

July' 2026

NEWSEFFECT

INNOVATION FRONTIER

Our Company's Growth &

SUCCESS IN 2026

We are incredibly proud to celebrate **Dr. Amit Goel**, Director at **Effectual Services**, on being featured in the **IAM Strategy 300** - The World's Leading IP Strategists 2026.



CONTENTS

AI Advancements

Disruptive Technologies

IP Insights

IP News

Technology Themes

AI ADVANCEMENTS



AGCO Uses AI To Help Farmers Produce More With Less

AGCO is using AI and precision agriculture to help farmers produce more with less. By integrating AI across equipment, digital platforms and its dealer network, AGCO aims to boost yields, reduce input costs and address labor shortages. Its retrofit-first approach supports diverse equipment, while PTx Farm Management turns vast farm data into actionable insights. Guided by its Farmer First philosophy, AGCO is making AI more practical, accessible and impactful for modern farming.

MHI Advances AI Infrastructure Commercialization with U.S. Deployment of 10MW-Class Chiller and MCP Development

Mitsubishi Heavy Industries (MHI) is advancing AI Factory infrastructure to meet the growing demands of high-performance computing. By combining its expertise in power, cooling and industrial engineering, MHI is developing integrated solutions—including advanced cooling, modular systems and power technologies—to support the shift from traditional data centers to industrial-scale AI environments.



Philips introduces Alturion ultrasound system with AI-powered workflows for high-volume clinical environments

Philips' Alturion ultrasound system combines advanced imaging, AI-powered workflows and a connected ecosystem to improve efficiency and consistency in healthcare. Its AI-powered measurements automate key tasks, reduce variability, save time and support more reproducible exams—helping clinicians streamline workflows and make informed decisions.

AI ADVANCEMENTS

Spotfire Advances AI-Augmented Investigation and Analytics at Scale for Industrial Organizations

The Spotfire Quarterly Update introduces advancements in four key areas: AI-Augmented Investigation, Investigation at Scale, Trusted Industrial Decisions and Industry-Native Analytics. New Spotfire AI capabilities help users uncover insights and speed up analysis, while scalable analytics enable organizations to work with complex datasets where they reside—improving efficiency, governance and decision-making.



Google Launches Lyria 3.5 To Bring 'Next-Gen AI Music Generation' To Flow Music

Google has launched Lyria 3.5, the latest version of its AI-powered music generation model, introducing upgrades aimed at improving song quality and giving creators greater control over the music creation process. According to the company, the updated model is designed to produce richer and more natural-sounding melodies, while generating higher-quality lyrics with better adherence to user prompts and improved song structure.



Michaels® Unveils 'Ask Mike' AI Assistant, Built With Google Cloud's Gemini Enterprise for Customer Experience

Michaels' Ask Mike transforms traditional shopping into a personalized, conversational experience. Powered by AI, it helps customers describe their creative ideas and quickly discover curated products and inspiration. With nearly 75,000 conversations in just weeks, Ask Mike is becoming a personalized creative partner for shoppers across Michaels' digital platforms.



DISRUPTIVE TECHNOLOGIES



An AI-powered Braille learning system

The University of Houston's PXD Lab is developing LUCID, an AI-assisted system designed to make Braille learning more accessible and engaging. Its two devices guide learners from basic letter recognition to fluent reading: LUCID-ALT builds tactile familiarity through an enlarged Braille keypad, while LUCID-ARC provides real-scale Braille reading practice, helping learners transition to everyday Braille tools.

AI-powered method enables instant ultrasound imaging with a single fixed sensor

IMDEA Materials Institute has developed an AI-powered acoustic imaging system that reconstructs accurate images using a single fixed sensor and one signal, eliminating complex sensor arrays and lengthy scans. A trained neural network decodes the signal and generates an image in tens of microseconds, enabling faster and simpler imaging.



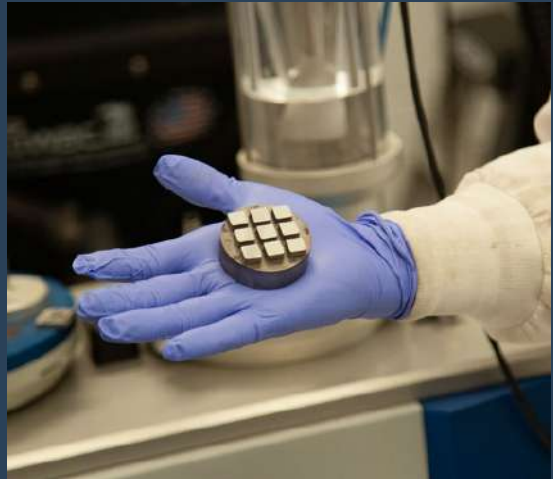
Ultra-robust acoustic chip can handle 12 times more power for 6G and satellite links

HKUST researchers have developed Layered Acoustic Wave (LAW), a chip architecture that enables smartphone acoustic devices to handle 12× higher power loads while operating cooler and more reliably. The technology reduces temperature rise by 70% and achieves a record 36.4 W/mm² power density, even at frequencies exceeding 2 billion vibrations per second.

DISRUPTIVE TECHNOLOGIES

AI-run lab discovers six 3D-printable alloys for extreme heat

Using AI-driven materials design, a team of researchers at the University of Toronto Engineering has discovered a new set of metal alloys that retain their strength under extreme conditions. The materials are well suited to additive manufacturing, also known as 3D metal printing and could lead to enhanced, custom-made parts for aerospace, power generation and more.



Engineers develop AI system to speed satellite tracking of wildfires

West Virginia University engineers have developed an AI-powered satellite system that can detect wildfires earlier and automatically adjust satellite positions and schedules to track their spread. By enabling satellites to coordinate and continuously monitor fires, the technology could help firefighters respond faster across vast, remote areas.

AI-powered system can predict how modern house fires behave

- AI-powered fire prediction: Uses AI, data science and advanced mathematics to predict fire behavior in modern homes.
- Toxic gas analysis: Studies how modern furniture, foams, fabrics and airtight buildings affect fire-generated gases.
- Real-time data insights: Machine learning analyzes complex sensor data to better understand fire conditions.
- Safety impact: Findings could improve building codes, emergency response and evacuation planning.



DISRUPTIVE TECHNOLOGIES

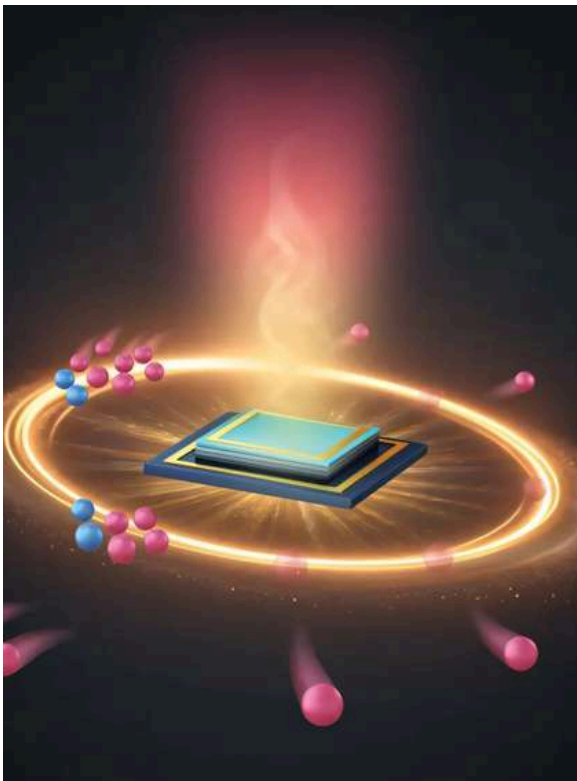
Thread-like electronics point to less obtrusive wearable health monitors

Tufts engineers have created flexible electronics that could do just that. Made of thread-based integrated circuits that can bend, coil, stretch and conform to the body's contours and movements, the devices are designed to exist free-form, sewn into clothing or wrapped around curved and movable surfaces. The kind of devices, worn on the body or adhered to the skin, could track a wide range of biomarkers or environmental conditions, while AI-driven applications could synthesize the resulting data into useful insights for fitness, health care and recovery from injury or disease.



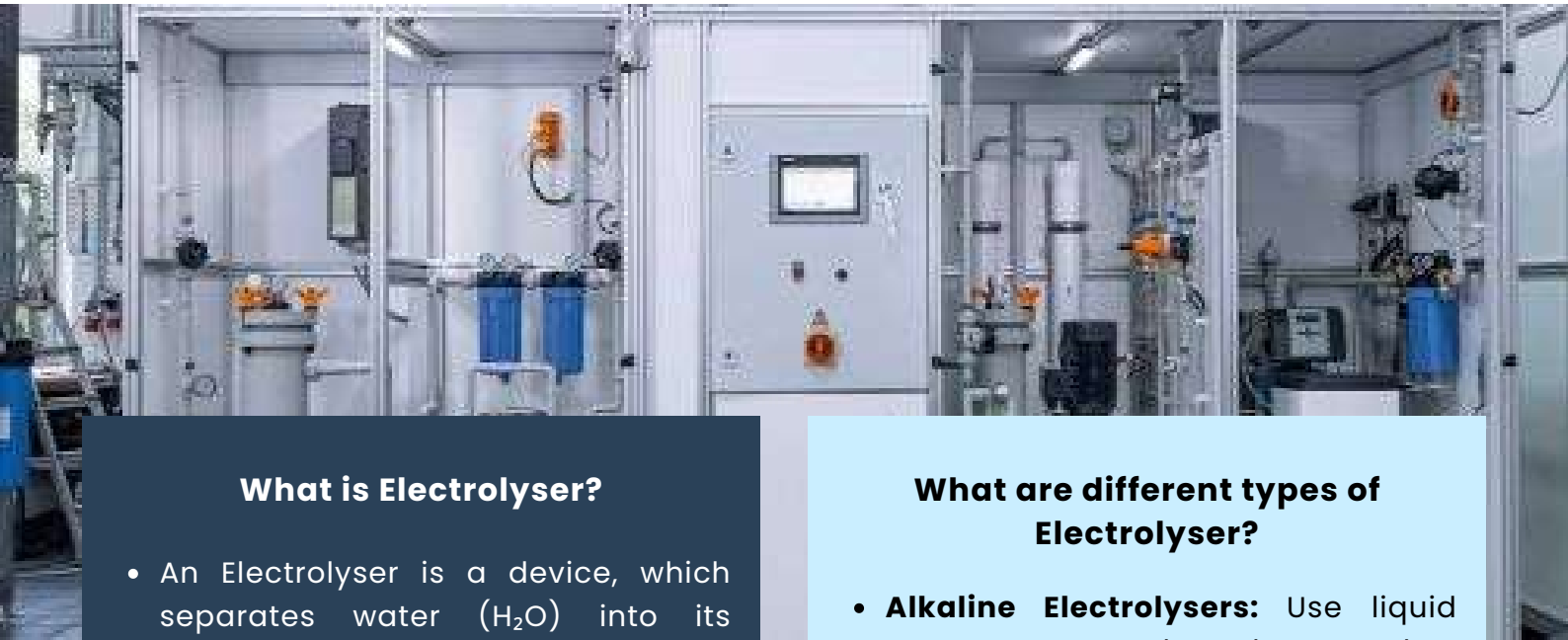
Small transistor sharpens low-cost thermal cameras without extreme cooling

- **More accurate thermal imaging:** Researchers used a small transistor to significantly improve thermal imaging performance.
- **NPN transistor:** A two-terminal NPN transistor creates a carrier feedback loop that enhances temperature sensitivity.
- **Higher sensitivity:** The technology boosts the material's temperature coefficient of resistance (TCR) from about 10% to up to 150% per kelvin.
- **Better heat detection:** The improved sensitivity enables devices to detect heat from surrounding objects more effectively.



IP INSIGHTS

ON ULTRAPURE WATER NEED IN ELECTROLYSE



What is Electrolyser?

- An Electrolyser is a device, which separates water (H_2O) into its constituent gases; hydrogen (H_2) and oxygen (O_2). The process is called as electrolysis. In cases where the electrical energy is generated using renewable sources, electrolysis becomes a process of producing hydrogen gas without any emissions.
- Although the fundamental concept remains the same in all hydrogen electrolyzers, the electrolyte, membrane materials, temperature and pressure requirements, system design and costs of operation differ.
- The first electrolyser that uses water as raw material (the first electrolyser) was developed and employed in May 1800 by English scientists William Nicholson and Anthony Carlisle.

What are different types of Electrolyser?

- **Alkaline Electrolyzers:** Use liquid KOH or NaOH electrolytes and a diaphragm to separate hydrogen and oxygen while enabling ion transfer.
- **PEM Electrolyzers:** Use solid polymer membranes that conduct protons. They operate at low temperatures and respond quickly to power fluctuations.
- **Anion Exchange Membrane (AEM) Electrolyzers:** Use a solid anion-exchange membrane and non-noble-metal catalysts, offering lower costs with efficiency comparable to PEM systems
- **Solid Oxide Electrolyzers:** It operate at extremely high temperatures, typically between $600^{\circ}C$ and $1000^{\circ}C$ and use a solid ceramic electrolyte. These high temperatures make them highly efficient because they use heat to reduce electricity requirements

IP INSIGHTS

ON ULTRAPURE WATER NEED IN ELECTROLYSE

Water Purity for Electrolysers

- High-purity water is essential to prevent equipment damage and maintain efficient hydrogen production.
- Key requirements include low conductivity, TDS, ions, minerals, silica and organics.
- Typical treatment includes RO, deionization (EDI/mixed-bed) and filtration.
- PEM electrolyzers generally require purer water than alkaline systems.

Ultrapure Water Treatment Stages

- **Pretreatment**

Removes contaminants based on the source—e.g., iron/manganese filtration for groundwater, ultrafiltration and UV for wastewater and RO for seawater.

- **Polishing**

Further purifies the water to meet the high-purity requirements of electrolysis.

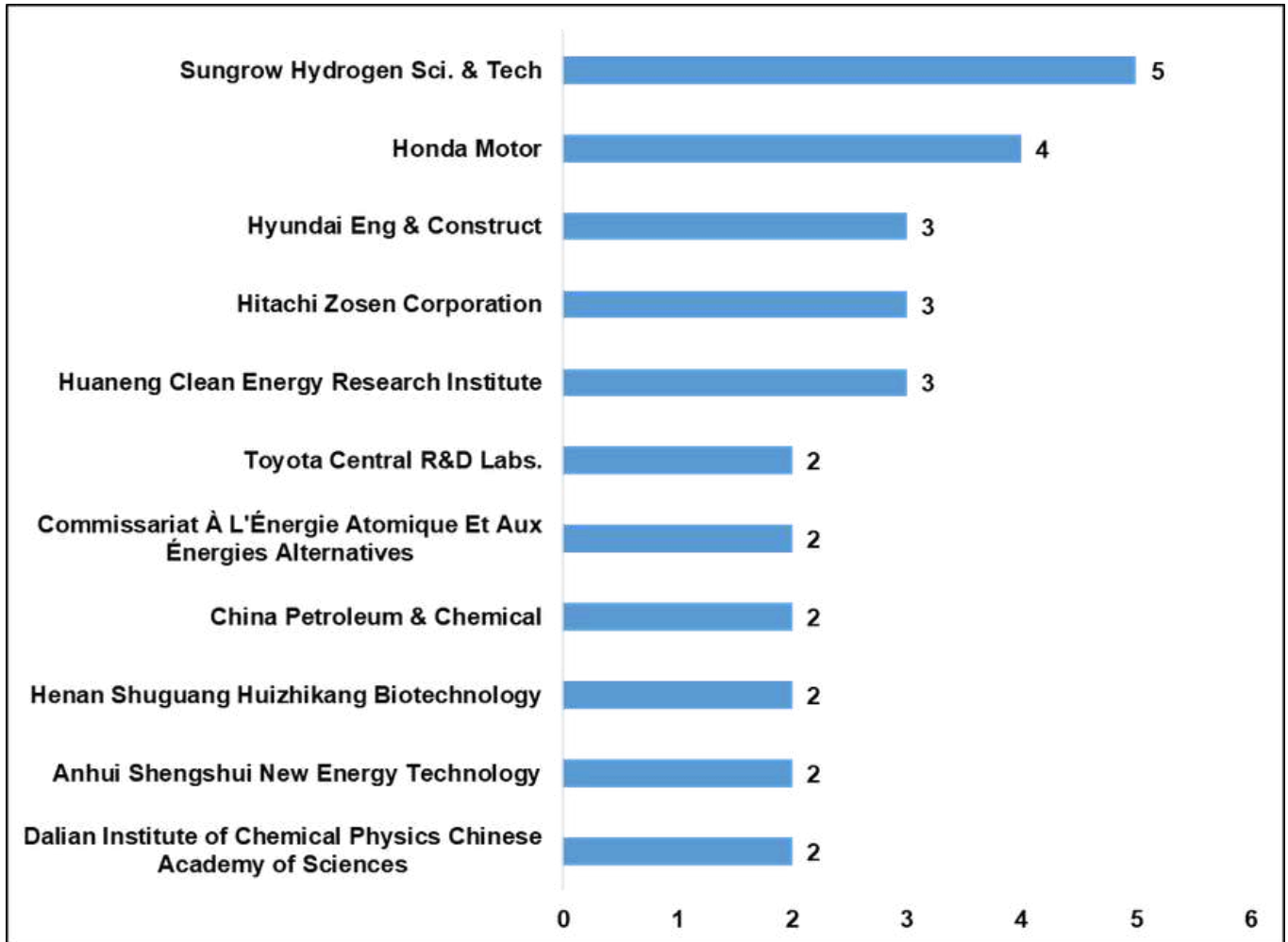
Recent Technical Advancements in Ultrapure Water for Electrolysers

- **Advanced Water Treatment:** Improved UF, RO and ED systems, along with polishing technologies, remove ions, silica, TOC and dissolved gases.
- **Direct Seawater Electrolysis:** Selective membranes block chloride ions, enabling hydrogen production with less desalination.
- **Real-Time Monitoring:** PEM systems continuously monitor pH, TDS, conductivity and temperature to prevent degradation.
- **Advanced Catalysts:** Non-PGM catalysts reduce costs while maintaining efficiency and durability.
- **Improved Efficiency:** Modern systems produce high-purity hydrogen with better energy efficiency, even from pre-treated low-quality water.
- **Greater Sustainability:** Water recycling, renewable energy, seawater and treated wastewater improve resource efficiency and reduce production costs.

IP INSIGHTS

ON ULTRAPURE WATER NEED IN ELECTROLYSE

Key Players Working on Ultrapure Water Need in Electrolyser

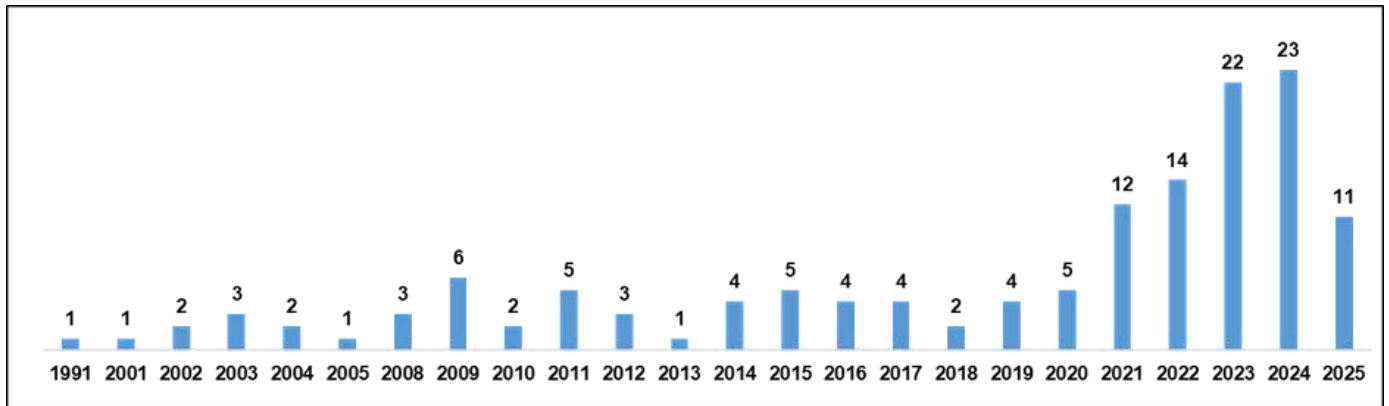


- Sungrow Hydrogen Sci & Tech leads with 5 patent publications, followed by Honda Motor.
- Hyundai Engineering & Construction, Hitachi Zosen and Huaneng Clean Energy Research Institute each have 3 patents.
- Sungrow's patents focus on:
 - Ultrapure water purification: Integrated RO, ion exchange and recirculation systems.
 - Real-time water monitoring: Conductivity, flow and temperature control.
 - Water management: Heat recovery and water conditioning for efficient operation.

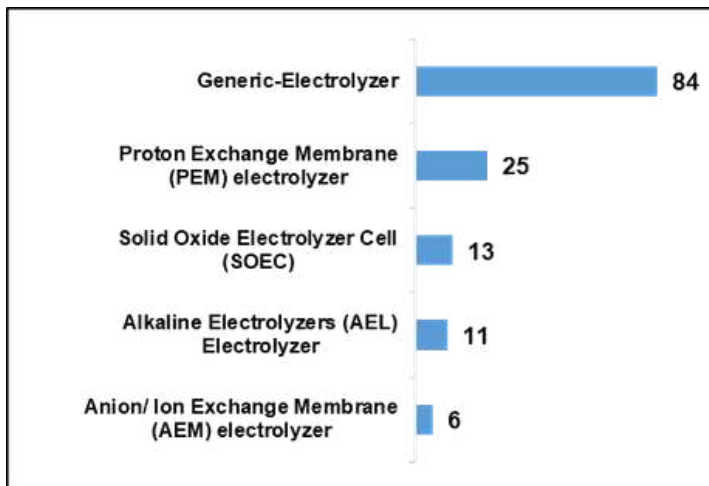
IP INSIGHTS

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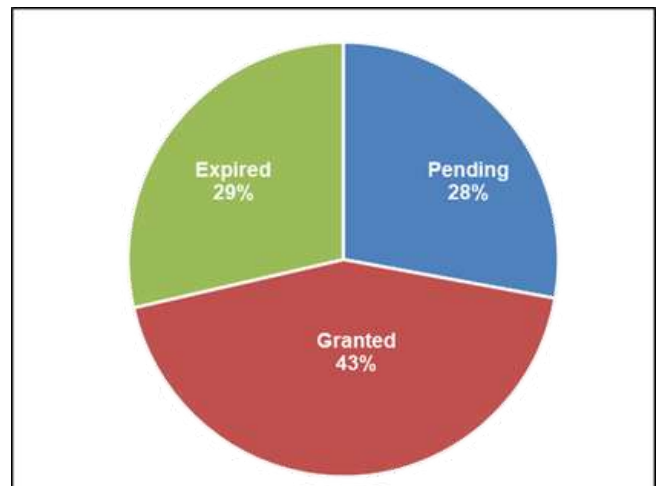
Patent Filing Year Trends



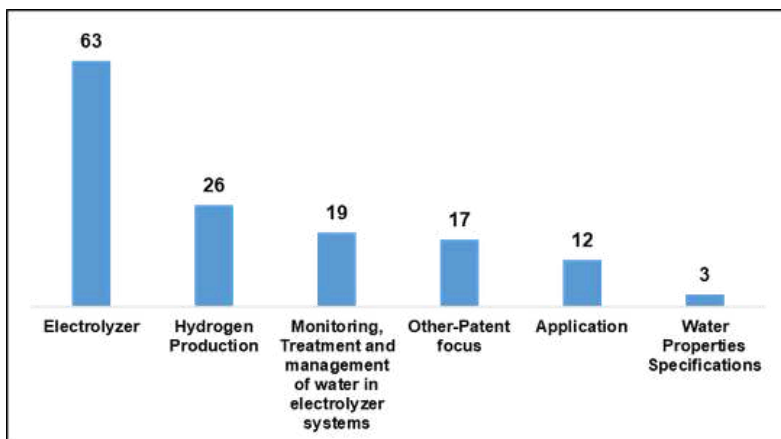
Type of Electrolyzer



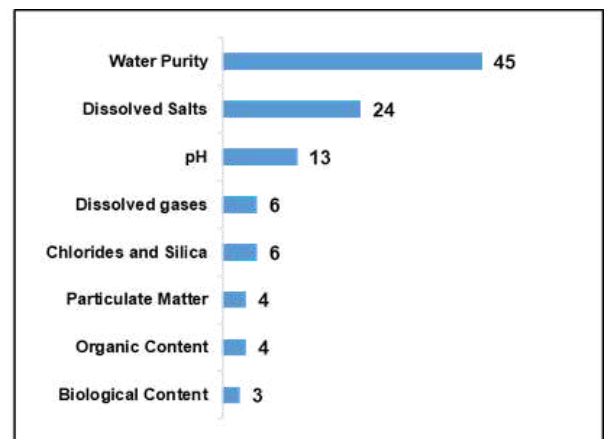
Legal Status



Patent Focus



Water Quality



IP NEWS



US judge approves Anthropic's \$1.5 billion settlement of copyright lawsuit

- A federal judge signed off on artificial intelligence company Anthropic's landmark \$1.5 billion settlement of a class action lawsuit brought by a group of authors who accused it of misusing their books to train its AI chatbot Claude.
- The case is one of dozens brought by copyright owners including authors and news outlets against tech companies over the training of their large language models, and the first major U.S. case to settle.
- "We reached this settlement in 2025, after the court's landmark ruling that training AI on books is fair use under copyright law — which remains the law today," Anthropic deputy general counsel Aparna Sridhar said in a statement.
- "We are pleased that more than 91% of authors and publishers covered by the settlement have claimed their share of the payment, and we're looking forward to bringing this matter to a close." The authors' lead attorney, Justin Nelson, welcomed what he called a "historic settlement."

IP NEWS



Kioxia owes Viasat \$229 million for infringing flash-memory patents, US jury says

- A federal jury in Texas said that Japanese chipmaker Kioxia owes satellite-communications company Viasat \$229 million for infringing a patent covering computer memory technology, according to a court document.
- Viasat said it developed improvements to flash-memory technology – which stores data on transistors using electrical charges – while designing error-correction systems for satellites.
- Viasat alleged that Kioxia's flash-memory devices include error-correction technology that works in the same way as its patented technology.
- Kioxia denied the allegations and argued that the patent was invalid.
- The jury determined that Kioxia's flash-memory devices violate Viasat's patent rights in technology that allows such devices to consume less power and improves their reliability and longevity.

IP NEWS



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- USPTO Appeals Review Panel (ARP) reinstated nonstatutory double patenting (NSDP) rejections against Sanofi's antibody-like binding protein application.
- NSDP purpose: Prevents multiple patents on patentably indistinct inventions and limits potential patent-term extension and infringement litigation risks.
- ARP ruling: The risk of harassment in infringement suits remains a valid basis for NSDP rejection, even when patent-term extension is not involved.
- Innovation concern: The Panel acknowledged that this approach could potentially discourage future innovation.
- Ex parte Baurin: The application faced NSDP rejection based on related Sanofi patents, despite having an earlier expiration date than the cited patent.

IP NEWS



Datavault AI Receives USPTO Notice of Allowance for Patent Targeting Naked and Excessive Short Selling Through Tokenized Dividend Distribution

- Datavault AI received a USPTO Notice of Allowance for a patent covering tokenized dividend distribution to address naked and excessive short selling.
- 24 claims were allowed, with the application reaching allowance in under six months.
- The technology aims to improve shareholder verification, dividend entitlement, and market transparency despite settlement discrepancies.
- The approach uses blockchain-enabled dividend distribution to strengthen market integrity and potentially create new licensing opportunities.
- The patent will proceed to issuance after payment of the issue fee and final administrative steps.

IP NEWS



Aspen Pharmacare wins Canada approval for generic Ozempic after Novo patent expiry

- Aspen Pharmacare received Health Canada approval for Aspen-Semaglutide, a generic version of Novo Nordisk's Ozempic, for type 2 diabetes.
- Market opportunity: Expiry of Novo Nordisk's semaglutide patent in Canada has opened the market to generic manufacturers.
- Launch timing: Aspen's Canadian launch depends on semaglutide API supplies from India's Dr. Reddy's Laboratories, currently facing production disruptions.
- Manufacturing: Aspen plans to produce multi-dose pens in South Africa and single-dose autoinjectors in France.
- Key challenge: API supply constraints could delay commercial availability in Canada until late October or later.

IP NEWS

Carla Kim
Director



When AI drives discovery — Patents and drug development

- Patent attacked: Generic manufacturer challenges the company's key peptide patent.
- Core issue: The peptide was generated and conceived by AI, not by the named human inventors.
- AI's role: It designed the molecule, selected the indication, planned experiments, and directed validation.
- Human role: Scientists largely executed the AI's instructions and confirmed its predictions.
- Problem: The patent names the CEO and founders as inventors, potentially creating inventorship and inequitable-conduct risks.
- Stakes: Patent protection could last another decade; if invalidated, generic entry could come years earlier.
- What should have been done:
 - Establish clear AI inventorship protocols before filing.
 - Document meaningful human contributions to conception.
 - Have patent counsel assess AI-generated inventions before filing.
 - Maintain a complete record of AI input, human judgment, modifications, and experimentation.
 - Ensure named inventors actually meet the applicable legal inventorship standard.

IP NEWS



US probes Samsung for alleged infringement of Netlist's memory-chip patents

- **USITC probe:** U.S. trade regulators are investigating Samsung memory chips and products from Google, Nvidia, Broadcom, and Super Micro that use them.
- **Patent dispute:** Netlist alleges Samsung infringed its DRAM patents, which cover memory critical to AI data-center servers.
- **Netlist's request:** It wants the USITC to block imports and U.S. sales of the disputed products.
- **Process:** An ITC judge will hold a hearing and issue an initial ruling; the Commission will then review it.
- **Timeline:** The USITC will set a target completion date within 45 days. Any exclusion order takes effect immediately and generally becomes final after 60 days.
- **Existing litigation:** Netlist previously won \$118M against Samsung in 2024 and \$303M in a related 2023 case.
- **Why it matters:** Memory demand is surging with the AI boom, making Samsung's chips increasingly important to U.S. data-center infrastructure.
 - The case could create supply-chain and AI infrastructure risks if the USITC restricts imports of Samsung's memory products.

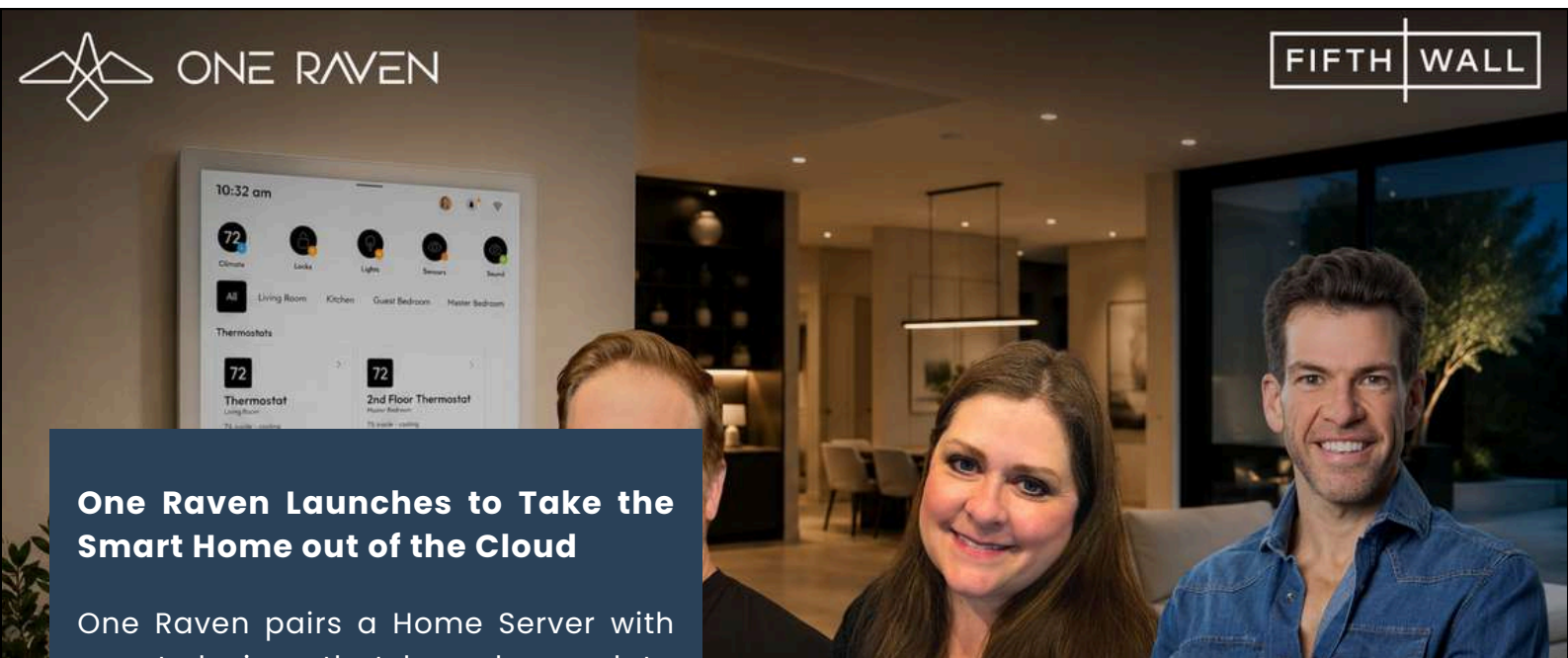
IP NEWS



Syngenta Sues BASF to Block Ridivex Corn Herbicide Launch

- Patent lawsuit: Syngenta has sued BASF in Delaware federal court over BASF's new corn herbicide, Ridivex.
- Core allegation: Syngenta claims Ridivex infringes U.S. Patent No. 8,404,618, covering the formulation used in its competing herbicide, Storen.
- Disputed formulation: Ridivex combines pyroxasulfone with the safener isoxadifen-ethyl.
- Why it matters: The safener protects corn from damage while the herbicide targets weeds.
- Syngenta's demand: The company wants the court to block BASF from launching and selling Ridivex in the U.S.
- Urgency: EPA approval is expected within days, while farmers are already preparing for the next growing season.
- Commercial stakes: Syngenta argues an early BASF launch could cause irreparable economic harm before the key fall purchasing and planting cycle.
 - Bottom line: The case could determine whether BASF can launch a major new corn herbicide in the U.S. before the upcoming planting season.

TECHNOLOGY THEMES



One Raven Launches to Take the Smart Home out of the Cloud

One Raven pairs a Home Server with smart devices that keep home data private and work without the cloud. Everything arrives pre-paired and ready to work together.

Instead, homeowners got fragmented apps, subscriptions, cloud dependencies, and features locked behind paywalls. They never agreed to rent the intelligence in their own homes.

Guardhouse Launches Watcheye Surveillance Camera for Home and Property Protection

GuardHouse today announced the GuardHouse WatchEye Camera, a compact, wire-free security camera designed for homes, rentals, and small businesses. WatchEye delivers 1080p video through a 150° ultra-wide-angle lens, providing broad coverage while reducing blind spots across rooms, entryways, and outdoor areas.



CyberLink's FaceMe® SDK Powers Edge AI Facial Recognition in Hundure Technology's Next-Generation Access Control

CyberLink Corp. (5203.TW), a global leader in AI facial recognition technology, today announced that its FaceMe® SDK has been integrated into Hundure Technology's latest HAC-990FA series of facial recognition access control terminals. The combined solution delivers fast, accurate on-device authentication with enterprise-grade security and privacy, enabling organizations to strengthen physical access control while keeping biometric data protected.

TECHNOLOGY THEMES

Digital Watchdog Expands MEGApix Ai Line with 12MP Fisheye IP Camera.

The DWC-XFFA12Ai delivers 12MP, 360° coverage with built-in AI that detects, classifies, and tracks people and objects. Its fisheye design can cover an entire room with one camera, reducing equipment and installation costs while providing clear video in challenging lighting conditions. NDAA/TAA compliant.



Zircon applies 50 years of sensor expertise to introduce new leak alert 360™ smart home water detection system

Zircon Leak Alert™ water detectors detect even the smallest amount of water or moisture. The Leak Alert 360™ Smart Home Water Detection system uses precise detection capabilities to sense water and alert users of the location immediately, making it an essential tool anywhere there's such concern. The Leak Alert 360™ provides proactive monitoring, simple setup, remote notifications and controls, and Zircon's proven sensor accuracy honed over five decades of expertise.



PLANET Technology USA Introduces the AIS-1000 AI Surveillance Station for Advanced Edge-Based Security Monitoring

PlanetechUSA, a Versa Technology division, has launched the AIS-1000 AI Surveillance Station. The system turns standard surveillance setups into proactive security networks by processing data locally, enabling faster threat detection while reducing bandwidth and cloud dependence.



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A Proud Moment for Effectual Services

We are incredibly proud to celebrate Dr. Amit Goel, Director at Effectual Services, on being featured in the IAM Strategy 300 – The World’s Leading IP Strategists 2026.

We are delighted to share that our esteemed leader, **Dr. Amit Goel**, has been featured by The Enterprise World in its prestigious issue “**Top Pioneering IP Management Experts to Watch in 2026.**”



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P R E S E N T S

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The summit brings together leading arbitrators, judges, general counsel, law firm partners, arbitral institutions, policymakers, sovereign stakeholders and multinational legal leaders to exchange ideas, build strategic relationships and influence the future of global dispute resolution.

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GLA MENA is intentionally limited to approximately **100 senior participants** to maximise:

- Meaningful conversations
- Relationship building
- Business development
- Executive networking

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Human interactions that drive innovation.



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