

Industrial valve

Patent Landscape Report

This sample report showcases a landscape of advancements in Industrial valve technology by analyzing 36618 patent from 2010 to 2025.

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Sample

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Executive Summary

This sample report showcases a landscape of Industrial valve technology by analyzing 36618 patent from 2010 to 2025. The analysis reveals:

Explosive Growth

Patent filings in the industrial valve sector have increased nearly ninefold from 2010 to 2025, with the peak observed in 2021. The rapid growth is a clear indication of increased innovation and interest in the sector, particularly since 2015.

Technology Focus

Key technologies in industrial valves focus on smart valves, automation, IoT integration, advanced actuation systems, and corrosion-resistant materials. Smart valves, especially those with IoT capabilities, are a dominant trend in recent innovations.

Geographic Dominance

China leads globally in industrial valve patent filings, accounting for over 50% of total patents, followed by the United States. Europe and other regions contribute smaller shares but remain important players in the sector.

Market Potential

The industrial valve market, valued at USD 76.2 billion in 2023, is expected to grow to USD 100.9 billion by 2030. Growth is driven by demand in industries like oil & gas, power generation, and water treatment, with a projected CAGR of 4.4%.

Methodology

The methodology employed in this report integrates AI-driven data analytics, machine learning algorithms, and expert human analysis, thereby ensuring a thorough and precise assessment of patent trends within this technology sector.

Data Collection

The analysis initiates with the collection of patent metadata from reputable global patent databases, including:

- WIPO PATENTSCOPE (World Intellectual Property Organization)
- Lens.org
- USPTO (United States Patent and Trademark Office)
- EPO (European Patent Office)
- National Patent Offices

These datasets encompass structured metadata, including patent titles, abstracts, claims, classifications (e.g., IPC, CPC), applicants, publication dates, citations, and legal status.

AI & Machine Learning Analysis

Using proprietary artificial intelligence (AI) and machine learning models developed by STIMAnalytics, the acquired patent data undergoes the following processing stages:

- Text Mining and Natural Language Processing (NLP): Extracting critical technical terms, concepts, and innovation themes from patent documents.
- Clustering and Classification: Categorizing patents into relevant technological groups and subgroups.
- Trend Analysis: Identifying growth trajectories, emerging technologies, and shifts in innovation focus over time.
- Network Analysis: Mapping interrelationships among applicants, technologies, and jurisdictions.
- Predictive Insights: Forecasting future technological advancements and market trends based on historical and contemporary patenting activities.

Reporting Infrastructure

The analytical results are subsequently integrated into a robust reporting infrastructure, which autonomously generates structured reports and interactive dashboards. These outputs are further enriched with:

- Visual Analytics (charts, graphs, maps)
- Strategic Insights
- Technology Roadmaps
- Company and Academic Profiles

Expert Review

Finally, all reports undergo a rigorous quality assurance process conducted by domain experts and technical editors to ensure:

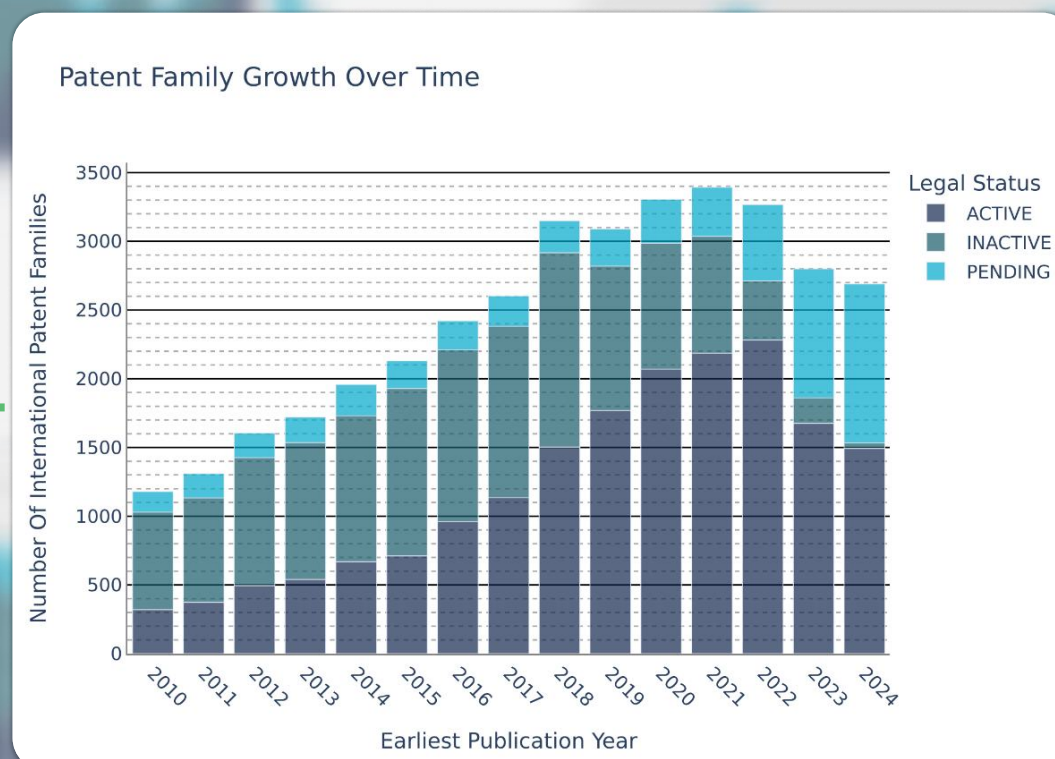
- Accuracy of technical interpretation
- Consistency in terminology and classification
- Relevance of strategic insights
- Professional formatting and readability

Delivery Formats

The final outputs are delivered in two formats:

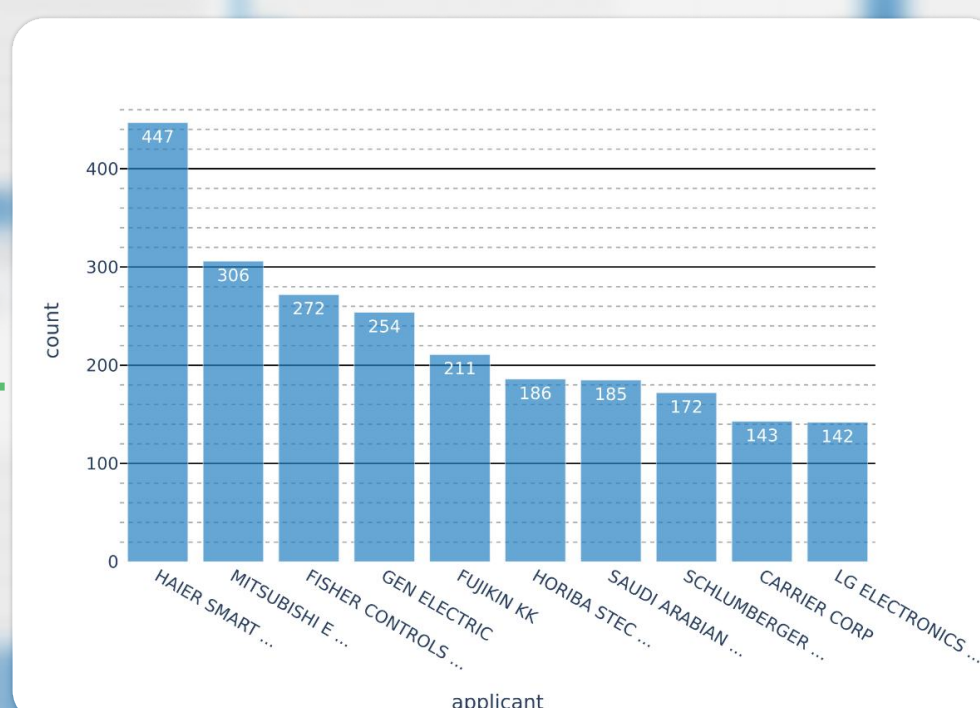
- Written Report (PDF): A comprehensive, publication-ready document featuring executive summaries, technology breakdowns, market insights, and key player profiles.
- Interactive Dashboard: A web-based platform enabling users to explore patent trends, filter by technology, applicant, jurisdiction, and time period, and generate customized reports.

Patent Landscape Overview



Patent filings increased steadily from 2010 to a 2021 peak of nearly 3,400 families, driven by active grants; recent years show fewer grants but rising pending applications, indicating sustained early-stage innovation activity.

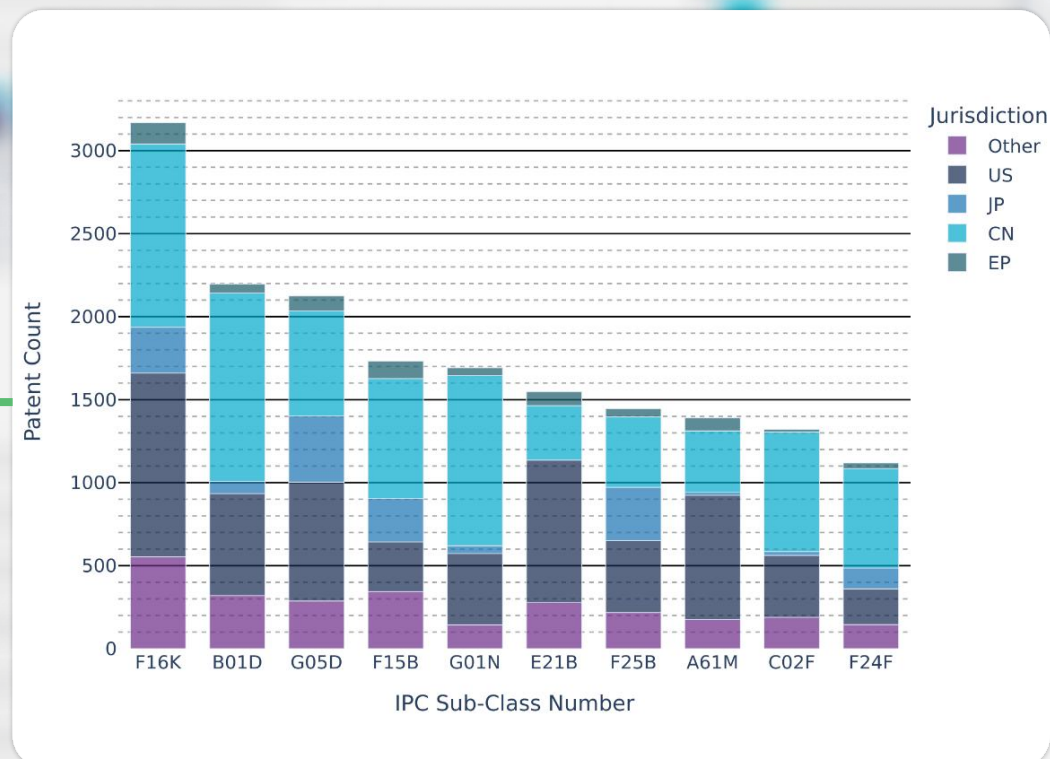
Top Patent Applicants



Haier Smart leads with 447 patents, followed by Mitsubishi and Fisher Controls, indicating strong innovation in smart appliances, industrial automation, and control systems across Asia and the U.S., reflecting diverse technological leadership.

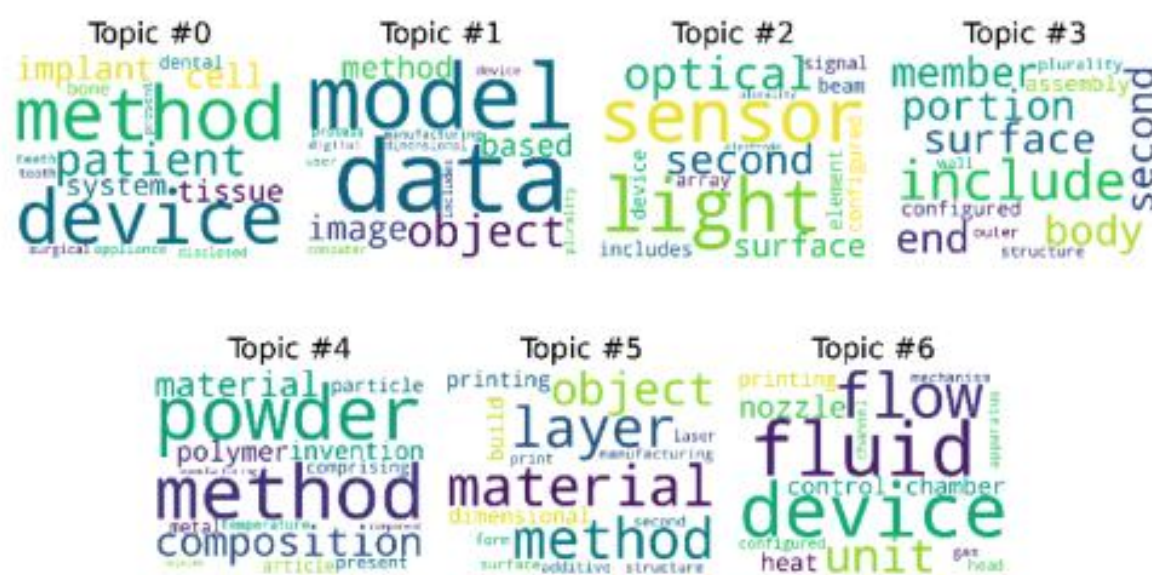
Technology Trends

Top Technologies by Sub-Class



F16K, covering valves and flow control, leads with over 3,000 patents—driven by U.S., China, and Japan—followed by filtration, control systems, and diagnostics, reflecting broad innovation in fluid handling, automation, and sensing technologies.

Key Patent Themes



Strategic Recommendations:



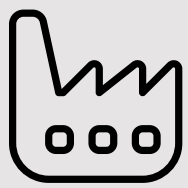
Policy Makers

1. Focus on fostering innovation in high-growth sectors.
2. Encourage investments in sustainable technologies.
3. Support industry-specific research and development initiatives.



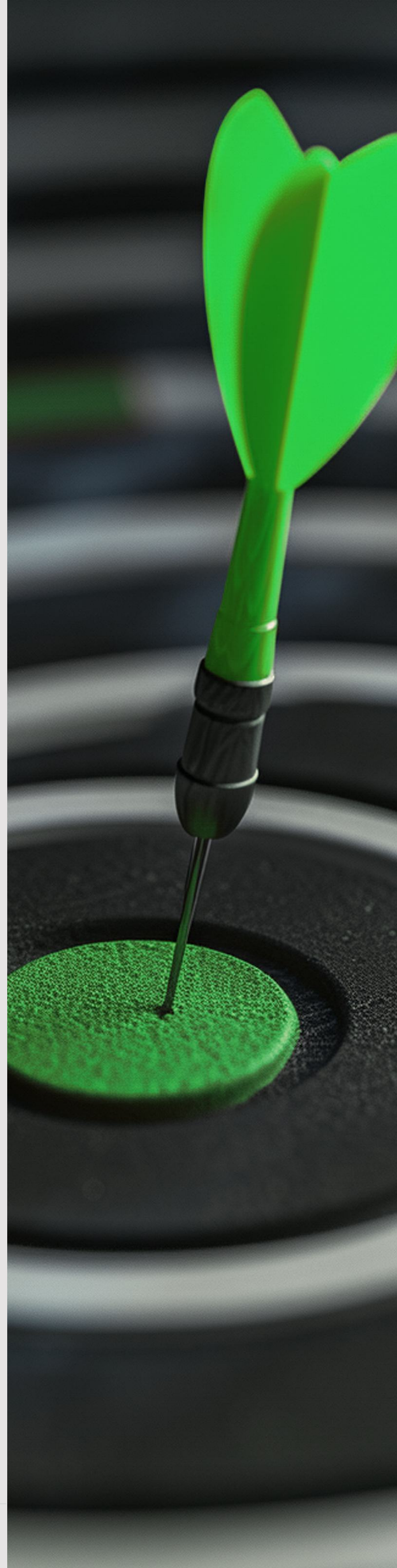
Investors

1. Prioritize companies with strong intellectual property in emerging technologies.
2. Monitor the latest advancements in new industrial applications and sectors.



Manufacturers

1. Embrace new technology adoption to improve operational efficiency.
2. Invest in scalable solutions for long-term growth.
3. Focus on sustainability and circular economy practices.

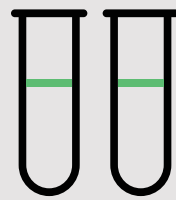


Our Industrial Expertise



Energy

Exploring innovations in the oil, gas, electricity, and renewable energy sectors.



Chemical

Advancing chemical processes, products, and catalysts for industrial applications.



Health and Pharma

Analyzing new pharmaceutical products, health services, and medical technologies.



ICT & Software

Examining trends in information and communication technology, software, and hardware.



Mining Industry

Investigating improvements in iron, steel, aluminum, copper, and other related industries.



New Materials

Researching advancements in advanced materials, nanotechnology, and their applications.

Our Global Allies





Industrial valve

Patent Landscape Report

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