

# NEWSEFFECT

INNOVATION FRONTIER



## Our Company's Growth & Success in 2024

We have been honored as the "IP Service Provider of the Year" at the 4th IP Excellence Awards & Global IP Conclave 2024, hosted by **ASSOCHAM (The Associated Chambers of Commerce and Industry of India)** in Delhi, India.

We have been recognized as one of the **Top 10 Pharma IPR Consultants 2024** by **India Pharma Outlook**.

## Content

- AI ADVANCEMENTS
- DISRUPTIVE TECHNOLOGIES
- IP INSIGHTS
- IP NEWS
- TECHNOLOGY THEMES



# AI ADVANCEMENTS



## FDA SEES PROMISE IN NEW AI MODEL FOR HEART ATTACK DETECTION.

- Powerful Medical, a New York-based AI company, received FDA's breakthrough device designation for its AI model detecting STEMI in ECGs.
- The PMcardio STEMI AI ECG model, called "Queen of Hearts," identifies STEMI and STEMI-equivalent patterns.
- Trained by Dr. Stephen W. Smith, an emergency physician and founder of Dr. Smith's ECG Blog.
- Robert Herman, MD, PhD, emphasizes the tool's potential to reduce delays in diagnosis, ensuring timely treatment and better patient outcomes.



## AI LEADING TO FASTER, CHEAPER OIL PRODUCTION, EXECUTIVES SAY

- AI is accelerating oil and gas drilling, prompting companies to reconsider difficult or expensive sites.
- Highlighted at CERAWeek in Houston, AI was central in discussions at the energy conference.
- Oil producers aim to stay profitable amid falling oil prices and concerns over U.S. tariffs affecting global demand.

# AI ADVANCEMENTS



## **CLEVELAND CLINIC & G42 TO ADVANCE HEALTHCARE THROUGH ARTIFICIAL INTELLIGENCE.**

Cleveland Clinic & G42 are collaborating to drive AI advancements in healthcare, forming a joint task force to evaluate, prioritize, & accelerate AI adoption through various projects and opportunities.

## **The AI ROBOTS ARE COMING. THE WORLD IS NOT READY.**

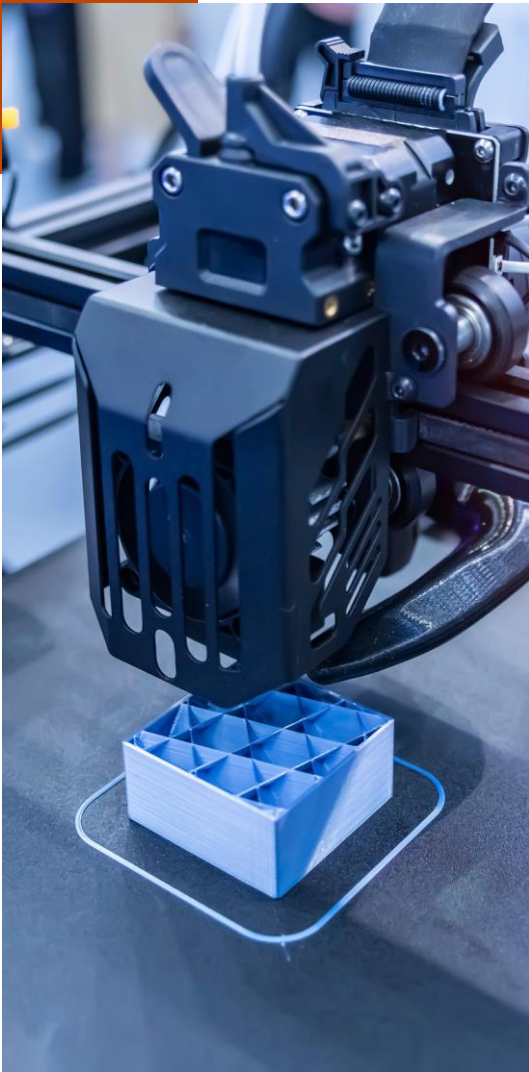
- AI transforms operations by speeding up processes, creating efficiencies, & easing jobs for administrators and educators.
- It augments, not replaces, human judgment.
- Handles routine tasks with speed & precision, freeing educators to focus on students.



## **AI CAN PREDICT PREMATURE DEATH AMONG PEOPLE WITH INFLAMMATORY BOWEL DISEASE: STUDY.**

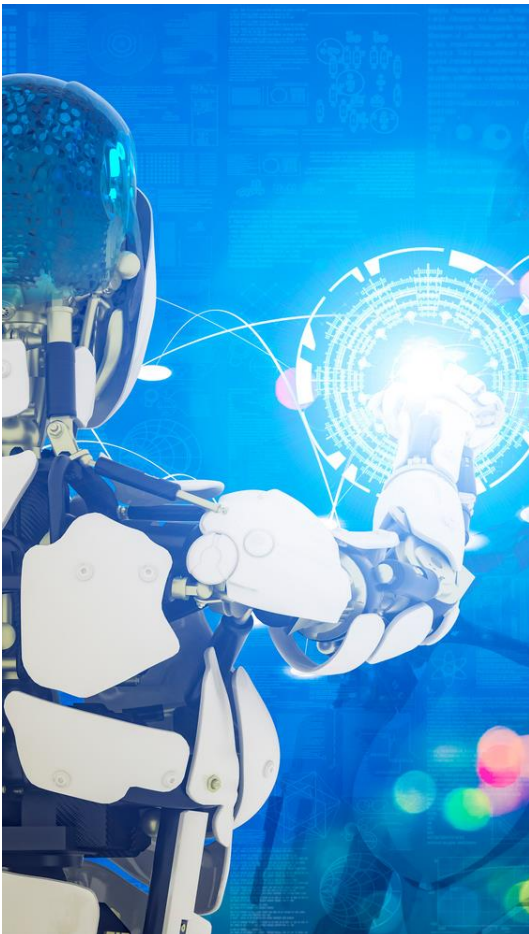
- A new study shows that AI can predict premature death in individuals with inflammatory bowel disease (IBD).
- Researchers used machine learning to analyze data from over 9,000 IBD patients in Ontario who died between 2010 and 2020.

# AI ADVANCEMENTS



## AI EMPOWERS 3D PRINTING REVOLUTION.

- AI and 3D printing are reshaping traditional manufacturing methods, enhancing efficiency, personalization, and cost-effectiveness.
- AI-driven predictive modeling identifies potential defects or weaknesses early in the design phase.
- AI analyzes past data and simulates scenarios to detect issues before production starts.
- This proactive approach reduces material waste and minimizes the risk of costly errors in 3D printing.



## How AI SEARCH IS SHAPING THE FUTURE OF EDUCATION AND RESEARCH.

The transformative power of AI is being felt across industries, and education is no exception. AI search tools are not a passing trend. They're completely reshaping how students engage with academic content, conduct research, and enhance their learning experiences

# DISRUPTIVE TECHNOLOGIES

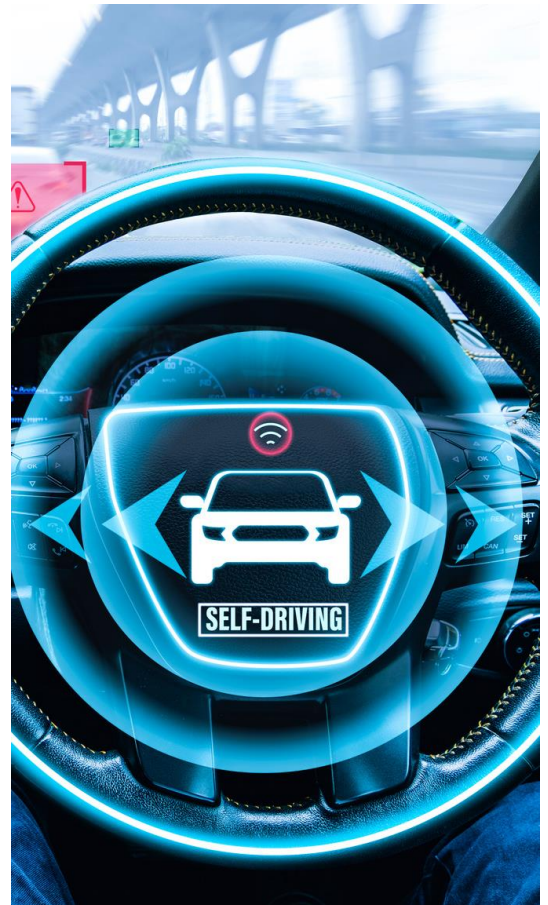
## SCIENTISTS DEVELOP INJECTION FOR LONG-LASTING CONTRACEPTIVE IMPLANT.

- Researchers are developing an injection that creates a long-lasting contraceptive implant in the body.
- Current implants last for years but require professional installation through surgery.
- Contraceptive injections are available but only last for three months.
- New self-assembling implant shows potential for longer-lasting contraception, with successful proof-of-concept experiments.



## AURORA PLANS FOR SELF-DRIVING TRUCKS IN HARSH WEATHER IN TEXAS.

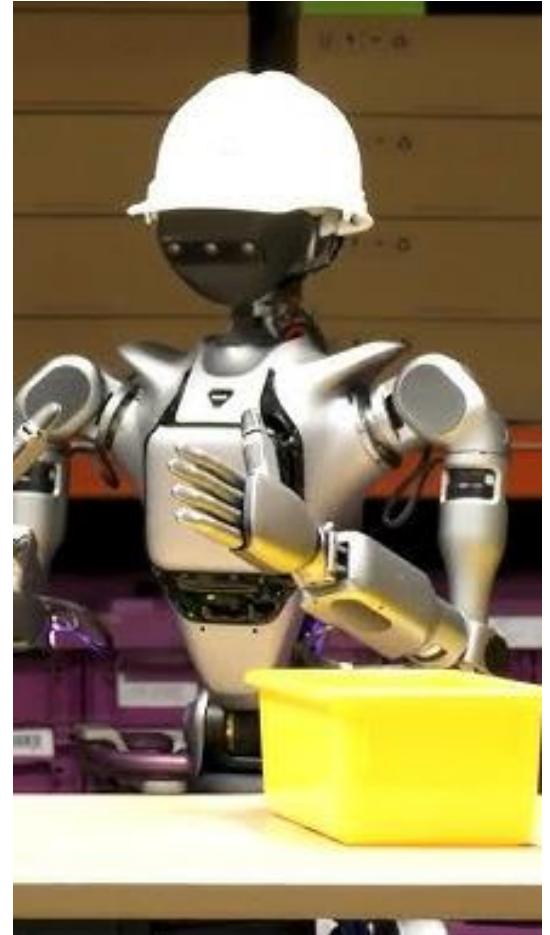
- Aurora Innovation plans to let its self-driving trucks operate without a driver in inclement weather ahead of commercial trips in Texas.
- Autonomous trucks are set to begin operating in Texas, New Mexico, and Arizona in 2025.
- Trucks will adhere to speed limits ranging from 25 to 75 miles per hour.
- The company aims to expand its operational design domain (ODD) to include harsh weather, considering geography, weather, and other factors.



# DISRUPTIVE TECHNOLOGIES

## NVIDIA ANNOUNCES ISAAC GROOT N1 — THE WORLD'S FIRST OPEN HUMANOID ROBOT FOUNDATION MODEL — & SIMULATION FRAMEWORKS TO SPEED ROBOT DEVELOPMENT

- NVIDIA launched the Isaac GROOT N1, an open, customizable model for humanoid robot reasoning and skills.
- It features dual-system architecture: fast reflexes (System 1) and deliberate decision-making (System 2).
- GROOT N1 enables robots to perform tasks like grasping and multistep actions, with post-training for specific tasks.
- IX Technologies demonstrated a robot using GROOT N1 to perform domestic tasks autonomously.
- The model enhances robot adaptability, aiming to create humanoid companions for human assistance.



## QUANTUM COMPUTING BREAKTHROUGH ACHIEVED WITH DIAMOND QUBITS

Researchers overcame challenges in building scalable quantum computers using ultra-pure diamonds and advanced gates. Diamond-based qubits, leveraging atomic defects, offer high-temperature operation, noise shielding, and photon interaction. Low-error quantum gates with diamond spins, previously difficult to achieve, are now successfully demonstrated.

# DISRUPTIVE TECHNOLOGIES

## NEO GAMMA HUMANOID ROBOT DONS A 3D-PRINTED FABRIC SKIN TO BETTER BLEND WITH YOUR HOME

- The NEO Gamma by IX Technology features a 3D-printed nylon fabric "skin" for a softer, more human-friendly appearance.
- The textile exterior helps the robot blend into domestic environments, hiding complex machinery.
- The flexible nylon material allows full motion and quiet operation, avoiding disruptive mechanical sounds.
- This design focuses on adapting robots to human spaces, ensuring a peaceful home atmosphere.



## MICROMANUFACTURING: PUSHING THE BOUNDARIES OF PRECISION

Micro-manufacturing is a growing technique for producing tiny, precise items, improving fields like medical devices & electronics. Automated solutions, with advanced optical equipment, now allow a single machine to clean, dry, & measure parts automatically, eliminating manual adjustments & perspective distortion during inspection.



## GENE-EDITED NON-BROWNING BANANA COULD CUT FOOD WASTE, SCIENTISTS SAY

- Scientists have developed a genetically engineered non-browning banana by Tropic, a biotech company.
- It stays fresh and yellow for 12 hours after being peeled & is less prone to browning during harvesting & transportation.

## WHAT IS AGENTIC AI?

Agentic AI acts autonomously, making decisions & taking actions with minimal human input. It adapts to changing environments & uses patterns & probabilities, unlike traditional AI that relies on predefined rules.

## WHY IS SMART METERS GAINING POPULARITY?

- **Autonomy and Decision-Making:** Agentic AI makes independent decisions, executes multi-step processes, & adapts to changing circumstances, mimicking human problem-solving.
- **Real-time Decision-Making:** Agentic AI systems can process information and make decisions in real-time, enabling businesses to adapt to changing market conditions and optimize operations.
- **Enhanced Automation:** Agentic AI can automate complex tasks and workflows, freeing up human resources for more strategic and creative endeavors, leading to increased efficiency and productivity.
- **Enabling Complex Applications:** Agentic AI makes it possible to build more sophisticated and reliable applications in areas such as healthcare, compliance, and creative industries.



# IP INSIGHTS (ON AGENTIC AI)

## PRODUCTS USING ADVANCE TECHNOLOGY IN AGENTIC AI



Salesforce introduces **Agentforce 2.0**, a digital labor platform that enables a limitless AI-powered workforce. It offers pre-built skills for any department and allows actions across various systems and workflows.



[IBM Watson to watsonx](#). Watson sparked curiosity around “machines that could think” and opened up the possibilities around how AI could be applied to business. Clients in industries ranging from financial services to retail put Watson to work to unlock new insights, drive productivity and deliver better customer experiences. Now through advancements in core Watson technologies, IBM has developed the next generation of AI products with [watsonx](#).

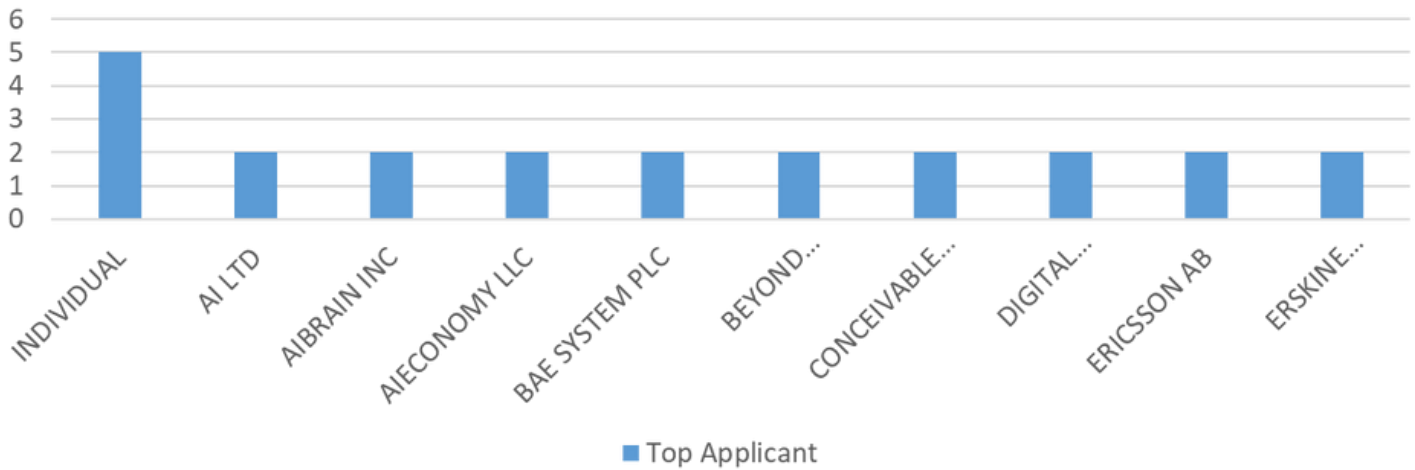


**Microsoft's Azure AI Agent** Service is a fully managed platform that lets developers securely build, deploy, and scale AI agents with minimal code, eliminating the need to manage compute and storage resources. What once required hundreds of lines of code can now be done in just a few.

# IP INSIGHTS (ON AGENTIC AI)

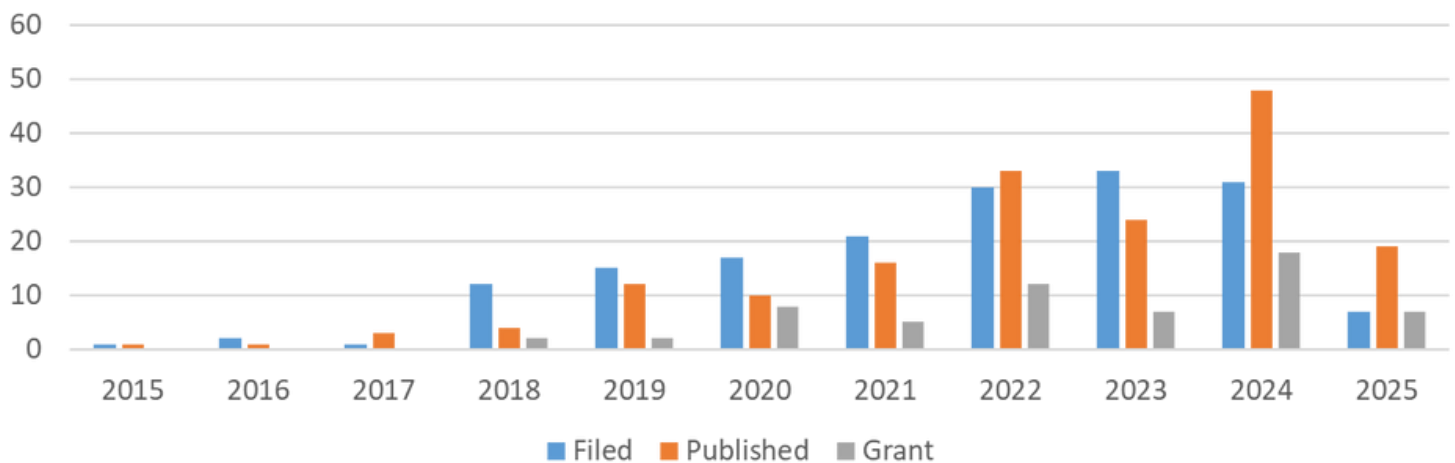
## PATENT TRENDS ON SMART METERS OBSERVED FOR RECENT YEARS

### Top Applicants



The patent IN202411081558, assigned to an INDIVIDUAL, discloses nature of agentic AI in the context of industries supplemented with applications would bring a significant shift in employment structures and skillsets.

### Patenting Trend



The patent [US12088599B1](#), assigned to AIECONOMY, discloses about Generative AI systems and methods are provide recommendations regarding the prevention, detection, mitigation, and/or remediation of cybersecurity threats as determined from a range of available data sources.

## HOW ARTIFICIAL INTELLIGENCE WILL NATURALLY AFFECT PATENTABILITY

- AI is revolutionizing patent law, raising questions about AI-generated inventions and patent eligibility.
- The 2022 *Thaler v. Vidal* case ruled only humans can be inventors, rejecting a patent for an AI-generated invention.
- As AI capabilities grow, fewer inventions may be patentable, as discoveries considered "obvious" won't qualify.
- Patents reward innovations that advance sciences, not obvious inventions, as per Supreme Court rulings in *KSR* and *Sinclair & Carroll*.
- AI will become a common tool for inventors, altering how inventions are judged for patentability.
- Past breakthroughs, like electricity and telecommunications, laid the foundation for future innovations, similar to AI's role today.



## PATENT LAW'S ON-SALE BAR AND COMMERCIAL EXPLOITATION BY SUPPLIERS AND THIRD PARTIES

- The patent system grants exclusive rights to inventors in exchange for public disclosure of their inventions (the "patent bargain").
- In *Medicines Co. v. Hospira*, the Federal Circuit reviewed whether a "supplier exception" should apply to the on-sale bar.
- MedCo had a supply agreement with Ben Venue to produce bivalirudin, then later filed a patent for the process.
- The court initially overturned the district court's decision, considering whether the agreement constituted a commercial sale.
- MedCo argued that the on-sale bar doesn't apply when an inventor retains a third party to develop or manufacture the invention under their control.
- The Federal Circuit analyzed the agreement, noting Ben Venue's role in manufacturing, the low price paid by MedCo, and lack of title transfer.
- The court concluded that the agreement was "preparation" for commercial activity and did not trigger the on-sale bar.



## THE BIRTH OF THE UNIFORM TRADE SECRETS ACT: A TRADE SECRET GEM

- *Electro-Craft Corp. v. Controlled Motion, Inc.* (1983) was the first appellate case under the Uniform Trade Secrets Act (UTSA).
- The UTSA was approved in 1979 and adopted by Minnesota in 1980, becoming the first state to enact it.
- The case illustrates how common law trade secrets were integrated into the UTSA framework.
- A trade secret must:
  - Not be generally known or easily obtainable.
  - Provide a competitive advantage.
  - Be developed at the plaintiff's expense.
  - Be intended to be kept confidential.
- The court emphasized focusing on property rights in trade secrets, not just the confidential relationship.
- To claim a trade secret, the trial court must identify specific secrets and determine their status.
- CMI argued that ECC failed to specify its trade secrets, and ECC changed its definition during litigation.



## **NASSCOM AND KITS PARTNER TO BOOST INNOVATION & IP CREATION IN KARNATAKA'S TECH SECTOR**

- NASSCOM has partnered with KITS to promote innovation and IP growth in Karnataka's tech sector.
- KITS is the implementing agency for Karnataka's Department of Electronics, IT, Biotechnology, and Science & Technology.
- The MoU aims to strengthen Karnataka as a leading innovation hub and drive IP creation.
- Focus on boosting economic growth through technology development and commercialization.
- The partnership will establish an IP enablement program to increase innovation and patent filings via mentorship and support.

**"The nasscom IP Enablement Program, a key component of this MoU, will provide structured mentorship and resources to Karnataka's IT industry, with a special focus on startups and SMEs, to strengthen their IP management and innovation capabilities. This initiative aims to accelerate patent filings and drive technological advancement across the state,"**

**NASSCOM**®

**KITS**  
(Karnataka Innovation and Technology Society)

## **BOMBAY HIGH COURT REMANDS AUDI AG'S "Q6" TRADEMARK DISPUTE FOR RECONSIDERATION**

- Bombay High Court remanded Audi AG's "Q6" trademark dispute to the senior examiner in Mumbai for a fresh review.
- Audi's "Q6" trademark, for a luxury SUV, had been rejected in 2021 for non-distinctiveness and potential public confusion.
- Audi contested the rejection, citing evidence of the trademark's registration in multiple countries.
- The senior examiner defended the decision, citing Section 9(1)(a) for non-distinctiveness and Section 11(1) for potential public misguidance.
- Justice Manish Pitale criticized the senior examiner's handling and called for a more thorough review of the evidence.



## **SAMSUNG TO LAUNCH NEW XR SMART GLASSES THIS YEAR, COMPETING WITH META'S RAY-BAN**

- Samsung to launch new XR smart glasses under codename "Project HAEAN" this year.
- Designed to rival Meta's Ray-Ban smart glasses.
- Features Galaxy AI, multiple cameras, and support for payments, gestures, and facial recognition.
- Powered by Qualcomm chipset, Sony IMX681 sensor, and Google's Gemini AI model.
- Expected to be lightweight (around 50 grams) and display information on lenses.
- Developed alongside Samsung's upcoming XR headset under "Project Moohan".



## DELHI POLICE RAID SEIZES NEARLY 3500 COUNTERFEIT HONDA PRODUCTS/STICKERS IN MAJOR TRADEMARK ENFORCEMENT ACTION

- Delhi Police and Honda Motorcycle & Scooter India conducted a successful anti-counterfeiting raid in Sarai Rohilla, New Delhi on March 12, 2025.
- The raid targeted a supplier and stockist suspected of distributing counterfeit Honda parts and accessories.
- Authorities seized 3,348 counterfeit stickers and products, including MRP/product labels.
- The operation was carried out under Sections 103 and 104 of the Trademark Act, 1999, and Sections 63 & 65 of the Copyright Act, 1957.
- An F.I.R. (No. 121/2025) was registered against the accused, and the seized items were stored for legal proceedings.
- The raid disrupted a major counterfeit supply chain, serving as a deterrent to further illegal activities in the region.



# TECHNOLOGY THEMES



## THE NEXT GENERATION OF SMART CLOTHING: NEW FABRIC ALLOWS HANDS-FREE CONTROL OF DEVICES, EVEN UNDERWATER

- An international team of scientists developed a new fabric enabling hands-free interactions in humid and underwater environments.
- The fabric features overbraided magnetoresistive sensors integrated into a knitted sleeve.
- Users can navigate virtual reality (VR) environments through simple hand movements, facilitated by a magnet in a glove.
- This innovation has potential applications in VR, safety gear, and wearable electronics.
- The study was published in Communications Engineering, marking a significant advancement in interactive textiles.



## ASTERA LABS ANNOUNCES SCORPIO SMART FABRIC SWITCHES FOR ENHANCED PERFORMANCE IN NVIDIA BLACKWELL-BASED MGX PLATFORMS

Astera Labs has launched Scorpio Smart Fabric Switches for PCIe 6-ready NVIDIA Blackwell-based MGX platforms, offering modular performance and an accelerated development kit for in-house testing. The Scorpio P-Series is designed to optimize AI server deployments.

# TECHNOLOGY THEMES



## SMART TEXTILE DISPLAY WITH ADDRESSABLE QUANTUM DOT LIGHT-EMITTING DIODE BASED ON DURABLE ULTRATHIN METAL ELECTRODEA

- Researchers from the University of Cambridge developed a smart textile display using quantum dot light-emitting diodes (QD-LEDs) with a  $\text{MoO}_3/\text{Au}$  oxide/metal hybrid electrode.
- The  $\text{MoO}_3/\text{Au}$  electrode surpasses ITO in bending durability, with 81% transmittance and  $17.92 \Omega/\text{sq}$  sheet resistance.
- The QD-LEDs maintain a luminance of  $6325 \text{ cd}/\text{m}^2$  after 500 bending cycles (5 mm radius).
- The study introduces a robust device and a lateral driving display system for precise addressing of individual QD-LEDs in textile displays.



## THREE-DIMENSIONAL FLEXIBLE THERMOELECTRIC FABRICS FOR SMART WEARABLES

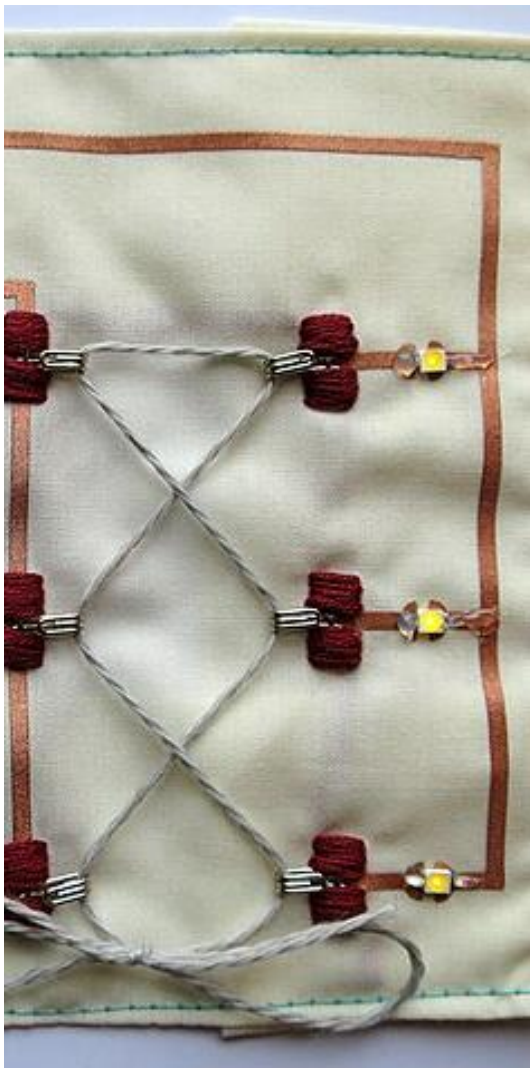
Chinese researchers created a 3D flexible thermoelectric device that converts body heat into electricity for IoT and soft robotics. It features precise temperature detection (0.02 K accuracy), high durability (10,000+ cycles), ultra-fast response (20 ms), and washability. Demonstrated in smart masks and gloves, it shows strong potential for wearable electronics.

# TECHNOLOGY THEMES



## FUTURISTIC FABRICS: VOORMI SMART T-SHIRT DEBUT'S 'MIJ' TECHNOLOGY

- Voormi's Mij technology integrates wireless sensors into clothing to monitor thermal load.
- The technology may evolve to include self-regulating and color-changing features.
- The smart clothing is designed for outdoor athletes, tracking thermal stress in real time.
- Voormi combines Mij sensors with its Core Construction knit, a fabric that offers waterproof and windproof properties in a single layer.



## INNOVATIONS IN SMART TEXTILES. ACCOMPLISHMENTS BY WOMEN IN E-TEXTILES RESEARCH AND PRODUCTS

- Sofia Guridi and colleagues at Aalto University are developing bio-based, biodegradable e-textile capacitive sensors.
- The first prototype uses a carboxymethyl cellulose (CMC) layer on wool fabric.
- A second prototype embeds the sensor's core into a woven wool pocket.
- The third combines wool yarns and CMC films to create a textile pocket for the sensor core.

# GLANCE @EFFECTUAL



## GLOBAL LEGAL ASSOCIATION

The Global Legal Association has successfully concluded its annual conference this February, bringing together over 250 legal professionals from more than 100 leading corporations and law firms.

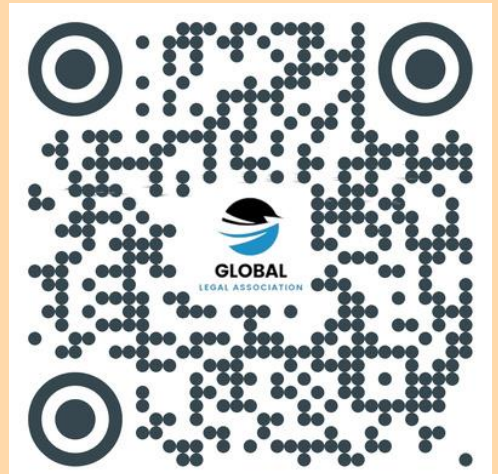
The conference served as a platform for thought leadership and insightful discussions on key legal trends, covering a diverse range of topics such as arbitration, litigation, modern mergers and acquisitions (M&A), and litigation funding. Experts from various fields shared their perspectives, fostering meaningful dialogue on the evolving legal landscape.

With engaging panel discussions and networking opportunities, the event reaffirmed its role as a crucial forum for industry professionals to collaborate, exchange ideas, and shape the future of legal practice.



**For more details on  
the event and future  
initiatives**

**SCAN THE CODE**



# GLANCE @EFFECTUAL



## 6<sup>TH</sup> GLA ARBITRATION & LITIGATION MALAYSIA 2025

The Global Legal Association is thrilled to announce its upcoming flagship event, the GLA Arbitration & Litigation Conference 2025 – Malaysia Edition, scheduled for May 26-27, 2025.

This premier conference is expected to bring together over 250 industry leaders, including Heads of Litigation, General Counsels, Litigation Managers, Arbitration Heads, ADR Professionals, Chief Dispute Resolution Officers, Risk & Compliance Experts, Data Privacy Managers, Legal Attorneys, Directors, and Partners from top law firms.

The event will serve as a key platform for addressing operational challenges and exploring innovative solutions in the legal and dispute resolution landscape. Attendees can expect insightful discussions, expert panels, and networking opportunities designed to shape the future of arbitration and litigation. Stay tuned for further details and registration information.



**BOOK & SECURE  
YOUR SPOT**

# 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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