# NEWSEFECT

### INNOVATION FRONTIER

#### SEPTEMBER' 2025

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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- **DISRUPTIVE TECHNOLOGIES**
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# AI ADVANCEMENTS







## HELIOS AI SECURES \$4.7M TO REVOLUTIONIZE AGRICULTURAL COMMODITY PREDICTION WITH AI COPILOT

Helios AI, an AgTech startup, has raised **\$4.7M** in seed funding to launch Helios Horizon-an Alpowered copilot for predicting agricultural commodity prices. Aiming to revolutionize risk management in a climate & market-volatile world, the tool brings advanced market insights to farmers and food businesses alike, leveling the playing field across the supply chain.



## HOW AI PREDICTIVE MAINTENANCE CUTS INFRASTRUCTURE FAILURES BY 73%

Al-driven predictive maintenance is transforming equipment upkeep by using real-time sensor data to monitor conditions like vibration, temperature, and pressure. All analyzes this data to detect issues early, enabling timely maintenance and reducing failures. The models continuously learn, improving accuracy over time.

# ONLINE TRAVEL PLATFORMS PREPARE FOR RISE OF ARTIFICIAL INTELLIGENCE 'AGENTS'

Major travel platforms like Booking.com, Expedia, and Airbnb are embracing Al stay ahead of Al "agents" could that bypass their services. Partnering with OpenAl, they're rolling out features like automated trip planners and Al-powered customer support enhance user experience and maintain relevance in evolving travel landscape.

# AI ADVANCEMENTS

### HOW AI & DIGITAL TWINS ARE SHAPING SUSTAINABLE BUSINESS

- TCS' Digital Twindex shows how Al and digital twins enable sustainable, highperformance operations.
- Al is both a tool for climate goals and a growing source of emissions.
- The paradox: Al drives sustainability while straining environmental resources.



#### **ROBOTS AND AI ARE REWRITING THE FUTURE OF SURGERY**

- Al and surgical robotics are revolutionizing healthcare, enabling expert-level precision in complex surgeries.
- Robotic telepresence is making life-saving procedures accessible in remote areas.
- This future is arriving faster than expected, with global adoption already underway.
- Dr. Mark Slack of CMR Surgical notes a major shift: autonomous surgery is now a real possibility.



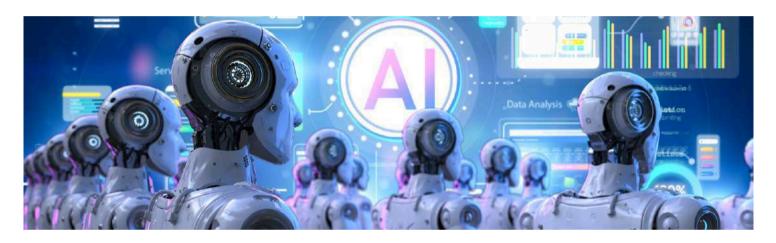




# AI ADVANCEMENTS

### BIOTECH BREAKTHROUGHS SHOWCASE CHINA'S AI DOMINANCE

China is emerging as one of the strongest drivers of artificial intelligence's shift from concept to clinical testing in the field of life sciences. From the discovery of novel drug candidates, to the delivery of advanced genetic therapies, enterprises have shown Al's potential in generating breakthroughs that may reshape the global pharmaceutical landscape.



## INDONESIA HARNESSES AI TO TRANSFORM HIGHER EDUCATION





- Indonesia has identified artificial intelligence as a central driver for strengthening the nation's higher education system, enhancing research capabilities and preparing the next generation of skilled digital professionals.
- He noted that intelligent tutoring systems and data-driven feedback can improve teaching quality and outcomes, while predictive analytics can help institutions understand student needs and enhance performance.

## DISRUPTIVE TECHNOLOGIES







## NEXT-GENERATION HUMANOID ROBOT CAN DO THE MOONWALK

KAIST's humanoid robot showcases world-class driving performance at 12 km/h and exceptional stability, even on rough terrain or with its eyes closed. Capable of complex movements like the duckwalk and moonwalk, it's seen as a next-gen industrial robot. The research team achieved full hardware independence by designing and manufacturing all core components in-house, including motors, reducers and drivers.

#### META CONNECT 2025 — META RAY-BAN DISPLAY, OAKLEY META VANGUARD SPORT GLASSES AND EVERYTHING ANNOUNCED

- Meta Connect 2025 unveiled Ray-Ban Display smart glasses, Ray-Ban Meta Gen 2 and Oakley Meta Vanguard.
- Previewed next-gen Meta Horizon OS and future of contextual AI.
- Launched Wearable Tool Kit for developers to build smart glasses apps.



# HOW PNEUMATICS & SOFT ROBOTICS ARE REVOLUTIONISING AUTOMATION

Ellie Gabel highlights how pneumatics and robotics are making automation safer and more adaptable - from enhancing colonoscopy procedures to building resilient robots environments. extreme Soft robotic endoscopes with inflatable actuators and real-time force offer sensors greater dexterity and reduced risk of complications.

## DISRUPTIVE TECHNOLOGIES

# FLEX-SCALE: FLEXIBLY SCALABLE ENERGY EFFICIENT NETWORKING ADVANCING OPTICAL NETWORKS FOR THE 6G REVOLUTION

- The EU-funded FLEX-SCALE project is developing optical network tech for ultrafast, energy-efficient 6G infrastructure.
- Aims to meet rising global data traffic demands with scalable, sustainable solutions.
- Addresses the limitations of current networks already strained by 5G rollout.
- Focuses on boosting both speed and energy efficiency for the 6G era.



## "JUNK DNA" PROVIDES SURPRISING NEW TREATMENTS FOR HARD-TO-TREAT BLOOD CANCERS



- King's College London found a new blood cancer treatment by repurposing drugs targeting overlooked DNA regions.
- Targets previously overlooked parts of human DNA as therapeutic opportunities.
- Focuses on MDS and CLL cancers with mutations in ASXL1 and EZH2 genes.
- Mutations disrupt gene regulation, leading to uncontrolled cell growth.

## DISRUPTIVE TECHNOLOGIES

HUAWEI PATENTS AI MODEL DESIGNED TO PREDICT USER NEEDS



Huawei has filed a patent application for an artificial intelligence model that aims to predict user requirements in advance. The patent, titled "A model interaction method, device, electronic device, and interaction system," details a technology intended to create a more proactive and intuitive user experience..

## THE AI-POWERED HUMANOID ROBOTS COMING FOR YOUR JOB (OR AT LEAST YOUR HOUSEWORK)



- San Jose-based startup Figure AI is gaining attention for its humanoid robots performing tasks like folding laundry and putting away groceries.
- The company recently secured new funding, pushing its valuation above major firms like Delta Air Lines and Adidas.
- Figure aims to create general-purpose humanoid robots to replace humans in dangerous or undesirable jobs.
- Initial applications will focus on industries with severe labor shortages: manufacturing, shipping, logistics, warehousing and retail.

# IP INSIGHTS

#### ON WI-FI SENSING

#### WHAT IS WI-FI SENSING?

Wi-Fi sensing is a technology that leverages existing Wi-Fi signals for a variety of applications, such as detecting motion, presence, and even gestures within a space, without the need for additional hardware like cameras or specialized sensors. It works by analyzing changes in Wi-Fi signal properties, such as Channel State Information (CSI), which are affected by objects or movement in the wireless channel.

## WHAT ARE MAIN APPLICATIONS OF WI-FI SENSING?

- Home security: Superior, privacyconscious motion detection using non-line-of-sight Wi-Fi sensing.
- Healthcare: Monitors family wellbeing by detecting arrivals and departures.
- Energy efficiency: Automates powering devices based on occupants' presence.

### WHAT ARE THE TYPES OF WIFI SENSING TECHNOLOGIES?

- RF Fingerprinting: RF Fingerprinting technology uses the unique signatures of individuals' movements to identify and track them within a space.
- Channel State Information (CSI)
   Based Sensing: CSI-based sensing extracts information from the phase and amplitude of Wi-Fi signals to detect movement.
- Received Signal Strength Indicator
  (RSSI): RSSI is a layer-2 (MAC layer)
  metric that indicates the power
  level of the received Wi-Fi signal.
  While less rich than CSI, it can be
  used for tasks such as human
  identity recognition.



# IP INSIGHTS

#### ON WI-FI SENSING

#### WHAT ARE THE BENEFITS OF WI-FI SENSING?

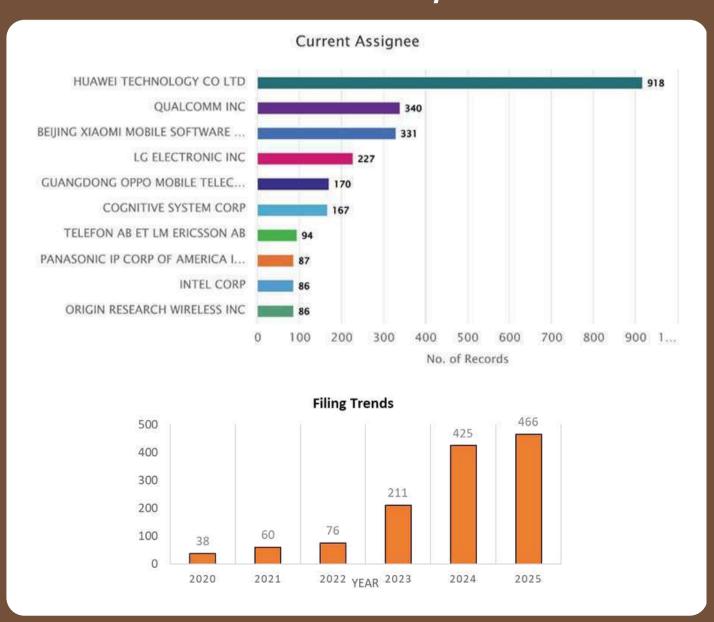
• Non-line-of-sight motion detection

Interoperability

Ease of installation

Privacy

#### TOP ASSIGNEES BY PATENTS/PUBLICATIONS



# IP NEWS

#### **USPTO WELCOMES NEW DIRECTOR JOHN A. SQUIRES**



- John Squires confirmed as Director of the U.S. Patent and Trademark Office (USPTO) under President Donald Trump.
- Previously served as Chief IP Counsel at Goldman Sachs and Partner at Dilworth Paxson LLP.
- Will advise the Secretary of Commerce, the President, and other agencies on IP policy, innovation, and global competitiveness.
- Coke Morgan Stewart, Acting Director since Jan 2025, continues as Deputy Director alongside Squires.
- Squires is also a former adjunct law professor at the University of Pennsylvania Carey Law School.
- Holds a B.S. in Chemistry from Bucknell and a J.D., magna cum laude, from the University of Pittsburgh School of Law.

# IP NEWS

## SAMSUNG SETTLES WIRELESS PATENT CASE AFTER \$279 MILLION US TRIAL LOSS



- Samsung has agreed to settle a patent lawsuit over wireless communications technology that led to a \$279 million jury verdict against the Korean tech giant earlier this year, according to a filing in Texas federal court.
- Samsung and Headwater Research told the court that they had resolved the dispute and asked to dismiss Headwater's claims with prejudice, which means they cannot be refiled..
- Headwater said earlier that a range of Samsung devices, including Galaxy phones and tablets, implemented its wireless technology without a license.
   Samsung denied the allegations and argued that the patents were invalid.
- The companies also asked to dismiss several related Headwater patent lawsuits against Samsung, including one where Samsung had fended off Headwater's claims at a trial recently.

# IP NEWS

### USPTO IMPLEMENTING ADDITIONAL SECURITY MEASURES FOR PATENT CENTER



- Effective Sept 11, 2025, identity verification is required for all USPTO Patent Center users.
- Guest and unregistered users will no longer have access.
- Aims to enhance IP fraud protection and deter fraudulent filings and data mining.
- Users can verify identity via ID.me or by mailing a Patent Electronic System Verification form.
- Starting Nov 1, users must switch from email login to a secure authentication method.
- Early registration is encouraged for a smooth transition.

## GLANCE @EFFECTUAL



## **MALAYSIA 2026** GLA ANNUAL ARBITRATION & LITIGATION SUMMIT



22<sup>nd</sup> - 23<sup>rd</sup> Jan' 2026



We are very happy to announce our upcoming flagship event, the 8th GLA Annual Arbitration & Litigation Summit 2026 Malaysia Edition, scheduled for 22<sup>nd</sup> - 23<sup>rd</sup> Jan, 2026. This conference is expected to bring together 275+ IP professionals, including:

- · Head of IP
- IP Counsels
- Head of Litigation
- General Counsels
- Litigation Managers
- Arbitration Heads

- ADR Professionals
- Chief Dispute Resolution Officers
- Risk & Compliance Professionals
- Data Privacy Managers
- Legal Attorneys
- Directors/Partners of Law Firms and
- · other key service providers.





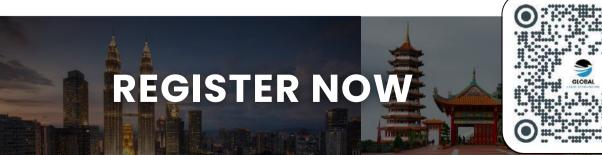






MEDIA PARTNERS









# GLANCE @EFFECTUAL



A Proud Moment for Effectual Services

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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



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