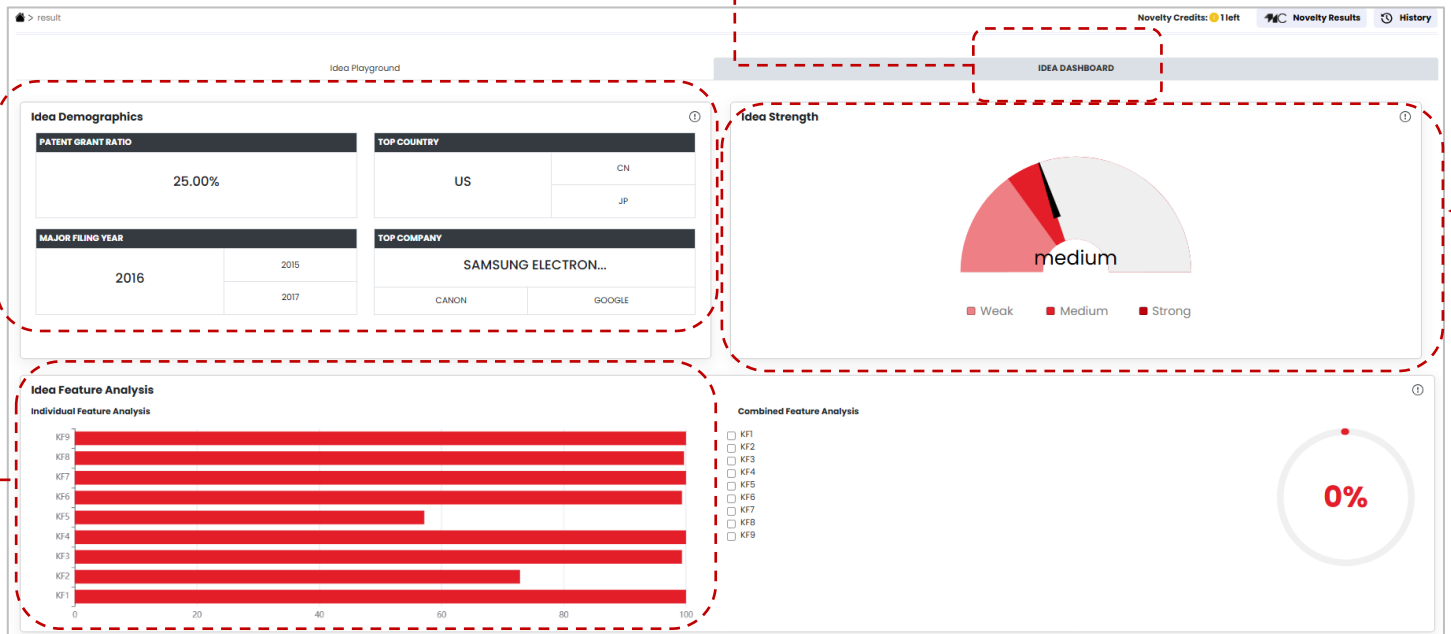
User can select any idea and proceed to Check Novelty/ Drafting LLM.

This screenshot shows the 'IDEA PLAYGROUND' interface with the 'Automated Cleaning Systems' concept selected. A dashed red box highlights the sub-concepts: 'Robotic Window Cleaners' and 'Integrated Cleaning Functions'. The rest of the interface, including the sidebar and the other concepts in the grid, remains the same as in the previous screenshot.

6.2 Idea Dashboard

- Idea Dashboard provides the user with Quantitative Analysis of the input Idea, providing Idea Strength, Idea Demographics, Idea Feature Analysis

Click here to access **Idea Dashboard**



This section provides insights for the key features of the idea in comparison to the prior art. Get more insights by combining new or existing key features to the input idea.

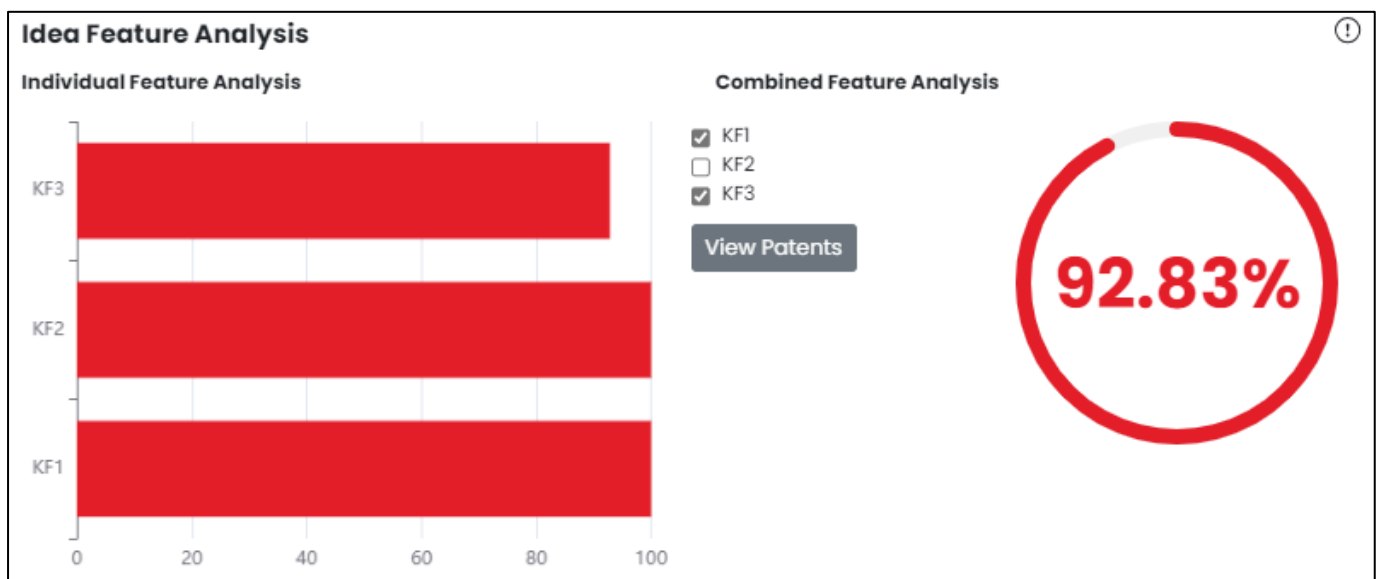
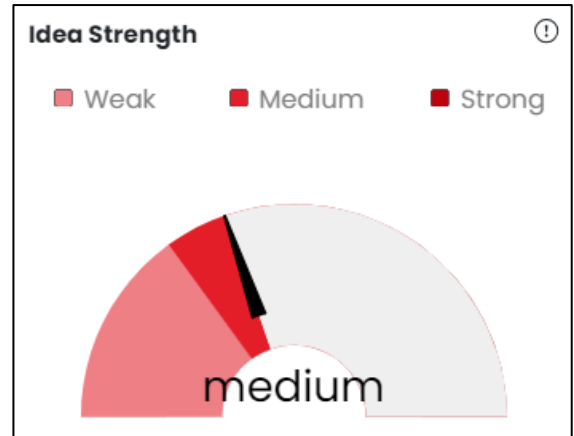
Idea strength denotes the inventive value of the idea.

Patent Grant Ratio depicts the percentage of patents granted by the patent offices related to the idea.
Top Country depicts the major countries in which maximum inventions were filed related to the idea.
Major Filing Year depicts the years in which maximum inventions were filed related to the idea.
Top Company depicts the major companies or applicants working in technical domain related to the idea

Weak strength denotes that the idea has less innovative potential with respect to the existing prior art globally.

Medium strength denotes that few elements of the idea are unique.

Strong strength denotes that the idea has innovative features with respect to the existing prior art globally.



Individual Feature Analysis shows the percentage of patents disclosing a particular key feature based on similarity score.

Combined Feature Analysis shows the percentage of patents disclosing multiple key features based on similarity score.

7. Novelty Checker LLM Report



7.1 Report Summary and Key Feature Mapping

Report Summary

Relevant Patent Citations of Document image analysis and optical character recognition (OCR) for automated personal-data extraction from identity or sensitive documents.

Title: Document image analysis and optical character recognition (OCR) for automated personal-data extraction from identity or sensitive documents.

Problem Text:
Optical Character Recognition in sensitive documents.

Key Features:
Document image analysis and optical character recognition (OCR) for automated personal-data extraction from identity or sensitive documents.
A method for extracting personal data from a sensitive document, the method comprising: predicting type of document by keypoint matching of the sensitive document; cropping the sensitive document in response to the type of document predicted to extract document shape and extract one or more fields, the one or more fields comprising text or pictures and the one or more fields comprising at least one categorical value field and denoising the one or more fields to prepare them for optical character recognition; performing optical character recognition on the denoised one or more fields to detect characters in the one or more fields; and categorizing the characters in the at least one categorical value field by calculating similarity scores between predefined category data corresponding to the at least one categorical value field and the detected characters in the at least one categorical value field. a feature extraction device for extracting transformation invariant features corresponding to keypoints of the sensitive document;

Citation No.	Title	Publication Date
US-20250045459-A1	APPARATUS FOR AND METHOD OF DE-IDENTIFICATION OF MEDICAL IMAGES	2025-02-06

This Table Enlists all the Relevant Patent Citations which have been mapped in the report.

Report Summary shows the **Title, Problem Text, Key Features.**

Key Feature Mapping

Key Feature Mapping: (1 of 1)

In the following table(s), '✓' represents fully mapped Key Features, while 'p' represents partially mapped Key Features.

		NREFERENCE INC
CE No.	Key Feature	US-20250045459-A1
1	A method for extracting personal data from a sensitive document, the method comprising:	✓
2	predicting type of document by keypoint matching of the sensitive document; cropping the sensitive document in response to the type of document predicted to extract document shape and extract one or more fields;	
3	the one or more fields comprising text or pictures and the one or more fields comprising at least one categorical value field and denoising the one or more fields to prepare them for optical character recognition;	p
4	performing optical character recognition on the denoised one or more fields to detect characters in the one or more fields;	✓
5	and categorizing the characters in the at least one categorical value field by calculating similarity scores between predefined category data corresponding to the at least one categorical value field and	✓
6	the detected characters in the at least one categorical value field, a feature extraction device for extracting transformation invariant features corresponding to keypoints of the sensitive document;	✓
7	a keypoint-vector association device which uses a KAZE-based approach to associate each of the keypoints with a best-describing vector;	
8	a Bag of Words module for building a Bag of Visual Word model having a plurality of clusters by clustering ones of the keypoints sharing same identified properties and a keypoint in cluster counting module for counting the keypoints in each cluster to determine a number of clusters.	
9	the number of clusters corresponding to a size of a feature vector combining the vectors associated with the keypoints in the clusters; and a prediction module for predicting the type of document in response to the size of the feature vector.	p

Each cited patent in the report includes a detailed mapping summary showing how it aligns with the disclosure’s key features. This helps users assess the relevance of each result. In the summary tables: '✓' indicates a fully mapped key feature, while 'p' indicates a partial match. The ones with blank fields are not mapped.

7.2 Addition of Conclusion Paragraph in LLM Report – New Version

- The Automated Novelty Checker LLM Report maps each patent citation against the key features from the disclosure.

Relevant Patent Citations

Bibliographic data

1. Publication No. & Title: US-20250045459-A1 - APPARATUS FOR AND METHOD OF DE-IDENTIFICATION OF MEDICAL IMAGES

Assignee: NREFERENCE INC

Publication Date: 2025-02-06 - Application Date: 2024-10-25 - Priority Date: 2023-07-31

Sno	Key Features	Explanation	Relevant Paragraphs (RP's)
1	A method for extracting personal data from a sensitive document, the method comprising:	The claim element describes a method for extracting personal data from a sensitive document. The provided context in RP1 details a method for de-identifying a DICOM series, which is a type of sensitive document, by applying a text de-identification method and optionally masking other relevant protected healthcare information (PHI or PII). This process inherently involves identifying or extracting the personal data (text, PHI, PII) before it can be de-identified or masked, directly supporting the concept of a method for handling personal data within a sensitive document. [RP1] RP2 further elaborates on	RP1: FIG. 2 shows an illustrative embodiment 200 of the methods and systems disclosed herein. In this example a DICOM series is de-identified. In this example, a text de-identification method is applied to the image series, while another optional algorithm can be used to mask other relevant protected healthcare information (PII or PHI). The text-de-identification method in this example includes the following steps. First, the method reads the metadata from the image series and selects a sampling strategy on the metadata. Then, a sampling vector is generated based on the sampling strategy sample slices of the image series that are likely to

Here the reports show **Key features**, their **Explanation** and their **Relevant Paragraphs (RP's)**. The report shows 3 of the best RP's and are listed in the Relevant Paragraphs (RP's) section.

5 Heated air removes condensation and frost from headlight.	The provided context describes an LED headlight radiator system that includes a heat base receiving heat from an LED light source, a heat sink, and a heat dissipation passage through which air can flow while being in contact with the heat sink. This mechanism explicitly supports the concept of air being heated within the headlight system. RP1 details the components involved in this heat transfer and airflow. RP2 further explains how air is moved through this heat dissipation passage, either forcibly by a blower when the vehicle is stopped or naturally when running, and flows out through an opening. This demonstrates that heated air is directed within and potentially out of the headlight assembly. However, the explicit purpose of this directed heated air is described in RP2 as part of the heat dissipation driving method, not specifically for removing condensation or frost from the headlight. While the context describes the generation and movement of heated air within the headlight system, it does not explicitly state that this heated air is used to remove condensation or frost from the headlight itself, such as from a cover plate. This specific function is not directly mentioned in RP1, RP2, or RP3. Therefore, while the mechanism for creating and directing heated air exists, its application to condensation and frost removal is not explicitly supported by these paragraphs. In conclusion, the context describes a system that heats and directs air within a headlight assembly. While the mechanism for producing and moving heated air is detailed, the provided paragraphs do not explicitly state that this heated air is used for removing condensation or frost from the headlight. The connection between the heated air and the removal of condensation/frost is not directly supported by the text.	RP1: The LED light source module 10 is installed below the LED light source module 10 disposed to be adjacent to the mounting hole 21 in the headlamp case 20 in which the mounting hole 21 having an opening 21 is formed at the lower side. To release the heat generated in 10), The lower surface of the LED light source module 10 is in contact with and fixed to the lower portion of the headlight case 20 to seal the mounting hole 21 of the headlight case 20 generated in the LED light source module 10 Heat base 110 receives heat; A heat sink 120 installed at a lower portion of the heat base 110 to discharge heat transferred from the heat base; A first opening 131 opening toward the front of the vehicle is formed, and fixed to the heat base 110 so as to surround the heat sink 120 so as to communicate with the first opening 131. Forming a heat dissipation passage 132 through which air can flow while being in contact with the heat sink 120, and communicating with the heat dissipation passage 132 and having a second opening, which is opened to the outside of the headlight case 20; 133 is formed a heat dissipation housing 130; A blower (140) for selectively blowing the heat radiation passage (132); A drive motor 150 for driving the blower 140; And Fixed LED headlight radiator having a drive control unit 160 for controlling the drive of the drive motor 160. RP2: The method according to claim 7, The drive control unit 160, When the vehicle is stopped, the air forcibly introduced through the second opening 133 by the operation of the blower 140 passes through the heat dissipation passage 132 and flows out to the first opening 131, When the vehicle runs, the air naturally introduced through the first opening 131 passes through the heat dissipation passage 132 and selectively controls the outflow to the second opening 133 to the fixed LED headlight radiator of the Driving method.
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In the new version, the LLM report will include a **conclusion paragraph** within the explanation, emphasizing whether the key feature is fully mapped or partially mapped. The mappings showcase elements from the Input Patent Mapped Against Relevant Paragraphs from the Relevant Patent Citation and AI Generated Explanation Justifying how the RP is similar to the input elements.

7.3 Relevant Non-Patent Citation

Details of Relevant Non-patent Citation

Sno	Title	Date	Source
1	Applications and Challenges in Video Surveillance via Drone: A ...	Oct 15, 2020	www.researchgate.net
2	Person identification from aerial footage by a remote-controlled drone	Oct 19, 2017	www.nature.com
3	Shot type constraints in UAV cinematography for autonomous target ...	Aug 6, 2019	www.sciencedirect.com
4	Hybrid Approach of Unmanned Aerial Vehicle and Unmanned ...	Jul 13, 2021	www.mdpi.com
5	Integrating body-worn cameras, drones, and AI: A framework for ...	Dec 13, 2023	academic.oup.com
6	Characterising the performance of a drone-mounted real-time ...	Mar 13, 2025	www.nature.com
7	Drone-Based Human Action Recognition for Surveillance: A Multi ...	Sep 23, 2024	ieeexplore.ieee.org
8	Drone-Based Position Detection in Sports—Validation and ...	Mar 17, 2022	pmc.ncbi.nlm.nih.gov
9	(PDF) Design of Real-time Video Transmission System for Drone ...	Apr 7, 2020	www.researchgate.net
10	An Overview of Drone Applications in the Construction Industry	Aug 8, 2023	www.mdpi.com

The system lists the **top 10 non-patent literatures**, with each title provided as a **hyperlink** to the source of the citation.

Here the **dates** and the **source** for the non-patent literatures are mentioned.

7.4 New Summary Report (AI Generated)

- **Search Summary Report:** Each downloadable report now includes a search summary report tailored to the inputted disclosure. Further these is deep analysis of the disclosure comprising Potential Risks and opportunities, recommendations, novelty and obviousness report.



- **Analysis of Key Features and Key documents identified**

Analysis of Key Features

1. JP-2007152446-A: This document discloses many features of the disclosure, including a camera coupled to a body, a display interface, command inputs on handles, and coupling/control. Feature 3 regarding 'two boom handles' is partially mapped (3p), suggesting some form of handles or manipulators are present but may differ from the disclosure's specific configuration.
2. US-9701015-B2: This document maps to most key features, including the presence of handles (3), command input (4), and control (6p). Features related to the camera/body coupling (1p), display interface (2p), and command input control (6p) are partially mapped, indicating potential differences in implementation details.
3. CN-104828184-A: While disclosing features like a display, handles, command input, and control (partially), this document does not map to the core feature of a camera coupled with a drone body (1n). The subject matter appears to be an 'Intelligent luggage box human-carrying robot', which is fundamentally different from a drone.

Key Documents Identified

Pub. Number	Assignee	Title	Key Features Mapping
US-10836508-B2	POLAR PRO FILTERS INC	Camera drone	1, 2, 3, 4, 5, 6
IN-202411026927-A	GRAPHIC ERA DEEMED TO BE UNIVERSITY	ENHANCED DEVICES AND METHODS FOR REMOTE IMAGE CAPTURE WITH DRONE-MOUNTED CAMERAS	1, 2p, 3p, 4, 5, 6
US-20190291864-A1	SZ DJI TECHNOLOGY CO LTD	TRANSFORMABLE APPARATUS	1, 2, 3, 4p, 5p, 6
US-9765926-B2	SZ DJI OSMO TECHNOLOGY CO LTD	Systems and methods for payload stabilization	1, 2p, 3p, 4p, 5, 6p
US-20160139602-A1	NIXIE LABS INC	LAUNCH-CONTROLLED UNMANNED AERIAL VEHICLES, AND ASSOCIATED SYSTEMS AND METHODS	1, 2p, 3, 4p, 5p, 6p

- **Novelty , Obviousness analysis , Potential Risks and Opportunities.**

Novelty and obviousness analysis

Novelty Analysis: The disclosure's key features 1-6 appear to be fully anticipated by US-10836508-B2, which explicitly discloses a camera drone capable of both aerial and manual operation, equipped with an integrated camera, display interface, dual boom handles, and integrated command inputs, covering all aspects of the disclosure. Additionally, US-20190291864-A1 also presents a strong challenge to novelty, disclosing a transformable apparatus with aerial and handheld capabilities, an integrated camera, and command inputs, though with partial mapping for the display and handles.

Obviousness Analysis: In the alternative, the disclosure would be considered obvious over US-10836508-B2 alone, as it independently discloses all key features, rendering the disclosed system obvious to a person having ordinary skill in the art. Similarly, the disclosure could be considered obvious over US-20190291864-A1, potentially combined with common general knowledge, to arrive at the full scope of the disclosure.

Patentability Assessment: Based on the analysis, the disclosure faces significant challenges regarding both novelty and inventive step, particularly in light of US-10836508-B2 and US-20190291864-A1.

Potential Risks and Opportunities

The primary risk lies in the comprehensive overlap with US-10836508-B2, which appears to disclose all key features. US-20190291864-A1 also presents a substantial challenge due to its 'transformable apparatus' concept. Opportunities for novelty might reside in the specific ergonomic design of the dual boom handles, the precise integration and functionality of the display interface for real-time monitoring across modes, or the seamlessness and intuitiveness of the switching mechanism, provided these aspects are distinct and not merely obvious design choices.
