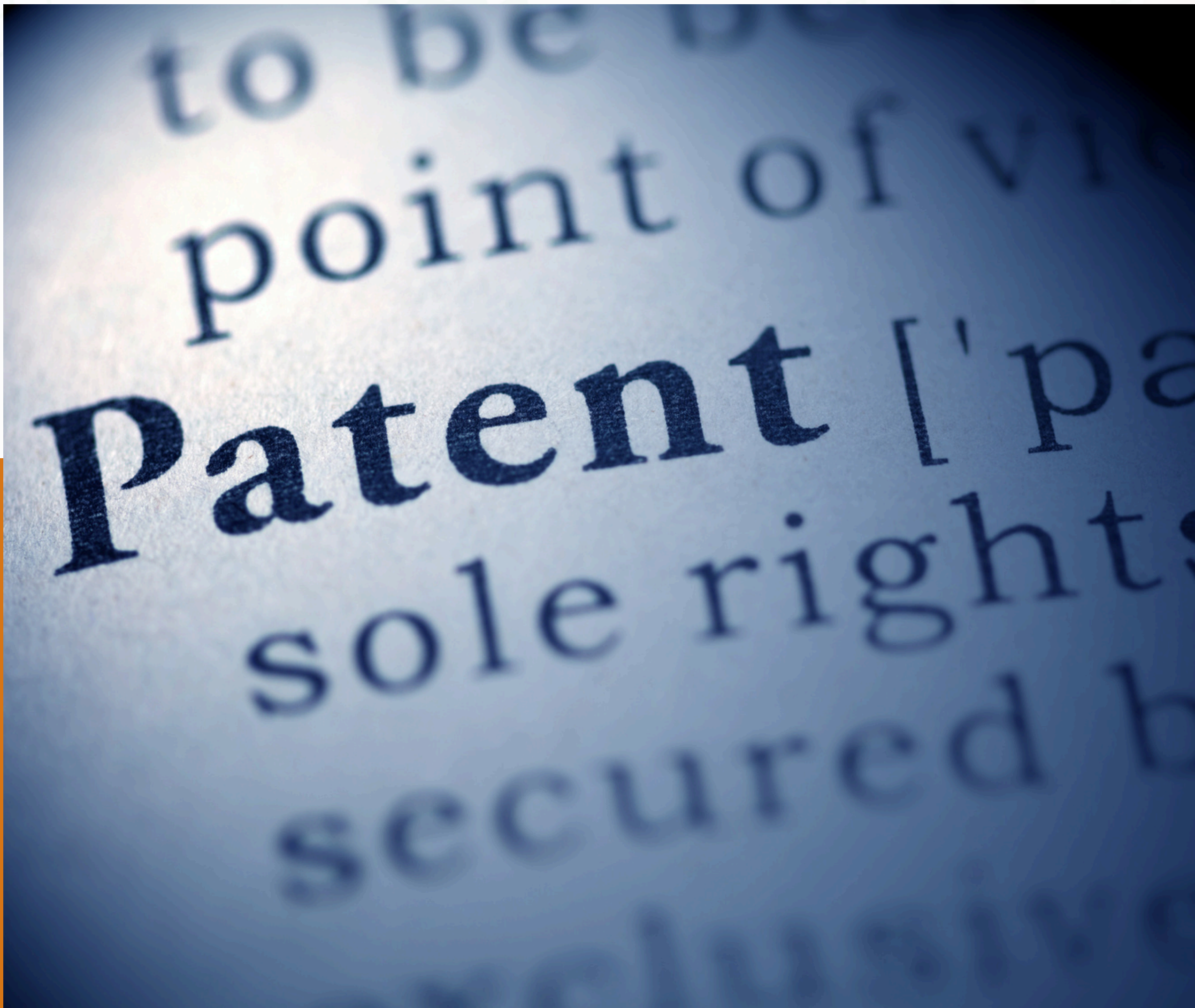
IAA INNOVATION
AGENCIES IN AFRICA NETWORK

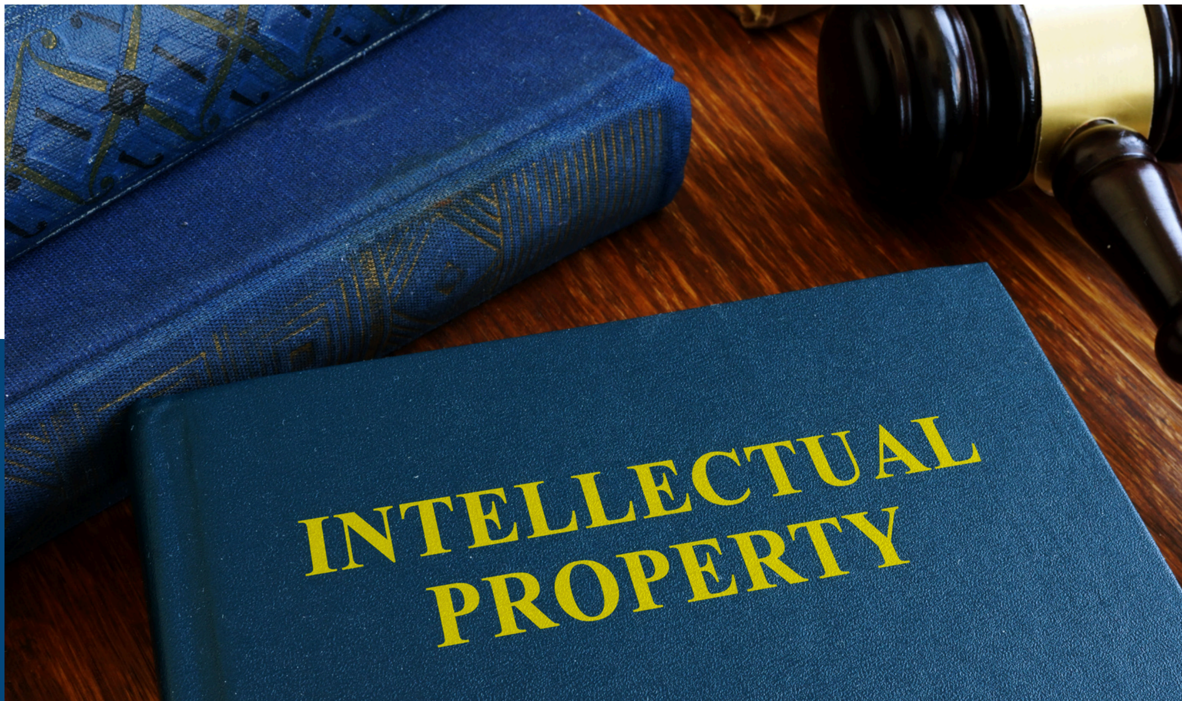
Knowledge Note

Trends, Opportunities and Implications from the World Intellectual Property Indicators 2025 for African Innovation Agencies



Purpose of the Knowledge Note

This Knowledge Note synthesises the key insights from the World Intellectual Property Indicators 2025 to inform African national and regional innovation agencies. It highlights global and African IP trends, provides thematic analysis aligned with the IAA Network's focus areas (digital, green and inclusive innovation), and outlines strategic implications and priority areas that can support evidence-informed policy, capacity building and collaborative programming across the continent.



About the Innovation Agencies in Africa Network

The Innovation Agencies in Africa Network is a pan-African platform that brings together national and regional innovation agencies to promote collaboration, capacity building, knowledge exchange, and policy harmonization across the continent. Its mission is to strengthen the capabilities of innovation institutions and accelerate Africa's transition to an inclusive, sustainable, and innovation-driven economy.

Executive Summary

The *World Intellectual Property Indicators 2025* report presents a global innovation system that continues to expand in scale and complexity. Worldwide patent filings reached an estimated 3.7 million in 2024, which the report describes as the fastest year-on-year growth since 2018. Asia continues to dominate global IP activity, led by China, India and the Republic of Korea, which have invested heavily in research, knowledge production and innovation infrastructure. Trademark activity remained resilient at about 15.2 million class counts and design registrations continued to rise globally. These patterns show strong demand for protection of intangible assets across a wide range of industries, from digital technologies to consumer goods and creative sectors. At the same time, the report highlights persistent global disparities. Women accounted for only 18 percent of inventors listed in PCT applications in 2024 and many developing regions continue to record small shares of global filings.

Africa's overall engagement with formal IP systems remains modest but shows areas of gradual improvement. Patent applications from Africa amounted to about 19,100 in 2024, which still represents only 0.5 percent of global filings and reflects limited domestic patenting capability in most countries. Trademark filings are more dynamic and accounted for approximately 300,700 class counts in 2024 with a growing proportion coming from resident applicants. Industrial designs and utility models remain significantly underutilised despite their relevance for everyday innovation in manufacturing, fashion, architecture and crafts. Regional systems experienced notable pressure in 2024. WIPO reports that ARIPO and OAPI recorded fewer applications for the second consecutive year, largely due to a reduction in non-resident filings. This trend highlights the importance of increasing participation from African innovators in order to stabilise and strengthen regional IP ecosystems.

Despite these challenges, several opportunity areas stand out. Digital innovation is growing rapidly across Africa as mobile connectivity expands, fintech solutions scale and interest in artificial intelligence and data driven innovation grows. African innovators remain underrepresented in global digital patenting but the potential for growth is substantial. Green innovation is another promising frontier with strong alignment to Africa's development priorities. Technologies related to solar energy, clean cooking, mini-grids and climate resilience offer clear opportunities for new inventors and emerging enterprises. Inclusive innovation also requires focused attention. Women, youth and MSMEs form the backbone of many African economies but continue to have limited participation in patents and designs. Creative industries that rely on design rights, trademarks and copyright are expanding quickly and require more structured IP support.

The findings from the WIPO report suggest several implications for African innovation institutions. Strengthening domestic innovation capacity will require improved access to IP advisory services, stronger integration of IP into research systems and targeted support for start-ups and MSMEs. New incentive schemes can help encourage patenting, design registration and the use of utility models, especially for innovators working in manufacturing, green technologies and digital sectors. Collaboration with ARIPO and OAPI will remain important for reducing procedural barriers, improving access to shared tools and encouraging more consistent use of regional systems. Dedicated initiatives aimed at women and youth will be necessary to close participation gaps across IP categories. The growing importance of regional trade under the African Continental Free Trade Area also underscores the need for enterprises to protect brands, product designs and technologies more strategically.

These insights provide a foundation for identifying priority areas for action and collaboration. Emerging organisations can create value by facilitating access to knowledge resources, commissioning analytical work that clarifies sectoral trends, supporting capacity building efforts in partnership with national and regional IP offices and enabling dialogue among stakeholders. The indicators presented by WIPO highlight both the gaps and the possibilities for African innovators. With deliberate and well structured initiatives, African institutions can help create the conditions that allow researchers, entrepreneurs, creative professionals and technology based enterprises to build stronger and more competitive intellectual property portfolios that contribute to inclusive and sustainable development across the continent.

Overview of Global IP Trends

Global intellectual property activity continued to grow in 2024, reflecting ongoing investment in research and development, an expanding global innovation base and renewed confidence across major technology producing economies. The World Intellectual Property Indicators 2025 report shows that all major IP categories either increased or remained stable, although performance varied significantly by region and income level.

To support interpretation, the table below summarises the key global metrics reported for 2024.

IP Category	2024 Volume	Year on Year Change	Notes
Patent Applications	**3.7 million**	**+4.9 percent**	Fastest growth since 2018. Asia contributed 70.1 percent of global filings.
Utility Model Applications	**3.25 million**	**+4 percent**	Mostly driven by China which accounts for over 95 percent of all UM filings globally.
Trademark Class Counts	**15.2 million**	**–0.1 percent**	Overall stable. Large emerging economies recorded strong growth.
Design Application Counts	**15.2 million**	**+2.4 percent**	Africa accounts for approximately 2 percent of global filings.
Women Inventors (PCT)	**18 percent**	No major change	Indicates a persistent global gender gap.

Regional Dynamics and Global Concentration

The global distribution of IP activity remains highly concentrated, with Asia maintaining its lead:

- 70.1 percent of all patent filings worldwide originated from Asia in 2024
- Source: WIPO Indicators 2025
- China alone accounted for:
  - 48.2 percent of global patent applications
  - 47.9 percent of global trademark class counts

This concentration reflects long-term national strategies that emphasise industrial competitiveness, R&D investment, technology upgrading and participation in global value chains.

Region	Share of global patent filings	Comments
Asia	**70.1 percent**	China, India, Republic of Korea and Japan are key contributors.
Europe	Approx. 16–17 percent	Driven by EPO and strong national offices.
North America	Approx. 9–10 percent	Led by the United States.
Africa	**0.5 percent**	Very small share. Growth is slow but steady.
Latin America & Caribbean	Small share	Trademark activity growing faster than patents.

Overview of Global IP Trends

Emerging Economies with Fast Trademark Growth

Several non traditional IP hubs are experiencing strong trademark activity, which WIPO often interprets as a signal of market expansion and entrepreneurial dynamism.
Countries with over 15 percent trademark growth include:

- Kazakhstan
- Guatemala
- Morocco
- Mongolia

For Africa, Morocco's performance is notable because it demonstrates how an African country can use institutional reforms and business environment improvements to stimulate brand creation.

Persistent Global Challenges

The WIPO report also highlights several structural challenges that continue to shape global IP performance.

1. Declining Applications at Regional IP Offices

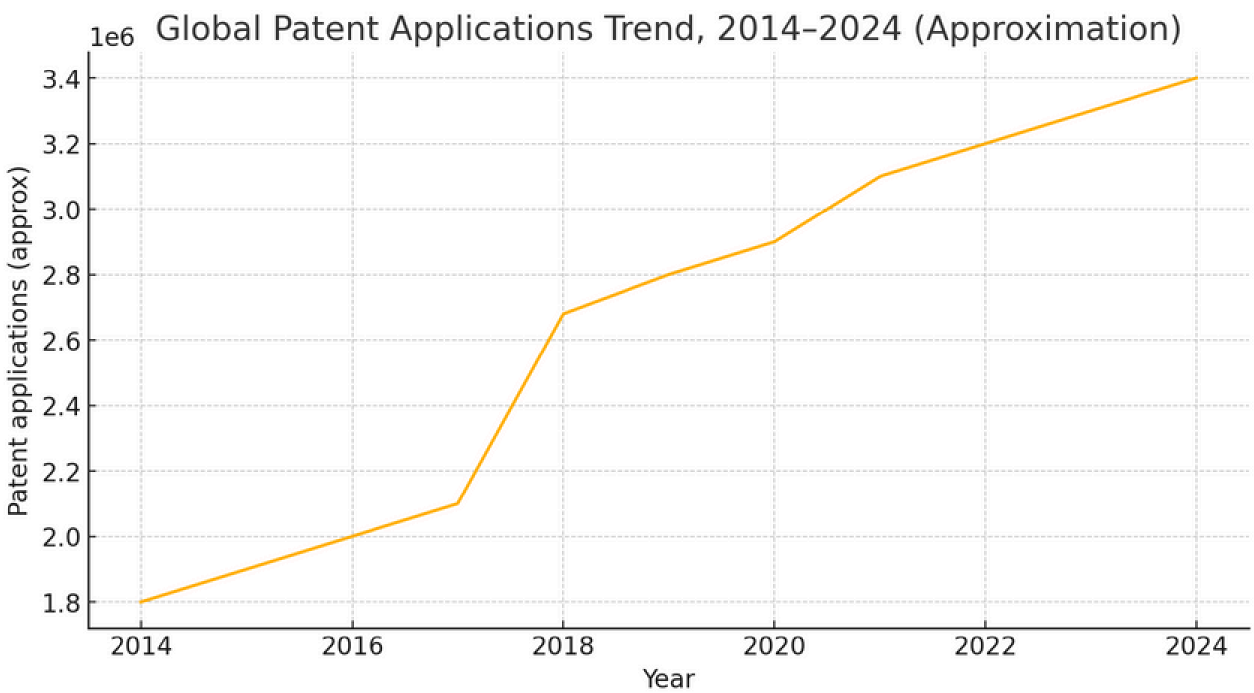
In 2024, WIPO notes that several regional IP offices experienced year-on-year declines, including ARIPO and OAPI, largely due to falling non-resident filings.
This matters because:

- Non-resident filings help sustain the operational stability of regional systems.
- Declines may reduce examination fees, revenue and overall activity levels.
- It signals a need for stronger domestic engagement across African countries.

2. Persistent Gender Gap

Women accounted for only 18 percent of inventors in international patent applications under the PCT system.
This points to:

- Structural inequalities in STEM participation
- Low representation of women in patent-intensive sectors
- Limited access to IP advisory support in many regions



Africa's IP Landscape

Africa's engagement with formal IP systems remains modest when compared to global volumes, but the continent demonstrates specific strengths in trademark activity, early growth in patent filings, and pockets of potential in industrial design. Patterns vary across countries and regional offices, with non-resident activity still driving most filings in patents and designs. The WIPO Indicators highlight both structural constraints and emerging opportunities for African innovation agencies.

IP Category	2024 Volume	Africa's Global Share	Notes
Patent Applications	**19,100**	**0.5 percent**	Growth remains modest, dominated by non-resident filings.
Trademark Class Counts	**300,700**	**2.0 percent**	Strongest IP category for African residents. Reflects MSME and brand creation strength.
Design Applications (ARIPO + OAPI)	**1,220** approx	**<1 percent**	OAPI: 1,082. ARIPO: 138. Underutilised despite high potential in creative sectors.
Utility Models	Very low	Not reported for most states	Largely unused except in a few jurisdictions.
Regional Office Trends	Decline in 2024	N/A	ARIPO and OAPI filings declined for second consecutive year.

1. Patents

Africa recorded about 19,100 patent applications in 2024, representing only 0.5 percent of global filings.
Most patents are filed by non-residents, indicating that:

- Domestic R&D systems remain small
- Universities and public research organisations file very few patents
- Patent awareness among start-ups and MSMEs remains limited
- Filing costs and procedural complexity deter many local innovators

Countries such as **South Africa, Egypt, Morocco and Kenya** show the highest levels of resident patenting, though still small on global terms.

2. Trademarks

Trademark activity is the most dynamic part of Africa's IP landscape.
With 300,700 trademark class counts in 2024, the continent shows:

- A healthy and growing resident share
- Strong usage among MSMEs, creative entrepreneurs and new consumer brands
- A link between economic formalisation and trademark filings
- Potential for regional brand protection under AfCFTA

Countries like **Morocco, Kenya, Nigeria and Egypt** have seen sustained growth due to rising entrepreneurship and improved business registration systems.

Africa’s IP Landscape

3. Industrial Designs and Utility Models

Design filing volumes remain low, especially for a region with significant creative and design-led industries.

- OAPI: 1,082 design counts in 2024
- ARIPO: 138 design counts in 2024

This gap indicates:

- Limited awareness among designers and artisans
- Weak integration of IP into creative industry development programmes
- Missed commercialisation opportunities for fashion, textiles, crafts, architecture and consumer product design

Utility models are barely used across most African countries, despite their importance for incremental, practical innovations common in manufacturing and agriculture.

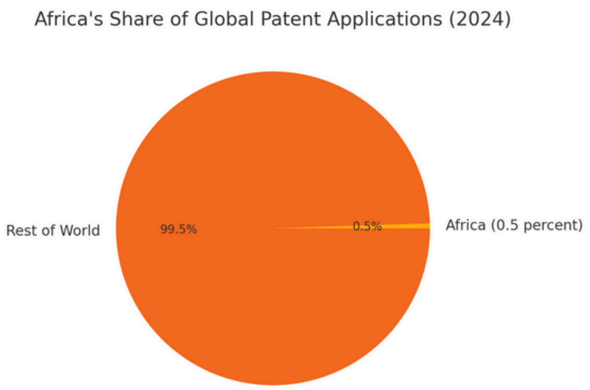
4. Regional Office Trends

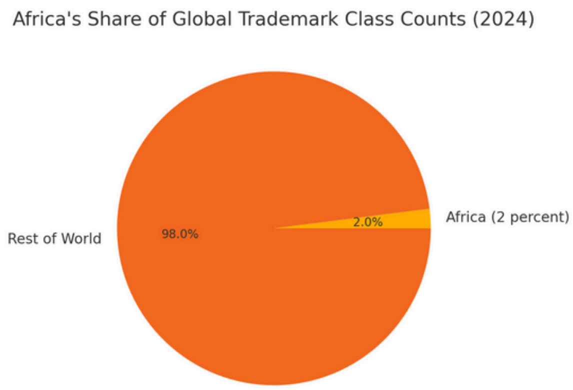
WIPO reports a serious warning:

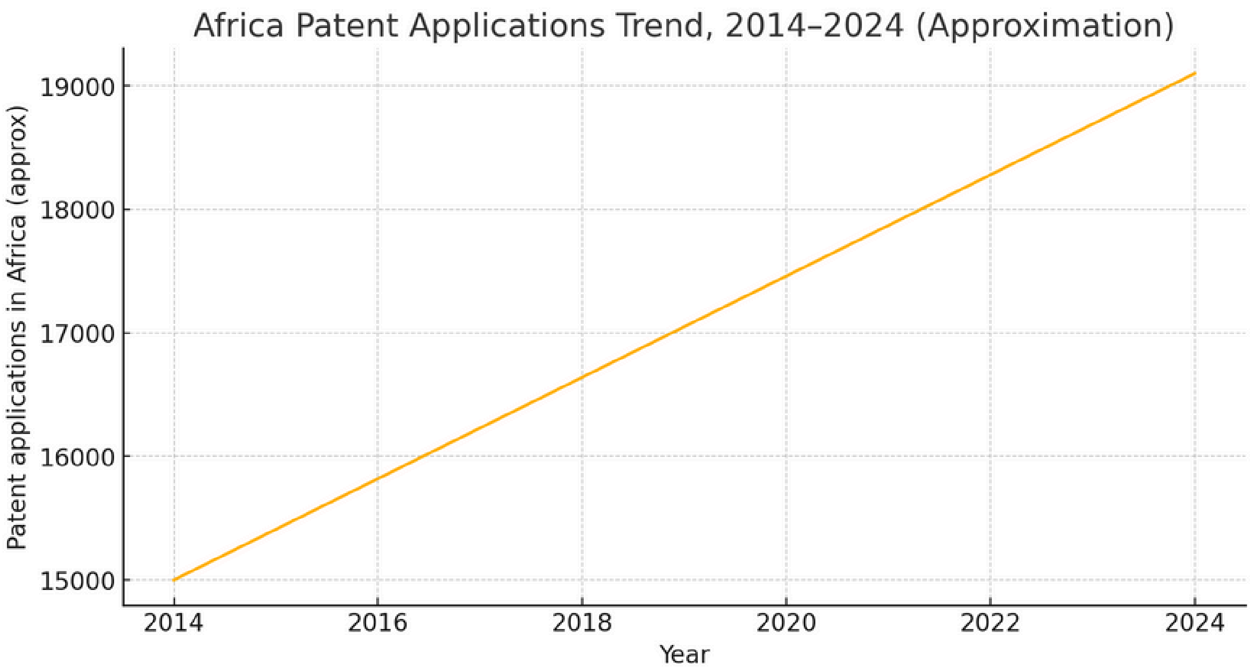
“Each of the three regional offices ARIPO, EAPO and OAPI received fewer applications in 2024 than the previous year, marking a second consecutive year of decline.”

For Africa, this signals:

- Overreliance on non-resident filings
- Slow domestic uptake
- Need to modernise digital services, examination processes and communication strategies
- Opportunity for harmonisation initiatives that reduce filing complexity







Thematic Insights

Digital Innovation Related IP Trends

Digital technology continues to dominate global patenting activity, reflecting its central role in modern economies. According to the report, the majority of global patent filings in 2024 came from areas classified under ICT, including:

- ***ICT hardware***

The report shows that Asia received 70.1 percent of all global patent applications in 2024, driven largely by China, Japan and the Republic of Korea, which have robust ICT hardware industries. China alone accounted for 1.79 million patent applications, representing 48.2 percent of the world total. This dominance is rooted in strong electronics manufacturing and hardware innovation ecosystems.

- ***Software engineering***

Software-related patenting continues to expand through PCT filings, with major contributions from the US, China and Europe. These patents commonly fall under IPC codes related to data processing and computing. The report notes that the share of resident patent filings is significantly higher in economies with strong ICT sectors, demonstrating the integration of software innovation with domestic R&D.

- ***Telecommunications***

Telecommunications remains a major driver of Asia's innovation leadership. Patent offices in China, the Republic of Korea and Japan reported high volumes of filings in technologies associated with 5G, network infrastructure and wireless communication. These filings contribute to Asia's dominant role in global patent growth.

- ***Data processing and AI***

Growing demand for AI-driven solutions has pushed up global filings related to machine learning, data handling, automated decision-making and cloud computing. Although the report does not break down AI-specific data in detail, these technologies are embedded within broader ICT patent categories that are expanding rapidly.

Africa's Position

Africa's contribution to digital-related patenting remains small.

The continent accounted for **only 0.5 percent of global patent applications** in 2024 (19,100 applications), and resident applicants represented **only 20.4 percent of these filings**. This is far below the resident share in Asia (84.6 percent), demonstrating the limited development of indigenous digital patenting capabilities.

However, Africa has growing digital entrepreneurship, especially in fintech, e-commerce and mobile technology, driven by high mobile penetration and youthful populations. These fields are active in innovation, but the activity is not translating into formal IP filings.

Key challenges include:

- *Limited patenting activity in digital sectors locally:* Countries such as South Africa (89 percent non-resident share) and ARIPO member states (83.5 percent non-resident share) show how few domestic innovators are protecting digital inventions.
- *Weak integration of IP into start-up ecosystems:* African tech start-ups often prioritise product development and market entry, not IP strategy. This leads to missed opportunities for protection and investment readiness.
- *Low participation in PCT pathways due to cost and complexity:* The cost of PCT filing and foreign prosecution remains prohibitive for many African innovators, contributing to the very low African representation in international filings.

Innovation agencies can intervene by:

- *Supporting digital innovators with IP advisory services:* Agencies can offer IP audits, patentability assessments, and advisory sessions to guide start-ups through protection strategies.
- *Developing regional patent landscaping tools:* Patent landscapes enable innovators to understand competition, identify white spaces and strengthen commercialisation strategies. A pan-African tool would reduce duplicative efforts.
- *Offering subsidised filing support for high-growth digital start-ups:* Fee subsidies, vouchers, or cost-sharing mechanisms can make PCT entry more accessible for AI, fintech, agritech and medtech innovators.

Thematic Insights

Green Innovation Related IP Trends
The report provides detailed IPC-based classifications for renewable energy technologies such as fuel cells, wind energy, geothermal systems and hydro technologies. These classifications help track how global patenting is evolving in green sectors.

Global filings in green technologies continue to grow, especially in:
- Wind energy (classified under F03D)
- Fuel cell technology (classified under H01M)
- Geothermal energy (F03G classifications)
- Hydro-based technologies (including F03C and E02B categories)

This rise reflects shifts toward global decarbonisation and sustainable industry.

Although the report does not isolate African data for these technologies, Africa's extremely low share of global patent activity (0.5 percent for patents and 2 percent for trademarks) indicates limited formal innovation output in these fields. However, the continent’s needs in energy access and green infrastructure are creating practical opportunities for innovation.

Emerging African opportunities appear in:
- **Off-grid solar**

Africa is the world’s largest off-grid solar market, yet patent activity related to solar technologies remains concentrated in China, the US and Europe. This represents a gap African innovators could fill.
- **Clean cooking solutions**

Innovations in efficient stoves, biomass technologies and clean fuel alternatives have potential for protection through utility models or patents.
- **Mini-grids**

Renewable mini-grids are expanding, especially in East and West Africa. Yet no major patent clusters exist around African-originating mini-grid technologies.
- **Water purification technologies**

Local solutions such as low-cost filtration, desalination and community treatment systems could benefit from design or patent protection.

Innovation agencies can:
- *Develop targeted green innovation funding windows:* Supporting innovations aligned with SDGs can help increase African representation in green IP filings.
- *Partner with OAPI/ARIPO on accelerated examination for climate tech:* Fast-track programmes can incentivise more filings similar to green patent programmes in other regions.
- *Build local capacity for technology transfer from foreign patent holders:* With non-residents accounting for more than 80 percent of patent filings in many African offices, capacity building in licensing and co-development is essential.

Thematic Insights

Inclusive Innovation Trends
Women and Youth
The report highlights a global gender gap in patenting, noting that women accounted for only 18 percent of inventors listed in international PCT applications in 2024.

This gap reflects systemic barriers that are even more pronounced in Africa due to:
- Limited access to R&D funding
- Underrepresentation of women in STEM fields
- Low awareness of IP rights among women-led enterprises

Youth face similar challenges, with limited exposure to IP systems despite high involvement in digital and creative innovation.

MSMEs
MSMEs dominate trademark filings globally and in Africa.
The report shows that trademarks make up Africa's strongest IP category, with 300,700 class counts in 2024 and a resident share of 55.8 percent.
However, MSMEs have:
- Very low participation in patenting (due to cost and complexity)
- Limited use of design protection, despite activity in manufacturing, crafts and creative sectors

Creative Sector
Design filings at OAPI and ARIPO remain low relative to Africa’s potential in:
- *Fashion and textiles:* OAPI recorded 1,082 design counts but with 65 percent non-resident origin, showing limited local usage.
- *Film, animation and gaming*
- *Handicrafts:* High potential due to Africa’s artistic heritage, yet few designs are registered.
- *Architecture and product design:* Strengthening understanding of design protection could unlock significant creative economy value.

Key Implications for African Innovation Agencies

Revisiting Incentive Schemes for Patenting and Design Registration

Innovation agencies do not directly set patent fees or determine regulatory incentives, but they can advocate for policy shifts while simultaneously reducing the practical barriers that make filing costly or difficult for innovators.

Agencies can explore:

- *Grants for prior art search and patent drafting:* Patent drafting and prior art searches are significant cost drivers for innovators. Through innovation funds or challenge grants, agencies can cover these technical services, especially for high-potential innovations emerging from universities, start-ups or research centres.
- *Fee subsidies for first-time applicants (through partnerships):* While most agencies cannot reduce statutory fees themselves, they can create schemes that reimburse or co-fund filing costs for youth innovators, women entrepreneurs, climate tech developers or MSMEs. This approach supports affordability without requiring immediate changes to national fee structures.
- *Accelerator programmes with IP mentorship:* When IP experts are embedded in accelerator and incubation programmes, start-ups gain early exposure to IP strategy, patent mapping and brand-building. This ensures that entrepreneurs do not treat IP as an afterthought but as part of their business and market-entry planning.

Deepening Regional Integration via ARIPO and OAPI

The declining filings at ARIPO and OAPI, largely driven by drops in non-resident activity, show a need for continental collaboration. Innovation agencies cannot directly change how regional IP offices operate, but they can act as bridges, advocates and ecosystem conveners who push for reforms and support their implementation.

Agencies can respond by:

- *Cross-region harmonisation to reduce fragmentation:* Innovation agencies can participate in technical working groups, forums or consultations aimed at harmonising procedures. Harmonised systems lower the complexity innovators face when navigating multiple jurisdictions.
- *Joint policy dialogues to address non-resident dependence:* Agencies can convene or support dialogues that bring together governments, IP offices, innovators and private sector actors to understand how to stimulate more resident filings. This collaborative platform can help shift systems from being passive registries to being active components of innovation ecosystems.
- *Shared IP databases and digital tools:* Agencies can advocate for or co-invest in shared databases and search platforms that make information more accessible. By partnering with ARIPO or OAPI, innovation agencies can help ensure that innovators have access to prior art search systems, IP analytics tools or user-friendly filing portals.

Promoting Inclusive IP Participation

Gender, youth and informal sector gaps in IP systems reflect broader inequities in innovation ecosystems. Innovation agencies are well positioned to champion inclusive innovation because of their proximity to entrepreneurs, communities and support institutions.

Addressing these gaps requires:

- *Women-focused innovation and IP clinics:* These can be delivered in partnership with women's business associations, STEM organisations and universities. Clinics can provide practical assistance in branding, design protection, patentability assessments and business development.
- *Youth IP awareness campaigns:* Innovation agencies can integrate IP literacy into hackathons, bootcamps, youth incubators and STEM education programmes to ensure early exposure to IP systems.
- *Inclusion of informal sector innovators*: Informal sector businesses rely heavily on branding and product identity. Innovation agencies can partner with IP offices to create simplified awareness guides, provide trademark clinics in markets and manufacturing clusters, and support microentrepreneurs in securing basic IP rights.

Key Implications for African Innovation Agencies

Leveraging IP for Industrialisation and AfCFTA

As continental trade integration expands, IP becomes a strategic tool for African industries seeking to compete regionally and globally. Innovation agencies can help firms understand how IP underpins competitiveness and market positioning.

IP's role includes:

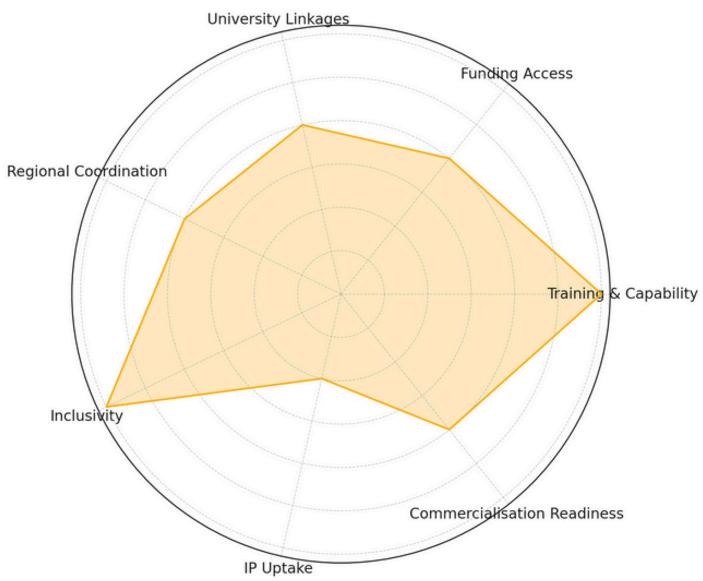
- *Market entry strategies:* Agencies can provide advisory support that helps firms align their IP portfolios with AfCFTA market opportunities, focusing on product differentiation and brand protection.
- *Protection of African brands and designs across regions:* With trademark and design filings rising in Africa, innovation agencies can help businesses learn how to protect their brands across multiple African markets through regional systems like ARIPO or OAPI.
- *Enhancing competitiveness of African products:* By supporting MSMEs and manufacturers in integrating IP into their production value chains, agencies help firms increase product distinctiveness, meet export requirements and build long-term market strength.

Expanding Use of Utility Models

Utility models are well suited for incremental innovations, many of which come from MSMEs and practical innovators who improve existing products. African utilisation of utility models remains low, but innovation agencies can change this through awareness-building and ecosystem strengthening.

Utility models could unlock more protection if:

- *Countries harmonise frameworks:* Innovation agencies can advocate for national reforms and regional alignment that create clearer, simpler utility model systems.
- *Awareness among MSMEs rises:* Agencies can integrate utility model education into entrepreneurship training, fabrication labs, industrial parks and innovation hubs.
- *Agencies encourage uptake in manufacturing clusters:* In sectors like furniture-making, metalwork, agro-processing or engineering workshops, utility models offer quick and affordable protection for product improvements. Agencies can deploy field-based campaigns or partnerships with cluster associations to drive adoption.



Innovation Ecosystem Support Readiness: A Snapshot of Key Capability Areas for African Innovation Agencies

This radar chart visualises the relative strengths and gaps across seven core support dimensions that influence how effectively innovation agencies can help innovators protect, scale and commercialise their ideas.

Conclusion

The patterns emerging from the World Intellectual Property Indicators 2025 reveal both the magnitude of Africa's innovation potential and the structural gaps that continue to limit the continent's full participation in the global knowledge economy. While the data shows that Africa remains a relatively small contributor to international IP filings, the trends across trademarks, emerging digital activity, early signs of green innovation, and the steady rise of creative sectors point to a region whose innovation landscape is shifting and gradually becoming more dynamic.

The findings suggest that African innovation ecosystems are entering a phase where the primary barriers are less about the absence of invention and more about the weak systems that surround it. The gaps reflected in resident patenting, design utilisation, and PCT participation are largely a consequence of limited institutional support structures, the high cost of filing, low awareness of IP pathways, and inadequate mechanisms for translating early-stage innovation into protectable and commercialisable outputs. These challenges are shared across many African countries, which creates a natural case for regional coordination and collective problem-solving.

For innovation agencies, the growing activity in trademarks and the early momentum in sectors such as solar energy, mini-grids, digital services, fashion, and creative manufacturing indicate that IP demand is not absent; it is simply concentrated in specific sectors where innovators feel most confident and supported. Strengthening institutional capabilities, deepening collaborative networks and improving access to specialised advisory support would allow these innovation pockets to expand and diversify into higher-value areas, including green technologies and digital hardware-software systems.

The report also highlights persistent inclusion challenges. The limited presence of women and youth in international patenting is not only a gender or demographic issue but also a signal of systemic inefficiency. When significant portions of the population remain underrepresented in formal IP systems, the continent loses out on potential ideas, products and competitive advantages that could contribute to economic transformation. Inclusive innovation policies, therefore, are not merely social interventions; they are economic imperatives.

Importantly, the current moment presents an opportunity for Africa to shape an IP agenda that aligns with its development priorities. The AfCFTA, national industrialisation strategies, and regional efforts to harmonise IP frameworks create an enabling environment for innovation agencies to redefine how IP can be embedded into entrepreneurial development, research commercialisation and industrial upgrading. This includes promoting domestic innovation clusters, building national technology transfer capacities, and strengthening institutional interoperability between IP offices, research institutions and enterprise development agencies.

As the continent moves toward a more integrated economic space, the role of regional institutions such as ARIPO and OAPI becomes even more critical. Their performance trends, particularly the decline in filings driven by non-resident activity, suggest the need for more robust strategies that stimulate local engagement and reduce overreliance on external applicants. Innovation agencies can help reverse these trends by promoting coordinated awareness campaigns, shared examination resources, collaborative patent landscaping efforts and the development of streamlined digital platforms that make regional systems more accessible to African innovators.

Africa is innovating, but its ability to secure, scale and commercialise that innovation hinges on stronger IP capabilities. The IAA Network is uniquely positioned to champion this shift by fostering cooperation, building institutional capacity, strengthening knowledge resources and advocating for IP systems that reflect the realities and aspirations of African innovators. With the right interventions, the continent can transition from a marginal participant in global IP activity to an active contributor shaping solutions for its markets and the world.

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