

Decode the Future of Innovation.

Beyond Search : Deep Research AI

Where deep research unlocks the blueprint of the future.

IIT AC | Forum | Incubig AI



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FORUM RPM is an AI-driven integrated platform designed to help academicians, policymakers, and industry professionals research effectively, refine their ideas, protect their innovations, and monetize their work.



. An IIT Alumni Council initiative .

The quality of life initiative was the brainchild of Ashok Madhukar, a tall leader who played a stellar role in the creation of IIT Alumni Movement.



Late Ashok Madhukar, who passed on in 2021, was a BTech from IIT Kharagpur. He was awarded the Distinguished Alumni by his alma mater. Ashok spent the last three decades of his life in the development sector – first as a part of the Social Fund for Development in Egypt and thereafter as a leading consultant to the government, specialising in the India-Africa corridor and the north east sector.

In 2016, Ashok introduced alumni leaders of the IIT community to the “quality of life” framework. His theory was that if we worked towards deploying technology to address all aspects of quality of life, we could create a blueprint for national progress. It was his strong conviction and passion for creating a nation building organisation that eventually led to the formation of the IIT Alumni Council.

He achieved in his lifetime, what may have otherwise taken decades more – to develop the unique core theme for the IIT Alumni movement. It is thanks to his foresight and guidance that the IIT Alumni Council and related mission organisations shifted focus –

- • • in spite of strong opposition from IIT alumni or the IITs,
- • • to nation building.

About IIT Alumni Council

The IIT Alumni Council is the largest global body representing the alumni of Indian Institutes of Technology (IITs), uniting some of the brightest minds from around the world. Established with the vision to drive innovation and societal impact, the Council fosters collaboration across academia, industry, and public policy.

With a strong focus on research, entrepreneurship, and technology-driven solutions, the IIT Alumni Council is at the forefront of addressing global challenges.

Through initiatives like Forum RPM and consortiums that connect innovators, the Council empowers individuals and organizations to create meaningful, scalable impact.

The Council's initiatives are a testament to the unparalleled legacy of IITs in nurturing leaders, shaping industries, and transforming societies.



Bridging Innovation: IIT Alumni Council, Forum RPM, and Incubig AI



The Collaboration of IIT Alumni Council, Forum RPM, and Incubig AI

At the intersection of innovation, technology, and impact lies a powerful collaboration between the IIT Alumni Council, Forum RPM, and Incubig AI. Together, these entities form a robust ecosystem designed to revolutionize the way ideas are researched, protected, and monetized, driving innovation at a global scale.

IIT Alumni Council, Forum RPM, and Incubig AI

IIT Alumni Council: The Visionary Backbone

As the largest global body of IIT alumni, the IIT Alumni Council brings together the brightest minds from diverse fields. Its mission to foster innovation, entrepreneurship, and societal impact provides the foundation for transformative initiatives like Forum RPM.

Forum RPM: The Integrated Innovation Platform

Forum RPM is the embodiment of the Council's vision—an AI-driven platform designed to empower academicians, policymakers, startups, and industry professionals to transform ideas into impactful solutions. It streamlines the journey from research and refinement to protection and monetization, making it a one-stop solution for global innovators.

Incubig AI: The Technology Powerhouse

Incubig AI is the deep-tech engine that powers Forum RPM, enabling users to leverage vast patent and research data with precision. Its advanced AI capabilities ensure actionable insights, robust intellectual protection, and seamless monetization strategies, making it an indispensable tool for innovators worldwide.

A Unified Mission

This synergy represents more than just a collaboration—it is a unified mission to accelerate global innovation and growth. With the IIT Alumni Council's network and vision, Forum RPM's integrated platform, and Incubig AI's technological prowess, the partnership drives impactful outcomes, connecting ideas to opportunities and innovation to global markets.



**r&d activity
research intelligence
originality review
patent drafting
patent defence
patent licensing
enforcement
legal and admin**

A hand is shown from the wrist up, reaching out towards the right. A bright pink laser beam originates from the right side of the frame, passing through the hand. The background is dark with a faint, glowing grid pattern. The overall mood is futuristic and technological.

Forum RPM

Revolutionizing Research, Innovation & Monetization

About FORUM RPM Platform

Forum RPM is a groundbreaking AI-driven platform designed to empower academicians, policymakers, industry leaders, and innovators across the globe. Built as a single-window solution, Forum RPM integrates advanced technologies to streamline the process of research, idea refinement, innovation protection, and monetization.

At its core, Forum RPM is dedicated to addressing the challenges faced by modern researchers and innovators. Whether it's identifying white spaces in research, refining concepts for maximum impact, or navigating the complexities of patent protection and commercialization, Forum RPM provides a comprehensive ecosystem to support every stage of the innovation lifecycle.

What Sets Forum RPM Apart?

- **AI-Driven Insights:** With cutting-edge AI capabilities, Forum RPM simplifies complex research data, enabling users to make informed, data-backed decisions with ease.
- **End-to-End Innovation Support:** From idea conception and refinement to securing intellectual rights and monetization, the platform provides seamless support throughout the journey.
- **Global Reach:** Forum RPM connects startups, universities, corporations, and governments, fostering collaboration and enabling access to a global innovation network.

FORUM RPM, Mission Mode

Forum RPM - a global platform for creation, protection and monetisation of IPR - will function as a mission. Structured like a movement rather than a business, the boundary between clients and experts will be a fluid and ever-evolving one. As more and more clients engage with the platform, the cumulative expertise of the platform keeps growing exponentially.

1

Self Learning

Forum RPM collects and collates both foundational data and related software patches like any open-source platform. By optimally utilising technology and human expertise, we are working to create a platform that is both self-programming and self-learning. This eliminates the need for working with pre-formulated hypotheses or judgmental opinions. Data is rarely an opinion and mathematics involves very little judgement.

2

Self updating

Forum RPM has embedded artificial intelligence systems for data collection. By using contextualised search across a range of paywall protected databases, the platform can aggregate information across parameters, creating a continuously upgraded information base. By fusing data into open source, standard compliant databases - the Forum RPM models create a layered unstructured data set which can be randomly accessed through AI tools to create a wide range of analysis.

3

Highly Automated

As the amount of data on the internet explodes, it will be possible to get data on almost a real time basis. This can help to continuously upgrade information with the objective of accelerating the pace of research without compromising on the quality. Continuous fine tuning helps improve eventual monetisability.

4

Data is the new oil

The Forum RPM platform being an open platform can connect via Docker with any application developer or data owner willing to contribute their stock to the overall Forum RPM stack. The platform thus manifests a multiplier effort as more and more researchers use the Forum datasets for their own analysis.

5

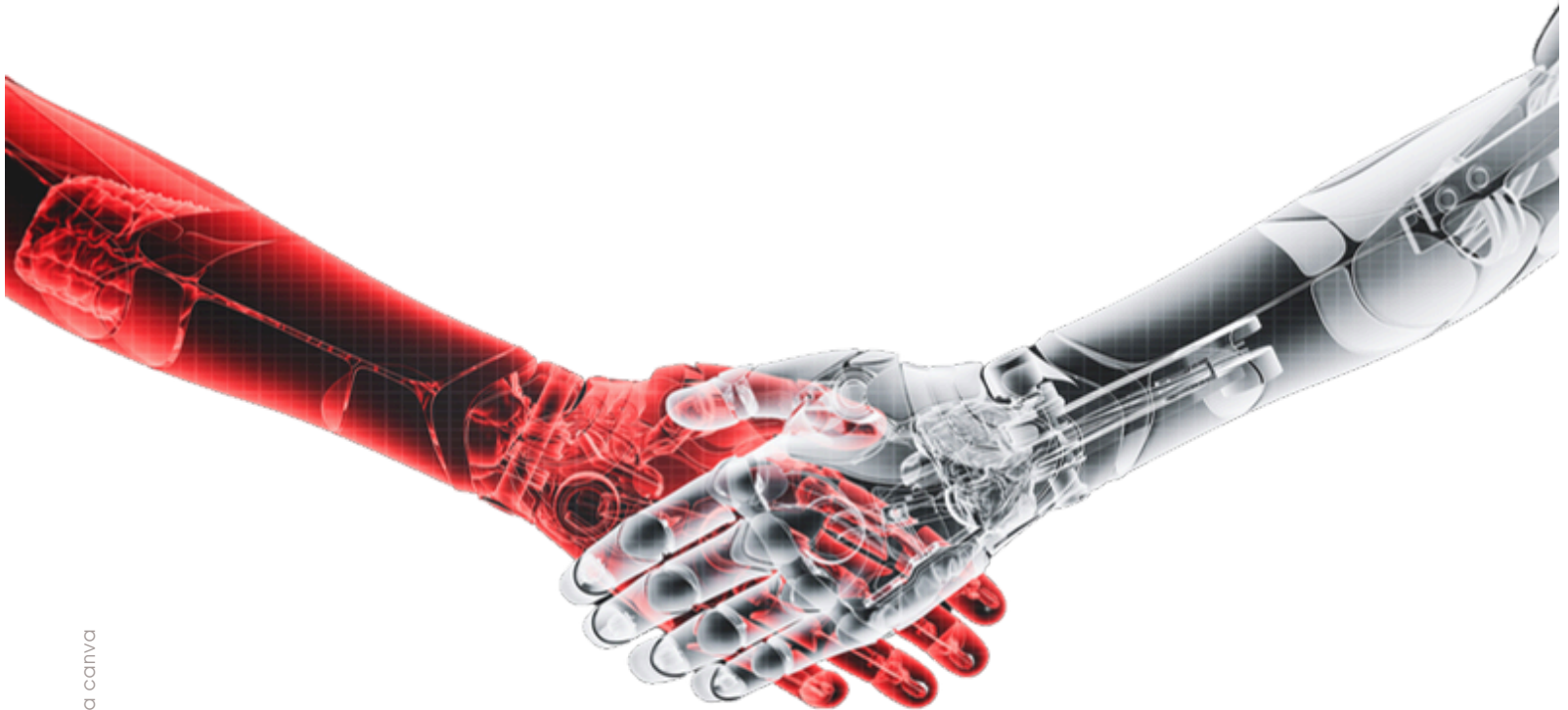
Comprehensive

With Forum RPM, you can be assured that you can unfold layers of data akin to peeling an onion. This allows a researcher to move seamlessly from the research data to competitor information to concurrent monitoring of developments elsewhere to pricing information for monetisation. The platform assists in acting as a data aggregator across domains.

FORUM

The cost and complexity of bespoke technology services continue to rise, while the supporters and depth of an open-source platform keep growing. This results in exponentially declining costs of data and related services for an open source platform like the Forum RPM.

By developing an ecosystem of credible and well-funded technology partners, Forum RPM is able to access large infrastructure facilities as well as trained specialist manpower to help in the cost-effective and timely development of a massive technology stack which neatly separates the raw data from the applications processing it. Application providers cannot access or download the raw data.





THE RPM MODEL

Forum RPM operates on a structured model designed to drive results:

Research (R)

Generate actionable intelligence by analyzing competitive landscapes, identifying innovation opportunities, and enhancing research outcomes.

Protect (P)

Secure patents and intellectual rights with precision, ensuring ideas are safeguarded against infringement.

Monetize (M)

Unlock the value of innovations through effective commercialization strategies, licensing, and client outreach.



Strong global Partner Networks

Given the relatively recent emergence of IPR monetisation opportunities and ecosystem players, there are only a limited number of established players and proven technologies for implementation. Most of these service providers are from a pre-AI era and substantial manual work is involved in going from secondary data based research to actual original research in the desired form and format.

Forum RPM data partners carefully diligence both - the data available as well as the data collection and collation agencies.



Startup Ecosystems

India is home to one of the largest startup ecosystems in the world. This includes startups, their mentors, incubators, venture capitalists, and related service providers such as accountants, lawyers, and IPR specialists. The IIT alumni community constitutes one of the most powerful startup ecosystems in the world. Forum works with hundreds of startups to solve challenging problems that range from automated data collection remotely and non-intrusively to simulation models and advanced sensors. Forum GSP has engaged several startups in the Data part of the consortium.

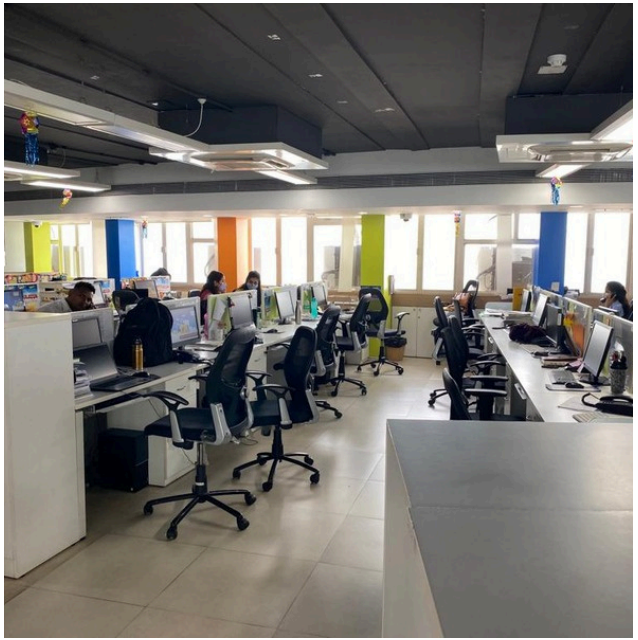
Scientists & Academia

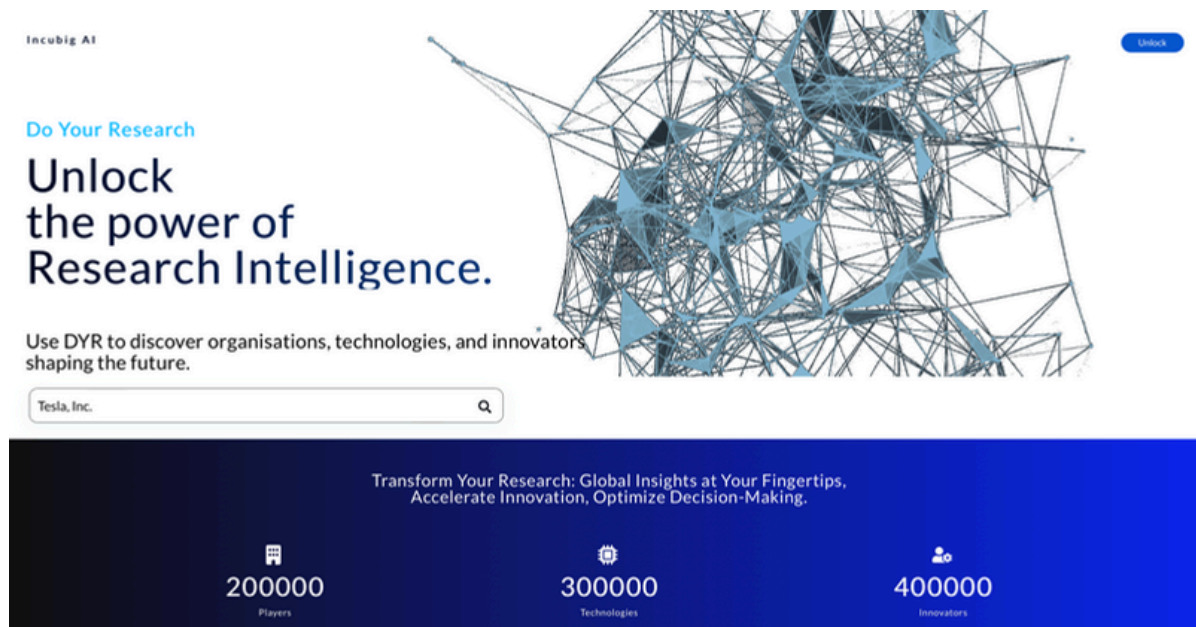
The IIT Alumni Council is home to over forty thousand IIT alumni, of whom more than one thousand have earned a PhD or equivalent doctoral or postdoctoral education. These include leading researchers in space, telecom, data science, remote sensing, AI, and tens of other specialisations. The institute mission (www.institute.org.in) has over 100 distinguished fellows with a target of growing this base to 10,000 Fellows over ten years.

Force Multipliers

Partner members of Forum RPM now collectively have access to commercial organisations around the world who work in the IPR protection and monetisation domain. Working alongside these global experts on a global basis, facilitates transfer of best practices to and from researchers working with Forum RPM.

FORUM





FORUM RPM Platform Powered by Incubig AI

At the heart of the Forum RPM platform lies Incubig AI, a state-of-the-art deep-tech solution that drives research excellence and innovation. Incubig AI is the backbone of Forum RPM, providing powerful tools for navigating the vast and complex landscape of global patent and research data.

The Role of Incubig AI in Driving Forum RPM

Incubig AI serves as the engine behind Forum RPM, enabling it to deliver seamless and intelligent solutions for research, protection, and monetization. By leveraging advanced AI algorithms, Incubig AI transforms complex patent and research data into actionable insights, empowering users to innovate with confidence.

- **Actionable Research Insights:** Incubig AI processes billions of data points to uncover trends, opportunities, and competitive intelligence, helping users make informed decisions.
 - **Precision in Protection:** Its advanced algorithms assist in drafting, filing, and safeguarding patents, ensuring every innovation is well-protected against infringement.
 - **Smart Monetization Strategies:** By analyzing market dynamics and identifying potential collaborators or licensees, Incubig AI enables effective commercialization of ideas.
-



The Synergy of Forum RPM and Incubig AI

Together, Forum RPM and Incubig AI create a unified ecosystem where research meets innovation. This collaboration transforms how ideas are developed, protected, and monetized, empowering academicians, policymakers, corporations, and governments to accelerate growth and make meaningful contributions to the global innovation landscape.



**Forum RPM,
powered by
Incubig AI, is
redefining the
future of
research and
innovation.**



Leading the Change !!

India is well positioned to lead globally in the area of providing knowledge process outsourcing services for protection and monetisation of intellectual property of various types including technology related IPR.

The Department of Science and Technology (DST), through its various initiatives has been promoting the protection of IPR through patenting and other filings such as copyright and tradenames/ trademarks. India is a signatory to various international protocols and reciprocity arrangements. As a result, global patents can be filed from India. The government also provides grants and subsidies to both academia and industry to promote filing of patents. Patent filings help businesses to get government contracts and help academia to improve their rankings and ratings.

The Forum RPM aspires to complement the efforts of the government.



Forum RPM

End to end Open Source Platform for Research, IPR creation and monetisation

Incubig AI: The Backbone of Forum RPM Platform

Incubig AI is a powerful artificial intelligence platform that forms the backbone of the Forum RPM platform. By utilizing advanced AI and machine learning technologies,

Incubig AI provides in-depth insights into global patent data, research trends, and technological landscapes. Forum RPM leverages these insights to support scientists, startups, universities, corporations, and governments in making informed decisions about the development, protection, and monetization of intellectual property.

With its ability to transform complex patent and research data into actionable intelligence, Incubig AI empowers the Forum RPM platform to drive innovation, accelerate R&D, and optimize patent strategies on a global scale.

Incubig AI

ACCELERATING RESEARCH, INNOVATION AND GROWTH .

Simple, Unified, Single-Window Platform.



Incubig AI - Research Intelligence



As we look ahead, the convergence of Patent & research data and intelligence on top of it, will drive smarter decisions, accelerating progress across academia, industry, and governance.

INCUBIG

INCUBIG

Don't react to change, know future landscape

GET STARTED

About Incubig

Driving Global Innovation through Research Intelligence.

At Incubig, we're driven by a powerful mission to transform the way businesses, universities, startups & Govts navigate the complex and often opaque world of patents, research, and technological intelligence.

We believe that even within the vast, dynamic landscape of global patent data lies immense untapped potential, and our goal is to unlock this potential for organizations across the world.

With the right tools and insights, innovation becomes not just achievable but sustainable, scalable, and transformative.

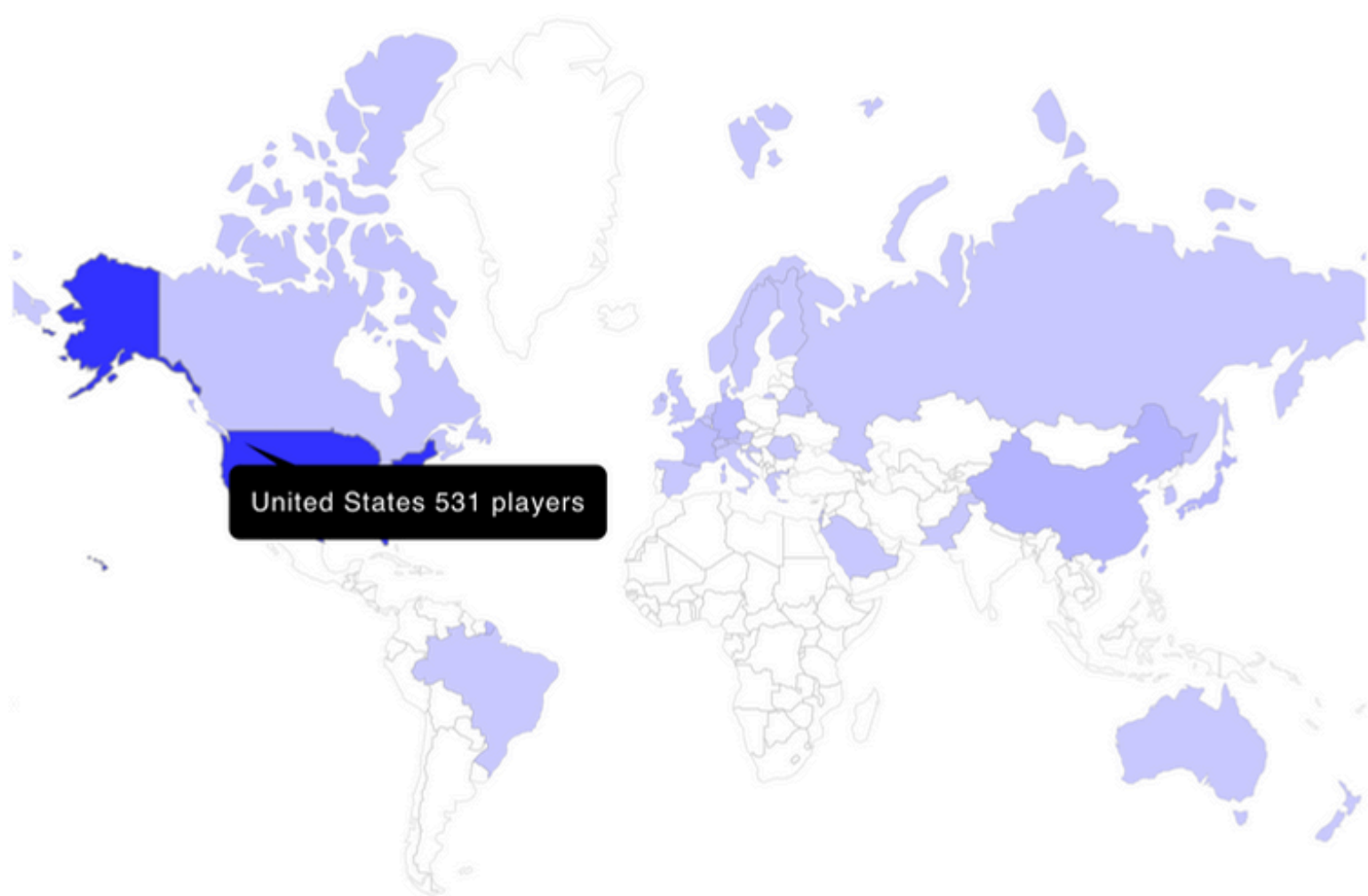


In today's rapidly evolving technological landscape, the ability to make informed, research-driven decisions is more important than ever.

Incubig exists to provide organizations with the clarity they need to succeed—whether they are developing breakthrough innovations or seeking to protect & grow their intellectual property in highly competitive Technological markets.

Our approach is grounded in the belief that patent data holds the key to understanding technological trends, emerging market opportunities, and the competitive landscape.

By making this information accessible and actionable, we empower our clients to stay ahead of the curve and to innovate with confidence.



By making research
intelligence accessible and
actionable, we empower our
users & clients to stay ahead
of the curve and to innovate
with confidence.


Our History

Founded in 2019 by a visionary team of innovators, Incubig emerged from a shared passion for unlocking the immense potential of patents and research data.

Recognizing the limitations of traditional patent analysis—often slow and cumbersome—the team set out to revolutionize the process by harnessing the power of artificial intelligence (AI) and machine learning (ML).

From the start, our goal has been simple. To equip the global research and innovation community with actionable, real-time insights that inspire smarter, faster decision-making.

By simplifying the complexities of patent & research landscapes, we provide our clients with the clarity they need to innovate boldly and maintain their competitive edge.



What began as a small startup
has since grown into a trusted
partner for organizations
across a range of industries—
from AI and biotech to energy,
automotive, and beyond.

Our journey has been marked
by a series of pivotal
milestones, each of which has
helped shape Incubig into the
company it is today.



In our early days, we were driven by a belief in the potential of AI to revolutionize patent research, but we needed the resources and backing to bring our vision to life.

After securing vital grants, computing resources, and partnership support in 2019-2020, we were able to significantly expand our research and development efforts.

A key milestone during this period was being recognized by the South Korean Government's K-Startup Grand Challenge (KSGC), as among the top 10 Global Startups in 2019-2020.

We were also honored to be the first company incubated by the Government of India, through Niti Aayog's AIC-GIM, marking a pivotal moment in our growth.

In addition to receiving a grant from the South Korean government, we forged strategic partnerships with leading research organizations and institutes across South Korea.

This funding, combined with our expanding network, enabled us to strengthen our core product offerings and assemble a team of world-class experts in artificial intelligence, data science, and intellectual property law.

Funding and grants from IIT-ISM, TexMIn, DST, MeITY, and the Government of India, our collaborations with these institutions provided essential resources that fueled the development of our core products.

These supports laid the foundation for our continued success, allowing us to push boundaries in our technological development.



Through partnerships with global governments, leading organizations, and institutes—including the Government of India, South Korean Government, U.S. Government, and prominent R&D institutes—

we established ourselves as a key player in the patent research landscape.

One of Incubig AI first major breakthroughs

Do Your Research (DYR)

One of our first major breakthroughs came with the launch of our flagship product, Do Your Research (DYR), in 2021-2022.

This powerful platform redefined the way organizations approach patent intelligence, offering users access to a vast, real-time database of global patent activity like never before.

DYR quickly became a game-changer, empowering clients to track cutting-edge innovations, spot emerging trends, and pinpoint potential areas for R&D investment with unmatched precision.

The platform's AI-driven algorithms transformed complex patent landscapes into simple, clear, actionable insights, making it an indispensable tool for decision-makers in universities, startups, and corporations alike.



DO YOUR Research (DYR)

Advanced deep learning | ML | NLP | Patent knowledge |
Proprietary algorithms

With a global team of data scientists, AI experts, IP experts contributing to our technology, we are automating patent research & analytics solutions.

Experience the ease of our platform, access valuable insights and predictions from a wealth of global research data.

Streamline your approach to patent analytics with Do Your Research – where advanced technology meets simplicity.

Know the future landscape with DYR.

What truly set DYR apart was its ability to provide real-time updates on technological shifts, helping businesses stay ahead of the competition and make informed strategic moves.

Whether it was uncovering hidden opportunities in niche sectors or mitigating risks in saturated markets, DYR offered a new level of transparency and foresight.

The launch of DYR was a defining moment for Incubig, firmly establishing our presence in the patent research space.

With DYR, we didn't just respond to industry demands—we anticipated them, delivering a platform that seamlessly adapted to the fast-changing, innovation-focused landscape.

This marked the start of Incubig's leadership in patent intelligence, unlocking new opportunities for our clients and fueling the next wave of technological advancements.

Incubig AI

Unlock

Do Your Research

Unlock the Power of Research Intelligence.

Use DYR to discover organisations, technologies, and innovators shaping the future.

Facebook, Inc



Transform Your Research: Global Insights at Your Fingertips, Accelerate Innovation, Optimize Decision-Making.



200000

Players



300000

Technologies



400000

Innovators

Loved by the global Innovation community.

2019-20

Recognized as one of the top 10 global startups by the South Korean Government at KSGC-2019.

- Honored to be the first company incubated by the Government of India, through NITI Aayog and AIC-GIM.
- Received incubation, grant, and funding support from the South Korean government.

2021-22

Worldwide Research Network & Alliances, Expert Connections & Global Reach

- Collaborations with GOI, South Korean Govt, US Govt, & leading R&D Institutes.
- Funding and grants from IIT-ISM, TexMIn, DST, MeITY, GOI.

2023-24

Introduced suite of tools for optimized intelligence gathering and insights

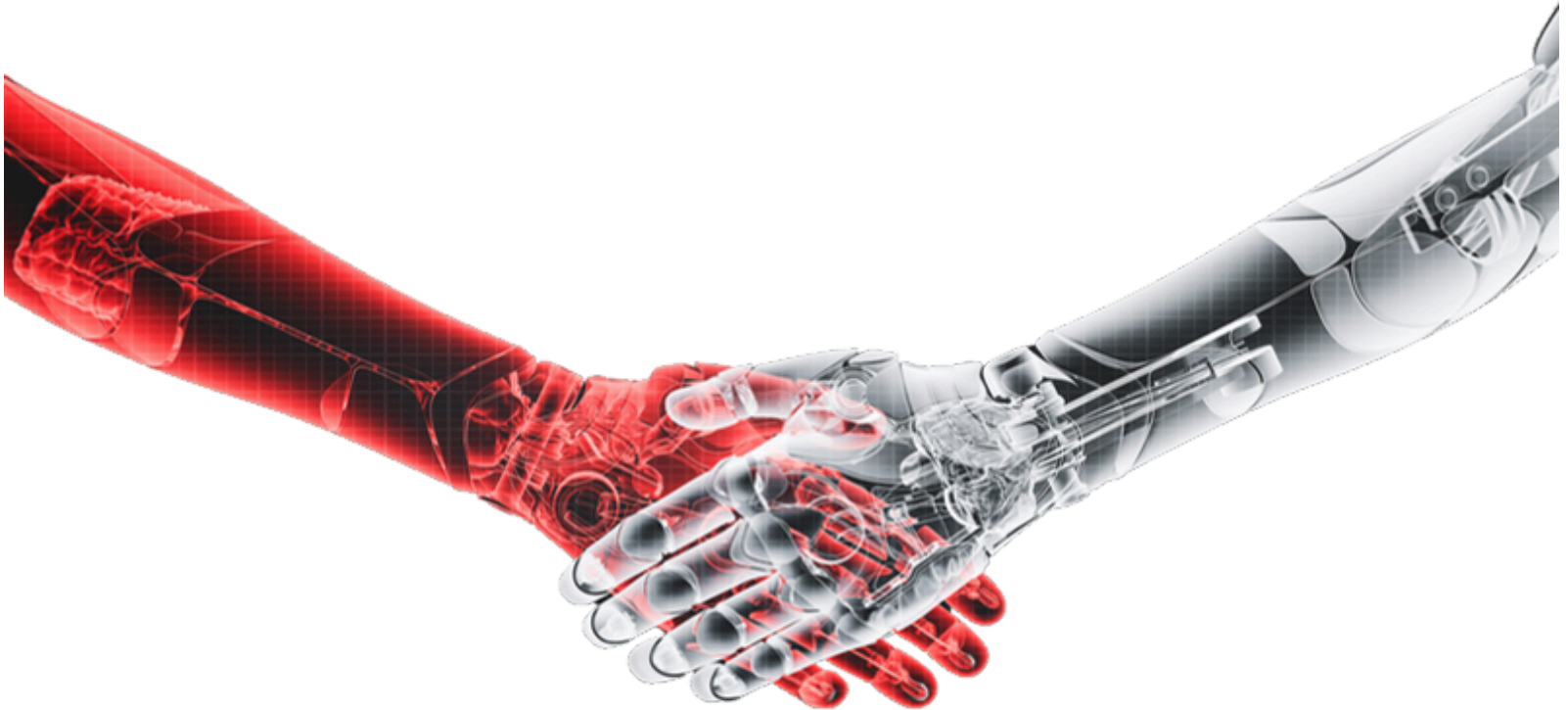
- Launched Do Your Research Platform (DYR), quickly adopted by leading universities, startups, and corporations.
- Released new products Monitor Your Competition (MYC) and Know Your Technology (KYC).

Partnered with IIT Alumni Council,
expanding our reach into new markets and
sectors.

This collaboration enabled us to tap into a
broader range of industries, deepening our
expertise and solidifying our reputation as
a leader in patent research.

Secured multiple strategic partnerships with
global research institutions and Fortune 500
companies, solidifying our position as a go-
to solution for patent intelligence across
industries.

These partnerships have helped us expand
our offerings and stay on the cutting edge of
innovation.



Incubig has evolved from a bold idea into a thriving company that serves the needs of some of the world's most innovative organizations.

Our growth has been driven by our commitment to delivering cutting-edge solutions that make a tangible difference for our clients.



Global Experts Behind building Incubig.

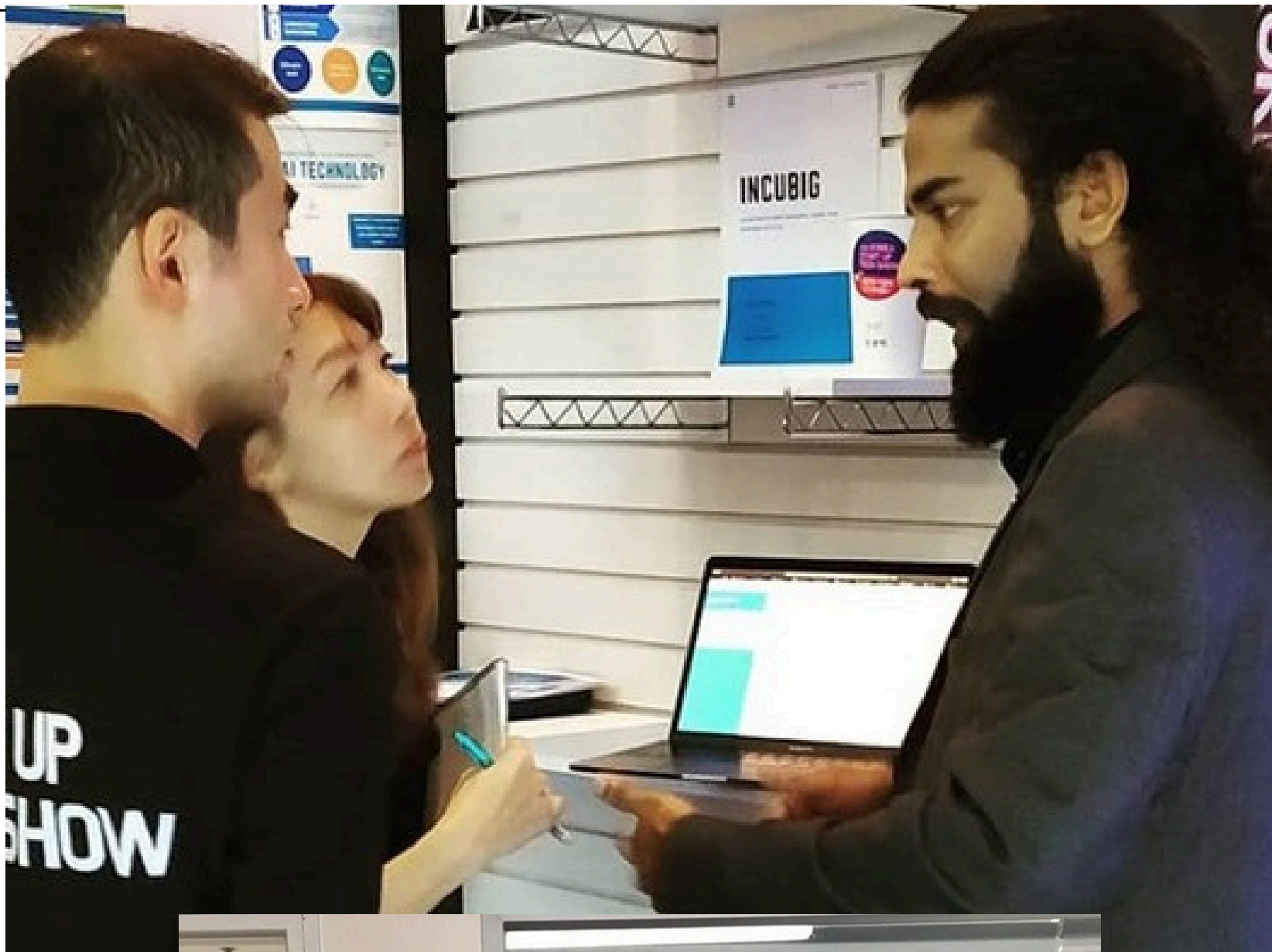
At the core of Incubig's success is our team—a diverse group of professionals who bring together expertise from a wide range of fields.

Our team is composed of specialists from around world in artificial intelligence, machine learning, data science, and intellectual property law, all of whom share a passion for innovation and excellence.

Our AI and machine learning experts are responsible for developing the powerful algorithms that underpin our products.

These algorithms analyze vast amounts of patent data in real-time, identifying trends, patterns, and potential opportunities for our clients.

By applying cutting-edge techniques like natural language processing and predictive analytics, we are able to offer insights that are both deep and actionable.



In addition to our technical team, we also have a group of seasoned intellectual property professionals who understand the intricacies of patent law and the challenges that organizations face in protecting their innovations.

Their expertise ensures that our products are not only technologically advanced but also aligned with the practical needs of our clients.

Moreover, our customer success and business development teams work closely with clients to ensure that they get the most out of our tools.

We believe that our success is tied to the success of our clients, and we take pride in helping them navigate the complex world of patent research.





Looking to the Future

As we look ahead, we are excited about the opportunities that lie before us.

The world of patents and intellectual property is vast and ever-evolving, and we see endless possibilities for how our solutions can transform the way organizations interact with this critical aspect of their business.

Our vision for the future extends beyond the tools we offer today.

We are committed to pushing the boundaries of what's possible in patent & research intelligence, developing more sophisticated AI-driven features that will provide deeper insights, faster analysis, and more strategic value to our clients.

Moreover, we recognize that the landscape of innovation itself is changing. With the rapid advancements in emerging fields like artificial intelligence, biotechnology, renewable energy, and quantum computing, the need for robust, actionable patent research has never been greater.



Our clients, ranging from early-stage startups to multinational corporations, are navigating this new frontier, and we are dedicated to being their trusted partner every step of the way.

We aim to provide them with the knowledge and tools they need to stay ahead of the curve and turn these innovations into competitive advantages.

Empowering Our Clients to Innovate and Thrive

At the heart of everything we do is our dedication to empowering our clients to innovate and thrive in a world that grows more complex and competitive by the day.

We understand that innovation is the lifeblood of progress—whether it's a groundbreaking new technology or an incremental improvement that makes a process more efficient.

By providing deep, data-driven insights into patent landscapes, we help organizations identify opportunities they may have otherwise missed, mitigate risks, and make informed decisions about where to invest their time, resources, and talent.



**At Incubig, we remain committed
to helping organizations not only
survive in a competitive world but
to thrive and lead it with
groundbreaking innovation.**

An abstract geometric pattern composed of thin, glowing blue lines that connect various points to form a series of overlapping triangles and polygons. The pattern is set against a dark blue background and appears to be a stylized representation of a network or a complex structure, possibly related to technology or innovation. The lines are more prominent in the lower right quadrant of the image.

Why Patent Research Matters?

In today's innovation-driven world, patent research is not just a tool for large corporations—it's essential for universities, startups, and even governments.

Each of these entities approaches innovation from different angles, but they all rely on a deep understanding of the patent landscape to fuel technological progress, protect intellectual assets, and maintain competitive advantages.

Whether it's identifying the next research frontier, preventing costly legal disputes, or driving national innovation agendas, patent research plays a crucial role in shaping the future.

In the fast-paced, innovation-driven landscape of modern business, staying ahead requires a deep understanding of the forces shaping the future.

Companies thrive or fall based on their ability to innovate, adapt, and protect their intellectual assets. At the heart of this effort lies patent research, a critical function that underpins innovation strategies for industries across the globe.

Far beyond its traditional association with legal protection, patent research is increasingly recognized as a vital source of competitive intelligence, driving strategic decisions, shaping R&D efforts, and fueling technological advancements.

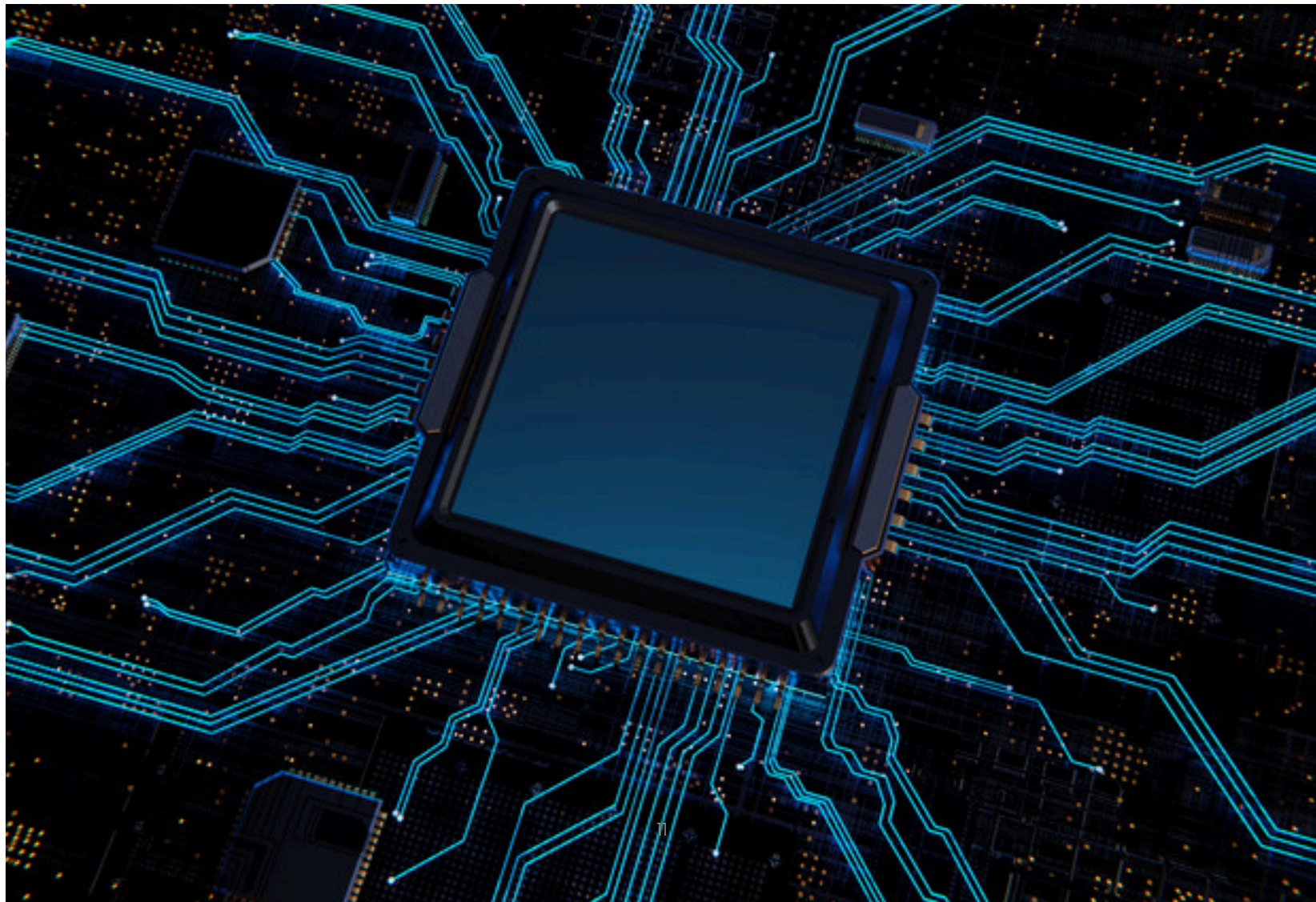
**In a world where innovation
defines success, patent
research is the key to
unlocking hidden
opportunities.**

**It helps protect
groundbreaking ideas, guides
strategic growth, and drives
impactful decisions—
empowering institutions to
shape the future of technology
and industry.**

Universities for Fueling Research and Collaboration.

Universities are hubs of knowledge creation, driving the advancement of science, technology, and innovation through research.

Patent research is essential for universities as it enables them to contribute to cutting-edge discoveries and avoid reinventing the wheel.





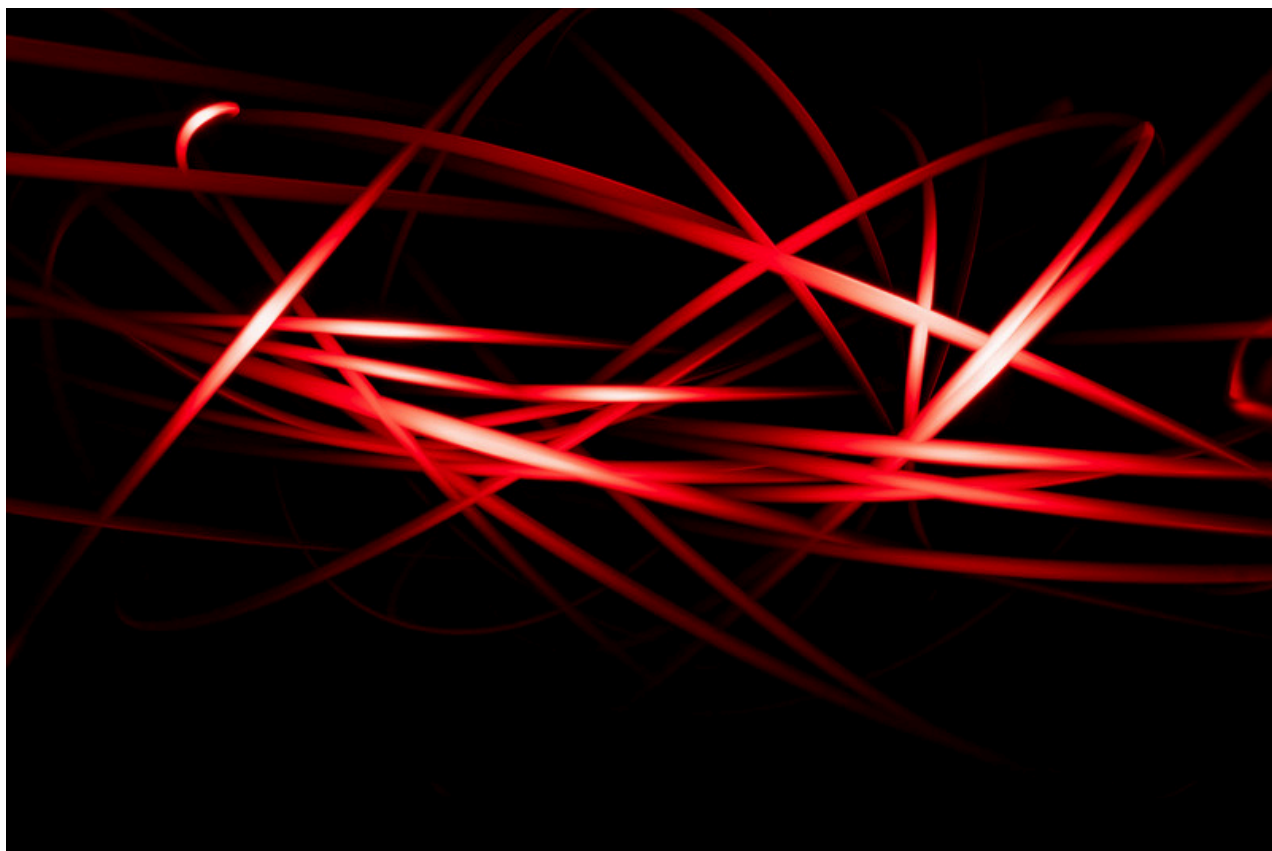
1 Driving Breakthroughs in Research

For universities, patent research serves as a guide to the latest advancements in various fields, helping researchers identify gaps in existing knowledge and focus on untapped areas of study.

By analyzing global patent databases, university research teams can understand the technological landscape in their areas of expertise, spotting trends and emerging fields that require further exploration. This ensures that academic research remains relevant and contributes meaningfully to global technological progress.

For example, a university research team working on quantum computing can study patents in the field to understand which aspects of quantum technologies have already been explored.

They can then pivot their research efforts toward less-explored areas such as quantum encryption or hardware optimization, ensuring that their contributions are novel and impactful.



2 Boosting Industry Collaboration

Universities increasingly collaborate with industry partners to translate academic research into commercialized products.

Patent research helps bridge the gap between academia and industry by identifying potential areas for collaboration. Universities can identify patented technologies that are ripe for further development, then partner with corporations or startups to commercialize these innovations.

By understanding the patent landscape, universities can also negotiate better licensing agreements, ensuring that their inventions are properly protected while generating revenue for future research.

In the competitive realm of research funding, patent portfolios can also boost a university's reputation, attracting industry partners and funding opportunities.



3 Protecting Intellectual Property and Avoiding Infringement

In the academic world, where knowledge sharing is key, the boundary between open research and intellectual property protection can be delicate.

Universities must be careful not to infringe on existing patents while developing new technologies or publishing their findings.

Patent research helps universities navigate these complexities, ensuring that their innovations do not overlap with patented work, thus avoiding potential legal battles.

It also allows them to secure patents for their discoveries, safeguarding intellectual property that could lead to commercialization.

Startups for continuous Innovation, Competitive & Strategic Growth

For startups, innovation is the lifeblood of success. Patent research is critical for protecting their unique ideas, avoiding legal pitfalls, and gaining a competitive edge in highly dynamic markets.

In an ecosystem where many startups fail due to lack of proper IP strategy, patent research becomes a game-changer.





1 Fueling Innovation and Product Development

Patent research enables startups to identify "white spaces"—areas of innovation that have not yet been fully explored or patented.

By uncovering these gaps, startups can focus their R&D efforts on developing novel products that offer unique solutions, positioning themselves ahead of competitors in the marketplace. This approach also accelerates product development by ensuring resources are not wasted on reinventing existing technologies, allowing startups to bring innovative products to market faster.

For example, a startup in the biotech space could use patent research to discover unexplored areas in gene editing technologies.

With this insight, they can develop a product that addresses specific unmet needs in the market, giving them a head start in a rapidly growing field.



2 Monitoring Competition and Market Trends

Patent filings are a treasure trove of competitive intelligence. By tracking the patents being filed by competitors, startups can gain insight into their product pipelines, R&D focus areas, and strategic directions.

This allows startups to anticipate competitive moves, adjust their own product strategies accordingly, and identify emerging trends in the industry. Monitoring patent activity also reveals which technologies are gaining momentum, providing startups with critical information to stay ahead of the curve.

For instance, if a startup in the fintech sector observes a surge in patents related to blockchain and decentralized finance (DeFi) from competitors, it can strategically position itself to innovate in adjacent areas or develop complementary solutions to maintain relevance and capture market share.



3 Securing a Competitive Edge with a Strong Patent Portfolio

A well-crafted patent portfolio acts as a powerful shield for startups, protecting their innovations from being copied by competitors.

Securing patents for key technologies not only fortifies their market position but also enhances investor confidence. Investors are more likely to fund startups with a clear intellectual property strategy, as a strong patent portfolio indicates a reduced risk of IP-related disputes and a commitment to innovation.

For example, consider a startup in the electric vehicle (EV) sector that develops a novel battery technology with improved energy density and faster charging times.

By securing patents on this technology, the startup not only safeguards its innovation from potential infringement but also signals to investors that it has a defensible market position.

As a result, the startup attracts interest from venture capitalists and strategic partners, ultimately leading to opportunities for collaboration with established automotive manufacturers looking to enhance their EV offerings.

Corporations for Maintaining Market Leadership and Driving R&D Efficiency

For established corporations, patent research plays a pivotal role in maintaining market leadership, driving innovation, and maximizing returns on R&D investments.

In highly competitive industries, where innovation cycles are short and new technologies emerge rapidly, patent research ensures corporations remain at the cutting edge of their fields.





1 Staying Ahead of Competitors

In industries such as technology, pharmaceuticals, and manufacturing, corporations constantly innovate to stay ahead of competitors. Patent research provides corporations with valuable insights into the R&D activities of their rivals, enabling them to anticipate market trends and outpace competitors.

By tracking competitors' patent filings, corporations can gauge where the industry is heading and adjust their strategies accordingly.

For example, a leading pharmaceutical company might use patent research to identify emerging drug candidates being developed by competitors.

Armed with this information, the company can accelerate its own drug development efforts or pursue licensing agreements for promising compounds. This proactive approach ensures that the corporation remains a leader in its industry.



2 Enhancing R&D Efficiency and Avoiding Redundancies

Corporations invest heavily in R&D, but without a clear understanding of the existing patent landscape, they risk duplicating efforts already covered by existing patents.

Patent research enables R&D teams to identify unexplored areas of innovation, ensuring that their efforts are focused on creating truly novel products.

By leveraging global patent databases, corporations can also foster collaboration between their R&D teams and external partners.

For example, a multinational technology company can use patent research to identify research areas where collaborations with universities or startups would be beneficial, enhancing innovation while reducing time-to-market for new products.



3 Monetizing IP Through Licensing

For large corporations, patent portfolios are not just about protection—they are valuable assets that can generate revenue through licensing agreements.

Patent research helps corporations identify potential licensees for their technologies, creating new revenue streams without the need for direct commercialization.

This strategy is particularly effective in industries like telecommunications, where companies like Qualcomm have generated billions through the licensing of their patented technologies.

Governments for Driving National Innovation and Economic Growth

Governments play a critical role in shaping national innovation agendas, fostering technological progress, and ensuring economic competitiveness.

Patent research is a strategic tool for governments, helping them monitor technological advancements, guide policy decisions, and support innovation ecosystems.





1 Shaping National Innovation Strategies

Governments need a clear understanding of global patent trends to shape national innovation policies.

By analyzing patent data, governments can identify the key technologies driving economic growth and invest in areas that will enhance national competitiveness.

For example, a government aiming to become a leader in green energy might use patent research to identify emerging innovations in renewable energy technologies, guiding public investment in R&D and infrastructure.



2 Protecting National Interests in Global Trade

In an era of globalized trade, protecting national interests in key industries is a top priority.

Patent research allows governments to monitor the patenting activities of foreign companies and governments, ensuring that domestic industries are not left behind in key technological areas.

For instance, by studying patent trends in semiconductors, a government can assess its country's position in the global supply chain and take steps to bolster domestic production capacity.



3 Supporting SMEs and Academic Institutions

Governments also play a role in supporting startups, SMEs, and academic institutions through patent research.

By providing access to global patent databases and resources, governments can empower smaller entities to protect their innovations, avoid IP disputes, and drive national economic growth.

Government programs that offer patent research support and funding for IP protection are particularly valuable for startups and universities looking to commercialize their innovations.



4 Guiding Policy and Regulatory Frameworks

Patent research helps governments create policies that promote innovation while protecting intellectual property rights.

By understanding global patent trends, governments can develop regulatory frameworks that strike a balance between encouraging technological advancements and safeguarding public interests.

In the realm of healthcare, for instance, patent research can inform policies that ensure access to life-saving medicines while promoting pharmaceutical innovation.




The Global Impact of Patent Research on Innovation is immense.

Patent research is a critical tool for every entity engaged in the innovation ecosystem—universities, startups, corporations, and governments alike.

Each of these entities relies on patent insights to protect their intellectual property, foster technological advancements, and maintain a competitive edge in their respective fields.

Whether it's shaping national policy, driving corporate R&D, protecting startup innovation, or advancing academic research, patent research is the linchpin that connects creativity to commercialization and strategy to success. In a world where innovation is the key to solving global challenges and driving economic growth, the importance of patent research cannot be overstated.

It is the essential foundation upon which the future of technology and progress is built.



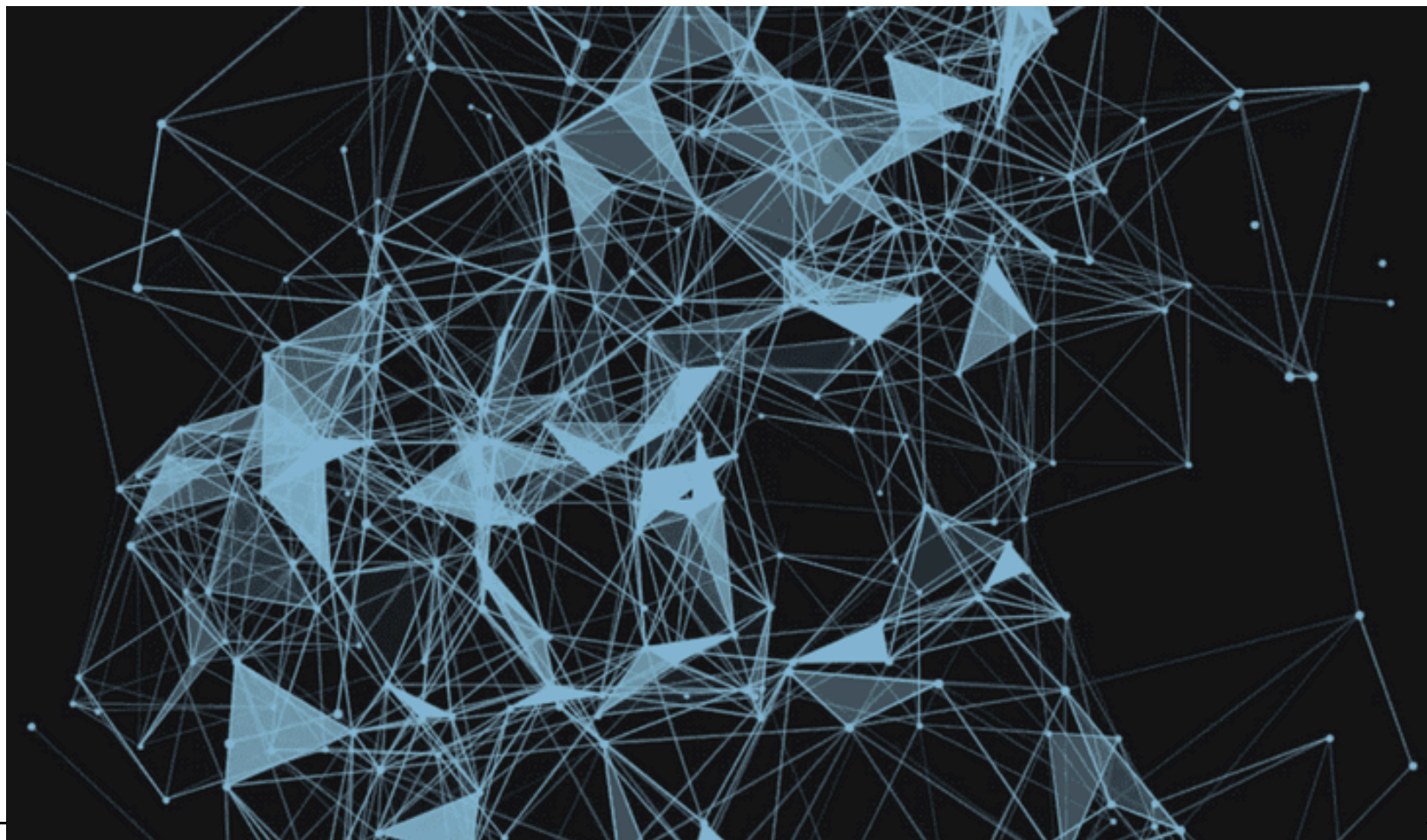
**Incubig AI
Introduces
DO YOUR
RESEARCH (DYR)
to Drive Innovation
through Advanced
Research
Intelligence.**

Do Your Research (DYR) is Incubig's Key to Unlocking Global Research intelligence.

Do Your Research (DYR) is Incubig's premier product, designed to equip businesses, universities, startups, and governments with exceptional intelligence.

Providing in-depth, data-driven insights, DYR revolutionizes the way individuals and organizations tackle research, innovation, and competitive analysis.

Powered by advanced AI and featuring easy access with a simple search interface, the platform empowers users to identify emerging technologies, monitor competitive dynamics, and uncover crucial trends, positioning them at the leading edge of industry advancements.



At its core, DYR is more than just a research tool.

At its core, DYR is more than just a research tool—it's a catalyst for transformation.

With real-time intelligence, users can explore new markets, discover emerging technologies, identify key players in specific fields, and even predict where future innovations will arise.

DYR empowers innovation by providing organizations with the tools to uncover key technological trends, discover competitive shifts, and make informed decisions that shape the future of their industries.

The platform offers a seamless, AI-powered experience that accelerates research, giving businesses, universities, and startups the ability to stay ahead of the curve.

Incubig AI

Unlock



Do Your Research

Unlock the Power of Research Intelligence.

Use DYR to discover organisations, technologies, and innovators shaping the future.

Facebook, Inc



Transform Your Research: Global Insights at Your Fingertips, Accelerate Innovation, Optimize Decision-Making.



200000

Players



300000

Technologies



400000

Innovators

Transform Your research with DYR

Insightful Trends and Intelligence

Track emerging technologies and research trends to identify growth opportunities for universities, startups, and corporations, while enabling governments to develop data-driven policies.

Competitive Analysis

Compare research impact and innovation efforts across institutions and industries, helping startups refine their models, corporations assess their positions, and governments enhance policy-making

Forecasting important decisions

Utilize predictive insights to align future research directions, inform investment choices, and anticipate industry shifts, empowering all users to make effective decisions.

Use DYR to Discover Organizations Shaping the Future

One of the most powerful features of Do Your Research (DYR) is its ability to help users uncover and analyze key organizations driving innovation globally.

Whether you're a startup looking to partner with established industry leaders, a corporation seeking to invest in emerging players, or an academic institution wanting to collaborate with top innovators, DYR provides the insights needed to identify the right organizations at the right time.



Organization

Sz dji technology co., ltd.

Baidu online network technology (beijing) co., ltd.

Autel robotics co., ltd.

Sz dji technology co., ltd

Hangzhou zero zero technology co., ltd.

DYR scans key data points from millions of patents, research papers, and technical documents

DYR scans key data points from millions of patents, research papers, and technical documents to highlight companies, universities, and research institutions leading the charge in specific technologies.

By pinpointing who’s filing the most patents or conducting groundbreaking research, you can identify potential collaborators, competitors, or investment opportunities.

Biohealthcore inc.

South Korea

Industry Focus

Sports
Mensuration

Technologies Developed

1

Top Inventor

Hyo taek lee

Robert bosch gmbh

Germany

Industry Focus

Vehicles
Computational Technology

Technologies Developed

7441

Top Inventor

Stefan nordbruch

Apple inc.

USA

Industry Focus

Computational Technology
Communication Technique

Technologies Developed

6378

Top Inventor

Dawei zhang

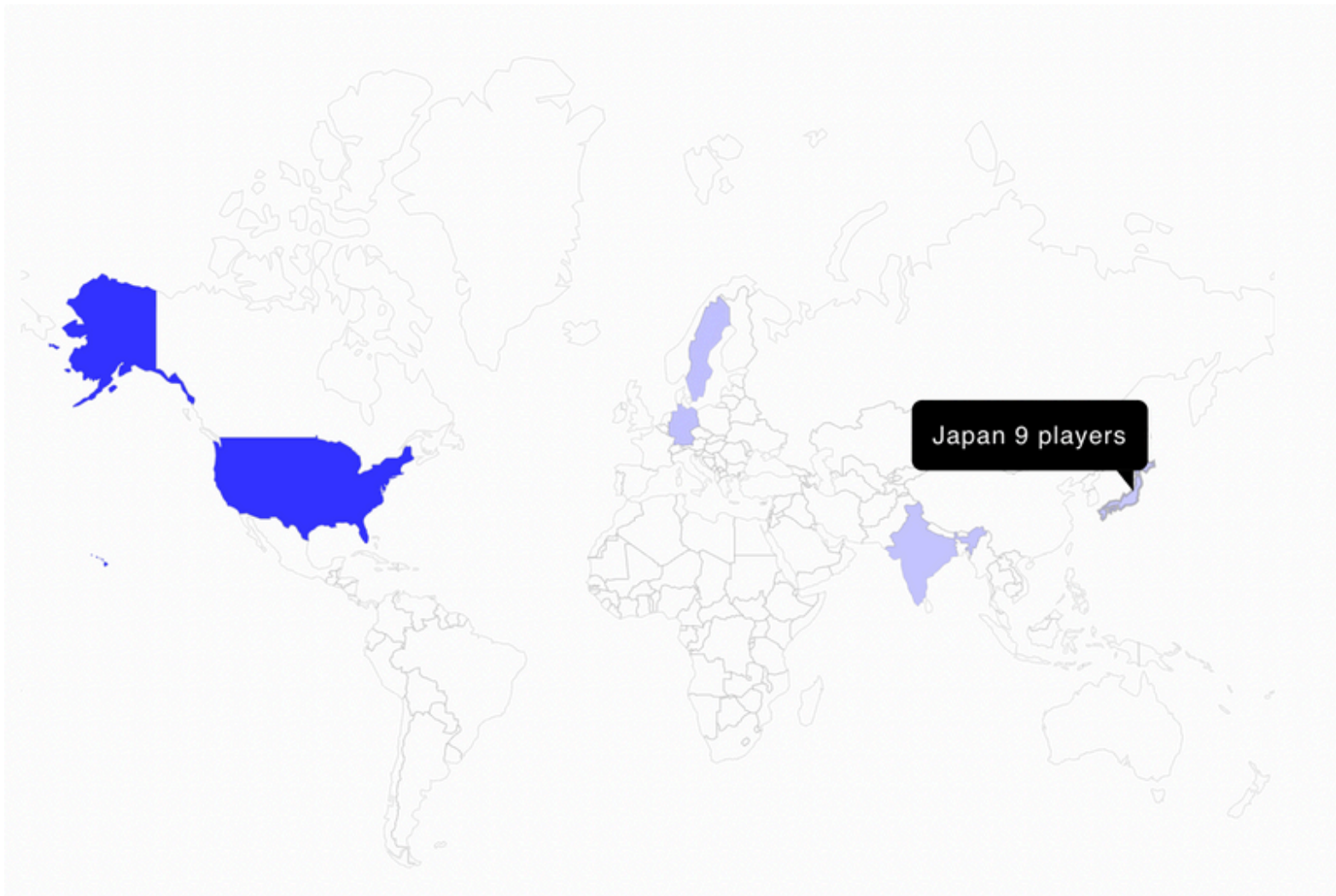
Track New Entrants and Startups

Track new Entrants and Startups Stay ahead of the competition by identifying new players entering your market.

DYR's market intelligence enables you to track startups making waves in emerging technologies, giving you a first-mover advantage for partnerships, acquisitions, or investments.

Top active organisations (India)

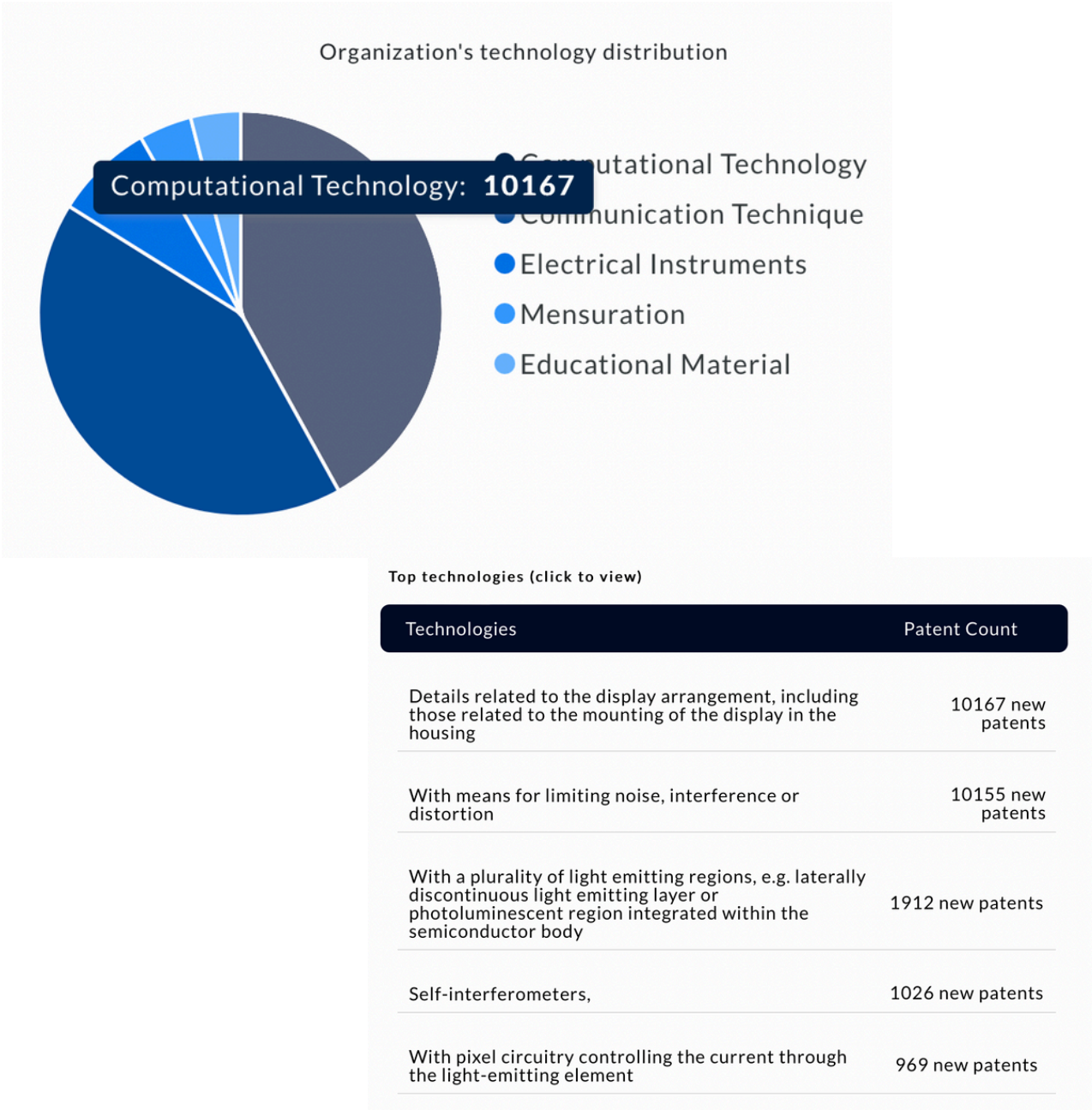
Organization	Recent Patents
Tata consultancy services limited	2
Chandigarh university	1
Dimension nxg private lilimited	1
Dimension nxg private limited	1
Rn chidakashi technologies private limited	1



Get Global Access

DYR's global data sources allow you to explore organizations across geographies, whether you're interested in technology hotspots in Silicon Valley or untapped innovation clusters in Asia or Europe.

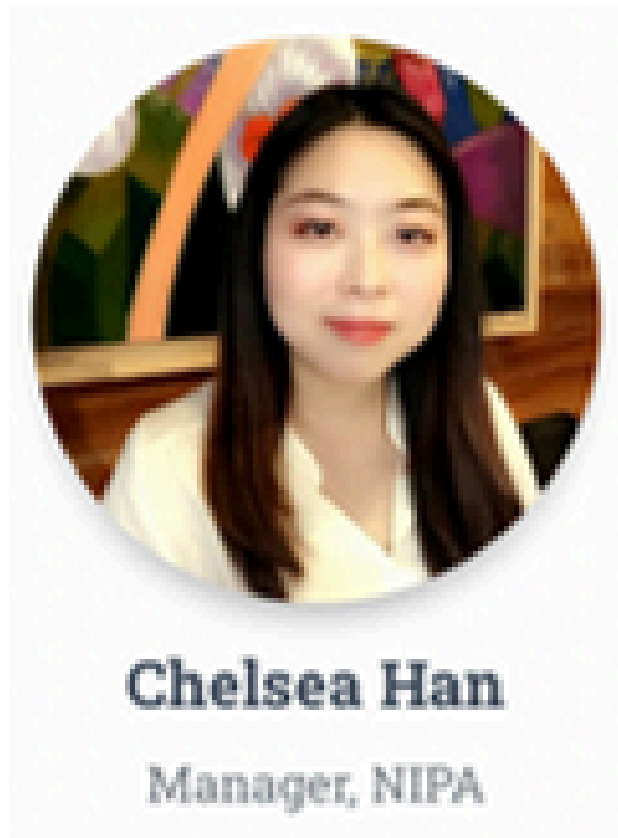
You'll gain insights into key players regardless of their location, helping you connect with organizations shaping innovation worldwide.



Assess Technology Strengths

By analyzing patent portfolios and research outputs, DYR helps you understand an organization's technology strengths.

Whether you're assessing competitors or looking for R&D partners, DYR gives you a clear view of who's excelling in areas that align with your strategic goals.



Incubig's solution & platform is needed in
South Korea.

One of the most impactful company, signed
MoUs and joint venture agreements with
leading corporations.

Gain Deep Intelligence on Emerging and Evolving Technologies

Staying informed about the latest advancements in technology is critical for organizations looking to innovate and maintain a competitive edge.

With Do Your Research (DYR), you can access cutting-edge insights into the technologies shaping the future.

Whether you're in R&D, strategy, or business development, DYR provides powerful intelligence to help you navigate the fast-paced world of technological innovation.

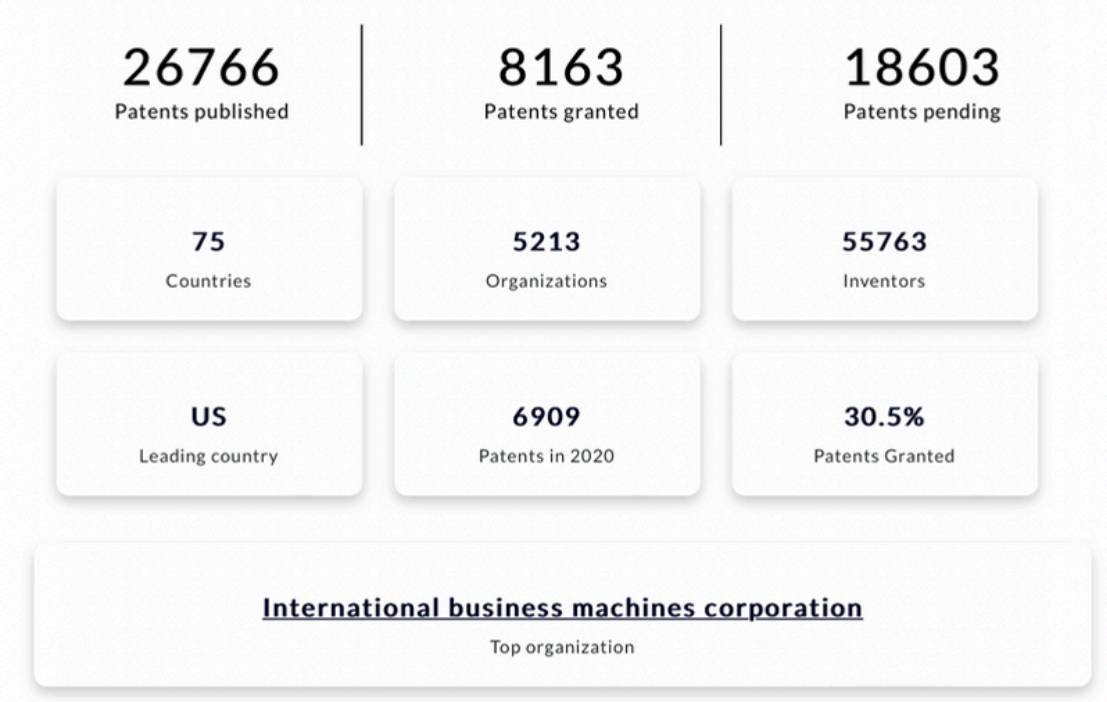


Track Emerging and High-Growth Technologies in Real-Time

DYR helps you monitor the development of emerging technologies as they unfold, giving you real-time insights into fields like AI, biotechnology, and quantum computing.

By analyzing patents, research papers, and global R&D efforts, DYR identifies high-growth areas where innovation is accelerating, helping you stay ahead of the competition and make strategic investments.

Name	Industry	Inventor	Patents
Machine Learning	Computing	Charles Howard Cella	26766
Automatic pilot	Aviation	Donald R. High	12889
Fuel cells	Electric Elements	Joachim F. OPPELT	14
Biological computer models	Computing	Jeffrey P. McGuckin	959
Cardiovascular drugs	Medical Science	Dorian Bevec	4092



Accelerate R&D and Drive Technology Development:

DYR enables organizations to streamline their research and development processes.

By providing an overview of the latest technological breakthroughs and advancements, DYR helps you focus on the most promising technologies, reducing time-to-market and boosting the efficiency of your innovation efforts.

Whether you're developing new products or enhancing existing technologies, DYR offers actionable data to accelerate technology development.

Control of position, course or altitude of land, water, air, or space vehicles, e.g. automatic pilot [Update](#)

12889 patents filed | 52 countries working | 2386 active organizations

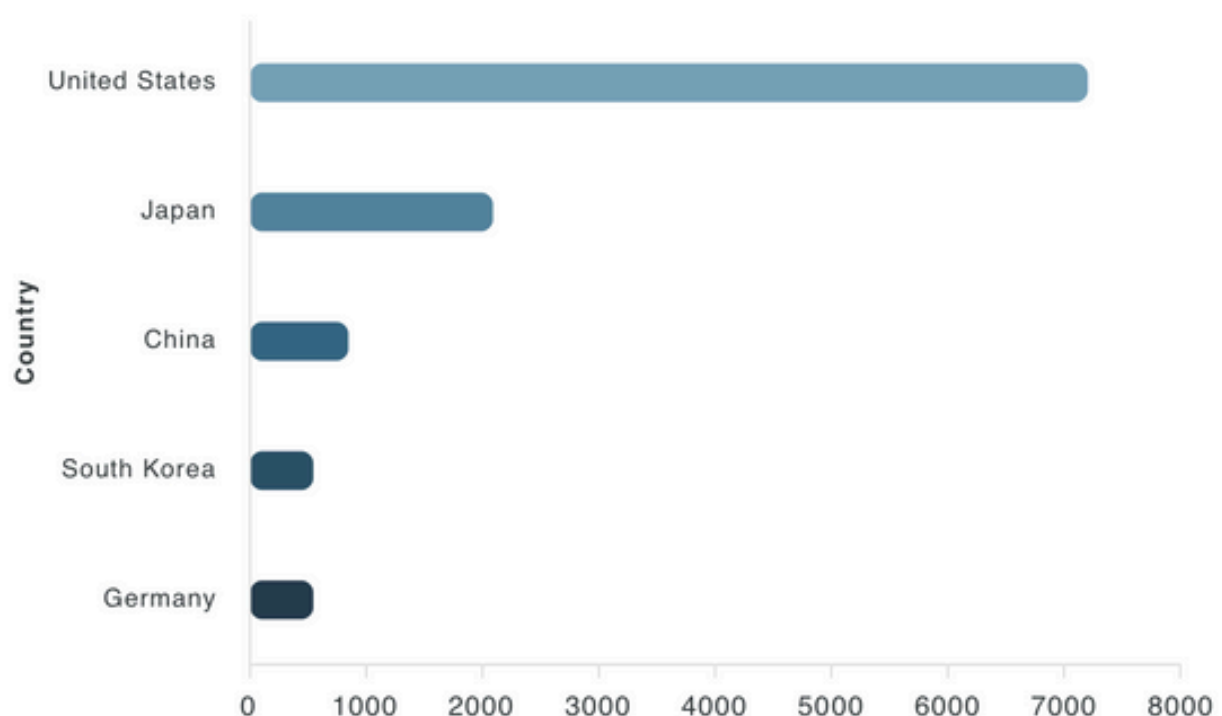
[Overview](#)[Dataset](#)[Trends](#)[Global](#)

Technology Monitoring | Global

View global activity

Leading global research hubs include **US**, followed by **JP** and **CN**. Noteworthy patent filers like **Toyota jidosha kabushiki kaisha** drive innovation worldwide.

- **US** is leading the research followed by **JP** and **CN**.
- **Toyota jidosha kabushiki kaisha** is the top patent filer, with **592**.



Access Key Technology Trends and Breakthroughs

DYR gives you instant access to the latest technology trends, tracking growth in emerging fields and uncovering key players driving innovation.

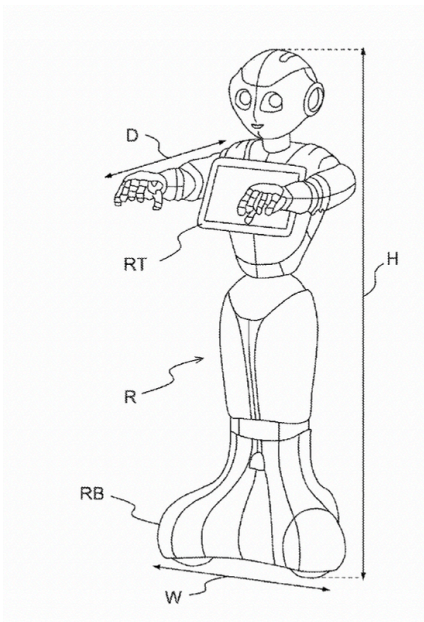
It helps you stay ahead by highlighting recent technological inventions and breakthroughs, enabling smarter R&D, investment, and strategic decisions.

With DYR, you can pinpoint high-growth areas and make informed moves in today's fast-evolving tech landscape.

75
Countries

5213
Organizations

55763
Inventors



Electric vehicle (ev) fast recharge station and system

The noco company | Vehicles | 2020 | US

An electric vehicle (EV) charging station for fast charging (e.g. 5 to 15 minutes) an electric vehicle (EV). The EV charging station can be configured to charge multiple EVs and mu...

Electric vehicle (ev) charging station management

Honda motor co., ltd. | Vehicles | 2020 | JP

According to one aspect, a system for electric vehicle (EV) charging station management may perform receiving an indication of an EV of a user initiating charging at an EV charging...



Naresh Soni

Chief Executive Officer @ DeepMatrix

DYR has been a valuable resource for us at DeepMatrix. It provided clear insights into emerging technologies and patents, helping us stay ahead in Big Data analytics, GIS, and drones.

The platform made our research easier and supported our growth strategy. I highly recommend DYR for any startup focused on innovation.

DYR helps in. Navigating and utilizing research data with ease

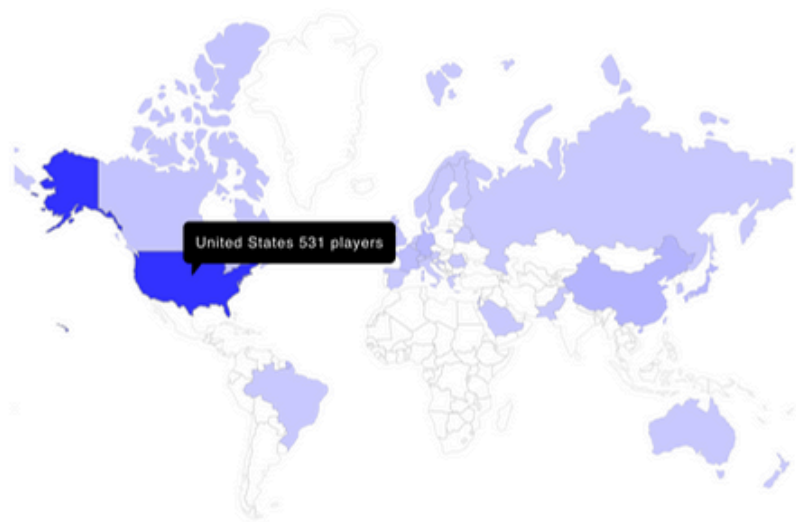
Do Your Research (DYR) offers seamless access to essential research data, converting it into clear and actionable insights.

Powered by advanced AI, DYR enables users to explore billions of data points from patents, research papers, and technical documents, facilitating the discovery of emerging technologies and monitoring the innovations that are defining the future.

With DYR, you can effortlessly navigate the landscape of research data to identify top innovators, their groundbreaking inventions, and the trends shaping your industry



In 2020, Arctop ltd filed a patent on Method and system for providing a brain computer interface.



Recent Innovations

<p>Advanced robotics for manufacturing automation</p> <p>Future tech co. Manufacturing 2022 Germany</p>	<p>Smart wearable health monitor</p> <p>Healthtech innovations Healthcare 2024 Canada</p>	<p>Next-generation battery technology</p> <p>Energy solutions inc. Energy storage 2023 Australia</p>
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Effortless Access to Research Data

DYR provides seamless access to billions of data points from patents, research papers, and technical documents, allowing users to uncover emerging technologies and track critical innovations.

Identify Top Innovators

With DYR, users can easily access key patents, such as Arctop Ltd.'s 2020 filing for a brain-computer interface, and discover other innovators in similar fields, gaining insights into their technological impact and research trajectories.

Build Your Strategy

By simplifying the navigation of research data, DYR empowers universities, startups, corporations, and governments to identify innovations, seize strategic opportunities, and remain competitive in a rapidly evolving tech landscape.

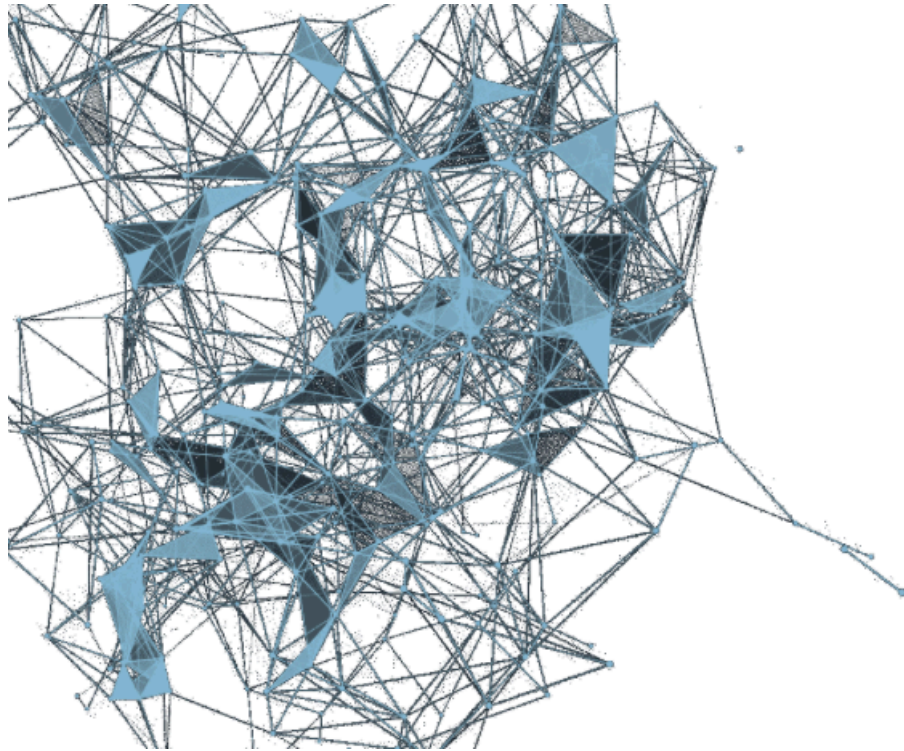


Alfonso Iñiguez,
Founder, Swarm Technology

I truly believe that Incubig provides a valuable and much needed service. To my company, and perhaps other companies in my situation.



**Academics, industry
leaders, business
consultants, and
strategists rely on
DYR for valuable
insights into
industries,
technologies, and
global players.**



Personalised DYR Experience

One of Incubig's Technologies greatest strengths is its ability to adapt its, data, insights, intelligence & tools to access them adapt to the unique needs of various clients.

Whether you're a startup looking to innovate, a university conducting cutting-edge research, or a corporation seeking a competitive advantage, Incubig's suite of products delivers tailored intelligence to help you achieve your goals.

FORUM

1 Universities: Empowering Academic Research

Universities play a pivotal role in global innovation by advancing research and developing new technologies.

However, navigating the world of patents and research trends can be daunting for academic institutions.

Incubig's products provide a solution that empowers universities to focus their efforts on impactful research, fostering collaboration with industry and maximizing the commercial potential of their discoveries.

Q: What are the latest trends and leaders in Biological Computer Models?

DYR:

In 2019, research in Biological Computer Models surged globally, with 27 countries actively innovating in this field.

The United States emerged as the leader in research activities, followed closely by Japan.

Notably, Strong Force IOT Portfolio 2016, LLC filed 84 patents recently, underscoring the active development within this sector.

Technology data stats

959
Patents published

374
Patents granted

585
Patents pending

27
Countries

409
Organizations

2403
Inventors

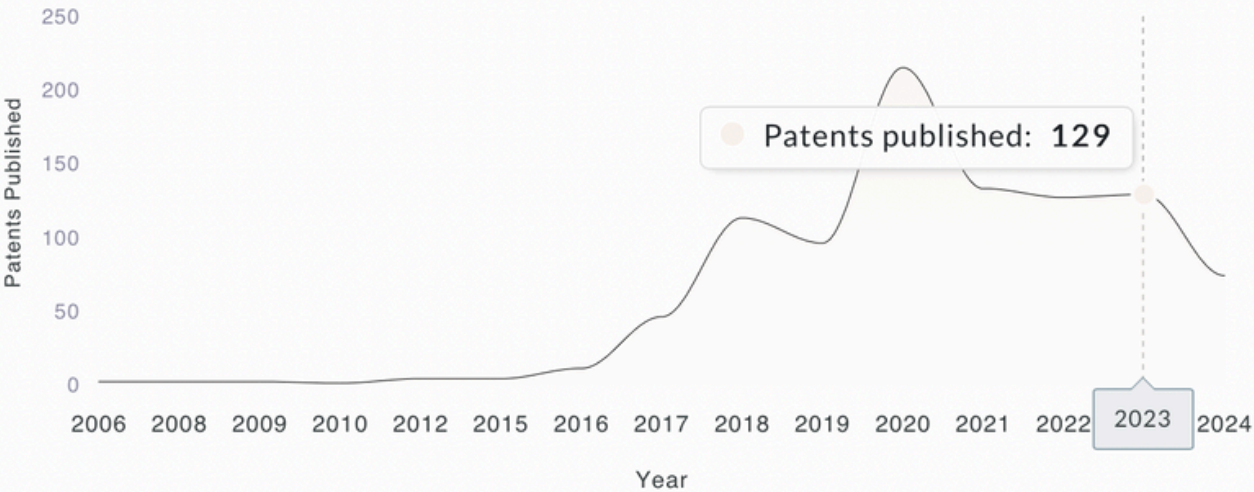
US
Leading country

211
Patents in 2019

39.1%
Patents Granted

Strong force iot portfolio 2016, llc
Top organization

YoY patent publishing trends



Global activity under the technology

27
Countries

409
Organizations

2403
Inventors

In 2019, there was a significant surge in research activity in the field of Biological Computer Models, with 211 patents filed globally.

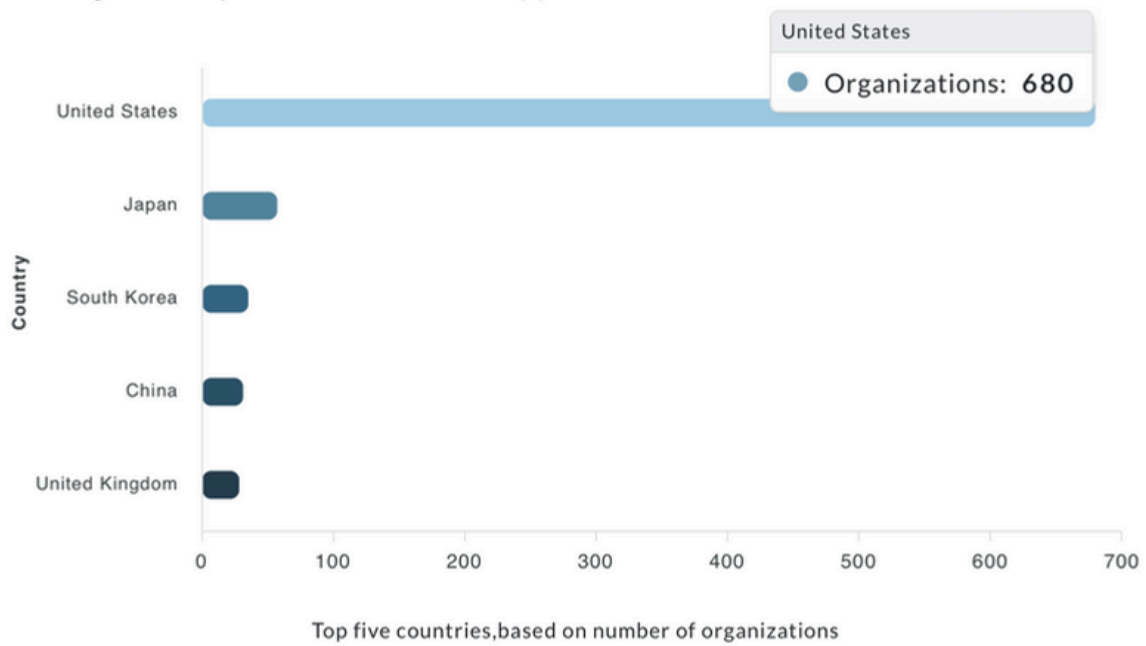
Of these applications, 39.1% were granted, marking a productive year for innovation in this domain.

The high number of filings in recent years reflects growing interest and advancements in integrating biological principles with computational models.

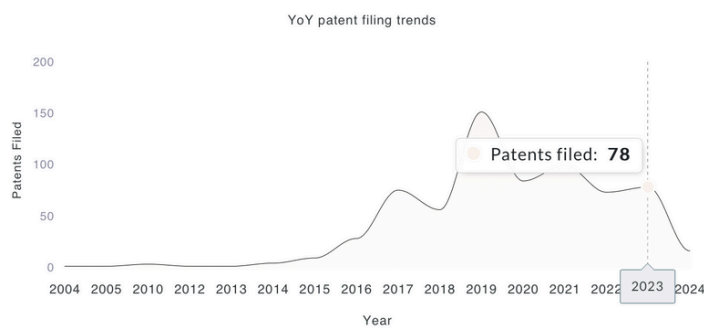
Q: Who is leading the global research in Biological Computer Models?

DYR:

The United States is currently leading global research in Biological Computer Models, followed closely by Japan and South Korea as major research hubs



A total of 680 patents have been filed from the United States, with Armonk leading as the top city for patent filings, followed closely by Santa Monica.



Top Locations

Armonk

77 patents

Santa monica

65 patents

Mountain view

46 patents

Redmond

34 patents

San francisco

34 patents

Q: What are the latest technologies being developed in the field of Biological Computer Models?

DYR:

In recent years, cutting-edge technologies in Biological Computer Models have seen a surge in innovation. Advancements in AI-driven simulations of biological processes, bio-inspired computing systems, and synthetic biology integration are gaining traction

Click to read patents

All countries

Social robot with environmental control feature

Warner bros. entertainment inc. | Industrial | 2024 | US

A method and apparatus for controlling a social robot includes operating an electronic output device based on social interactions between the social robot and a user. The social ro...

Wearable electronic device and system for tracking location and identifying chan...

Careband inc. | Medical science | 2024 | US

A wearable electronic device, a system and methods of monitoring with a wearable electronic device. The device includes a hybrid wireless communication module with wireless communi...

Architectures, systems and methods for generating audible content

Milestone entertainment, llc | Computational technology | 2024 | US

Systems and methods are provided for training an artificial intelligence system and generating audible content for output. The method utilizing a system including at least an appli...

1

2

3

4



Dheeraj Kumar

Dy. Director, IIT (ISM) Dhanbad, Director, TEXMiN Foundation

Do Your Research (DYR) has significantly enhanced our research capabilities at IIT (ISM) Dhanbad, TEXMIN.

Ease of access to invaluable insights, enabling us to identify emerging technologies and strengthen our collaborations effectively.

2 **Startups: Accelerating Innovation and Reducing Risks**

For startups, especially those in tech-driven industries, innovation is critical to survival and growth.

However, building cutting-edge products comes with risks, particularly in terms of intellectual property and competition.

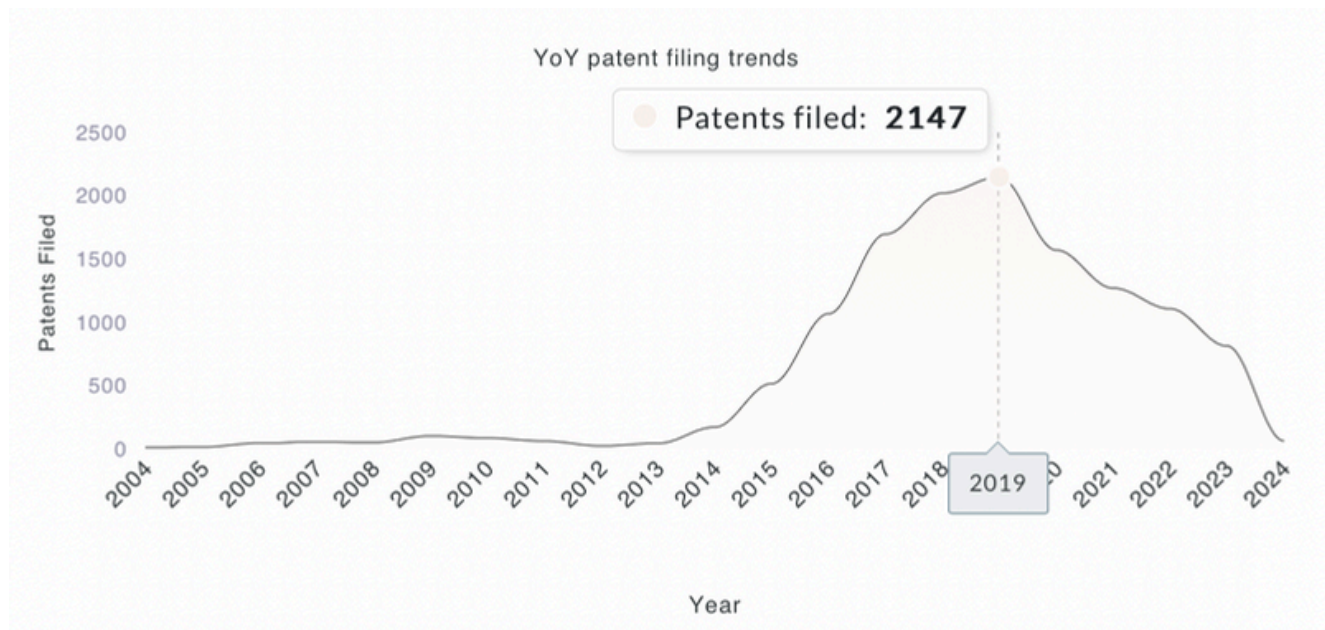
Incubig's products help startups navigate these challenges by providing insights into emerging technologies, competitive landscapes, and patent risks.

Q: Is my technology worth pursuing?

DYR:

According to recent data from 2019, 2147 patents were filed in the automatic pilot industry, indicating high research and innovation activity.

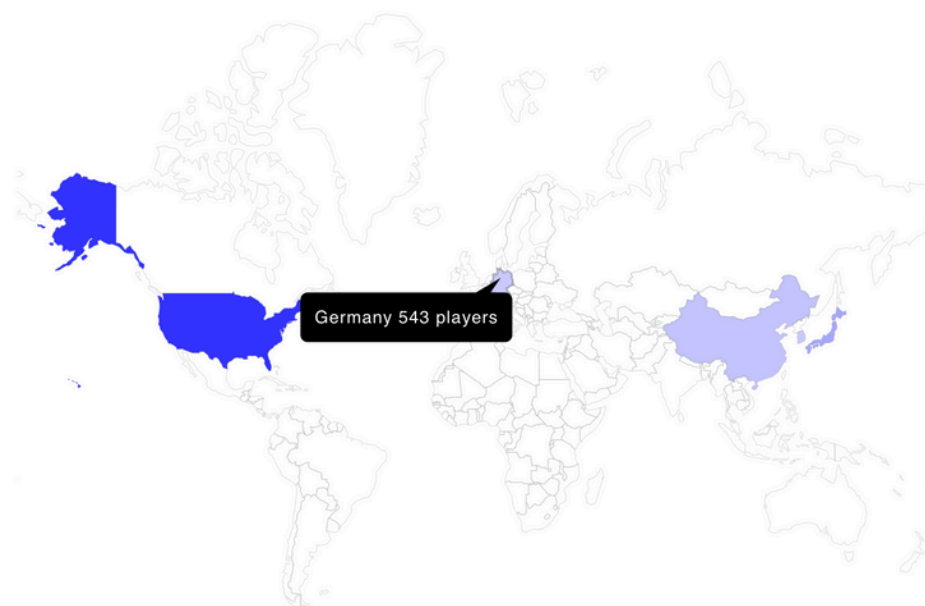
Of these, 49.8% were granted, which suggests that a significant portion of the filed patents are seen as viable and novel.



This level of patent activity highlights the continued relevance and growth potential of the technology.

The US leads global research in this field, followed closely by Japan and China.

Click country to see activity



Q: What is Germany doing in my technological area?

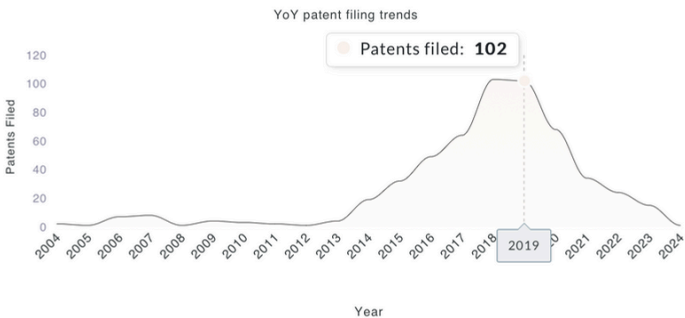
DYR:

Germany is playing a significant role in the automatic pilot industry with 128 organizations contributing to innovation.

The country has an impressive 1401 inventors actively filing patents. Research activity peaked in 2018, a standout year for German innovation in this field.

This demonstrates Germany's strong presence, and major companies like Robert Bosch GmbH are leading the charge.

A total of 544 patents have been filed from Germany, with Stuttgart leading as the top city for patent filings, followed closely by Wolfsburg.



Top Locations

Stuttgart

173 patents

Wolfsburg

54 patents

Muenchen

40 patents

Ingolstadt

23 patents

Bietigheim-bissingen

15 patents

Top active organisations (Germany)

Organization	Recent Patents
Robert bosch gmbh	153
Volkswagen aktiengesellschaft	40
Bayerische motoren werke aktiengesellschaft	33
Audi ag	26
Valeo schalter und sensoren gmbh	15

Q: What is Valeo Schalter und Sensoren GmbH doing in this space?

DYR:

Valeo Schalter und Sensoren GmbH, based in Germany, is a specialized company primarily focused on technologies for land vehicles.

They are an expert in the field of Mensuration, having filed a total of 360 patents, with 156 patents specifically related to this area.

The year 2018 marked a peak in their research activity, highlighting their commitment to innovation in automotive technologies.

Valeo schalter und sensoren gmbh Update

Mensuration | Vehicles | Computational Technology | Physics: Control Aparatus | Signalling

📍 Bietigheim-bissingen, DE

Overview

[Dataset](#)[Trends](#)[Technologies](#)[Company Page | Overview](#)

About Company

Valeo schalter und sensoren gmbh is a company from DE, primarily working on 'Of land vehicles'. It is part of Mensuration, where company has filed 156 patents. Total patents filed by company are 360.

Key Points

- **Valeo schalter und sensoren gmbh** is a pure play company (niche focussed).
- **2018** year observed a high research activity.

Company Overview

360

Patents

396

Inventors

17

Industries

203

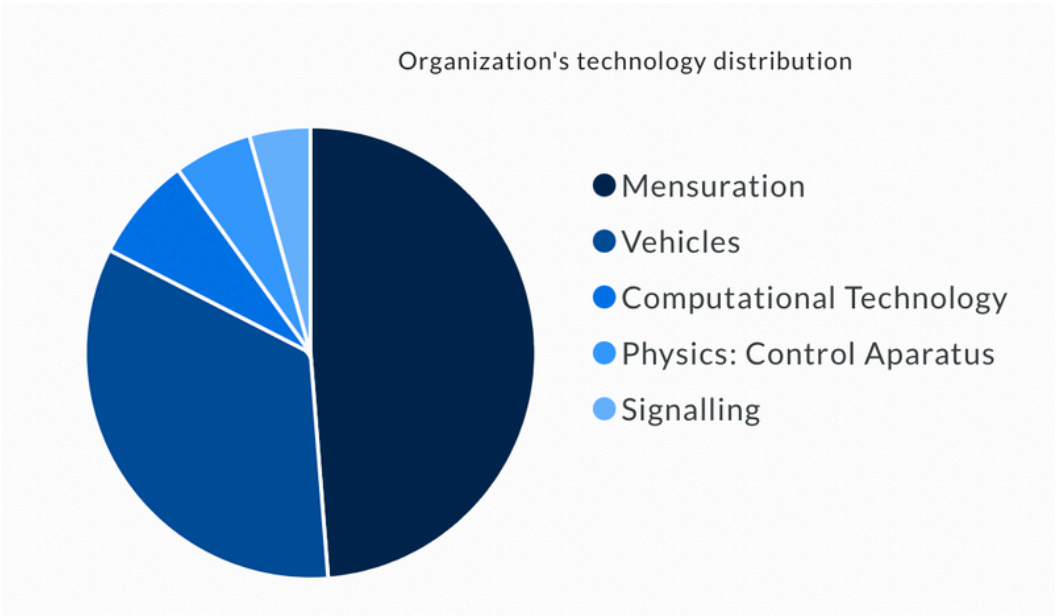
Technologies

2018

Active Year

**Thomas
schuler**

Top inventor



Valeo Schalter und Sensoren GmbH is primarily focused on research related to land vehicles, with additional efforts in developing systems for the automatic or assisted adjustment of the relative position of charging devices and vehicles.

Top technologies (click to view)

Technologies	Patent Count
Of land vehicles	156 new patents
Means for automatic or assisted adjustment of the relative position of charging devices and vehicles	108 new patents
Recognising traffic signs	24 new patents
For transition from automatic pilot to manual pilot and vice versa	18 new patents
Where the received information does not generate an automatic action on the vehicle control	14 new patents

Q:What are some of the recent inventions published in my field?

DYR:

Recent inventions in the automatic pilot industry include innovative technologies aimed at enhancing vehicle automation and safety.

For example, Waymo LLC is primarily focusing on advancements in means for monitoring or calibrating vehicle systems, as well as developing solutions for taking automatic action to avoid collisions, such as braking and steering mechanisms.

Click to read patents

All countries

Emergency signaling in autonomous trucking systems

Waymo llc | Physics: control aparatus | 2024 | US

Aspects and implementations of the present disclosure relate to performance and safety improvements for autonomous trucking systems, such as reactive suspensions for maximizing aer...

Backup navigation system for unmanned aerial vehicles

Wing aviation llc | Physics: control aparatus | 2024 | US

Described is a method that involves operating an unmanned aerial vehicle (UAV) to begin a flight, where the UAV relies on a navigation system to navigate to a destination. During t...

System and method for aerial traffic management of unmanned aerial vehicles

Flytrex aviation ltd. | Physics: control aparatus | 2024 | IL

A system and method for aerial traffic management of unmanned aerial vehicles (UAVs) are provided. The method includes receiving at least a navigation request from a first UAV of a...



Kalash Nibjiya

CTO & Co-Founder, Bidaal Tech

"Incubig played a key role in helping us file and secure valuable patents at Bidaal Tech.

Their insights guided our product development strategy, ensuring our innovations were protected and aligned with our goals.

3 Governments: Shaping Policy and Fostering Innovation

Governments play a crucial role in shaping the policies that drive technological advancements and economic growth.

By leveraging patent research tools, governments can identify emerging trends, assess national and global research activity, and craft informed policies to support innovation.

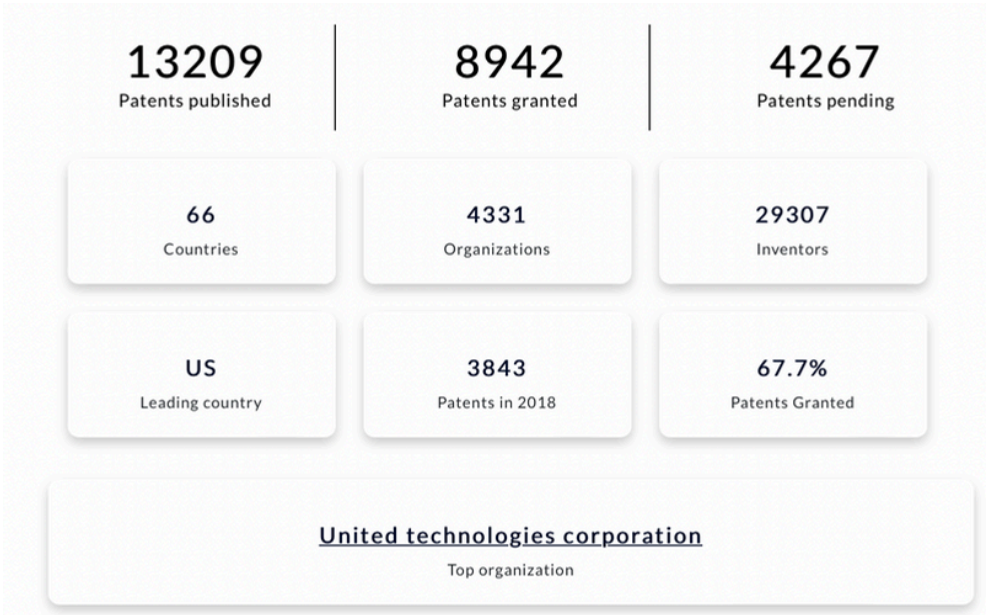
Incubig's products help governments make data-driven decisions, ensuring they stay ahead in fostering innovation ecosystems, protecting intellectual property, and driving technological competitiveness.

Q: How is our country performing in climate change mitigation and adaptation technologies compared to global leaders

DYR:

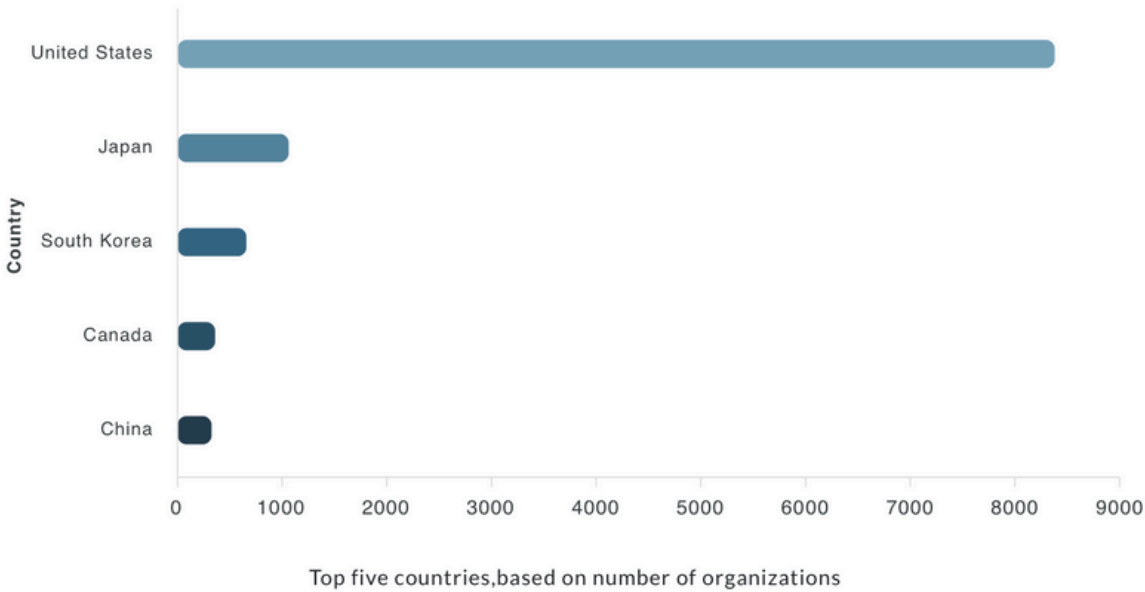
In 2018, research in climate change mitigation and adaptation technologies surged globally, with 66 countries actively innovating.

The U.S. leads the research, followed by Japan. One of the key players, United Technologies Corporation, filed 251 patents in recent years, showcasing its commitment to clean energy solutions.



The U.S. leads in research activity, with Japan and South Korea closely behind.

United Technologies Corporation stands out as the leading patent filer, with 251 patents.



Q: Which organizations and institutions are leading research in climate change mitigation and adaptation technologies in India?

DYR:

India has seen growing research activity in climate change mitigation and adaptation technologies. 35 organizations are actively involved, with 450 inventors contributing to this field.

The year 2018 marked the peak of research activity, with 31.7% of the patents being granted.

Shoolini University stands out as the top organization leading this innovation effort in India.



Top active organisations (India)

Organization	Recent Patents
Shoolini university	3
Council of scientific & industrial research	3
Amrita vishwa vidyapeetham	2
Thermax limited	2
Cipla limited	2

Q: What is the Council of Scientific & Industrial Research (CSIR) working on regarding climate change?

DYR:

The Council of Scientific & Industrial Research (CSIR), based in India, is actively engaged in innovative research primarily focusing on the reaction of organic compounds with carbon dioxide, particularly in processes like Kolbe-Schmitt synthesis. The organization has filed a total of 2,435 patents, with 736 specifically in this area.

In 2015, CSIR experienced a surge in research activity, filing 316 patents, and achieving a grant rate of 16.1% for its patent applications.

Additionally, they are exploring advancements in macromolecular materials, contributing to India's growing expertise in climate change mitigation and adaptation technologies.

Top technologies (click to view)

Technologies	Patent Count
By reaction of organic compounds with carbon dioxide, e.g. kolbe-schmitt synthesis	273 new patents
Macromolecular materials	256 new patents
Containing mineral polymers, e.g. geopolymers of the davidovits type	248 new patents
Noble metals	130 new patents

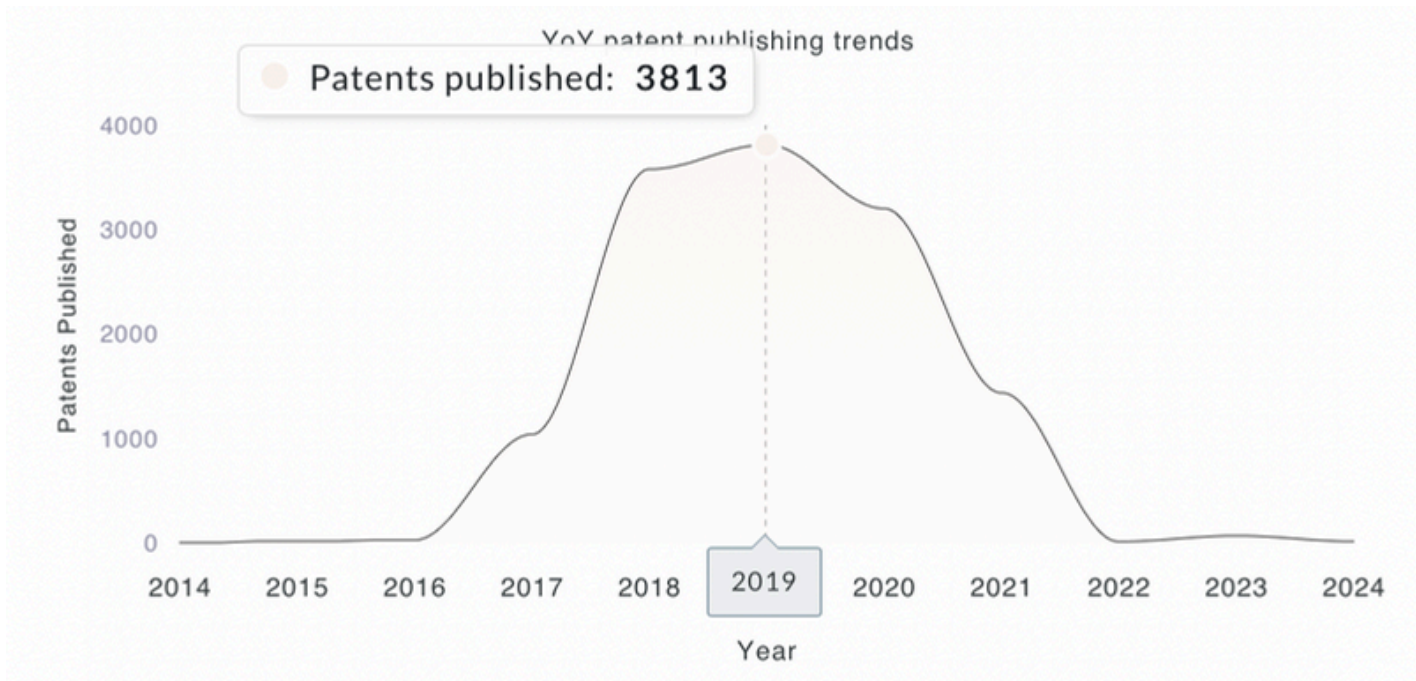
Q: What are the current publication trends in climate change mitigation and adaptation?

DYR:

In 2018, there was a significant surge in research activity, with a total of 3,843 patents filed globally in the field of climate change mitigation and adaptation.

Notably, 67.7% of these patent applications were granted, indicating a strong trend toward innovation and advancement in this crucial area.

The high volume of patents reflects the increasing commitment to developing effective solutions to combat climate change and enhance adaptation strategies.





Dr. Divya Rajput

CEO, JSS Science & Technology Entrepreneurs Park

DYR has been transformative for our startup and incubator. It helps us identify market gaps and speed up our innovation process.

It also helps us navigate government funds and policies effectively, aligning our projects with available support and enhancing our impact in the startup ecosystem.

4 Corporations: Strengthening Innovation and Strategic Planning

Large corporations often have vast R&D efforts, but staying ahead in competitive industries requires constant innovation and vigilance.

Incubig's tools provide corporations with the intelligence they need to refine their R&D strategy, monitor competitors, and forecast technological shifts.

Q: What is DeepMind Technologies' latest research?

DYR:

DeepMind Technologies Limited, based in Great Britain, is at the forefront of innovation in the field of learning methods within computational technology. The company has filed a total of 349 patents to date, showcasing its commitment to advancing artificial intelligence and machine learning.

In 2024, DeepMind made headlines by filing a patent focused on augmenting machine learning language models using search engine results.

This groundbreaking research aims to enhance the performance of AI models by integrating real-time data from search engines, potentially leading to more accurate and context-aware language processing capabilities.

[Click to read patents](#)

All inventors



Augmenting machine learning language models using search engine results

Wojciech jan stokowiec | Computational technology | 2024 | GB

Methods, systems, and apparatus, including computer programs encoded on computer storage media, for augmenting machine learning language models using search engine results. One of ...

Black-box optimization using neural networks

Yutian chen | Computational technology | 2024 | GB

Methods and systems for determining an optimized setting for one or more process parameters of a machine learning training process. One of the methods includes processing a current...

Animating images using point trajectories

Carl doersch | Computational technology | 2024 | GB

Methods, systems, and apparatus, including computer programs encoded on computer storage media, for animating images using point trajectories.

Q: Who is the top inventor at DeepMind Technologies, and what is their latest research?

DYR:

The top inventor at DeepMind Technologies Limited is Oriol Vinyals.

In 2019, he was particularly active, contributing to 46 patents across 10 different industries and focusing on 125 unique technologies.

His recent research focuses on generating audio using neural networks and multi-agent reinforcement learning.



[Click to read patents](#)

Oriol vinyals

Graph neural network systems for generating structured representations of object...

Oriol vinyals | Computational technology | 2023 | GB

There is described a neural network system for generating a graph, the graph comprising a set of nodes and edges. The system comprises one or more neural networks configured to rep...

Multi-agent reinforcement learning with matchmaking policies

Oriol vinyals | Computational technology | 2023 | GB

Methods, systems, and apparatus, including computer programs encoded on a computer storage medium, for training a policy neural network having a plurality of policy parameters and ...

Computer code generation from task descriptions using neural networks

Oriol vinyals | Computational technology | 2023 | GB

Methods, systems, and apparatus, including computer programs encoded on computer storage media, for generating computer code using neural networks. One of the methods includes rece...

Q: What are some research trends observed at DeepMind Technologies?

DYR:

In 2019, a total of 81 patents were filed, reflecting a year of high research activity in the field.

Notably, 25.4% of the patent applications submitted that year were granted.

This indicates a robust innovation landscape, with significant efforts being made to develop new technologies and solutions.

Deepmind technologies limited

Update

Computational Technology | Musical Instrument | Comunication Technology | Industrial | Communication Technique

📍 London, GB

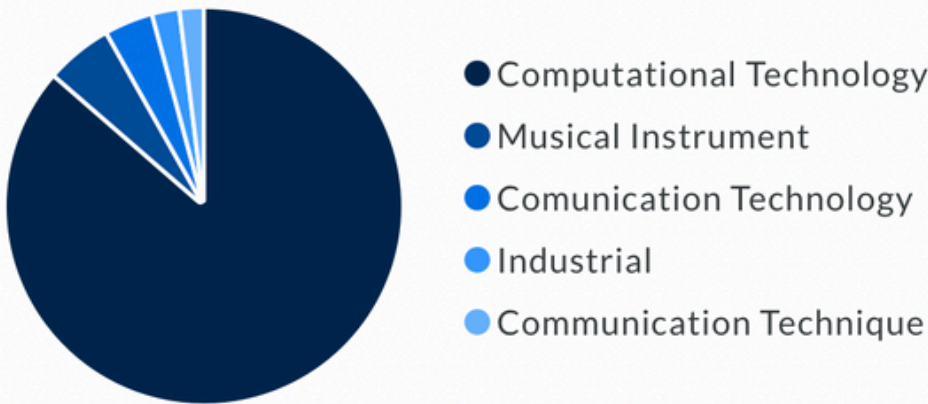
Overview Dataset Trends **Technologies**

Company Page | Explore

View Technologies

Deepmind technologies limited is primarily researching on Learning methods, followed by Architecture of speech synthesisers.

Organization's technology distribution





Grateful for
each and every
one for the
support on our
journey.

Ketan Chandra

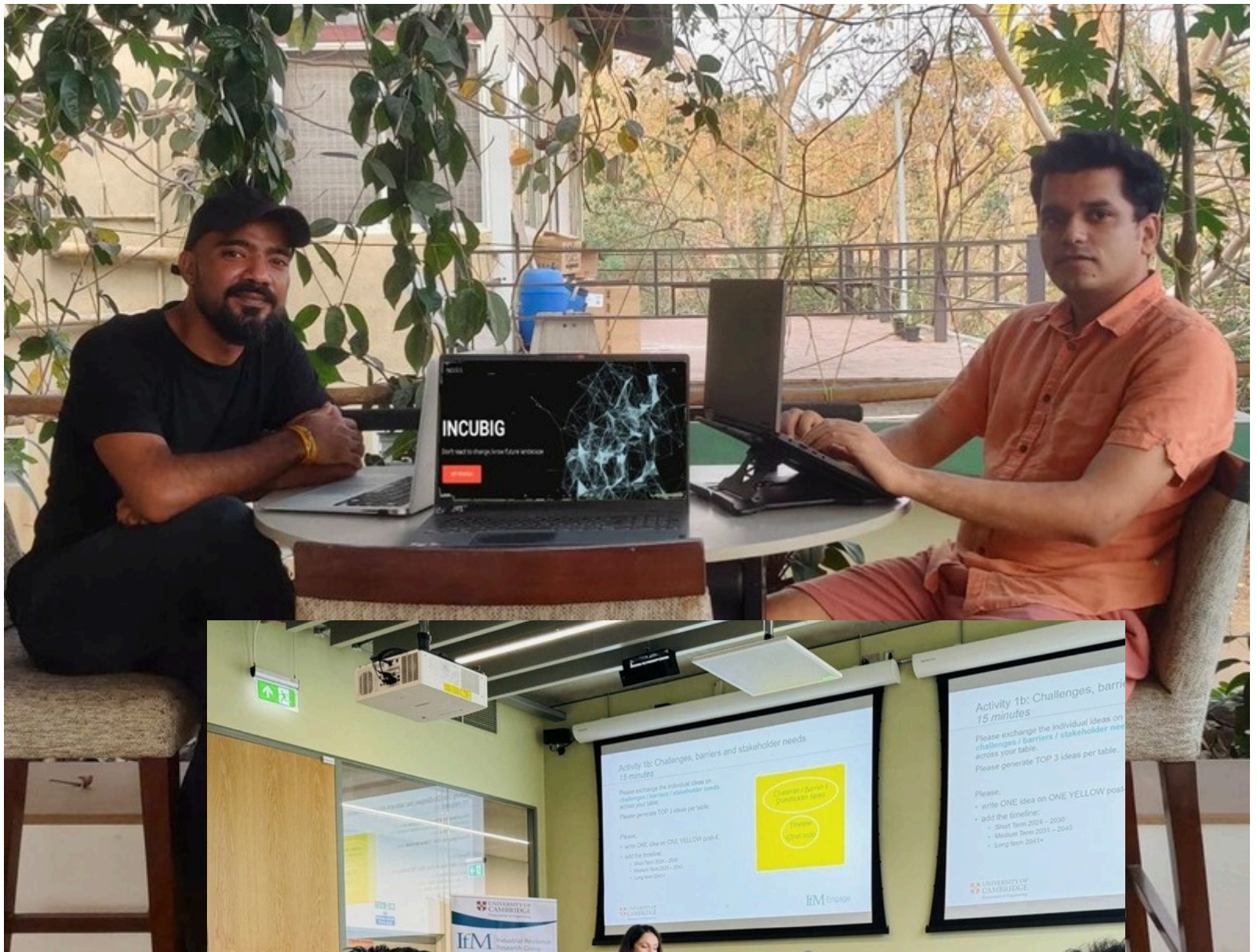


At Incubig, we're turning complex data into clear, actionable insights that empower innovators to make informed decisions. By leveraging AI and machine learning, we're not only analyzing patents but unlocking hidden value within them. Our mission is to simplify research intelligence, driving forward the possibilities for R&D and beyond.

Ketan Chandra, an alumnus of IIT Madras and Technology Head at Incubig, is pivotal in advancing the company's AI-powered research intelligence platform.

With deep expertise in building scalable B2B solutions, he harnesses AI, NLP, and machine learning models to process vast patent datasets, providing actionable insights that drive innovation.

His work ensures Incubig's products deliver accurate, data-driven intelligence,



Ketan Chandra, meeting In Goa, IIT ISM dhanbad..



Attending AI summit in Ireland, South Korea.

James Huh



Intellectual property today is a catalyst for growth. At Incubig, we provide insights that help our clients seize opportunities and stay ahead in a dynamic global landscape.

James Huh, an expert in intellectual property management and sales, brings a wealth of experience to Incubig. As IPMS Chairman and KPAA Secretary General, he has a deep understanding of global IP trends.

His involvement with the Korea Production Center and KISTI, along with his role as a visiting professor at IBU and adjunct professor at Korea University, strengthens Incubig's efforts in providing world-class IP intelligence.

His expertise in international contracts and IP management is invaluable in shaping Incubig's strategic approach to delivering cutting-edge patent research solutions.



Dinner & business In Seoul, and Busan.

Arvind Singh



AI is redefining how we harness data for innovation. At Incubig, we're building solutions that transform raw data into meaningful insights, empowering our clients to drive smarter decisions and impactful growth.

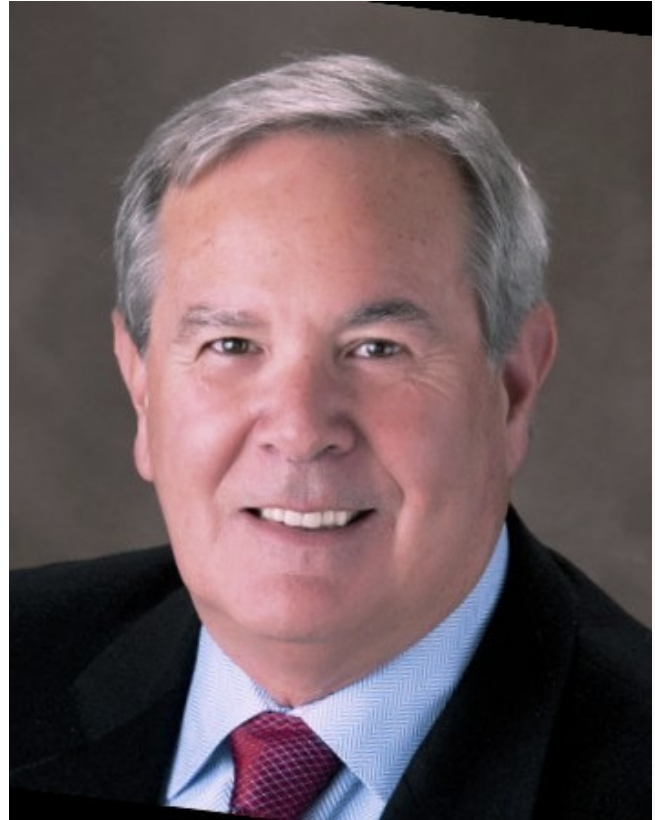
Arvind Singh, Chief AI Advisor at Incubig, brings 12+ years of experience in driving growth and innovation. A former VP of Engineering at PayU and GirnarSoft, he specializes in AI-driven product development.

His strategic insights are key to advancing Incubig's tech solutions.



Walk, talk and collaborate

Michael Wright



Strategic insight is about looking beyond the horizon. At Incubig, we're harnessing technology and foresight to turn complex trends into clear opportunities, helping our clients lead in innovation.

Michael Wright, Business Strategist at Incubig, brings over 30 years of experience in high-tech innovation and strategic foresight.

As CEO of Intercepting Horizons, he helps companies navigate emerging technologies and trends. With expertise in AI, automation, and smart tech, Michael guides Incubig's growth and technology strategy.



Biomimetics24 & Technological events

Mridula Sharma



Successful innovation starts with the right insights. At Incubig, we dig deep into market data and patent landscapes, identifying opportunities that empower our clients to make strategic, forward-thinking decisions.

At Incubig, Mridula Sharma focusing on identifying licensing opportunities for clients through in-depth market and product analysis. She develops Innovation Profiles for startups, ensuring they are positioned for success in their respective fields.

Additionally, she conducts thorough technology reviews and market assessments of various patent portfolios, providing valuable insights that drive strategic decisions for our clients.



One of working place in Goa, India

The interns from South Korea who worked with Incubig played a key role in market testing. Their efforts focused on assessing product-market fit, gathering user feedback, and helping shape the go-to-market strategies for Incubig's AI-driven research products.

Their contributions were crucial in refining the platform to better meet the needs of diverse industries and markets.





BDs & Techies from AIC-GIM, IIT Bombay, India



Business, networking & fun.

Incubig's journey has been fueled by a diverse team from around the world, bringing expertise from both business and technology sectors. Their unique perspectives and varied backgrounds have been essential in shaping innovative solutions that push the boundaries of research and innovation.

This mix of global perspectives has played a huge part in making Incubig what it is today, creating solutions that truly meet the needs of our diverse clients.



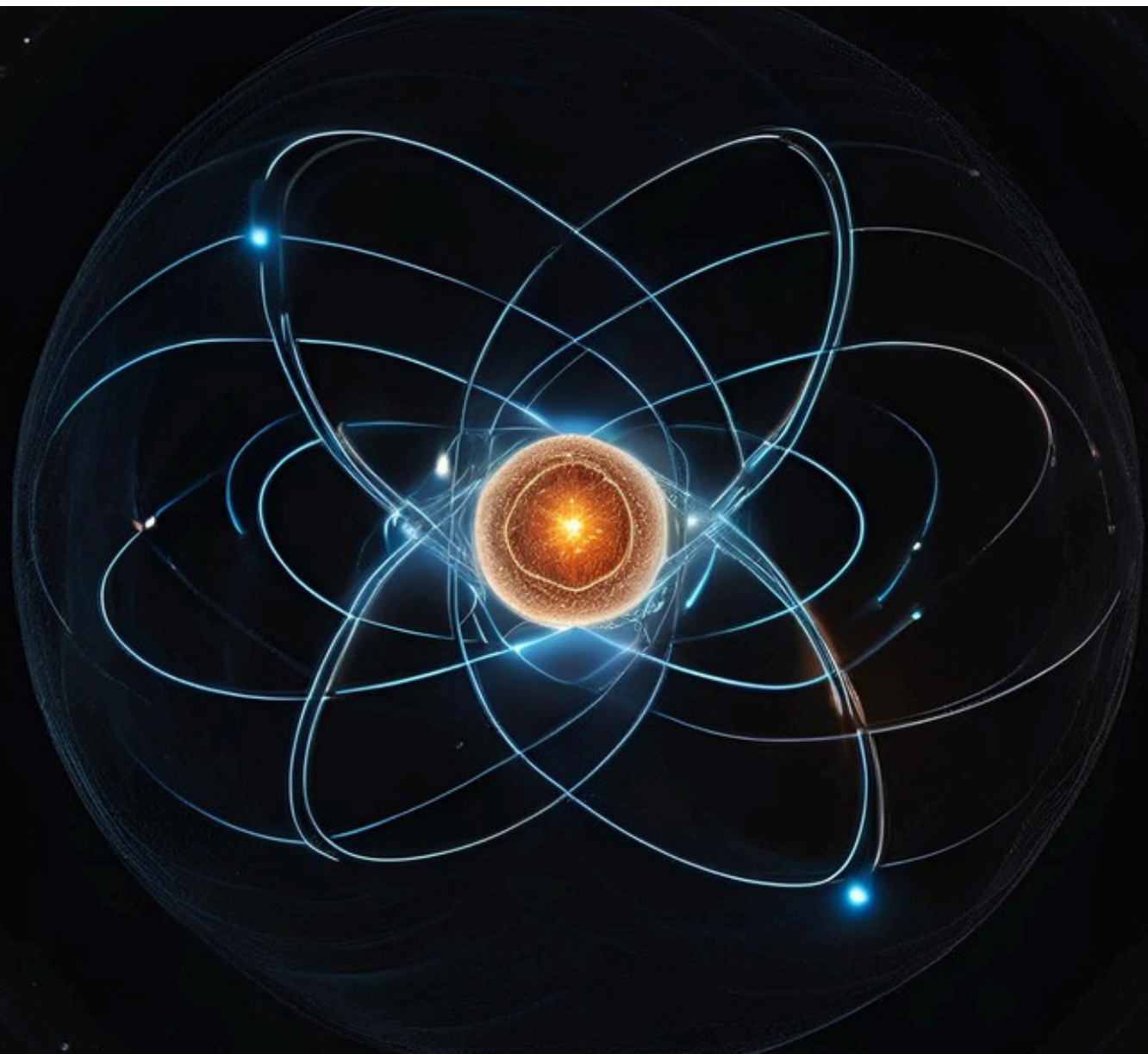


Work, travel, and learn.



United States White House
appreciated our research
work on coronavirus.

FORUM



Because Heart Matters – Arpit Lekhra

This work is lovingly dedicated to the memory
of my brother, Arpit Lekhra



Follow

Arpit Lekhra

Affiliation

Department of Augmented Vision

Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau (RPTU)

Kaiserslautern, Germany

Publication Topics

2D Pose, Action Localization, Angle Error, Asteraceae, Athletes, Ballistic Trajectory, Boundary Markers, Bounding Box, Center Of Mass, Continuous Video, Convolutional Network, Convolutional Neural Network, Feature Maps, Graph Convolutional Network, Hip Joint, Human Pose, Joint Angles, Localization Accuracy, Low Latency, Metric Scale, Neural Network, Parametrized, Peak Height, Pose Estimation, Receptive Field, Recurrent Neural Network, Temporal Coding, Temporal Convolution, Temporal Convolutional Network, Vision Transformer



“

A note by Ankit Lekhra

"Those who unlock the power of knowledge are the ones who will shape the future"

— Ankit Lekhra
Founder & CEO, Incubig
Life Fellow, IIT AC

As we move forward into the age of AI, it's clear that research will not just be a tool for specialists—it will be woven into the fabric of everyday decision-making.

At Incubig, our journey is built on a shared belief: that empowering people with the right insights can spark new ideas and unlock unseen opportunities.

Our partners and collaborators play a vital role in this vision, driving change across industries.

In this rapidly evolving world, research is no longer optional—it's essential for everyone.





**LIFE FELLOW
AWARD**

PRESENTED TO

Ankit Lekhra

For his early mover work in the area of artificial intelligence based search engine which helps scientists and academicians to radically reduce time spent on patent research, filings, defence and protection. This will help India become an IPR powerhouse and achieve global supremacy in this MegaSphere.

AUGUST 15, 2024









PATENTS





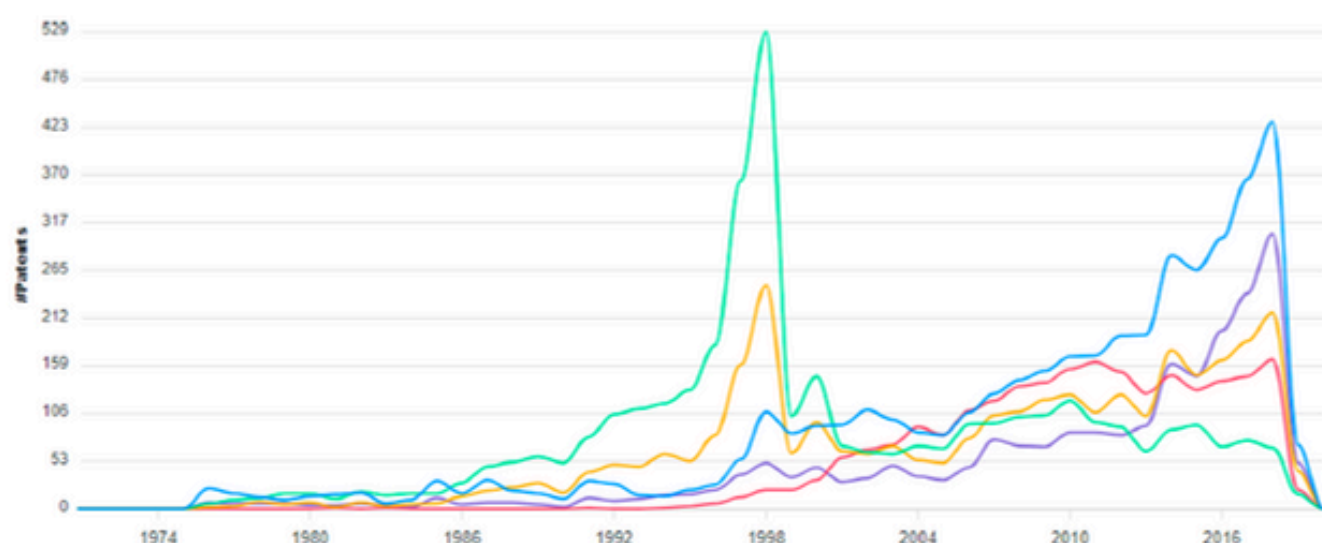


Our work has played
a pivotal role in
driving key decisions
that shape the
future.

BRIEF OVERVIEW ON CORONAVIRUS

Urgent brief from the C19 Task Force of
IIT Alumni Council.

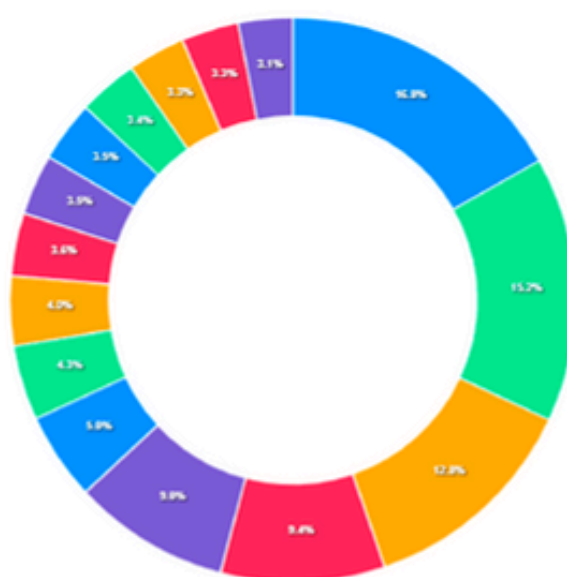
KEY RESEARCH AREAS



- Medicinal preparations containing antigens or antibodies -Viral antigens
- Medicinal preparations containing antigens or antibodies
- Peptides having more than 20 amino acids; Gastrins; Somatostatins; Melanotropins; Derivatives thereof -from viruses
- Medicinal preparations containing antigens or antibodies -comprising whole cells, viruses or DNA/RNA-DNA (RNA) vaccination
- Viruses; Bacteriophages; Compositions thereof; Preparation or purification thereof

Research Activity

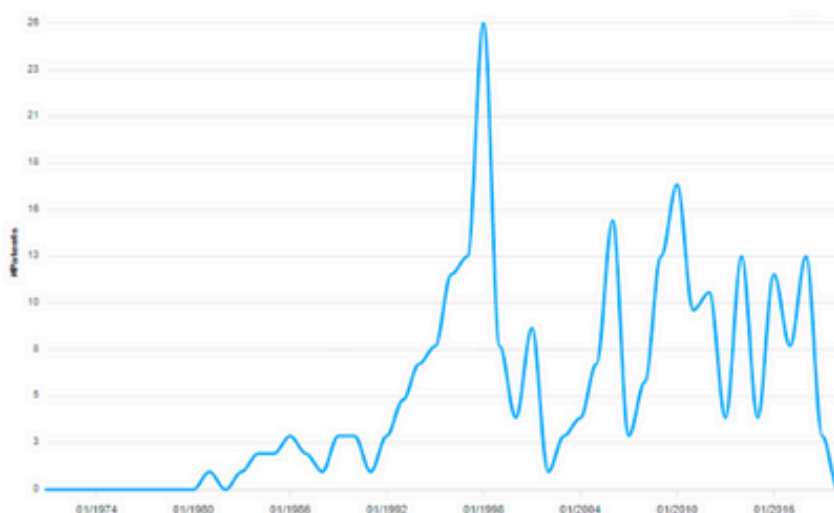
- The graph above provides a comparison in YOY research activity under each key areas related to coronavirus.
- A steady rise in patent filing can be observed under most of the key research areas in the last decade.
- 16.9% of the filed patents fall under the research area- Medicinal preparations containing antigens or antibodies -viral antigens.
- 15.2% of the filed patents fall under the key research area - Medicinal preparations containing antigens or antibodies.



THE USA AS DEPARTMENT OF HEALTH AND HUMAN SERVICES

261

Patent documents



Top Research Areas

149

Medicinal preparations containing antigens or antibodies.

145

Peptides having more than 20 amino acids, Gastrins, Somatostatins, Melanotropins, Derivatives from viruses.

139

Medicinal preparations containing antigens or antibodies: Viral antigens.

Recent Patents

Compositions and methods for prevention or treatment of neoplastic disease in a mammalian subject.

Live attenuated virus vaccines for la crosse virus and other bunyaviridae.

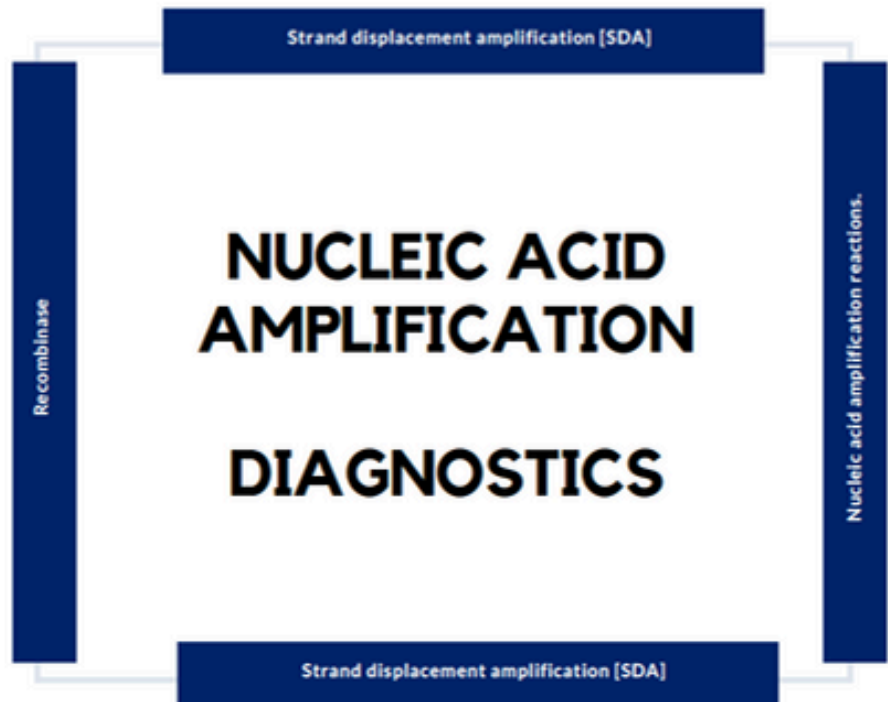
Recombinant virus with diminished latency and methods of using same.

**The Hong kong
University did extensive
research under
coronaviruses, new
isolates, mutants or
their genomic
sequences.**

Used the SARS experience as a model for future
pandemics.

What are key research and applications areas

Applications



Key Research Areas

Nucleic acid amplification reactions.

Recombinase

Strand displacement amplification [SDA]

HYDROGEN AS A FUTURE ENERGY SOURCE

Incubig's brief research intelligence study on hydrogen production for meeting future energy demands.

Hydrogen - A fuel of the future.

Hydrogen was originally used by the Nazis to produce synthetic fuels from coal. Today, it is back in business. There has been great interest in hydrogen as an energy carrier in the transport sector. Recent studies have suggested that, a complete switch to hydrogen fuel-cell vehicles in the transportation sector would likely lead to a significant improvement in health, air quality and climate.

1

Hydrogen Fuel Cell market

Valued at USD 10.49 billion in 2019 and is expected to attain a USD 49.52 billion value by the year 2027, at a CAGR of 21.4%

2

Greenhouse gas emissions

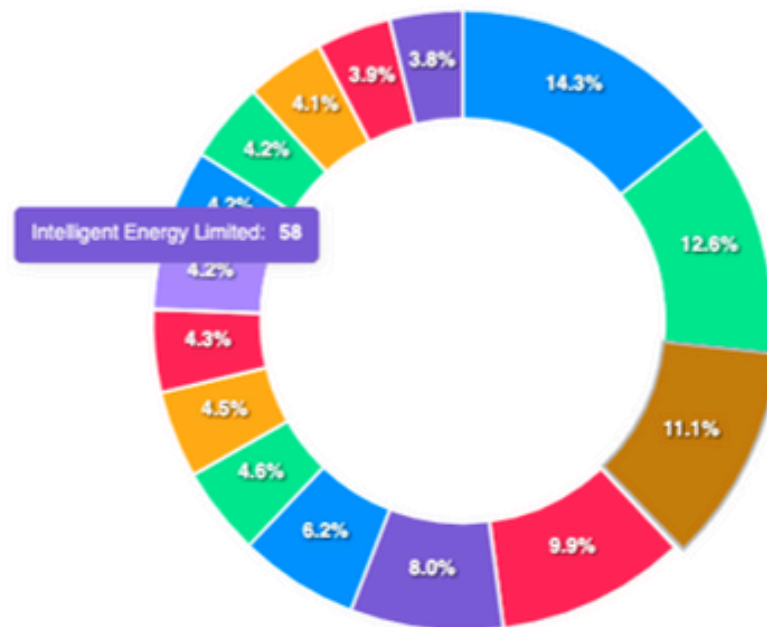
Bloomberg New Energy Finance said clean hydrogen "can help address the toughest third of global greenhouse gas emissions by 2050.

3

Challenges

Need to build up hydrogen infrastructure. That is a huge task that needs political support.

KEY ORGANIZATIONS



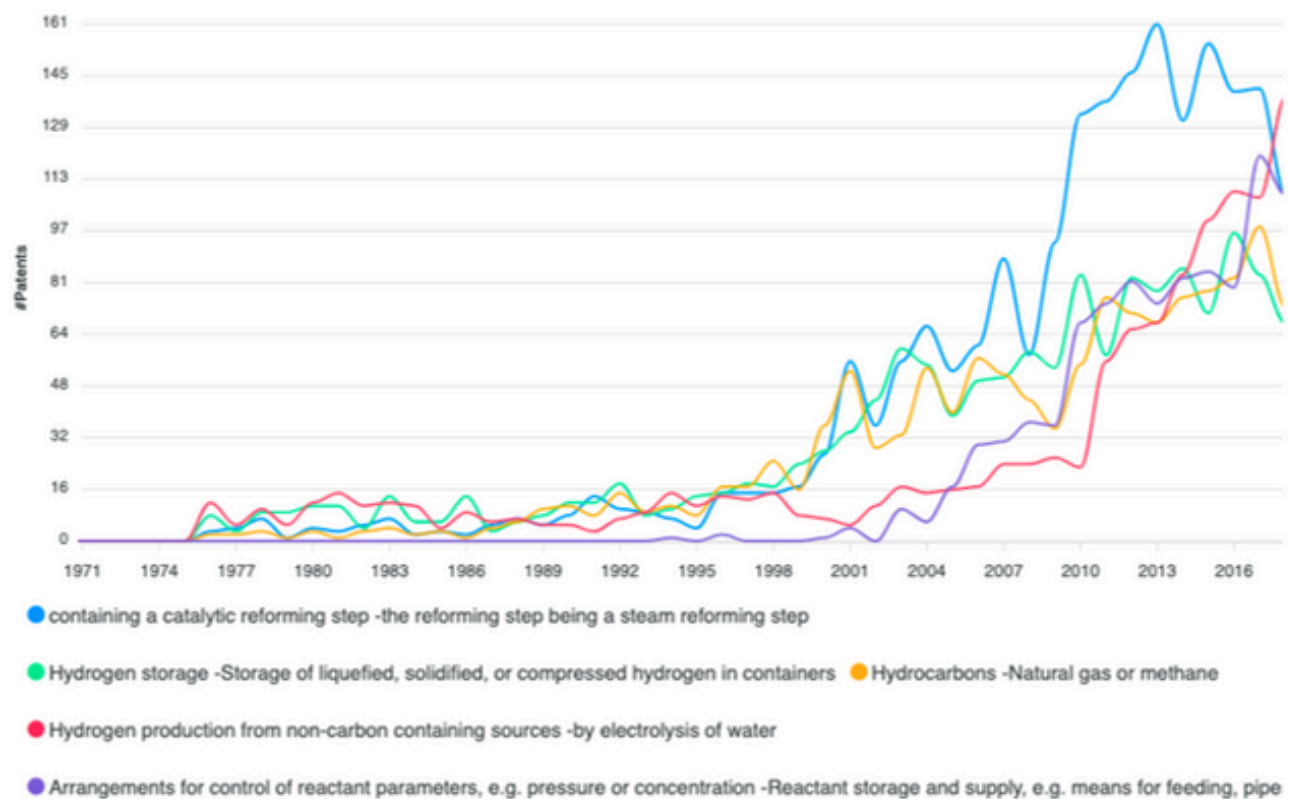
- Toyota Jidosha Kabushiki Kaisha ● Honda Motor Co., Ltd. ● Air Products and Chemicals, Inc.
- GM Global Technology Operations LLC ● Praxair Technology, Inc. ● Samsung SDI Co., Ltd.
- L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procèdes Georges Claude ● Societe BIC
- Panasonic Corporation ● Intelligent Energy Limited ● Haldor Topsøe A/S ● IdaTech, LLC
- General Electric Company ● Shell Oil Company ● Commissariat à l'Energie Atomique



Some of the other key research & market players in this domain are **Samsung, Panasonic, Haldor Topsøe, General Electric, and Shell.**

Intelligent Energy Limited with 58 granted patents owns around 4.2% of the total patent share.

RESEARCH AREAS



The highest research activity has been conducted under **catalytic reforming step**.

The other key research areas are **hydrogen storage**, **Hydrocarbons-Natural gas**, and **hydrogen production from non-carbon containing sources**.

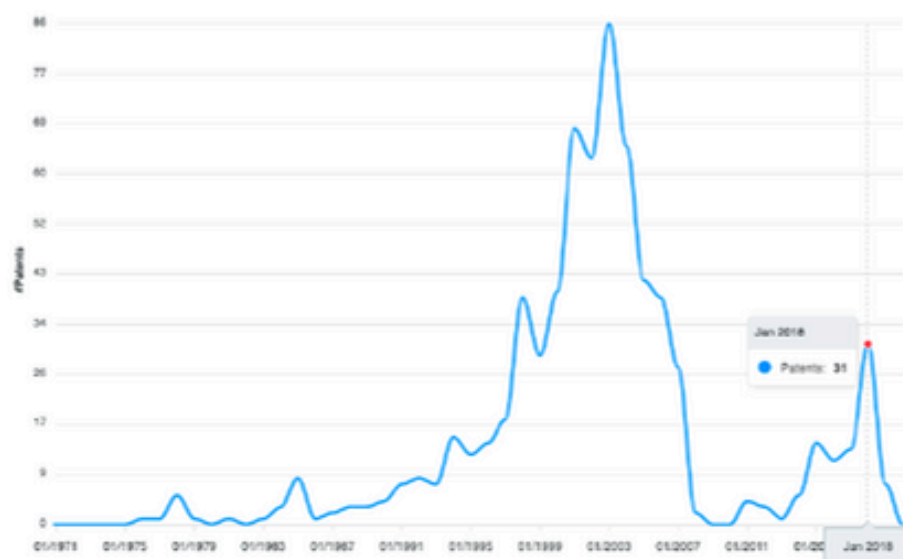
PATENT LANDSCAPE ON QUANTUM TECHNOLOGY

IBM

RESEARCH ACTIVITY

704

Patent documents



Patents under Research Areas

648

Nanotechnology for information processing, storage or transmission,

289

Nanomagnetism

277

Magneto-resistive devices

Recent Granted Patents

High fidelity threshold detection of single microwave photons using a quantum non-demolition photon detector

Architecture for coupling quantum bits using localized resonators

Weakly tunable qubit based on two coupled disparate transmons

TOSHIBA

RESEARCH ACTIVITY

346

Patent documents



Patents under Research Areas

342

Nanotechnology for
information processing,
storage or transmission,

124

Nanomagnetism

93

Recording by magnetisation
or demagnetisation of a
record carrier;

Recent Granted Patents

Computing device comprising a
josephson junction

Quantum computer and quantum
computing method

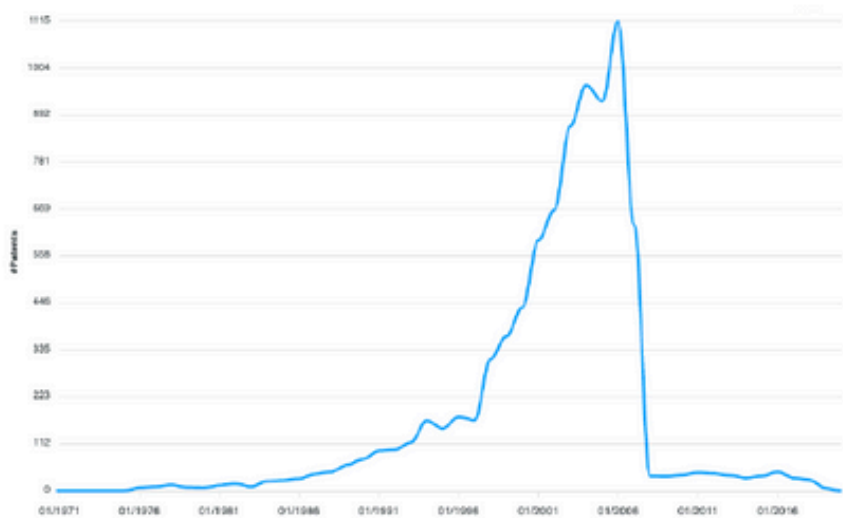
Quantum optical system

NANOTECHNOLOGY

ANALYSIS

8632

Patent documents



Key Players Operating

648

IBM

347

HITACHI

342

TOSHIBA

Recent Granted Patents

Architecture for coupling quantum bits using localized resonators

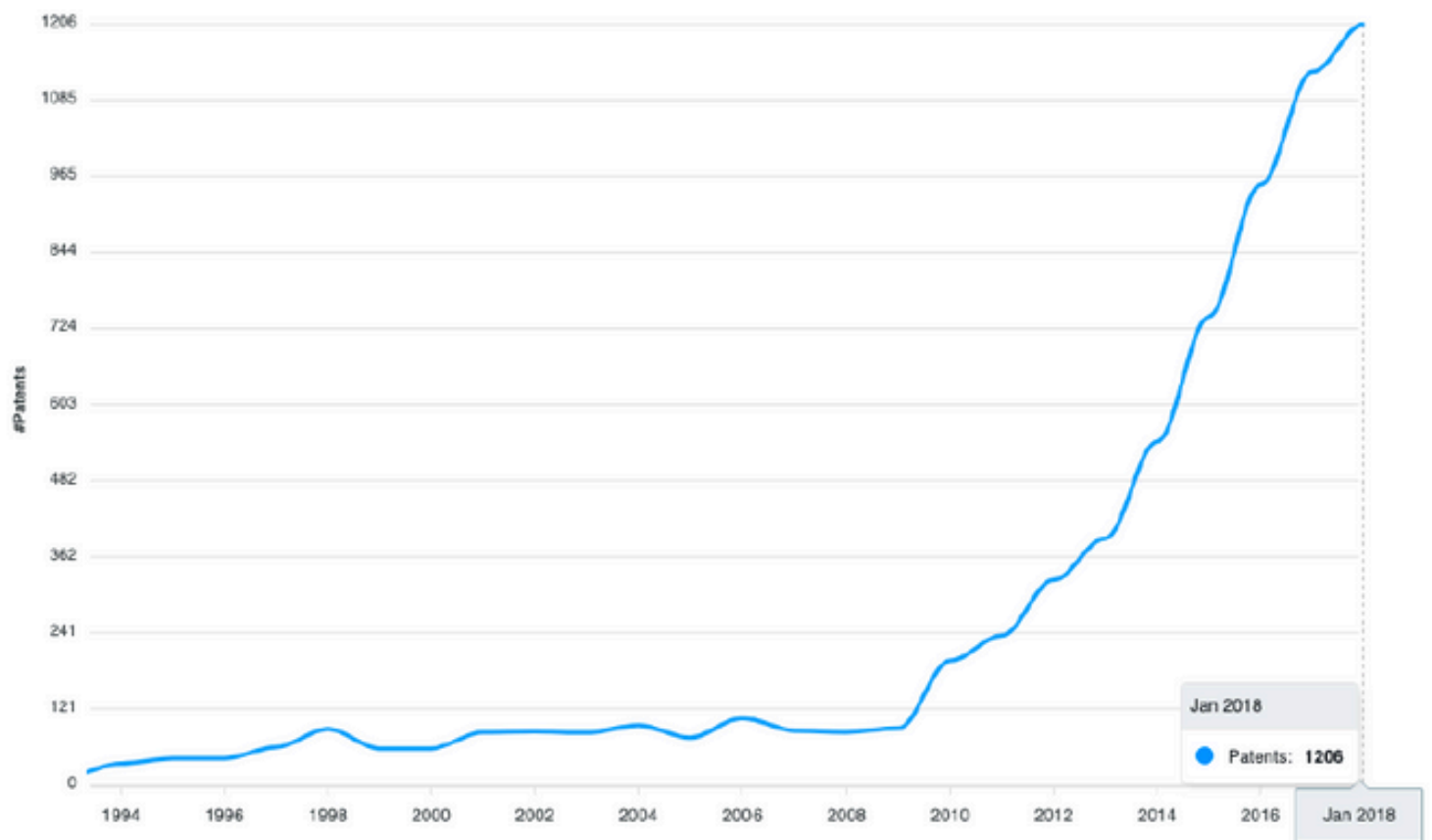
Measurement-only topological quantum computation

Shielded through via structures and methods for fabricating shielded through via structures

ROBOTICS

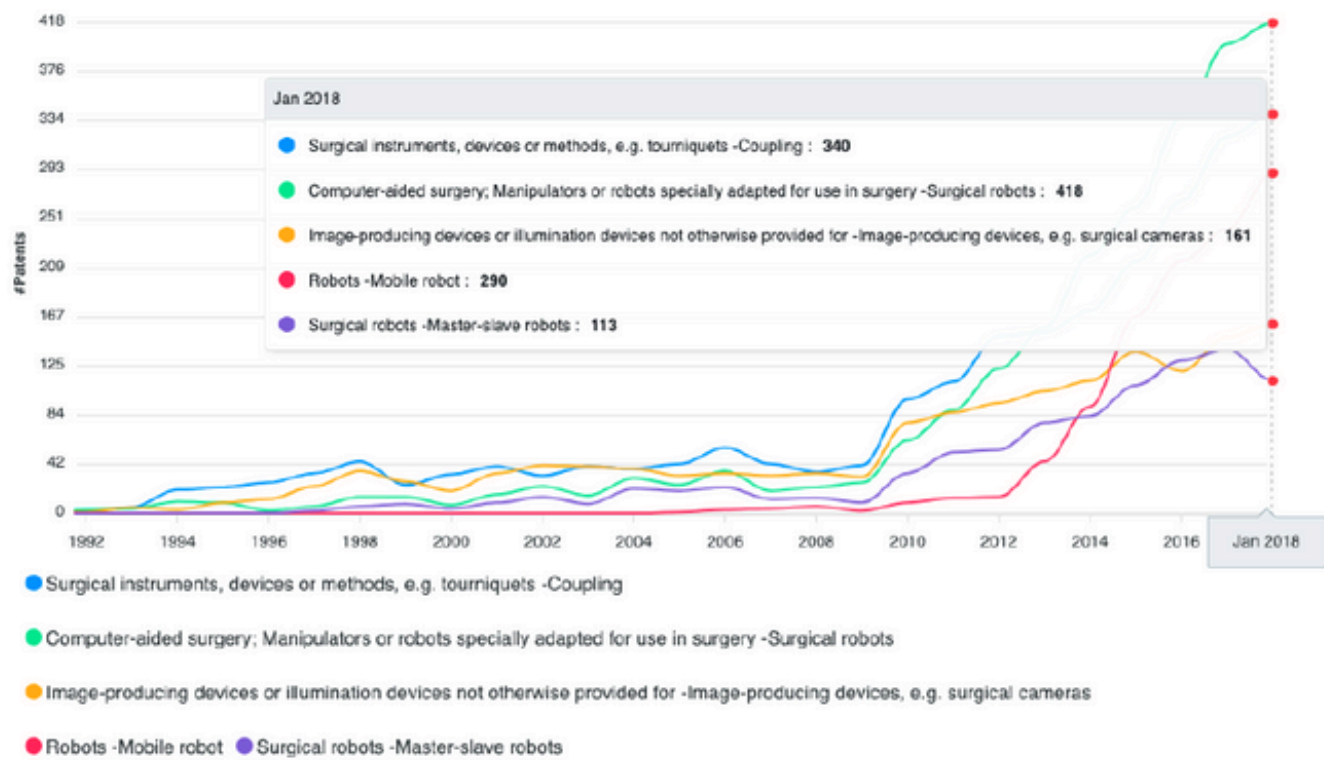
Incubig's brief landscape study in association with
Intercepting Horizons.

PATENT FILING TRENDS



Constantly rising trend under Robotics research since 2010. High research value and multiple monetization application areas.

KEY RESEARCH AREAS



The highest research activity has been conducted under Surgical instruments.

The other key research areas are computer-aided surgery, Surgical cameras, and Mobile robot.

ENERGY DEMAND FOR ELECTROMOBILITY

Incubig's brief research intelligence study & prior art analysis of the patent US9698398B2 in association with Market Insight Consultants (MIC)

Future demand for EV batteries.

The world is shifting to electric vehicles (EV) to mitigate climate change. The EV advantage, together with technological progress and governmental subsidies led to a massive increase in the demand for EVs.

1

Demand for EVs

Few thousands just a decade ago to 7.5 million vehicles in 2019.

2

Market penetration of EVs

Just 1.5% in 2019 and future growth is expected to dwarf past growth in absolute numbers.

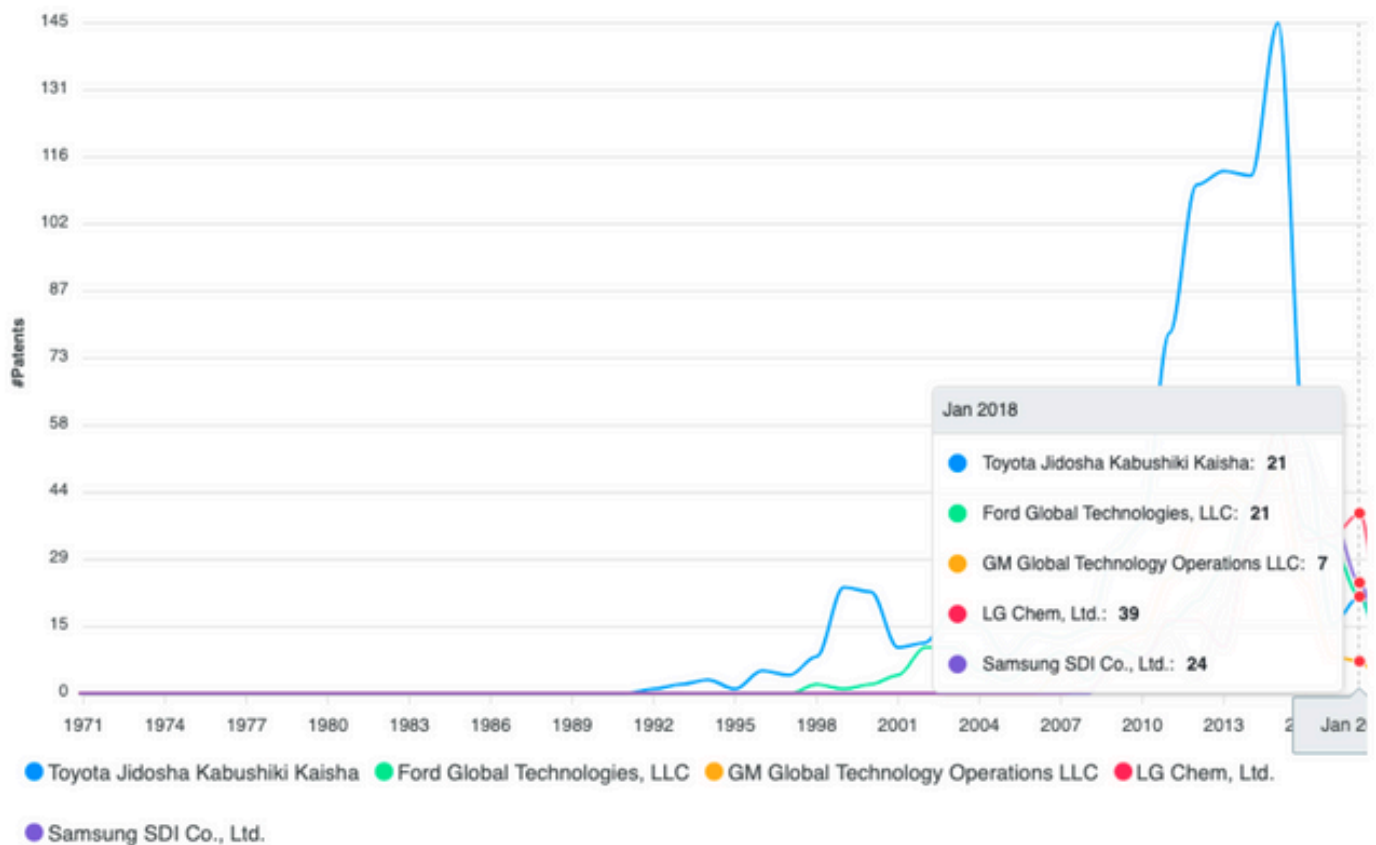
3

Energy demand

2040 battery demand from EVs produced in Europe will reach 1,200 gigawatt-hours per year.

TOP 5

ORGANIZATIONS



The graph shows the YoY patent activity of the top 5 organizations.



Toyota is one of the top players with 145 patents granted in Jan 2015, followed by **Ford**, **GM**, **LG**, and **Samsung**.

SAMSUNG

KR20080010156A

Title : Battery module

RELEVANT EXCERPTS

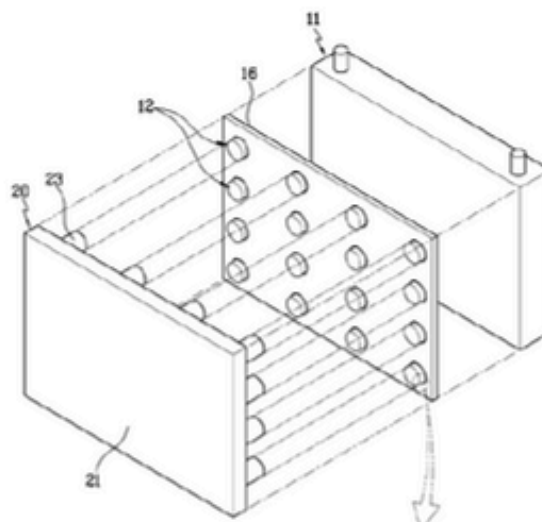
In order to achieve the above object, a battery module according to an embodiment of the present invention includes unit cells and a spacing member disposed between the unit cells, and the spacing member includes protrusions directly attached to the unit cells. The protrusions may be made of a synthetic resin or ceramic, and the protrusions may be formed of an anodic oxidation coating on the surface of the unit cells,

The protrusions 12 are disposed between the unit cells 11 in a fixed state attached to the unit cells 11 so as to maintain the interval between the unit cells 11.

As shown in FIG. 5B, the protrusions 42 may have a rectangular column shape. As shown in FIG. 5C, the protrusions 43 may have a pentagonal prism shape, and the protrusions 44 may have a hexagonal column shape, as shown in FIG. 5D. Although not shown in the drawings, the protrusions may be formed in a rib shape elongated in the advancing direction of the cooling medium. That is, the protrusions of the spacer according to the present invention are not limited to any one form.

PATENT DATES

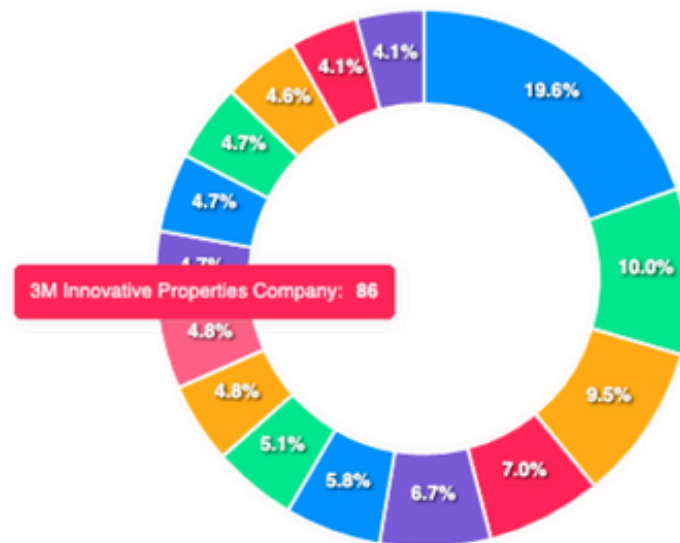
- Filing date:
2006-07-26
- Application Publication date:
2008-01-30



MATERIAL SCIENCE

Incubig's brief landscape study in association with
Intercepting Horizons.

ORGANIZATIONS



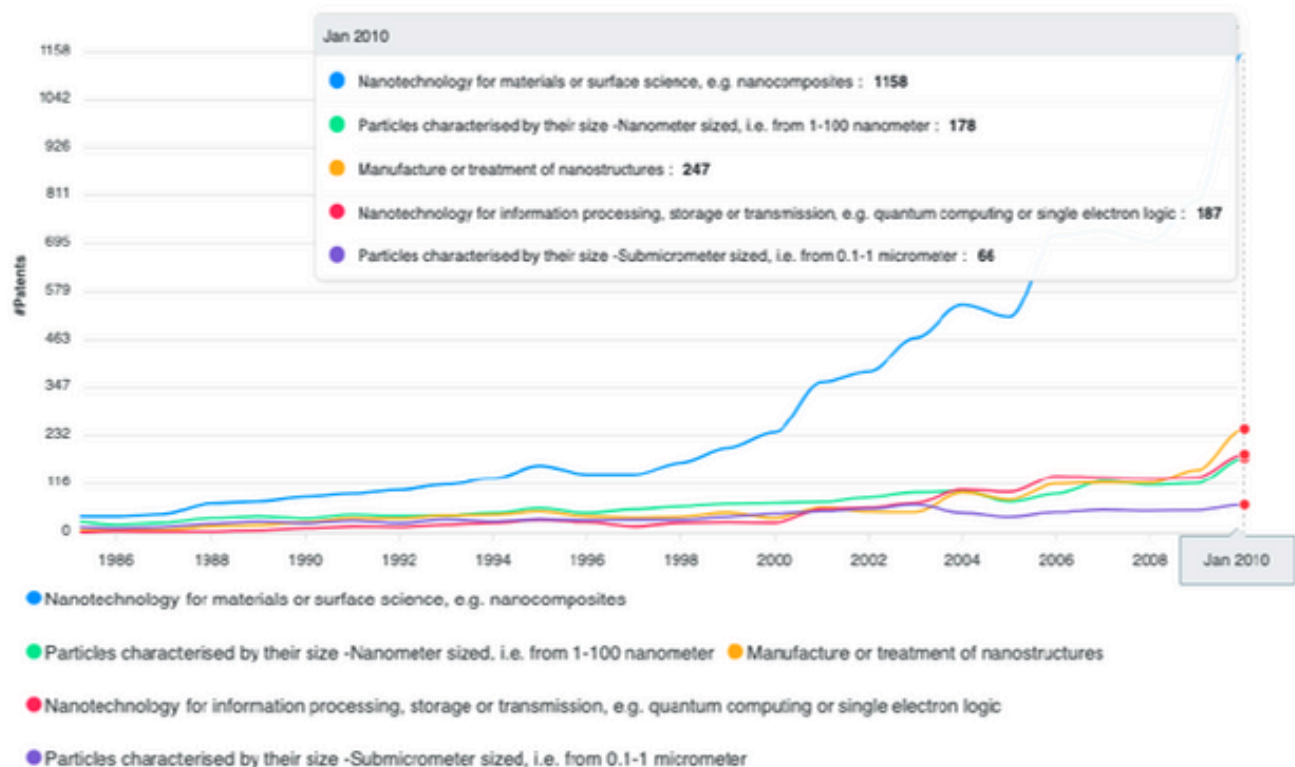
- Silverbrook Research Pty Ltd
- Matsushita Electric Industrial Co., Ltd.
- The Regents of the University of California
- Affymetrix, Inc.
- International Business Machines Corporation
- E. I. Du Pont de Nemours and Company
- Samsung Electronics Co., Ltd.
- William Marsh Rice University
- 3M Innovative Properties Company
- Canon Kabushiki Kaisha
- Massachusetts Institute of Technology
- Cabot Corporation
- The United States of America as represented by the Secretary of the Navy
- President and Fellows of Harvard College
- Hon Hai Precision Industry Co., Ltd.

Some of the other key research & market players in this domain are Du Pont, Samsung, 3M Innovative, MIT, Cannon, and Cabot Corporation.



3M with 86 granted patents owns around 4.8% of the total patent share.

KEY RESEARCH AREAS



One of the key research areas is Nanotechnology for materials.



Other key research areas are Nanometer-sized particles, manufacture or treatment of nanostructures, and nanotechnology for information processing.

Future is autonomous.

-Self learning AI.

AI will be the driving force of industry.

- Multi-functional Robots
- Virtual nursing, drug discovery
- Autonomous cars
- 3D-Printing manufacturing
- Autonomous weapons
- Super-humans

Incubig • Jun 02, 2020

TRANSPORTATION	FARMING	HEALTHCARE
SURVEILLANCE	MANUFACTURING	MINING
FINANCE	GENETICS	WEAPONS
ENERGY	ENTERTAINMENT	UNIVERSE, OCEANS



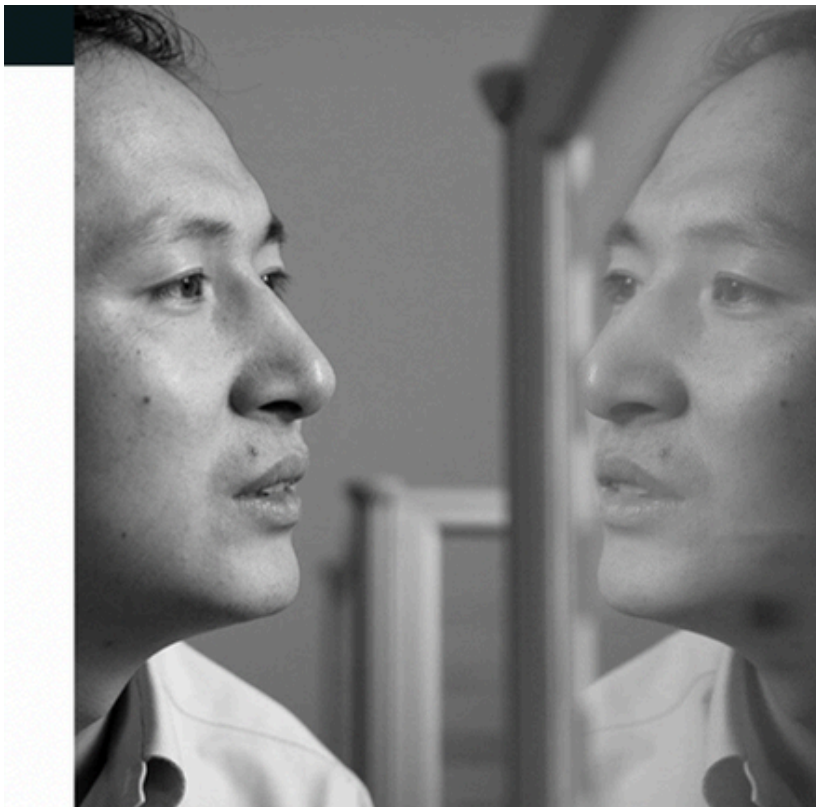
Of the 9,100 patents received by IBM inventors in 2018, 1,600 (or nearly 18 percent) were AI-related.

Possibilities of Future?

Will depend a lot on Ethics.

- Security
- Mass unemployment
- Behavior and interaction

Incubig • Jun 02, 2020



Incubig • Jun 02, 2020

The CRISPR Baby Scandal

He Jiankui, a Chinese scientist claims to have helped make the world's first genome-edited babies — twin girls.

**Unlock
Innovation
Potential—One
Platform for All
Your IPR Needs.**

At Incubig, we simplify and strengthen the journey from invention to market leadership through a single-window IPR solution.

At Incubig, we simplify and strengthen the journey from invention to market leadership through a single-window IPR solution. By uniting advanced technology with a global network of IP experts from the US, Korea, and India, we make it easy for universities, corporations, and VC funds to protect, manage, and capitalize on their intellectual assets.

- **Unified Platform :** Unified IPR platform for hassle-free patent filing, protection, and commercialization.
- **Global Partner Network:** Global partnerships with domain experts to offer clients comprehensive solutions.
- **Tailored Solutions:** Tailored solutions to meet specific needs of academic, corporate, and investor clients.

Why a Single-Window Solution Matters?

Managing intellectual property can be overwhelming, particularly for organizations dealing with multiple innovations across different domains. The challenges often involve coordinating between various stakeholders, understanding the intricate nuances of patent law, and ensuring timely filings to secure rights.

Incubig's integrated platform consolidates all these processes, providing:

Efficiency

All your IP needs are handled in one place, reducing administrative burdens and streamlining workflows.

Expert Guidance

Our deep expertise ensures that you not only protect your innovations but also maximize their value through strategic licensing and commercialization.

Comprehensive Protection

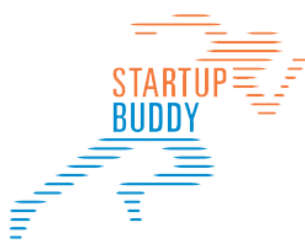
From protecting your core innovations to exploring new market opportunities, our platform ensures that your intellectual property is an asset that drives growth and competitive advantage.

Incubig, along with its global partners from the US, South Korea, and India, is committed to simplifying and securing your intellectual property needs through an all-encompassing, single-window solution.

FORUM



Our global expertise, spanning top law firms, specialized attorneys, business experts, and IPR consultants, offers unparalleled support for every stage of your IP journey.





Global Partner Network for End-to-End IP Management

Through partnerships with top law firms, expert attorneys, and industry advisors, Incubig provides clients with a global support network.

- **IP Attorneys and Law Firms :** Offering legal expertise across industries to protect patents worldwide.
- **Business Experts and IPR Consultants:** Specialised knowledge to address sector-specific IP needs.
- **Global Reach with Local Expertise:** A team spanning continents ensures compliance with local laws and global standards.

End-to-End IPR Solutions Offered by Incubig's Single-Window Service

IPR Filings

Covering patents, trademarks, copyrights, and more, we manage the entire filing process with precision and efficiency.

Licensing & Commercialization

Beyond protection, we facilitate the effective commercialization of your patents, ensuring a strategic path to market success.

Valuation & Safeguarding

Through advanced analytics and valuation methods, we assess and protect your intellectual assets against, technology theft, infringement and financial risk.

Strategic Consultation & Management:

Expert consultation tailored to each client segment to maximize IP value and align it with organizational goals.

The background of the slide is black, featuring several dynamic, glowing streaks of teal and light blue light that sweep across the lower half of the frame from left to right, creating a sense of motion and energy.

Empowering
Universities in
Advancing
research,
Elevating
Rankings, &
Unlocking
Revenue Potential.



We are Empowering Universities in Advancing research, Elevating Rankings, & Unlocking Revenue Potential.

For universities intellectual property plays a pivotal role in advancing research and innovation, while also impacting key metrics like global rankings and student admissions.

The importance of effectively managing patents, trademarks, and copyrights goes beyond mere legal protection—it directly influences the institution's reputation, research funding, and ability to attract talent.

Powering Universities with one stop solution for all IPR needs.

Advancing Research Impact:

Research is central to academic excellence. Incubig helps universities quickly secure intellectual property rights for groundbreaking faculty and student work, enhancing credibility and attracting funding for future innovation.

Elevating University Rankings:

Strong IP portfolios directly impact university rankings, drawing global attention and influencing student admissions. Incubig's platform simplifies IP management, positioning universities competitively in the academic landscape.

Unlocking Revenue Potential:

Patents and industry licensing create valuable revenue streams that fuel further research. Incubig guides universities from patenting through licensing, fostering collaboration and translating academic research into real-world applications.

Incubig helps universities tap into a global research ecosystem, enabling them to benchmark their innovations, identify emerging trends, and discover new growth opportunities.

This comprehensive insight supports research excellence, enhances university rankings, and drives student engagement.

Massachusetts institute of technology

Update

Medical Science | Electrical Instruments | Biochemistry | Mensuration | Metallurgy

📍 Cambridge, US

Overview

Dataset

Trends

Technologies

Company Page | Overview

About Company

Massachusetts institute of technology is a company from US, primarily working on 'Sockets, e.g. of suction type'. It is part of Medical Science, where company has filed 755 patents. Total patents filed by company are 4095.

4095

Patents

6342

Inventors

74

Industries

2572

Technologies

2018

Active Year

Robert s. langer

Top inventor

Massachusetts institute of technology

Update

Medical Science | Electrical Instruments |
Biochemistry | Mensuration | Metallurgy

📍 Cambridge, US

Overview

Dataset

Trends

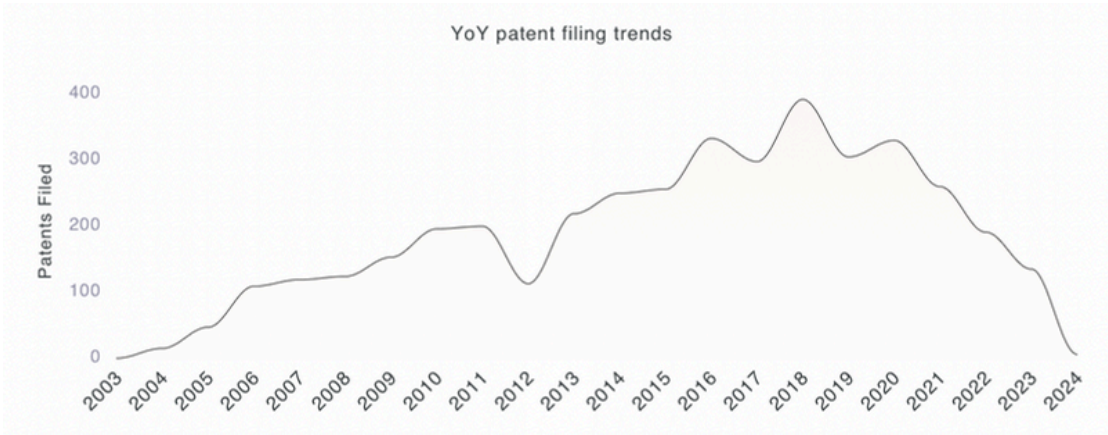
Technologies

Company Page | Trends

Key Trends

Recently in the year 2018, 394 patents were filed.

- 52.1% of the patent applications filed are granted.
- 2018 observed a high research activity.
- 394 patents were filed in 2018 year.



Massachusetts institute of technology

Update

Medical Science | Electrical Instruments |
Biochemistry | Mensuration | Metallurgy

📍 Cambridge, US

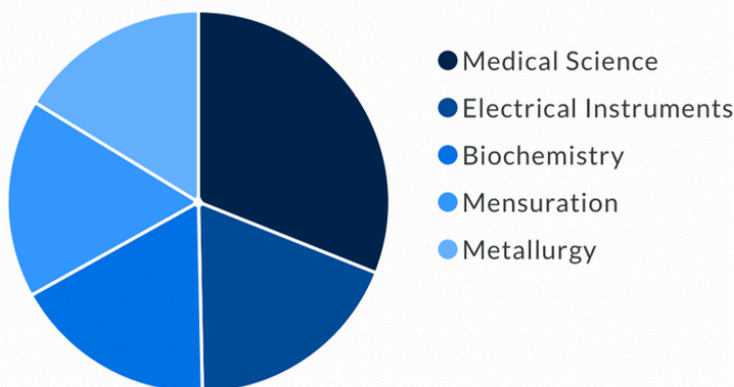
Overview

Dataset

Trends

Technologies

Company Page | Explore



Top technologies (click to view)

Technologies	Patent Count
Sockets, e.g. of suction type	755 new patents
Characterised by the means for switching between superconductive and normal states	453 new patents
Preparation or screening of expression libraries, e.g. reporter assays	419 new patents
Using optical pumping	409 new patents
Polyester-amides	396 new patents

Massachusetts institute of technology [Update](#)

Medical Science | Electrical Instruments |
Biochemistry | Mensuration | Metallurgy

📍 Cambridge, US

Overview

Dataset

Trends

Technologies

Company Page | Data

Patent data

In 2024, Massachusetts institute of technology filed a patent on Sequence-controlled polymer random access memory storage.

Click to read patents

All inventors



Sequence-controlled polymer random access memory storage

Tyson shepherd | Computational technology | 2024 | US

Methods for controlled segregation of blocks of information encoded in the sequence of a biopolymer, such as nucleic acids and

All inventors



Sequence-controlled polymer random access memory storage

Tyson shepherd | Computational technology | 2024 | US

Methods for controlled segregation of blocks of information encoded in the sequence of a biopolymer, such as nucleic acids and polypeptides, with rapid retrieval based on multiply ...

Generation and synchronization of pulse-width modulated (pwm) waveforms for radi...

Alexander sergeev jurkov | Electric circuitry | 2024 | US

Described are concepts, systems, circuits and techniques directed toward methods and apparatus for generating one or more pulse width modulated (PWM) waveforms with the ability to ...

Recovery and recycling of byproducts of activated aluminum

Jude kelley | Chemical industry | 2024 | US

Methods, systems, and compositions related to the recycling and/or recovery of activating materials from activated aluminum are disclosed. In one embodiment, an aqueous solutions c...

For Large
Corporations:
Securing
Innovation,
Optimizing R&D
Investments and
Market Advantage

Abstract teal and blue light streaks on a black background, suggesting motion or data flow.



For Large Corporations: Securing Innovation, Optimizing R&D Investments and Market Advantage

In today's highly competitive landscape, large corporations must prioritize protecting their innovations to maintain a strong market position and maximize the value of their R&D investments.

Through strategic IP filings and robust protections, corporations can safeguard proprietary knowledge and ensure long-term growth. Here's how our single-window IPR solutions support these goals:

Here's how our single-window IPR solutions support these goals:

Defend Market Position

Patent filings and IP protections provide corporations with exclusive rights to their technologies, defending their market share and leadership by limiting competitor access to core innovations.

Optimize R&D Investments

Our platform identifies and safeguards valuable innovations, ensuring that R&D spending is directed toward developments that are both protected and aligned with business strategy, driving meaningful returns on investment.

Protect Proprietary Knowledge

Comprehensive IP security measures shield corporations from imitation or reverse engineering, helping them to maintain their brand's integrity and competitive edge in the market.

Incubig provides corporations with the insights needed to strengthen IP protection, optimize R&D investments, and secure competitive advantages.

Our platform helps safeguard proprietary technologies and maximize the impact of innovation efforts in a dynamic market

Nvidia corporation

Update

Computational Technology | Communication
Technique | Educational Material | Mensuration |
Physics: Control Aparatus

 Santa clara, US

- Overview
- Dataset
- Trends
- Technologies

Company Page | Overview

About Company

Nvidia corporation is a company from US, primarily working on 'Ray-tracing'. It is part of Computational Technology, where company has filed 2489 patents. Total patents filed by company are 3836.

3829

Patents

3964

Inventors

29

Industries

1337

Technologies

2022

Active Year

Jan kautz

Top inventor

Nvidia corporation

Update

Computational Technology | Communication
Technique | Educational Material | Mensuration |
Physics: Control Aparatus

📍 Santa clara, US

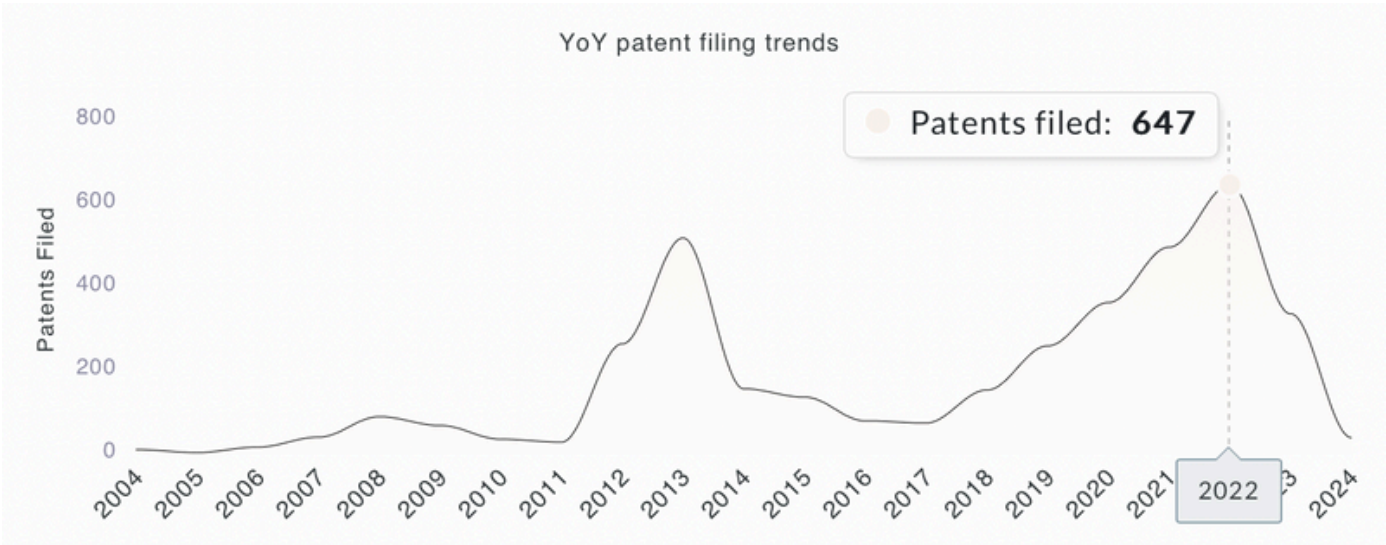
Overview Dataset Trends Technologies

Company Page | Trends

Key Trends

Recently in the year 2022, 647 patents were filed.

- 42.0% of the patent applications filed are granted.
- 2022 observed a high research activity.
- 647 patents were filed in 2022 year.



Nvidia corporation

Update

Computational Technology | Communication
Technique | Educational Material | Mensuration |
Physics: Control Aparatus

📍 Santa clara, US

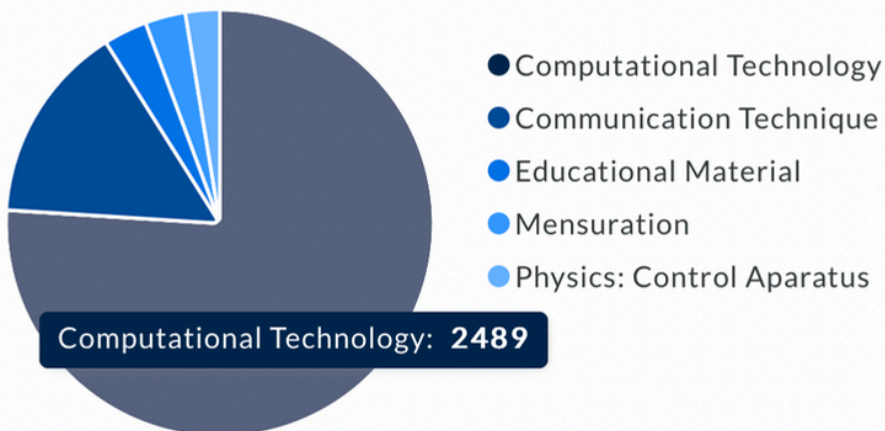
Overview

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Technologies

Company Page | Explore



Technologies

Patent Count

Ray-tracing

2489 new patents

Link aggregation, e.g. trunking

493 new patents

Details of a display terminal, the details relating to
the control arrangement of the display terminal and
to the interfaces thereto

108 new patents

Point data, e.g. point of interest

100 new patents


Characterized by the autonomous decision making
process, e.g. artificial intelligence, predefined
behaviours

85 new patents

Nvidia corporation

Update

Computational Technology | Communication
Technique | Educational Material | Mensuration |
Physics: Control Aparatus

 Santa clara, US

Overview

Dataset

Trends

Technologies

Company Page | Data

Patent data

In 2024, Nvidia corporation filed a patent on Inline data inspection for workload simplification.

Click to read patents

All inventors

▼

Inline data inspection for workload simplification

Andrew kerr | Computational technology | 2024 | US

A method, computer readable medium, and processor are described herein for inline data inspection by using a decoder to decode a load instruction, including a signal to cause a cir...

All inventors



Inline data inspection for workload simplification

Andrew kerr | Computational technology | 2024 | US

A method, computer readable medium, and processor are described herein for inline data inspection by using a decoder to decode a load instruction, including a signal to cause a cir...

Behavior planning for autonomous vehicles

Yizhou wang | Vehicles | 2024 | US

Embodiments of the present disclosure relate to behavior planning for autonomous vehicles. The technology described herein selects a preferred trajectory for an autonomous vehicle ...

Application programming interface to accelerate matrix operations

Piotr majcher | Computational technology | 2024 | US

Apparatuses, systems, and techniques to determine a matrix multiplication algorithm for a matrix multiplication operation. In at least one embodiment, a matrix multiplication opera...

For VC Funds: Maximizing Investment Security and Growth Potential





For VC Funds: Maximizing Investment Security and Growth Potential

For venture capital funds, securing intellectual property is a critical factor in reducing investment risks and enhancing the long-term viability of portfolio companies.

By ensuring that IP assets are well-protected, VCs can drive growth, safeguard technology, and maximize value across their investments.

Here's how our single-window IPR solutions help VC funds achieve these goals:

Our single-window IPR solutions empower VC funds to protect and maximize their investments

Enhance Portfolio Value

Protecting key innovations through patents and IP rights strengthens the valuation of portfolio companies, increasing potential returns on investment by ensuring that unique technologies are exclusive and defensible.

Reduce Technology Leakage

Comprehensive IP protection prevents unauthorized access or replication of core technologies, securing proprietary knowledge and reducing the risk of technology leakage, which is essential for maintaining a competitive edge.

Drive Market Differentiation

Strong IP portfolios allow portfolio companies to stand out in competitive markets, creating distinct value propositions and helping VC funds attract further investment interest or successful exits.

Incubig equips VCs with deep insights into emerging technologies and market landscapes, helping them identify high-potential investments and stay ahead of innovation trends.

Our platform offers a clear view of tech developments, enabling smarter decisions and safeguarding investments.

Characterized by the autonomous decision making process, e.g. artificial intelligence, predefined behaviours

Update

5285 patents filed | 37 countries working | 936 active organizations

Overview

Dataset

Trends

Global

Technology Monitoring | Overview

Key Points

In 2018, research surged globally in this technology with 37 countries actively innovating, led by US.

- 2018 year observed a high research activity.
- 37 countries are actively doing research.
- US is leading the research, followed by JP.
- Toyota jidosha kabushiki kaisha filed 280 patents recently.

37

Countries

936

Organizations

9780

Inventors

US

Leading country

1355

Patents in 2018

65.9%

Patents Granted

Toyota jidosha kabushiki kaisha

Top organization

Characterized by the autonomous decision making process, e.g. artificial intelligence, predefined behaviours [Update](#)

5285 patents filed | 37 countries working | 936 active organizations

Overview

Dataset

Trends

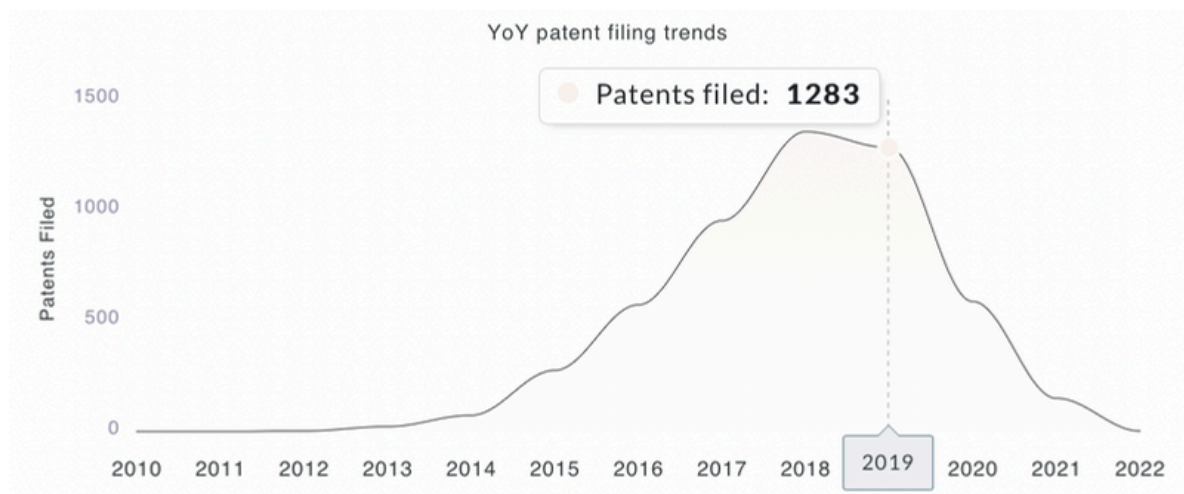
Global

Technology Monitoring | Trends

Key Trends

Recently in the year 2018, 1355 patents were filed.

- 65.9% of the patent applications filed are granted.
- 2018 observed a high research activity.
- 1355 patents were filed in 2018 year.



Characterized by the autonomous decision making process, e.g. artificial intelligence, predefined behaviours

Update

5285 patents filed | 37 countries working | 936 active organizations

Overview

Dataset

Trends

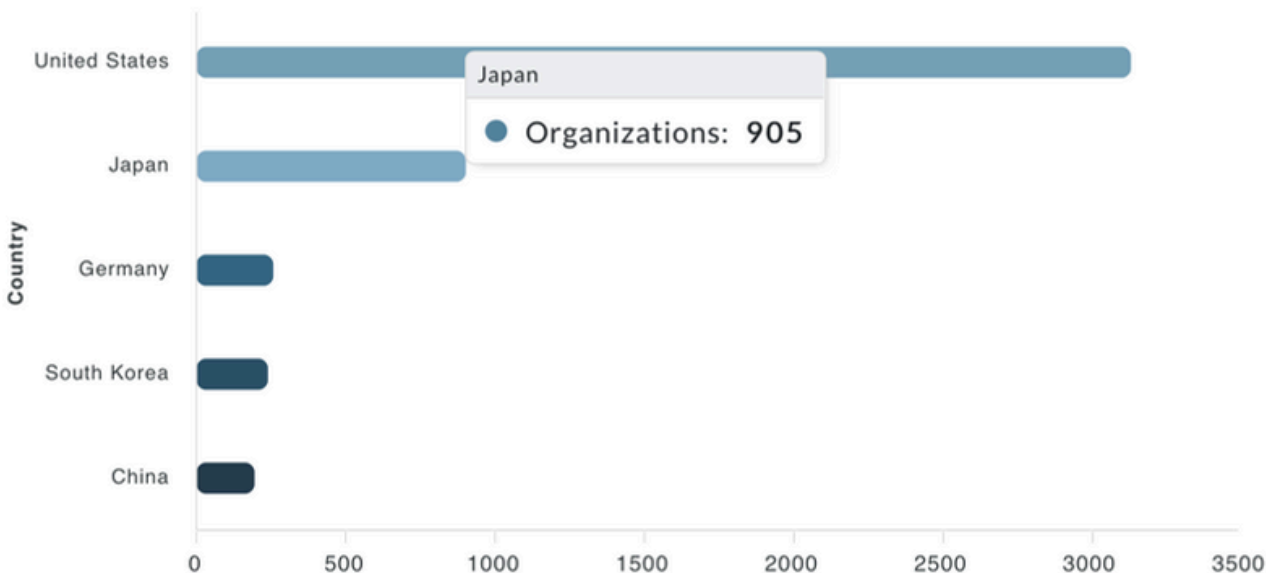
Global

Technology Monitoring | Global

View global activity

Leading global research hubs include **US**, followed by **JP** and **DE**. Noteworthy patent filers like **Toyota jidosha kabushiki kaisha** drive innovation worldwide.

- **US** is leading the research followed by **JP** and **DE**.
- **Toyota jidosha kabushiki kaisha** is the top patent filer, with **280**.

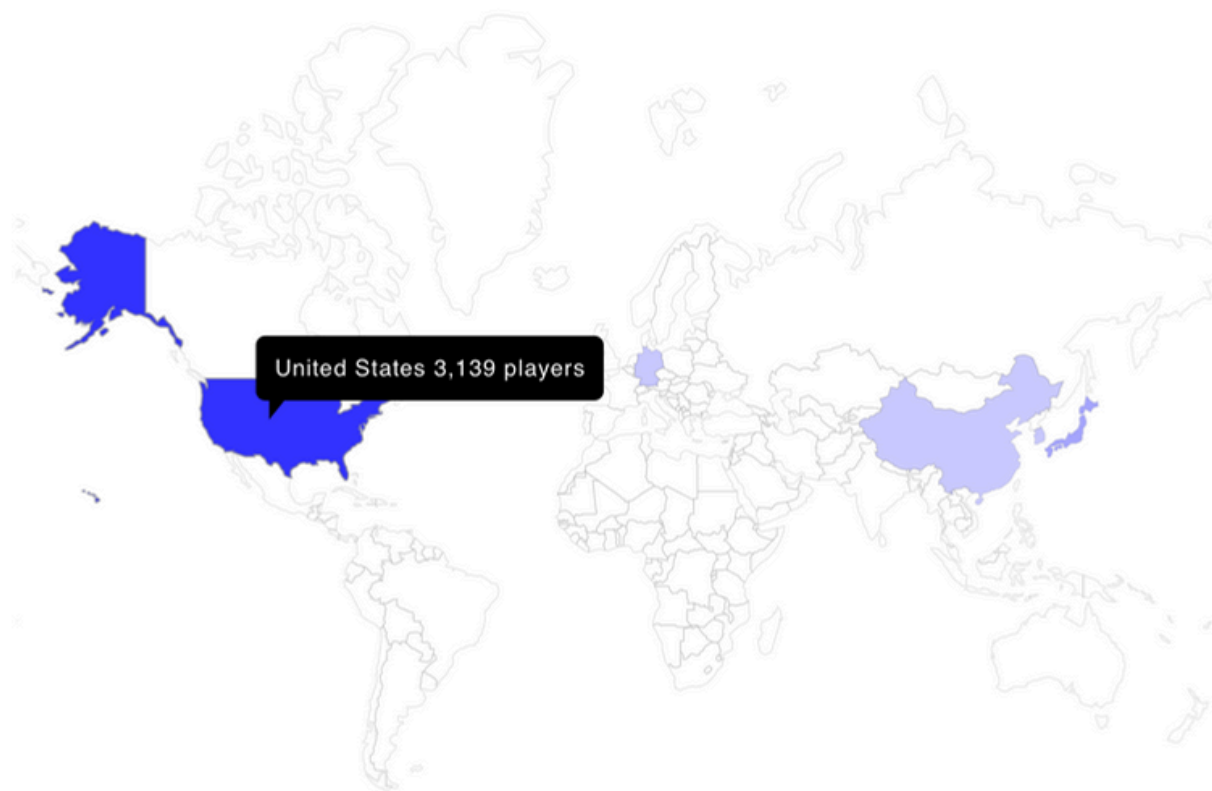


Global activity under the technology



Country specific activity under technology





Organization	Recent Patents
Ford global technologies, llc	222
Gm global technology operations llc	217
Uber technologies, inc.	161
Waymo llc	157
Baidu usa llc	141

The Incubig Advantage: Why Choose Us?

INCUBIG

Don't react to change, know future landscape

GET STARTED

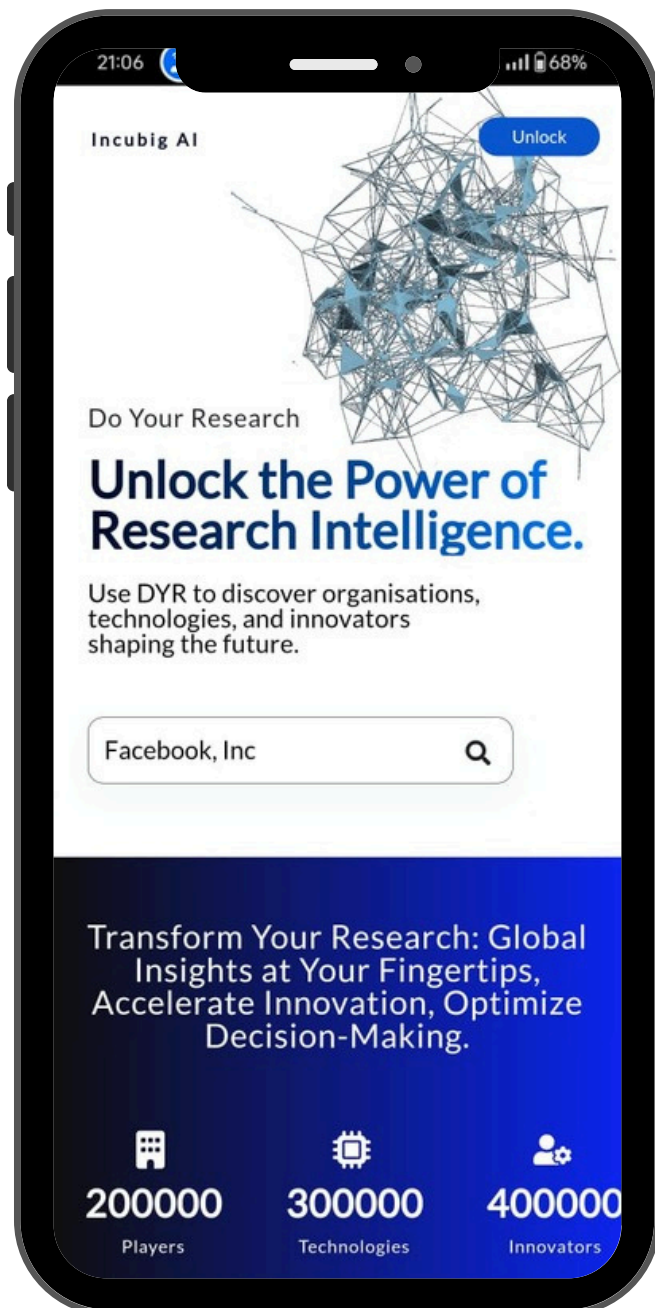
The Incubig Advantage: Why Choose Us?

- **Comprehensive, Single-Window Solution :** Simplify IP management, from filing to monetization, with our all-in-one platform.
- **Global Reach, Local Expertise:** Legal and technical IP support in key markets worldwide, backed by region-specific insights.
- **Commitment to Client Success:** Our solutions are tailored to align with strategic goals, providing customized support for each client segment.

INCUBIG AI's

RESEARCH INTELLIGENCE PLATFORM

Dont react to change, know future landscape



Personalized dashboard

- Research-driven personalised data intelligence.
- +100 million research data points driving insights.
- Complete, 360-degree research & market landscape.

Innovation Index

- Global research and business trends.
- Market understanding, & competitor intelligence.
- Partnership, and growth opportunities, gaps in technology/sectors, know the future landscape.
- Accelerated R&D, minimized infringement and litigation risk, increased valuation.

IPR Solutions

- Own valid and valuable patents, trademarks, & copyrights.
- Sector agnostic deep-dive reports for making right decisions at right time.
- Technology Valuation, Licensing and monetization solutions.

Incubig AI

OWN YOUR INNOVATION



Own valid and Valuable Patents.

- **INCREASED VALIDITY**

A quick novelty analysis report will help you to determine if your invention features are patentable or not.

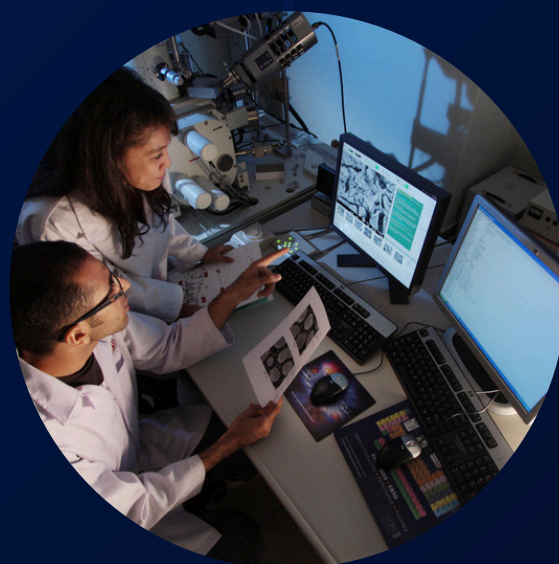


- **INCREASED VALUATION**

Claim feature/s recommendations for increasing valuation of your patent application.

- **DRAFTING ASSISTANCE**

Patent drafting assistance & expert level review of your patent application. Preparing forms, and enabling you to easily file patents, thereby saving time & costs.



Incubig AI

KNOW YOUR TECHNOLOGY



Make right research & business decisions.

- **KNOW FUTURE LANDSCAPE**

Monitor technological maturity and advancements in your sector. Discover next big R&D area & innovation-driven patent filing opportunities.



- **MONITOR COMPETITION**

With just a few clicks, discover, track, and analyze your competitors' research and product activities across both core and non-core sectors—giving you a continuous competitive edge.



- **BETTER ROI**

Optimize investment, monetization, and M&A strategies with research-driven, predictive insights from Incubig.

Incubig AI

DO YOUR RESEARCH

For making right research & business decisions.

- **FREEDOM TO OPERATE**

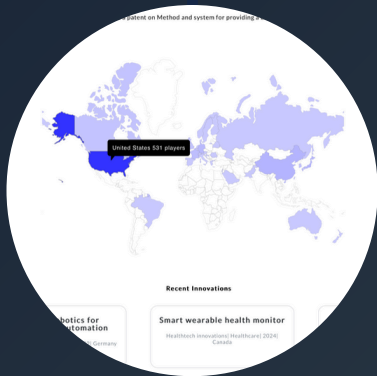
Track technological advancements and maturity in your sector. Identify emerging R&D areas and innovation-led patent filing opportunities.

- **EARLY INFRINGEMENT**

With Incubig, effortlessly track, analyze, and gain insights into your competitors' research and product activities across core and non-core sectors—keeping you a step ahead

- **INCREASE VALUATION**

Boost your company's worth with data-driven insights. Incubig's intelligence helps you leverage IP to enhance valuation and drive strategic growth.



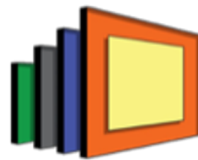
Checkout emerging tech

Industry	Innovation
Computing	Charles H
Aviation	Donald
Electric Elements	Joachim
Computing	Jeffrey
Medical Science	

**IPR Solutions
That Our Clients
Trust and Value.**



Ainstein



IMITO



SWARM
TECHNOLOGY



LG Innotek



MINNESOTA WIRE

Life Saving Connections

Insights look very nice.

**-Suzanne Cook, CEO & Co Founder
Ainstein AI**

Saved my time and
money for filing my
patents.

-MedTech Startup in Stealth Mode

Very satisfied with the
results.

-LG Innotek

Own Your Invention
solution is significant.

-IITs, US Universities, VCs



Incubig AI

Do Your Research

Unlock
the power of
Research Intelligence.

Use DYR to discover organisations, technologies, and innovators
shaping the future.

Tesla, Inc.



Unlock

Transform Your Research: Global Insights at Your Fingertips,
Accelerate Innovation, Optimize Decision-Making.


200000
Players


300000
Technologies


400000
Innovators

DYR.INCUBIG.ORG

Just click and explore to see how Incubig can turn
your vision into reality!

**KEEP
INNOVATING.**



consortium.

the total should
be more than
the sum of the
parts.

Being built like

An Open Source Movement !!

Forum RPM has been designed not as an advisory business but as a movement. A truly inclusive movement which welcomes credible new partners to join its ranks. Partners can contribute time, resources or funding.

Our objective is to build the most powerful IPR monetisation platform in the world which can be used by users and organisations using a SaaS model.

This approach will avoid repetitive manual work in creating documentation multiple times, improve IPR through secondary research, help fine tune the original research problem, take timely steps for protection and defend IPR in case of violation.

The Forum RPM Platform welcomes as active members

Research & Innovation teams funded by conscientious technology companies.

Professional firms working in this domain.

Data owning/collecting companies who have access to relevant data and infrastructure for data collection.

User agencies and government departments who have a need for such services.

Contact us

to join the consortium

1 **Non-profit platform in the IPR protection and monetisation space**

The platform has been designed ground up for continued development and upgradation. This is not a for-profit initiative. As a user, you can be sure that your data will not be misused, exported or made available to unauthorised users.

10 + **Memorandum of Understanding across various areas**


IIT Alumni Council has entered into several MoUs across geographies, sectors and industries. These include DRDO, IIT Ropar, Dassult Aviation, Mumbai University, Moscow University, UDCT and several others.

100+ **Global technologists, innovators & venture capitalists as backbone**

All of whom are alumni of the prestigious Indian Institutes of Technology. This technology literate group is well placed to open doors and help access the latest developments globally.

1,000+ **Interns who work on IIT Alumni Council projects as student volunteers**

With one of the largest and most literate intern armies in the world – more than 50% of our interns are children of IIT Alumni. More than 90% of our volunteers and council members are IIT Alumni.



IIT ALUMNI COUNCIL foundational technologies.

FORUM

A combination of global, open source, open API (application programming interface), and user-contributed & independently collected data can fundamentally alter the price performance and applicability of the RPM engine for the research targets being pursued by the scientist/ researcher.

1

TECHNOLOGY

Contextual crawling of the web

A digital replica can be created at close to cellular level accuracy for living beings and at millimetre level accuracy for an entire city or estate. Once interfaced with live sensor feeds - the digital version starts behaving like a living being. However, this digital element is not constrained by the limitations of time and space. Thus it is possible to use the digital replica of a city or country to run climate change simulations at several orders of magnitude faster than real-time.

2

TECHNOLOGY

Real world interfaces

Digital twin technology is fundamentally different from simulation of a static digital representation or replica. When appropriately handled with relevant and fast-developing AI tools - a digital replica converts to a dynamic digital twin. This approach can give life to a virtual digital element. The element could be a machine, a person or an entire town.

3

TECHNOLOGY

Correlation creation

Computer vision helps bring AI and digital twin to life. New photogrammetry tools including hyperspectral imaging can see things which the human eye can not. To give an example from Agritech - a hyperspectral system can, not only identify the crop in the field, but it can accurately determine the exact species or variety of the plant. In addition, it can validate the health of the plant in terms of age, time to harvest, hydration level and nutrient deficiency. It can even assess the condition of the soil in terms of organic carbon content and other parameters.



megaSpheres

the critical success areas
required for improving
Indian quality of life and
enhancing global
integration



Transformation through Technology



megaSpheres

QUALITY OF LIFE INITIATIVE OF
IIT ALUMNI COUNCIL



The megaSpheres initiative includes three mission organisations, and three mission facilitators synchronised to achieve its goal of accelerated socio-economic progress through technological and financial interventions.

Idea stage ventures are incubated at the INCUBATOR.

FORUM facilitates access to strategic resources & growth capital.

INSTITUTE helps access research resources & indigenous technologies.



.PROFESSIONAL SERVICES.



.STARTUP ACCELERATOR.



.APPLIED RESEARCH .





HEALTHSPAN ENHANCEMENT INITIATIVE

The C19 Task Force was set up by the IIT Alumni Council as a Rs 700 crore initiative to catalyse the national fight against Covid. The C19 Task Force morphed into the MegaLab mission in August 2021.

MegaLab advances preventive health and longevity through a fusion of traditional medicine systems with cutting-edge technologies and artificial intelligence.

megalab.in





GLOBAL ALUMNI OUTREACH & PARTICIPATION

MegaReach for an outreach to IIT alumni around the world who can help in the identification, development and deployment of key technologies involved in the MegaFund's target areas for investment.

megareach.in





SOCIAL FUND REGULATED AS AN AIF FUND BY SEBI

The MegaFund is a consortium of social and venture capital funds with a target corpus of Rs 21,000 crores and a fund life of twenty years. The anchor entity PanIT Fund is registered with and regulated by SEBI under the Social Impact Fund framework under the AIF Regulations 2012.

The MegaFund promotes the progress of science and technology, advances national health and prosperity and helps to secure and lead in key strategic technologies including climate change.

megafund.in





PROJECT IMPLEMENTATION
AGENCY

A central project implementation and compliance platform which implements pilot projects for technology demonstration and validation. The Forum also does esg, environment and concurrent audits for impact assessment studies.

forums.org.in





TECHNOLOGY STARTUP
ACCELERATOR

Startup accelerator, which works on a venture studio model to pivot or incubate projects in identified areas with the objective of catalysing the creation of professionally-managed, board-run companies which are build ground-up for early stage listing on a stock market.

incubator.org.in



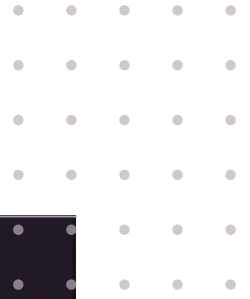


APPLIED RESEARCH
ORGANISATION

A research platform which identifies appropriate resources from industry, research institutions and academia to meet the needs of ventures and projects supported by the various mission organisations and facilitators of the IIT Alumni Council.

institute.net.in





Creating awareness through curated experiences and opportunities for practical learning of healthy habits, nutrition, and lifestyle choices relevant to our personal contexts are essential parts of wellness facilitation. And form the core philosophy of āyushéa.





LEGAL DISCLAIMER

Forum refers to PanIIT Forum, an Indian non-profit company registered under Section 8 of the Companies Act, its network of partner member firms, charter members and their related entities. Forum and each of its member firms are legally separate and independent entities.

This material is prepared by the āyushća Project Management Team of the Forum. The Forum Council is manned by a group of alumni drawn from various mission organisations of the IIT Alumni Council. None of the Council members has received any remuneration for the services rendered. No sponsorship or fee has been received for the same.

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This is a strictly confidential document which can be shared with members of the investment committee of MegaFund and the various stakeholders and potential partners of the project.

2024@Forum dated 30.1.2024

Document ID: goa.iitcouncil.org



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Report authored by the
āyushéa Project
Managment Unit of Forum

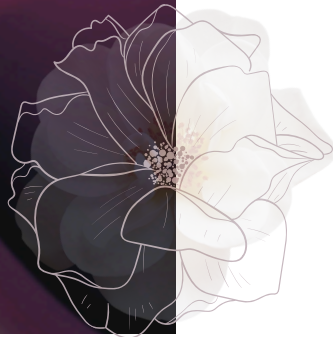
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goa.āyushéa.org

Designed by
ANYTIME MEDIA
for IIT Alumni Council
anytimemedia.in



annexure.

FORUM

contact.



. An IIT Alumni Council initiative .

Get in touch with us for a free, no-strings-attached conversation about what Forum CRP can do for you.

To ensure adequate impact and in order to focus on large initiatives, we typically look for clients with a USD 250 million or more remediation budget in a 3-4 year time frame.

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