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Decoding the Future

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BREAKAWAY ROOM 1

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Decoding the Future

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Strategic patent analytics for Intellectual Asset Management

Patent analytics

- Patent analytics involves **electronic searching and analysis** of the vast amount of available on-line published patent data.
- Various analytics can be extracted from the published patent data, including **technical, business and legal information**.
- Such information vastly improves the ability of a business or research group to make decisions relating to:
  - intellectual asset management,
  - project planning and direction of basic R&D,
  - intellectual property protection, management and enforcement, and
  - financial investment

Patent landscaping

- 80% of published science and technology information contained in patents is not published anywhere else.
- If merely non-patent literature such as scientific articles are considered in a search strategy, only a small amount of the relevant information can be obtained.

Landscape mapping techniques

MAPPING FOCUS	PURPOSE	OUTCOME
Crowded Spaces	Identify heavy competition	Adjust claim scope; avoid wasted filings
Whitespace	Spot under-protected areas	Broad, high-value patents
Competitor Positioning	See who dominates segments	Guide partnerships or defensive strategy

Citation and patent family strength indicators

Citation Metrics Importance

Forward citations reveal a patent's technological relevance and influence in subsequent innovations. Backward citations show foundational prior art context in the field.

Patent Family Size & Expansion

Patent family size indicates commercial ambition, with large families showing global market pursuit and strategic protection across jurisdictions.

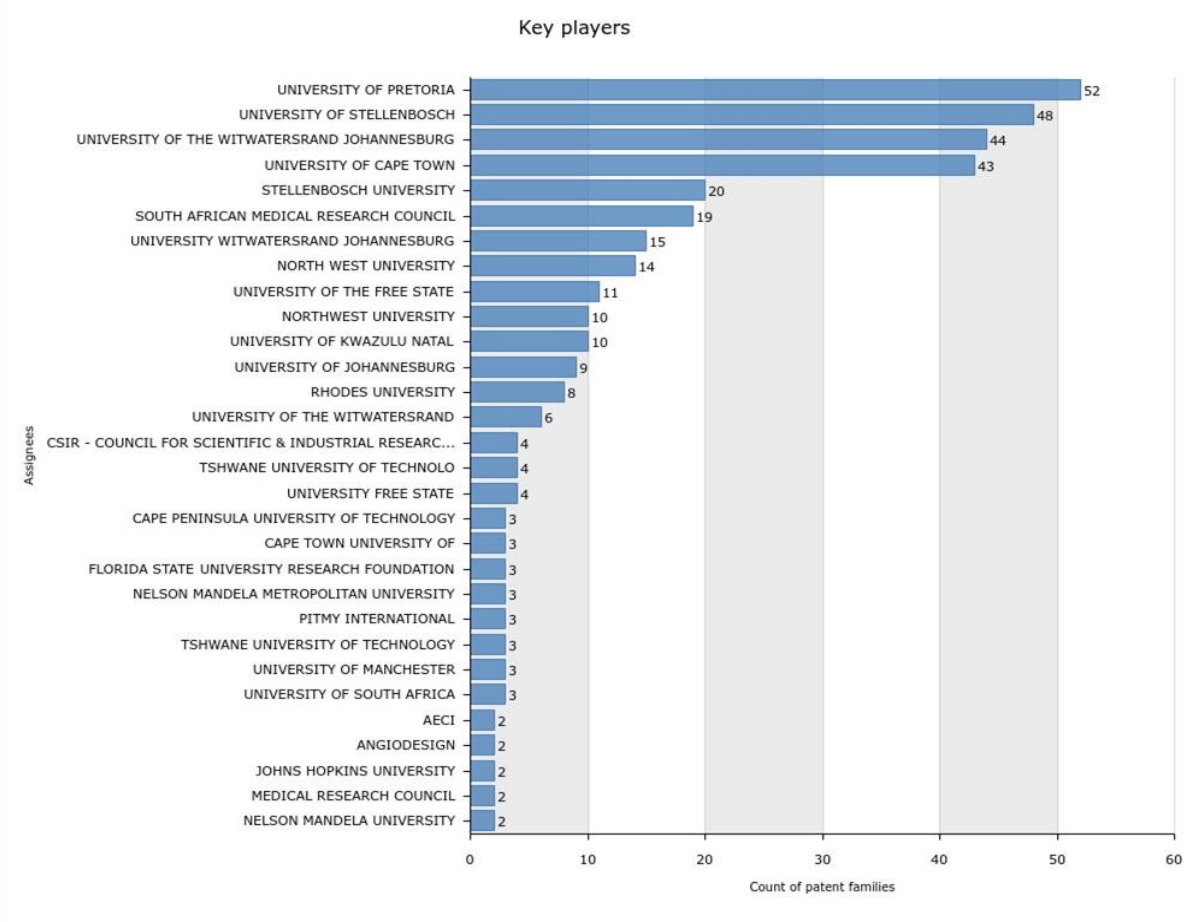
Renewal Behaviour Insights

Renewal patterns reveal ongoing commercial relevance of patents; maintained renewals highlight core assets, while abandoned ones indicate declining value.

Strategic Decision Making

Citation and family analytics help with prioritised patent maintenance, licensing, and strengthening for better resource allocation.

Assignee/competitor analysis



- Size of the applicants' portfolios indicates level of R&D activity/spend and inventiveness of active players.

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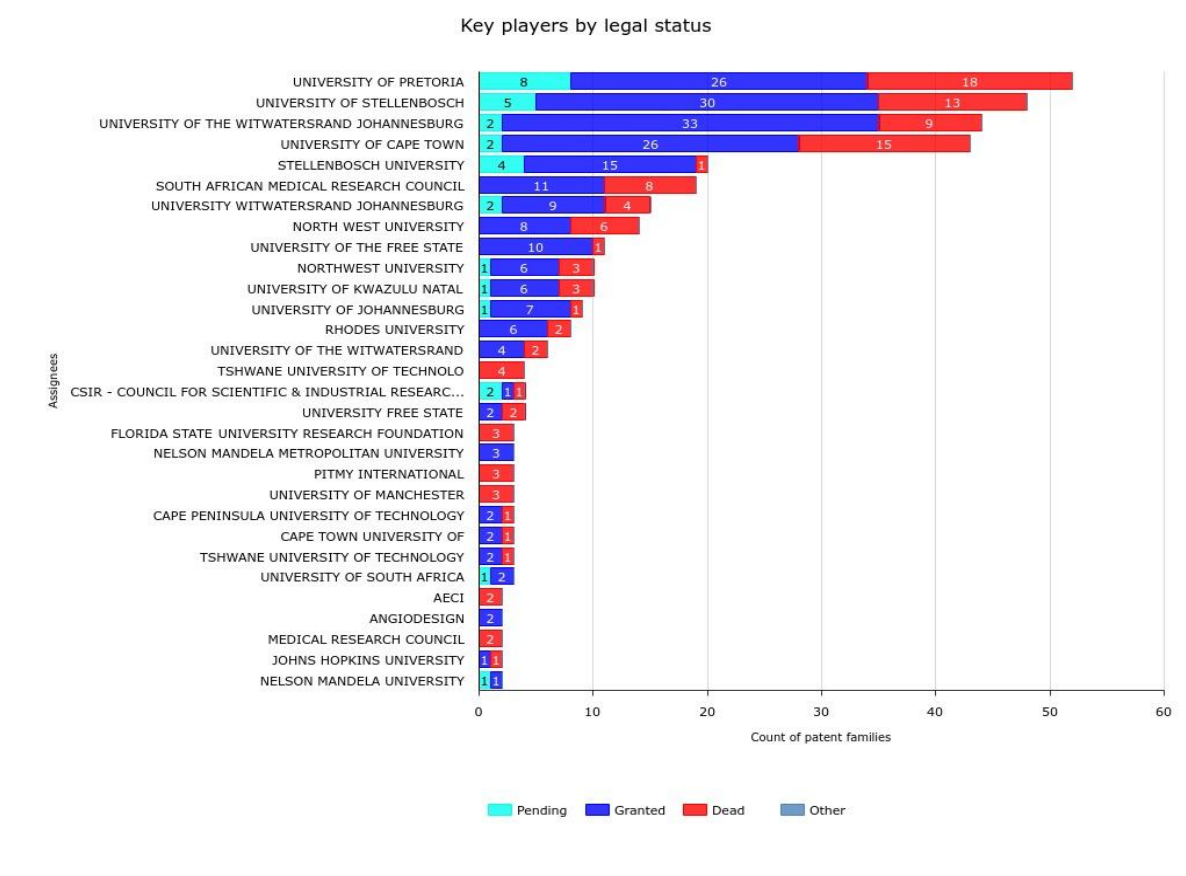
Assignee/competitor analysis



- Patents analysed according to legal status.
- Identify applicants who have withdrawn from the sector and those who are still active.

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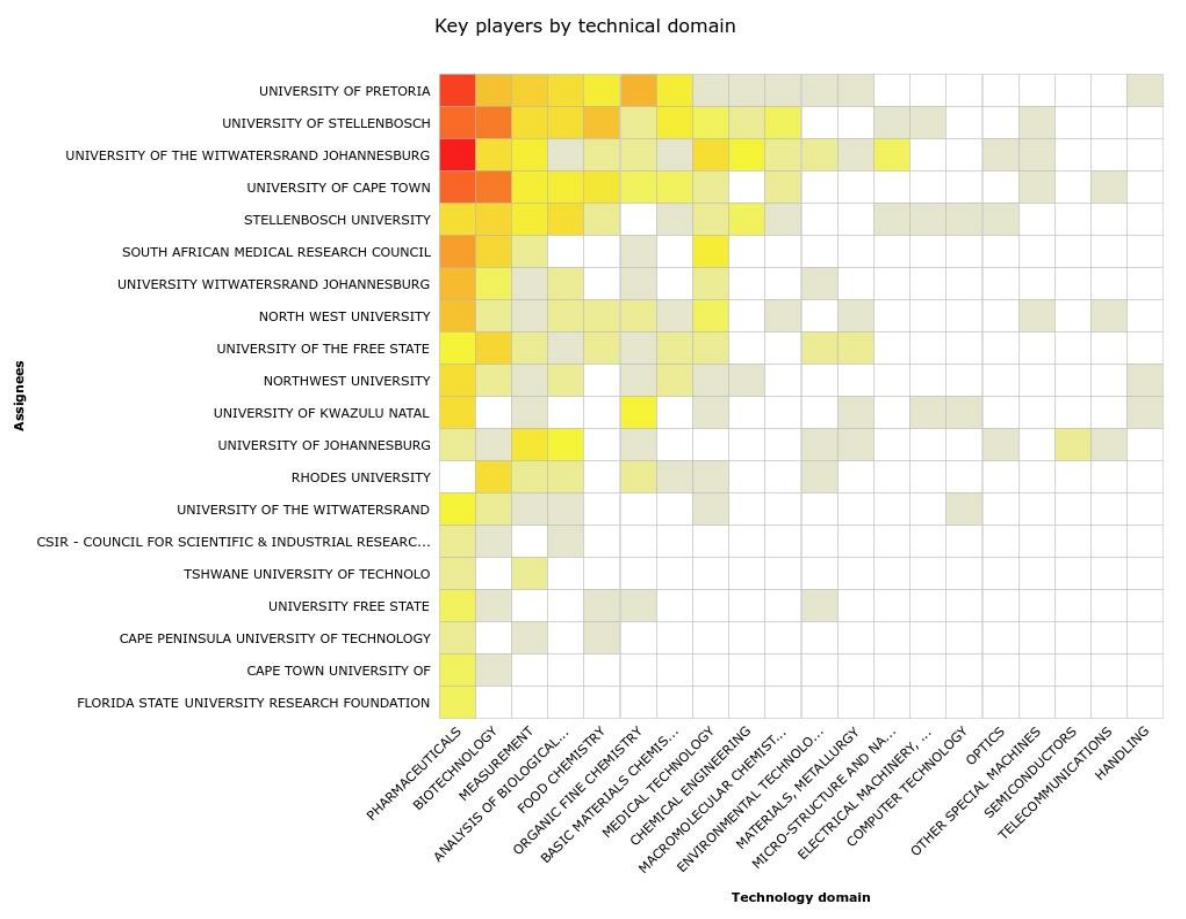
Assignee/competitor analysis



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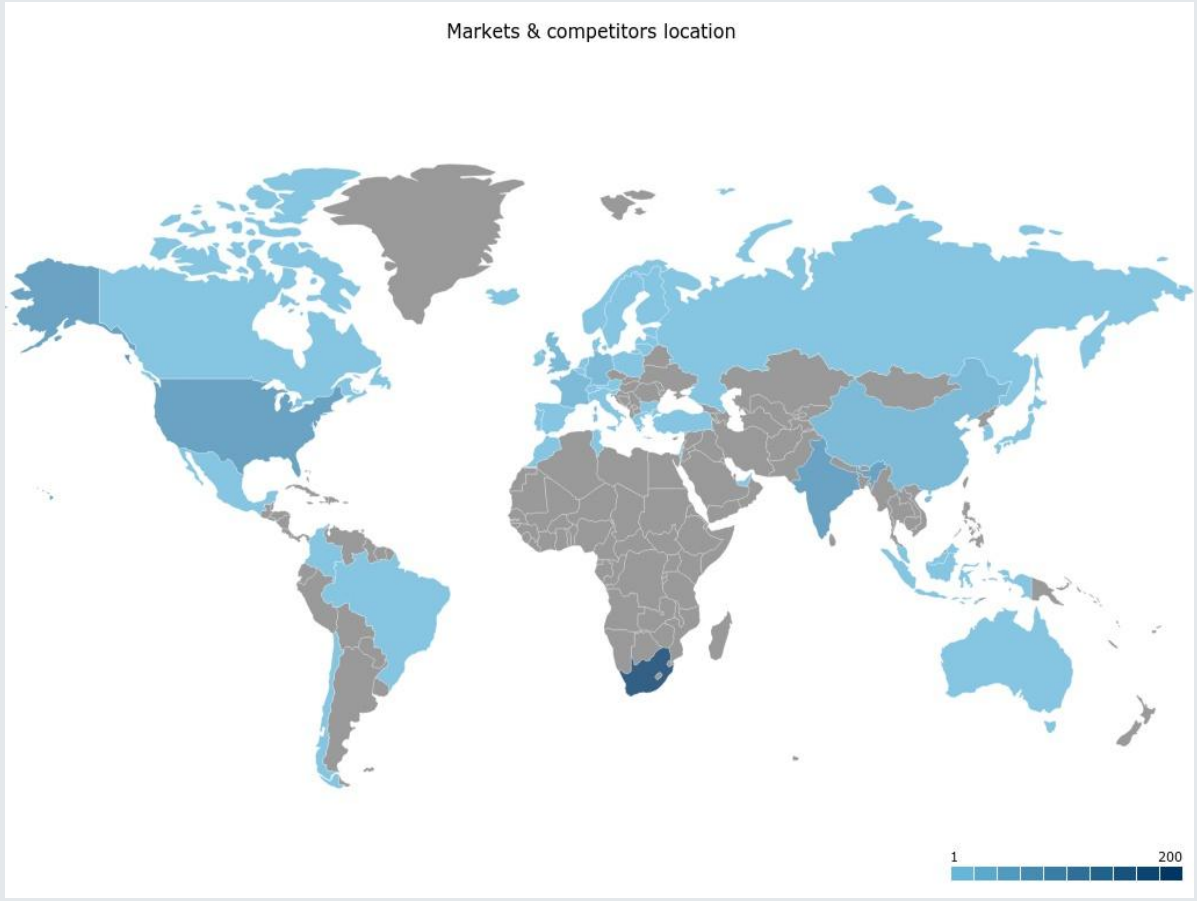
- Patents analysed according to main technology areas protected by applicants.
- Makes it possible to study the positioning of the applicants and identify complementarities with potential partners.
- Also provides intel on “whitespaces” and “hot spots”.

Markets/competitor analysis



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- Provides patent activity according to territory for a technology or an entity.
- Demonstrates the protection strategy of the applicant, and thus helps to identify target markets.
- Provides general intel on filing strategies for fields of technology, indicating potential markets/manufacturing hubs.

Assignee and competitor clustering

Relational Networks of Patent Holders

Clustering organizes patent holders into networks showing how organizations interact and align in technology landscapes.

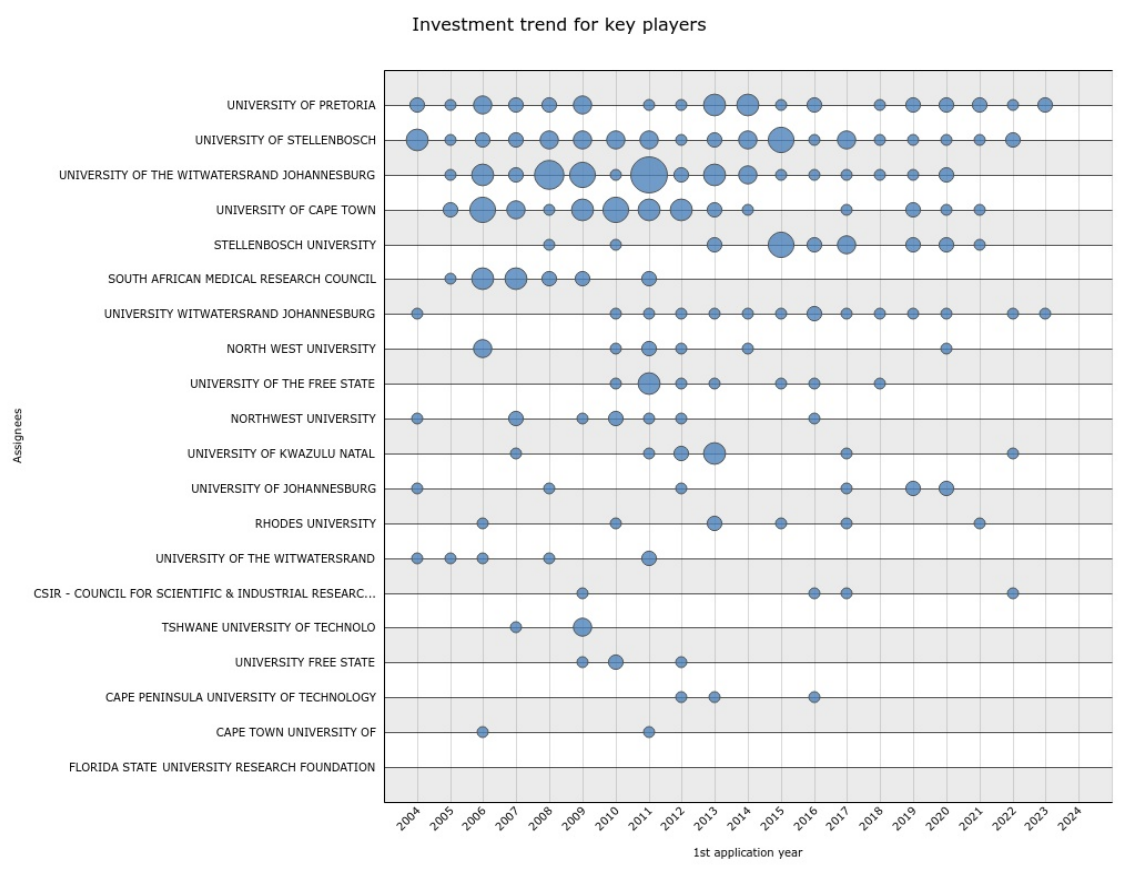
Identifying Collaborators and Competitors

Clusters reveal potential collaborators in adjacent fields and direct competitors posing risks or opportunities.

Strategic Insights for Technology Transfer

Clustering helps businesses align strategies, anticipate moves, and target licensing to valuable assignees.

Investment trends



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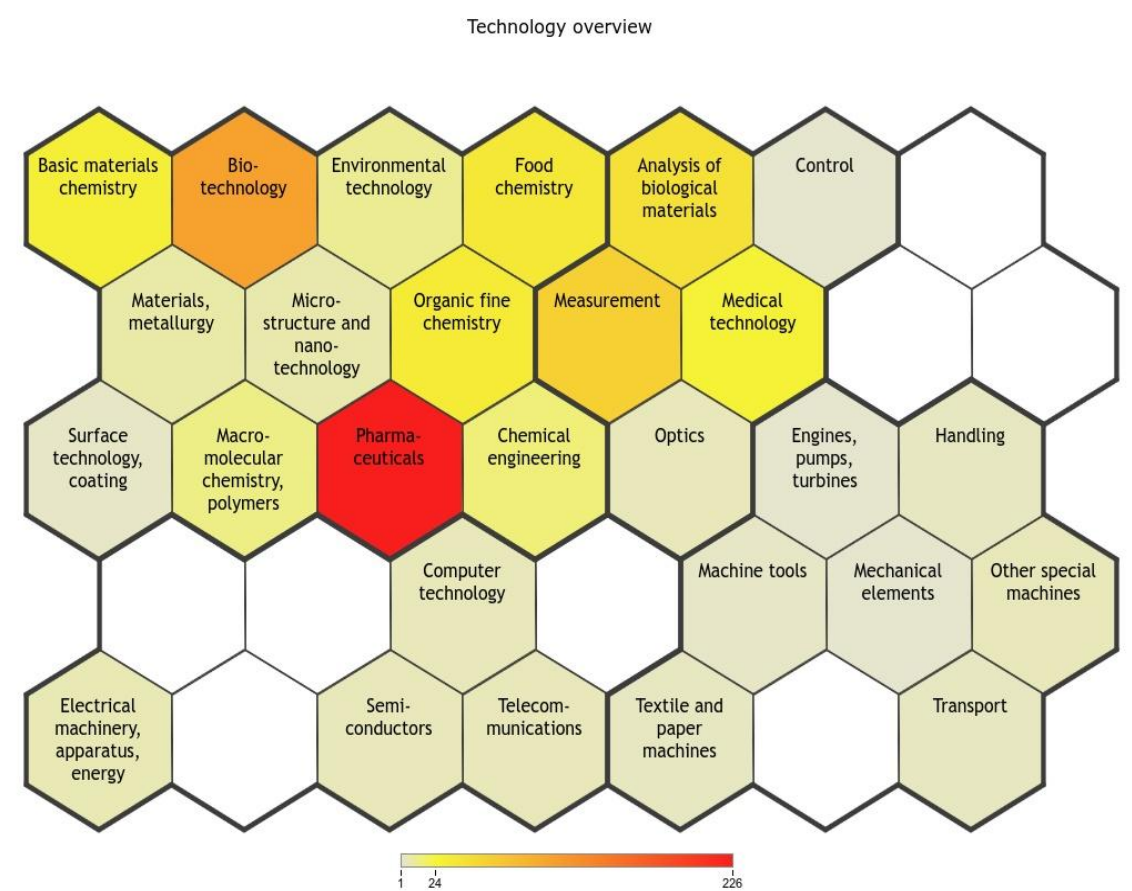
- Evolution of applications over time.
- A growing portfolio (linear or exponential) shows investment by an applicant in R&D.
- A decline in the number shows a reduction in R&D or IP budgets.
- Exponential growth is indicative of a race for a patent.
- A stable profile is a sign of sector maturity.

Note: There will always be a gap in current patent information due to the 18-month delay between the filing of an application and its publication

Technology overview



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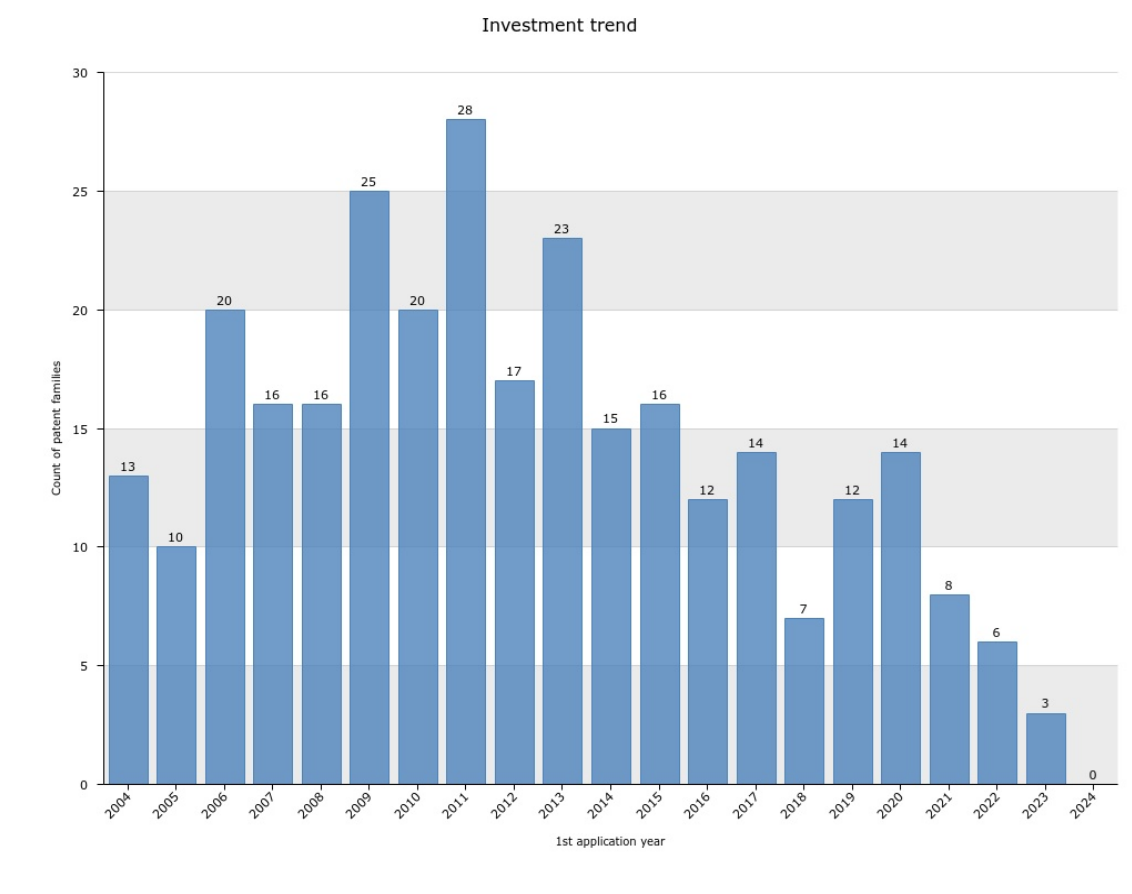
- Based on IPC patent classification classes.
- Provides intel on the diversity or the specificity of an applicant’s patent portfolio.
- Provides intel on the core business of the player being studied.
- Least represented categories serve as a means to identify other potential applications of this actor's patents.

Trend and timeseries patent forecasting



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Patent Trend Analysis

Analysing patent filing trends reveals emerging technologies and market acceleration signals for strategic decision-making.

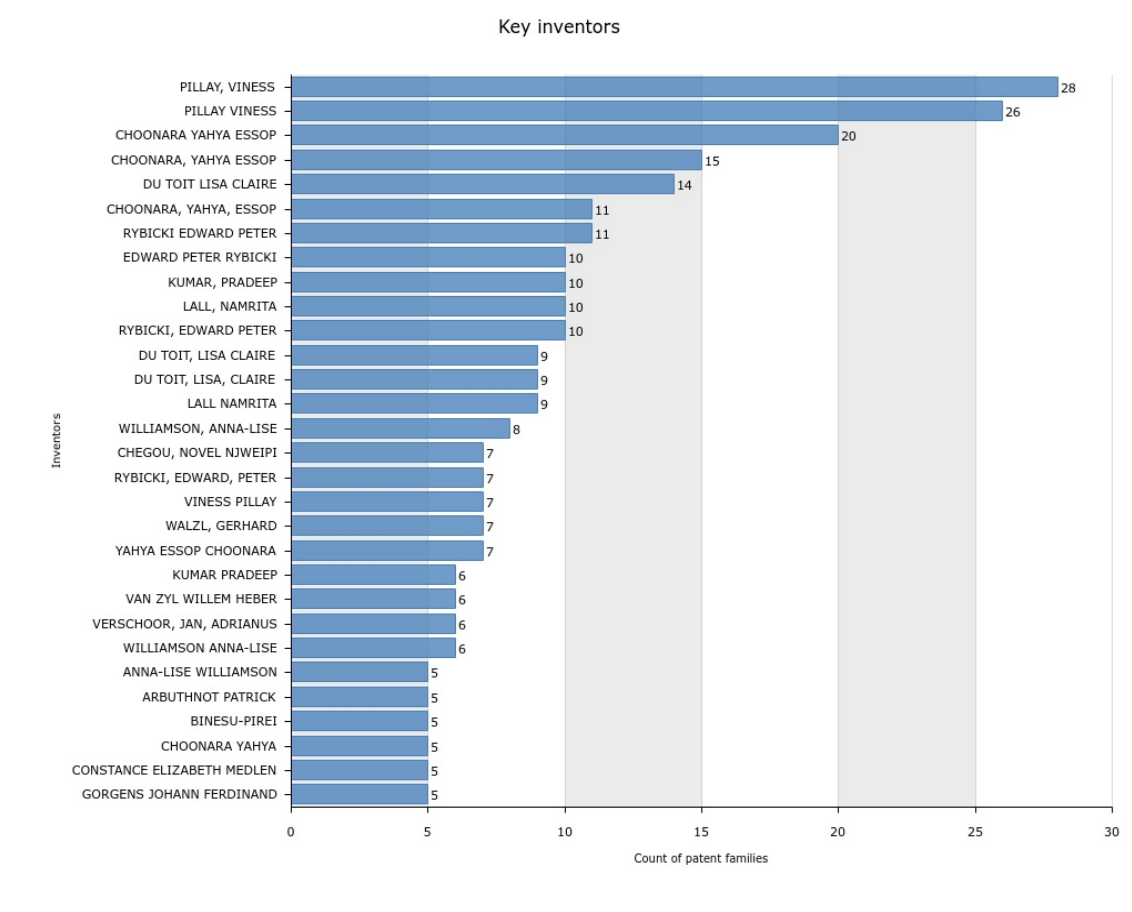
Technology Waves & Lag Periods

Trend curves identify periods of rapid innovation and lag phases, offering early entry opportunities in new technologies.

Timeseries Forecasting Benefits

Timeseries forecasts help plan budgets, justify follow-on filings, and choose optimal moments for patent protection.

Inventor Intel



- Highlights expert inventors for collaboration or recruitment.

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Transforming analytics into IP strategy

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Using Landscape Maps

Landscape maps help prioritize patent filings in whitespace, avoiding investment in saturated areas.

Citation and Family Indicators

Citation and family data guide investment decisions on patents and identify licensing opportunities.

Clustering for Strategic Insights

Clustering reveals licensing targets, competitive threats, and potential partners or acquirers.

Trend Forecasting and Market Timing

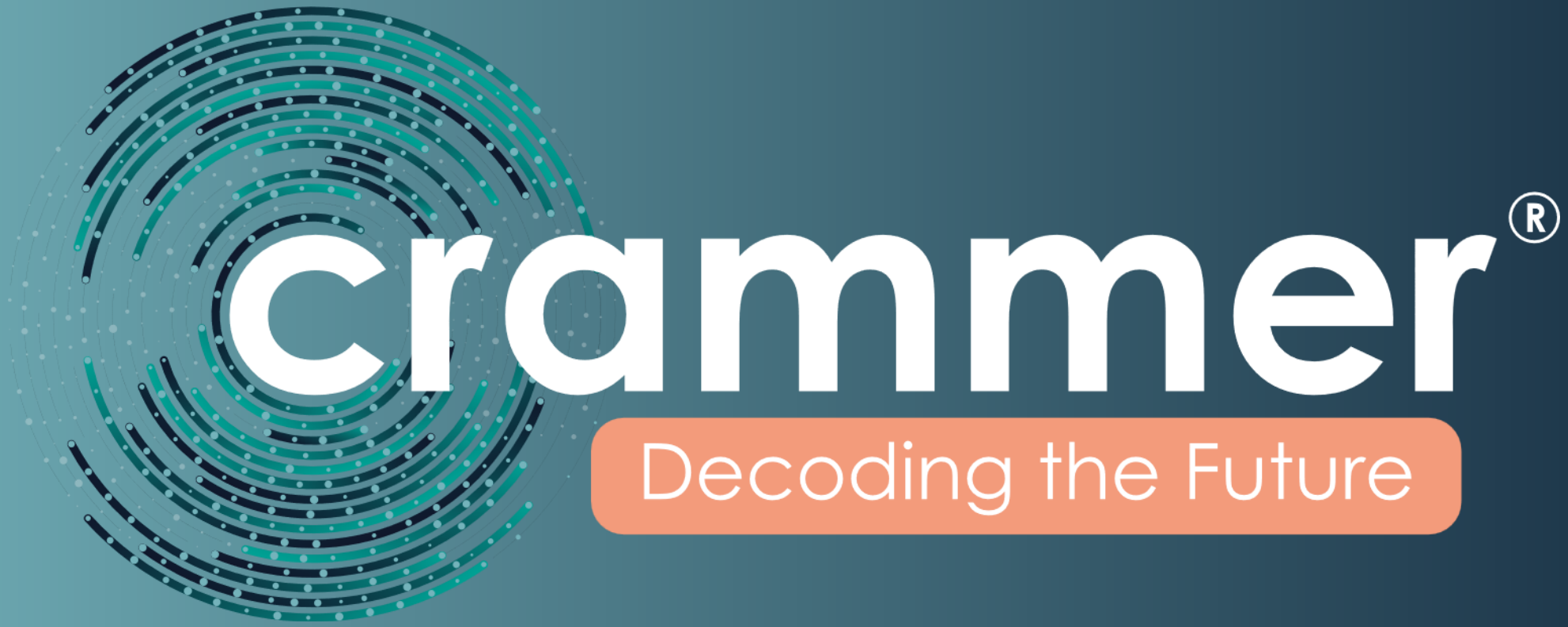
Trend forecasting aligns patent protection with rising market interest and commercial potential.

Patent landscaping

- International patent databases:
  - https://worldwide.espacenet.com (Global);
  - https://www.uspto.gov/patents/search/patent-public-search (US);
  - https://patentscope.wipo.int/search/en/search.jsf (WIPO)
  - Questel® Orbit Intelligence;
  - The Lens (https/www.lens.org)
- Literature websites, e.g. journals
- Google/Google Patents

Patent landscaping – immensely useful intel

- Awareness of the **existing technologies** (“state of the art”) - development, improvement or modification
- Avoid “**recreating the wheel**”
- Identification of **risks and pitfalls in current technology development** to - avoid or identify solutions
- Identification of “**hot spots**”/“**patent thickets**”
- Identification of “**white spaces**”
- Identification of **collaborators, acquisitions / investors**
- Provides **competitor intel**
- The commercial phase of the technology - **early stage, mature or declining**
- Recruitment of **inventors**
- Identify areas for **R&D funding**



THANK YOU