

AUGUST, 2025

NEWSEFFECT

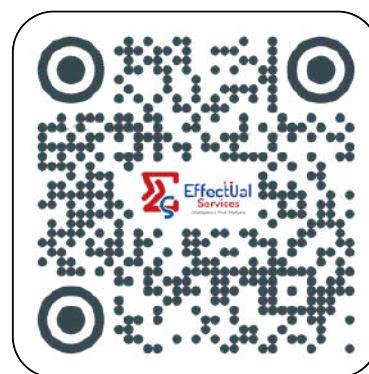
INNOVATION FRONTIER



Our Company's Growth &

SUCCESS IN 2025

Our beloved leader – **Dr. Amit Goel** has been recognized & included in the renowned **WIPR – World IP Review** Leaders 2025 Directory, which is a testament to our expertise in the field of IP.



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- IP INSIGHTS
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AI ADVANCEMENTS

SOUNDHOUND IS GIVING ITS AI THE POWER OF SIGHT

SoundHound AI, already a major player in voice assistants, is now giving its technology a pair of eyes. Imagine driving past a landmark and, without pulling out your phone, asking your car, "What's that building over there?" and getting an instant answer. That's what SoundHound AI is building.



GENERATIVE AI MODEL SCANS EMERGENCY NOTES TO IDENTIFY HIGH-RISK AVIAN INFLUENZA EXPOSURES

Researchers at the University of Maryland have developed an AI tool that rapidly scans medical records to identify high-risk patients potentially infected with H5N1 bird flu, as published in Clinical Infectious Diseases.

THIS AI MODEL SIMULATES 1000 YEARS OF THE CURRENT CLIMATE IN JUST ONE DAY

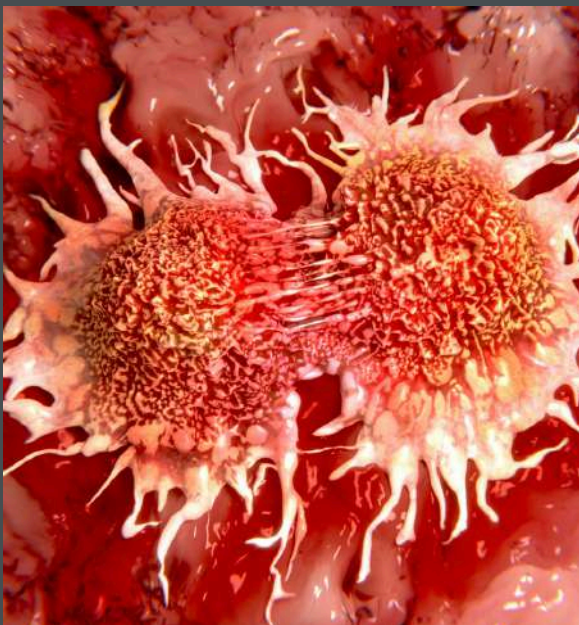
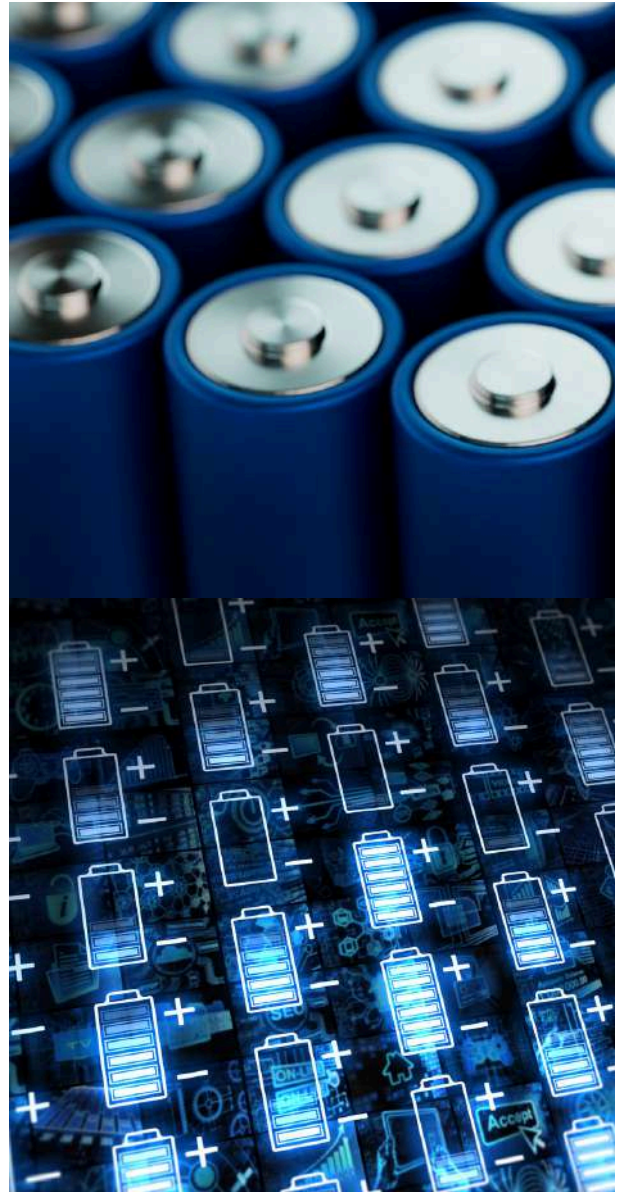
AI is making weather forecasts faster and cheaper than traditional supercomputers, but most models are limited to 10-day accuracy—even as long-range forecasts remain vital for climate planning and preparedness.



AI ADVANCEMENTS

AI CREATES NEW BATTERY MATERIALS THAT COULD REVOLUTIONIZE ENERGY STORAGE

- Combines two AI tools: Crystal Diffusion Variational Autoencoder (CDVAE) and a fine-tuned Large Language Model (LLM)
- Explores thousands of crystal structures significantly faster than traditional methods
- Identifies five new porous transition metal oxide structures
- Structures feature large open channels ideal for ion transport
- Targets multivalent-ion batteries using magnesium, calcium, aluminum & zinc
- Demonstrates AI's potential in accelerating materials discovery



AI MODEL DETECTS GENETIC CHANGES IN COLORECTAL CANCER FROM TISSUE IMAGES

Prof. Jakob N. Kather's team at TUD Dresden developed an AI model that detects genetic changes in colorectal cancer from tissue images, enabling faster & cheaper diagnostics. Validated across seven cohorts from Europe and the USA, the study was published in The Lancet Digital Health.

AI ADVANCEMENTS

SOLVING THE SOFT SKILLS CRISIS USING ARTIFICIAL INTELLIGENCE

New Zealand faces a “skills emergency” as many graduates lack key soft skills. A 2023 survey of 543 employers found 83% of applicants had poor communication skills and 73% lacked initiative. In tech, 82% of IT job ads specifically required soft skills, with communication being the top priority.



SCIENTISTS JUST DEVELOPED A NEW AI MODELED ON THE HUMAN BRAIN — IT'S OUTPERFORMING LLMS LIKE CHATGPT AT REASONING TASKS

- New AI model, Hierarchical Reasoning Model (HRM), mimics human brain's multi-timescale information processing
- Outperforms leading LLMs on a difficult reasoning benchmark
- Developed by Sapient, a Singapore-based AI company
- Achieves high efficiency with fewer parameters and less training data
- Inspired by how different brain regions integrate information over time

DISRUPTIVE TECHNOLOGIES

CHINA SET TO UNVEIL FIRST PREGNANCY ROBOT WITH ARTIFICIAL WOMB

China's Kaiwa Technology is set to unveil a humanoid robot with a fully functional artificial womb, enabling "interactive pregnancy" from fertilization to birth. The system mimics the uterine environment using synthetic amniotic fluid & nutrient delivery, building on earlier animal trials.



IBM AND NASA UNVEIL SURYA: THE AI-POWERED SOLAR SENTINEL

NASA and IBM have developed Surya, an AI-powered digital twin of the Sun that predicts solar storms up to two hours in advance with 16% higher accuracy. Trained on nine years of NASA data, Surya aims to protect satellites, power grids & astronauts, while advancing heliophysics and global collaboration.

AT&T, ERICSSON, AND 1FINITY COMPLETE INAUGURAL OPEN RAN CALL WITH THIRD-PARTY RADIO EQUIPMENT

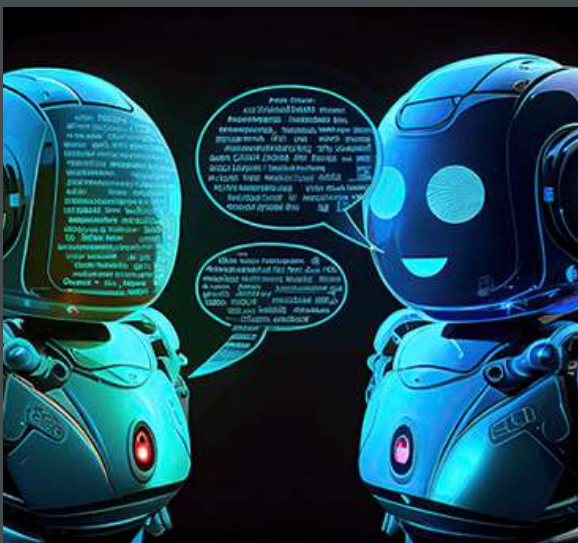
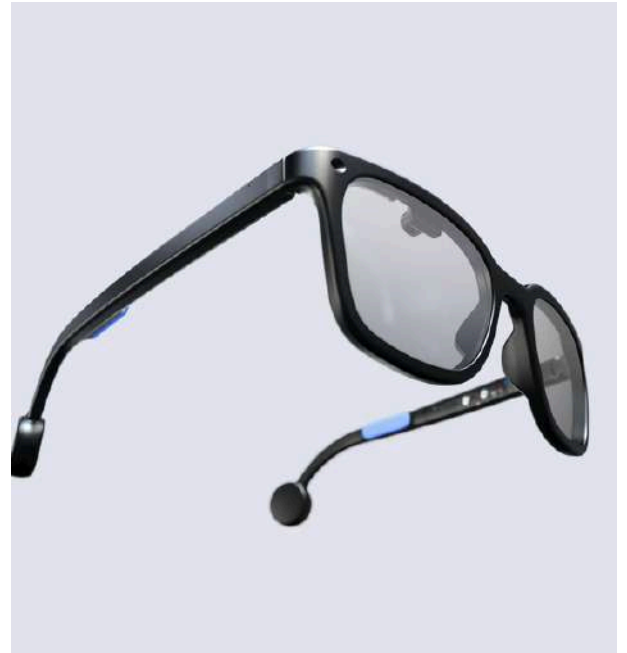
AT&T, Ericsson, and 1Finity successfully made their first Open RAN call using third-party radios, showcasing seamless multi-vendor interoperability and paving the way for more flexible wireless networks.



DISRUPTIVE TECHNOLOGIES

HARVARD DROPOUTS UNVEIL HALO X AI GLASSES FOR CONSTANT RECORDING

Harvard dropouts launched Halo X AI glasses that record and transcribe conversations in real time, offering “infinite memory” and AI-powered insights. While promising enhanced cognition, the device raises major privacy and legal concerns due to its always-on surveillance.



MICROSOFT JOINS THE COMPETITION IN ARTIFICIAL INTELLIGENCE BY UNVEILING ITS OWN INTERNALLY DEVELOPED MODELS: MAI-1-PREVIEW AND MAI-VOICE-1

- Microsoft unveiled two new AI models: MAI-1-preview and MAI-Voice-1.
- MAI-Voice-1 powers Copilot features with natural, expressive speech.
- MAI-1-preview, a language model trained on 15,000 H100 GPUs, excels at following instructions.
- It's now live on LMArena and set for wider rollout in text-based apps.
- MAI-1 used far fewer GPUs than xAI's Grok, showing efficiency in training.

IP INSIGHTS

ON NEW APPLICATIONS OF HYDROGEN STORAGE ALLOYS

WHAT ARE HYDROGEN STORAGE ALLOY?

Hydrogen storage alloys are metallic materials that can absorb and release hydrogen gas reversibly. They work like a “sponge for hydrogen”, storing hydrogen atoms inside their crystal lattice without forming strong chemical bonds (like hydrides do) that are too difficult to reverse.



WHAT ARE THE TYPES OF HYDROGEN STORAGE ALLOY?

AB₅ –type alloys:

- Example: LaNi₅ and its derivatives.
- Store ~1.4 wt% hydrogen.
- Widely used in NiMH batteries

AB₂ –type alloys:

- Example: TiMn₂-based alloys.
- Higher capacity, cheaper than rare-earth alloys.

A₂B –type alloys:

- Example: Mg₂Ni.
- Can store more hydrogen, but often require high temperature for desorption.

WHAT ARE MAIN APPLICATIONS OF HYDROGEN STORAGE ALLOY?

Rechargeable NiMH batteries:

use LaNi₅-based alloys as the negative electrode.

Hydrogen fuel storage for fuel cells (though still challenged by cost, weight, and performance vs compressed H₂).

Heat pumps and thermal storage (because hydride formation releases/absorbs heat).

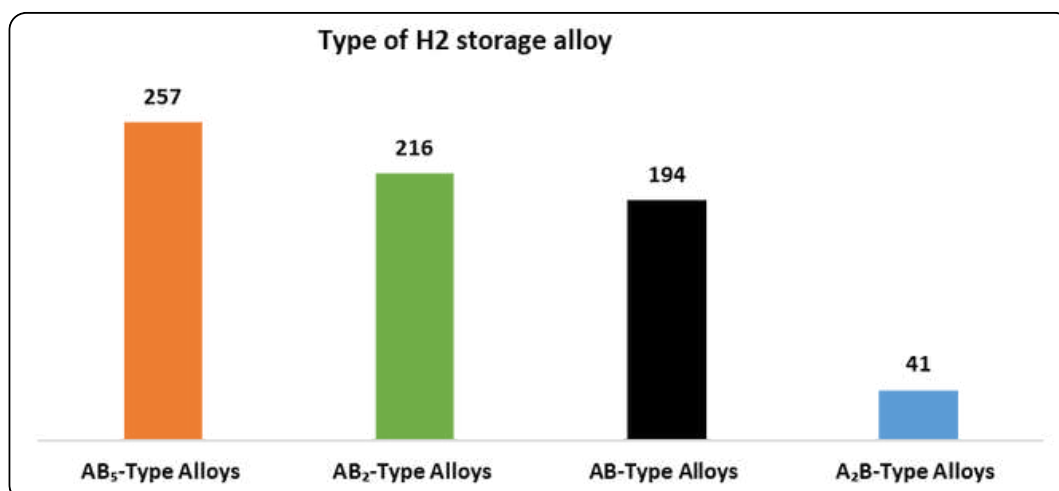
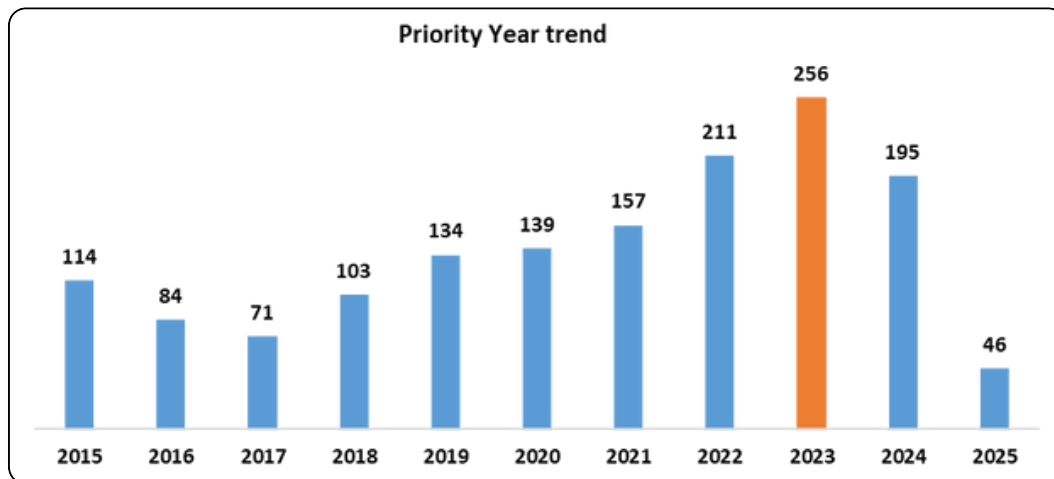
IP INSIGHTS

ON NEW APPLICATIONS OF HYDROGEN STORAGE ALLOYS

WHAT ARE MAIN ADVANTAGES OF USING HYDROGEN STORAGE ALLOY?

- Stores hydrogen at low pressure (1–10 bar), reducing explosion risk
- Offers 2–10× higher volumetric H₂ density than liquid hydrogen (e.g., LaNi₅H₆ ≈ 150 kg/m³ vs. liquid H₂ ≈ 70 kg/m³).
- Supports hundreds to thousands of reversible hydrogen cycles.
- Self-regulates H₂ pressure, simplifying system design.
- Integrated into NiMH batteries, fuel cell backups & portable H₂ systems.

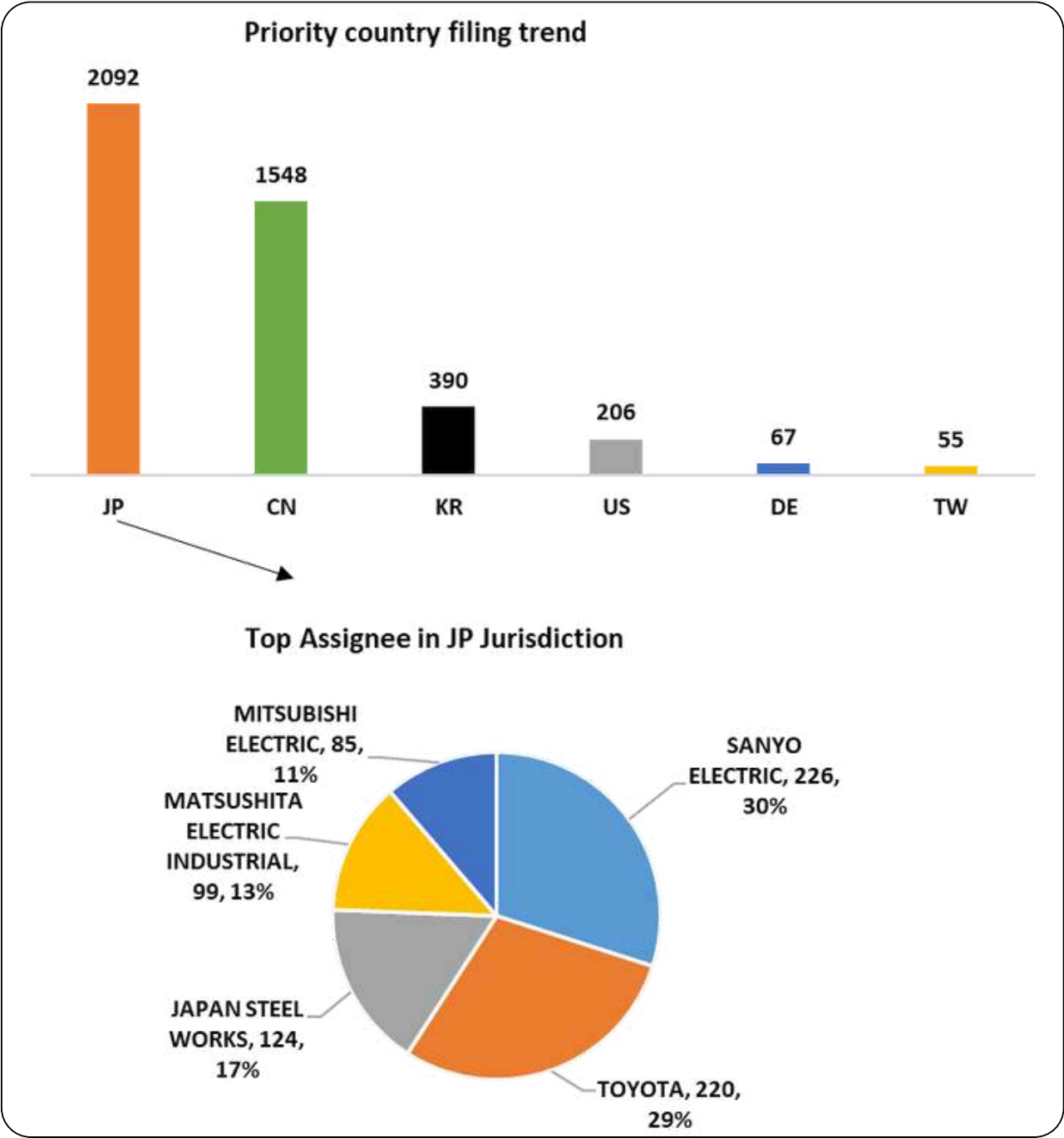
PATENT TRENDS ON NEW APPLICATIONS OF HYDROGEN STORAGE ALLOYS



IP INSIGHTS

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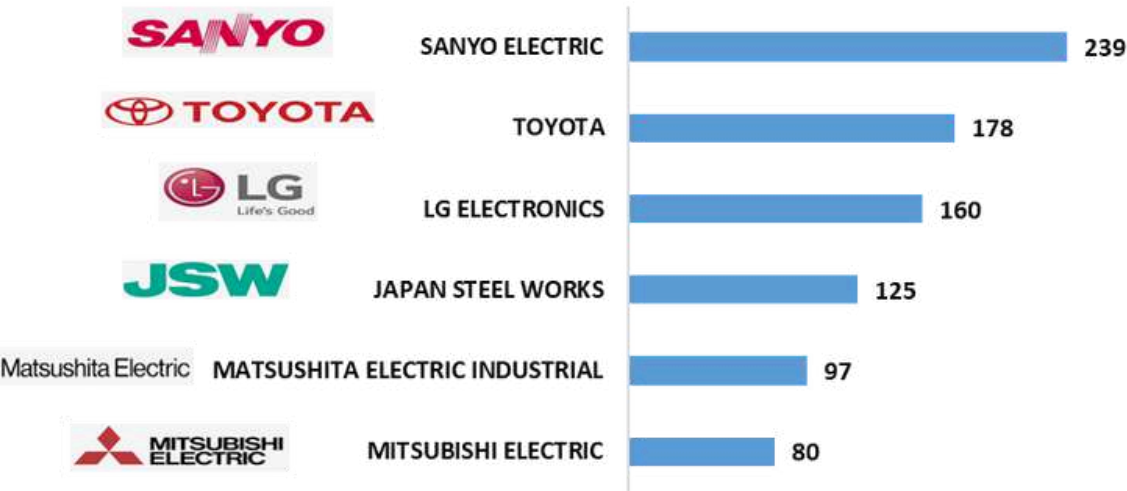
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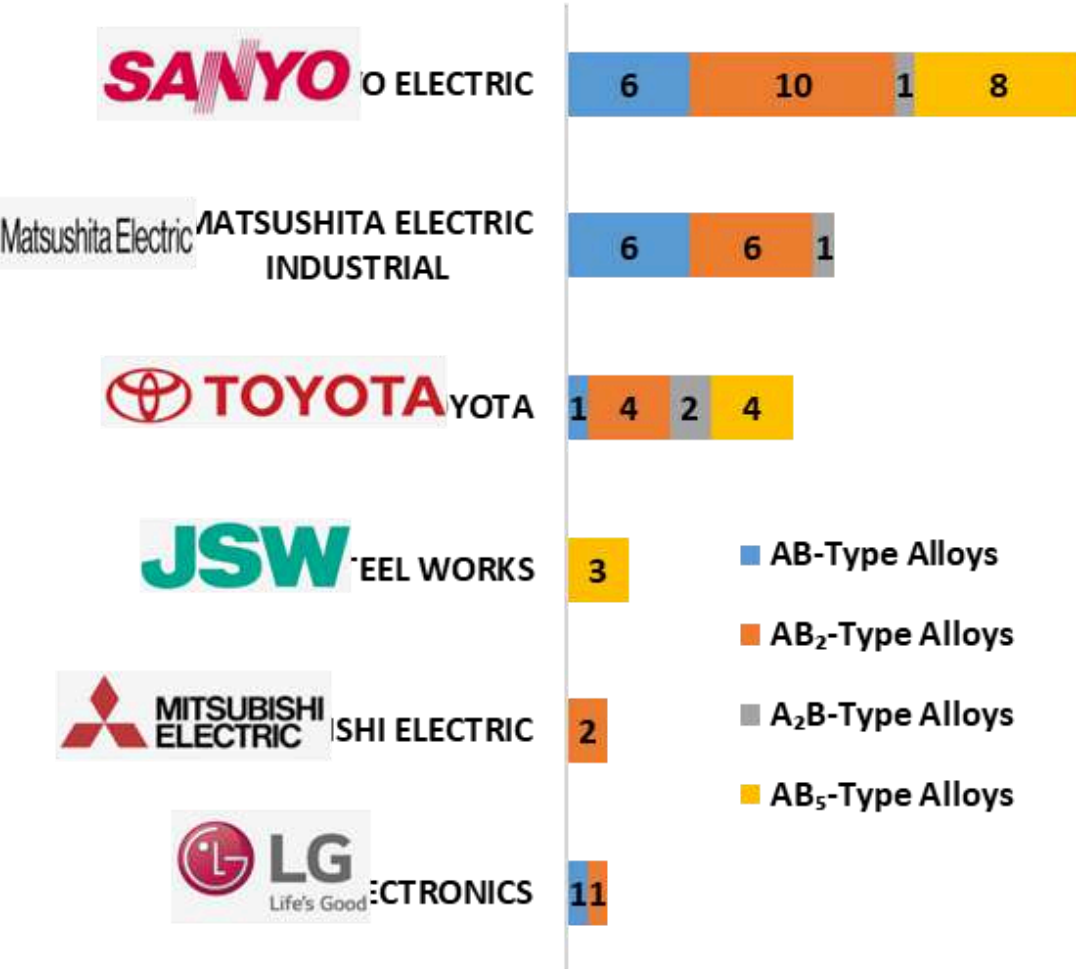
IP INSIGHTS

ON NEW APPLICATIONS OF HYDROGEN STORAGE ALLOYS

Top Assignee on new applications of hydrogen storage alloys



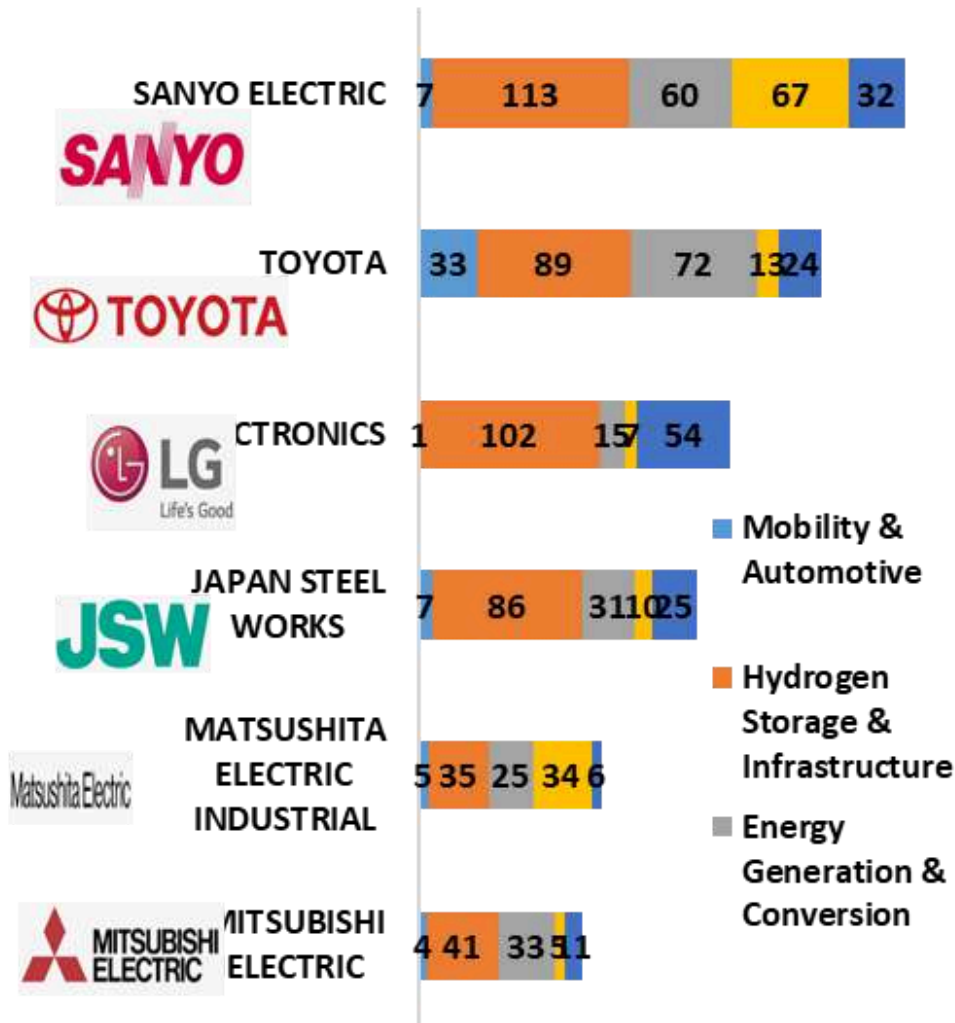
Top Assignee Vs. Type of H2 Storing Alloy



IP INSIGHTS

ON NEW APPLICATIONS OF HYDROGEN STORAGE ALLOYS

Top Assignee Vs. new applications of hydrogen storage alloys



IP NEWS

SONOS WINS RULING TO REVIVE US PATENT IN CASE AGAINST GOOGLE

- A U.S. appeals court revived Sonos' \$32.5M patent case against Google, reversing a prior ruling that invalidated the patent.
- The case returns to San Francisco court for further proceedings.
- Sonos had sued Google in 2020 over smart-speaker tech, claiming IP theft in products like Google Home.
- The dispute spans multiple countries, with both companies filing cross-lawsuits.
- Sonos called the ruling a win and urged Google to negotiate a fair license.



ANTHROPIC'S SURPRISE SETTLEMENT ADDS NEW WRINKLE IN AI COPYRIGHT WAR

- Anthropic settled a copyright lawsuit with U.S. authors over using pirated books to train its AI.
- Faced up to \$1 trillion in damages; settlement terms are undisclosed.
- Case was unique and may not set a precedent for OpenAI, Meta, or Microsoft.
- Anthropic claimed "fair use" as its defense.
- Legal impact on future AI copyright cases remains uncertain.



IP NEWS

FAILED BID FOR F-WORD TRADEMARK DESERVES FRESH REVIEW, US COURT RULES

- US appeals court told USPTO to rethink denying "fuck" trademark.
- Erik Brunetti applied in 2019 for apparel and accessories.
- USPTO rejected it, saying the word can't identify a product source.
- Court said USPTO's reasoning was unclear, citing approvals of words like "Love."
- Decision isn't based on obscenity, unlike a past Supreme Court case.
- Trademark would give Brunetti exclusive branding rights.



USPTO RESTRICTS PRIOR ART THAT CAN BE USED IN INTER PARTES REVIEWS

- USPTO limits prior art in IPRs, banning use of applicant admitted prior art (AAPA) and general knowledge.
- New policy narrows previous guidance and recent court rulings.
- Challenges must be based only on patents or printed publications.
- IPR petitions must clearly cite prior art for each claim element.



IP NEWS

MASIMO SUES US CUSTOMS OVER APPROVAL OF APPLE WATCH IMPORTS

- Masimo sued U.S. Customs over Apple's blood-oxygen tech in smartwatches.
- Customs reversed a ban, letting Apple import Series 9 and Ultra 2 watches.
- Masimo had secured an import block via the Trade Commission for patent infringement.
- Apple resumed the feature with Customs' approval, without informing Masimo.
- Masimo seeks a court order to stop Customs' decision and block Apple's watch sales.



USPTO DIRECTOR DISCRETIONARY DENIALS GRANTED DUE TO TRIAL TIMING DESPITE YOUNG AGE OF PATENTS

- USPTO denied six IPRs by Samsung against GenghisComm patents, including some only 3 years old.
- Age alone wasn't enough to avoid discretionary denial.
- The "settled expectations" doctrine has been applied to patents as young as 6 years (e.g., Kahoot! case).
- Even with parallel court proceedings, younger patents can now gain protection under this doctrine.



TECHNOLOGY THEMES

IIT GUWAHATI RESEARCHERS DEVELOP CONTACTLESS VOICE RECOGNITION SENSOR FOR INDIVIDUALS WITH VOICE DISABILITIES

- IIT Guwahati and Ohio State University developed an underwater vibration sensor for automated, contactless voice recognition.
- This tech offers alternative communication for people with voice disabilities.
- Research published in Advanced Functional Materials.
- Addresses voice recognition gaps for children and young adults with voice disorders.
- Focuses on detecting air expelled during attempted speech for inclusivity.



REDEFINING VOICE TECH: CHECK 5 AUTOMATIC SPEECH RECOGNITION ENGINES IN 2025

Speech recognition technology is evolving rapidly. Automatic Speech Recognition (ASR) engines are no longer just simple tools to turn voice into text. They are now smarter, faster and more accurate than ever before. Here are 5 ASR engines that are reshaping the future of speech-to-text technology.

TECHNOLOGY THEMES

RESEARCHERS DEVELOP PRIVACY-FOCUSED SPEECH RECOGNITION FOR CHILDREN

- UT Dallas researchers use Lonestar6 supercomputer to improve Automatic Speech Recognition (ASR) for children.
- They create 'discrete speech units' as anonymous audio encodings to detect speech and language issues early.
- Goal: better understand children's speech for faster intervention.
- Study published in International Journal of Human-Computer Studies.



'IT'S NOT YOUR WIFE CALLING': ISRAELI TECHNOLOGY WILL COMBAT AI VOICE SCAMS

Israeli company MultiKol has developed a unique biometric voice recognition technology to combat rising deepfake voice scams. CEO Eddie Nevoani and chairman Noam Band explain that voice is the only dynamic biometric, allowing for real-time verification by asking multiple questions. This technology aims to prevent financial fraud in an era where deepfakes are increasingly used for scams.

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GLOBAL LEGAL ASSOCIATION

7TH GLA CONCORDIUM DUBAI 2025

 22nd – 23rd Sep' 2025

 Knight Castle Hotel

We are delighted to announce our upcoming **Flagship international forum – the 7th Edition** of Global Legal Association Concordium, set in the thriving innovation hub of **Dubai**.

ABOUT THE EVENT

GLA Concordium Dubai 2025 will bring together:

Legal pioneers & practitioners ,AI and LegalTech innovators ,IP experts , Policymakers & academics ,Global industry leaders

This year's theme explores the **Intersection of AI, LegalTech & Intellectual Property**, focusing on:

- Ethical AI in legal practice
- Disruption and opportunity in LegalTech
- IP protection in a rapidly digitizing world
- Regulatory frameworks for emerging technologies

EVENT HIGHLIGHTS

Featuring 250+ attendees, 50+ speakers, 10+ exhibitors, 20+ media partners, and 10+ curated sessions.



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A Proud Moment for Effectual Services

Our beloved leader - Dr. Amit Goel has been recognized & included in the renowned WIPR - World IP Review Leaders 2025 Directory, which is a testament to our expertise in the field of IP. Congratulations to you for getting listed and thank you for the brilliant work you do, very well deserved.

Every year, World IP Review painstakingly compiles the opinions of over 12,000 IP professionals. Following a thorough examination procedure, outstanding people who have become leaders in their fields are shortlisted. The WIPR research team carefully assesses the shortlisted candidate's background, industry expertise, work accomplished, and other contributions. Their selection demonstrates their capacity to sculpt and sway IP's destiny.

This acknowledgment strengthens our commitment to offering our clients the greatest research and consulting services possible because it gives us further assurance that our best practices are the standard in the sectors and industries in which we operate. We dedicate this recognition to our wonderful employees without whom this wouldn't have been possible and to our beloved global clients, who help us in constantly challenging ourselves, while setting new benchmarks. Once again, our heartfelt appreciation to our clients and colleagues for their continued support & trust.

GET IN TOUCH

The sum of human ingenuity and expertise that powers us.

Human interactions that drive innovation.



EffectUal Services

Intelligence That Matters

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