A person with dark hair, seen from behind, wearing a dark sweater over a light-colored collared shirt. They are looking at a large screen displaying a complex network diagram with glowing blue and yellow nodes and connecting lines. The background is dark with some blurred lights.

Use case – AI supported innovation workflows,
experiences so far with IPScreener at Ericsson

Fredrik Egrelus, Ericsson, 2024-06-03

The Intelligent Novelty Search (INS) system at Ericsson 1/4

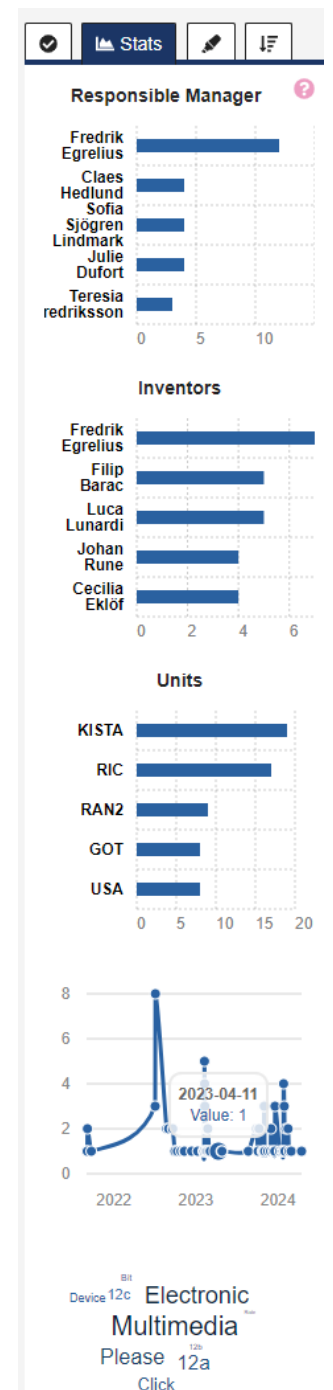
Automatic novelty screening of Invention Disclosures (IvDs), in

- Internal IvD database
- Public patent documents
- Future (?): Standardization docs
- Enables manual follow-up searches in an easy way

Recommending:

- Internal patent engineers
- Experts/Inventors
- Patent units
- Future (?): Application draftspersons

PDF export of patent documents from IPScreener to Anaqua



The INS system at Ericsson 2/4



SECURITY COMES
FIRST



COMBINATION OF
ANAQUA AND
IPSCREENER



EVERYTHING HOSTED
IN THE ERICSSON
CLOUD



API CALLS BETWEEN
ANAQUA AND
IPSCREENER



SYNCHRONIZATION
EVERY 15 OR 30
MINUTES

The INS system 3/4

The screenshot displays the IPSCREENER software interface, which is used for patent novelty screening. The interface is divided into several sections:

- Left Sidebar:** Contains navigation options such as 'Search new idea', 'Admin', 'Dashboard', 'My ideas', 'Export', 'Settings', 'Support', and 'Log out'. At the bottom, it shows 'Terms & Conditions' and 'Version 2.41'.
- Top Bar:** Shows the user 'Ericsson Internal' and the current search filter 'Novelty screening'.
- Search Panel (Left):** Includes a search bar, 'Version 1 / 1', a date filter 'Version 1 / Jan 29, 2024', and a 'Searched' section. The 'Text describing the idea' section contains technical details about power control methods for networks with aerial users, including terms like 5G, NR, UAV, and PUSCH. An 'Advanced search' section is also visible.
- Main Content Area:** Displays search results. The top result is '#1 Shooting method controlling movement of unmanned aerial robot in unmanned aerial system and apparatus for supporting same'. It includes:
 - Image:** A technical diagram of a drone with various components labeled.
 - Original abstract:** A paragraph describing an unmanned aerial vehicle system with a robot, robot station, and base station.
 - Primary passage:** A paragraph discussing MNO responsibilities for UAS traffic management (UTM).
 - First claim:** A numbered list item describing the unmanned aerial vehicle system.
- Document Metadata:** Located below the image, it lists 'Document US10869004 B2', 'Status Patent granted', 'Published Sep 05, 2019', 'Applicant LG ELECTRONICS INC', and 'CPC/IPC class H04N5/232'. It also provides 'External links' to Espacenet and Google patent.
- Right Panel:** Contains a 'Tools' section, navigation arrows, and a 'Ranking of document' section. The document is ranked '#1 US10869004 B2'. The 'Ranking of document' section includes buttons for 'To Anaqua', 'Background', and 'Noise', along with an 'Auto step when ranked' toggle.
- Bottom Section:** Shows the start of a second result, '#2 Method for photographing an unmanned aerial robot and a device for supporting the same in an unmanned aerial vehicle system', and the beginning of a third result, '#3 Drone, drone station and method for controlling drone take-off using drone station'.

The INS system 4/4



Filtering of IvD text before novelty screening to remove bibliographic data and supporting template text



The filter is customizable by the admin



Statistical info to keep track of usage

Experiences so far

- Basic aim to **reject 20%** of submitted IvDs – we currently assess 22% good searches and directly killing prior art in 8% of the cases
- **Security and maintenance work** take a lot of time
- **Hit rate varies** in dependence of technical field
- Used for **other tasks** than just novelty searching IvDs
- Seems to be more efficient with **an early search** than during drafting of application





<https://www.ericsson.com/en/patents>