

#### At a glance

#### Customer

Merck KGaA, Darmstadt, Germany

#### Requirements

- Review their technology and innovation from a sustainability perspective
- Conduct an analysis to reveal their strengths and weaknesses in supporting the United Nations Sustainable Development Goals
- Communicate clearly with their stakeholders about their commitment to sustainability

#### Solution

Using the unique PatentSight® patents to SDG mapping feature, the Merck team are able to study and understand how their innovative portfolio contributes to the overall global goals of achieving sustainability. The charts, graphs and insights developed from this analysis will also be used to communicate their commitment towards sustainability to their internal and external stakeholders.



As companies commit to helping meet the United Nations' Sustainable Development Goals through their core business activities, many are grappling with how to measure sustainability contributions of their IP in the face of a confusing plethora of assessment tools and reporting standards. One company, however, decided to take the path of clear and objective assessments of these contributions using a highly innovative tool: patent analytics.

The tool Merck KGaA, Darmstadt, Germany is using is PatentSight, a leading analytics platform from LexisNexis for the strategic management of intellectual property. The platform enables companies to evaluate patent quality, to benchmark patent portfolios and to use data-driven insights as a guide to decision making. LexisNexis is now enabling users to harness those insights to assess sustainable technologies and companies.

In 2021, the company started to assess the sustainability impact of its intellectual property using PatentSight. Building on this, as of the reporting year 2022, it has started disclosing its share of newly published sustainability-related patent families.

#### A powerful new tool

The approach of Merck KGaA, Darmstadt, Germany is something William Mansfield believes many companies could benefit from. As Head of Consulting and Customer Success for LexisNexis Intellectual Property Solutions, he sees patent analytics as a powerful new tool in tracking the progress companies are making as they tackle social and environmental challenges.

"We often talk about patents as a unique window," he says. "But that's particularly true for sustainability, since we can see what companies are doing—and not just where they're investing in R&D but where they are actually producing outputs."

To come up with the tool, a group of LexisNexis patent search experts mapped technology areas with active patenting activity to the SDGs and their 231 unique indicators. Mansfield explains how the PatentSight tool works when applied to sustainability. "Fundamentally, the concept is a set of searches," he says. "We define technologies that are relevant for each SDG and then we define searches that capture those technologies."

In developing the definitions for these searches, the team adhered closely to the guidance provided by the U.N. "It's not our place to decide what's sustainable and what's not," says Mansfield. "The SDGs provide an amazing way of defining the rules that determine whether or not a patent fits into the framework."

Using PatentSight, it is possible to search for the details of patents through their title, the abstract and the claims (the core of the patent information), along with descriptions that expand on those core claims. "You can apply that to all worldwide patents, so you can see which companies have the most inventions that are included the SDGs in a particular country, region or time period," explains Mansfield. "So you can see the strongest SDG inventions and how they've developed over time."

#### A variety of applications

As Merck KGaA, Darmstadt, Germany is doing, some companies may use the tool to manage internal



To truly understand a company's portfolio from the perspective of sustainability, PatentSight includes a powerful visualization tool. The SDG Value-Distribution chart depicts the patents in a portfolio related to specific U.N. goals. This clears a clear understanding of where a company focuses its innovation pursuits.

key performance indicators for sustainability. The PatentSight definitions make it possible, for example, to assess where a company needs to increase its percentage of sustainability-related innovation, both in terms of the patent applications its attorneys choose to file, the patents it chooses to maintain and where it focuses its R&D resources. Companies can also use the tool to assess value of the sustainable technologies in their patent portfolios.



"As a company, it enables you to look at yourself through this outside lens to understand what you've been doing and where there are places where you can improve," says Mansfield. "Then you can extend that to what your competitors are doing, how the technologies you're investing in are developing and whether you are ahead, behind or alone."

When looking to expand, the tool makes it easy for companies to scout for potential mergers or acquisitions that meet their sustainability objectives. They can also gain a comprehensive picture of the competitive landscape for sustainable technologies so as to identify trends and find partners and licensing opportunities that align with a sustainability strategy.

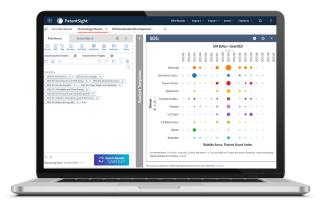
Meanwhile, for the investment community, the technology can assist asset managers as they develop portfolios of companies that meet ESG (environmental, social and governance) criteria. Using PatentSight, they can quickly assess which companies in a portfolio meet those criteria and which do not, based on the strength of their IP in sustainable technologies, and then adjust investment levels accordingly.

Another strategy for investors might be to look for technologies in the SDGs and search for companies developing a strong patent portfolio in those technologies. "That gives you a shortlist of places to put your money," says Mansfield.

#### The value of objectivity

Whatever the application, PatentSight offers an unbiased view of the sustainability of companies and the way their technologies align with the SDGs. "It's the objectiveness that is the key factor," says Mansfield. "That is the differentiator and what makes it valuable."

In terms of customer implementation, it's early days, he says. "It takes time for companies to add something like this to corporate KPIs and investor statements," he says. "But we're on a good path with them that I'm super excited about because these organisations see the value of leveraging data in this way – with Merck KGaA, Darmstadt, Germany as a frontrunner."



The Technology Matrix chart in PatentSight facilitates the comparison of different entities with respect to their focus on specific technology fields or, in this case, U.N. SDG goals. This visualization provides a snapshot of each entity's sustainable portfolio share in each technology field or goal.

For Mansfield personally, there is also satisfaction in recognizing the potential of this new approach to sustainability evaluation. "Patents are so interesting," he says. "To see what people are really working on, what technologies are being developed—it's certainly what keeps me coming to the office every day."



# Key PatentSight Capabilities That Provide Insights into Sustainable Innovation



# Discover the share and the value of sustainable technologies in a patent portfolio

- Discover the share and the value of sustainable technologies in your patent portfolio.
- Identify growth areas in sustainability for your business.

## Develop a strategy for sustainable technology investment

- Get an overview of the competitive landscape in sustainable technology fields.
- Identify trends, gaps and whitespaces in the sustainable technology landscape.
- Find partners and licensing opportunities to support and accelerate your sustainability efforts.

## Objectively measure and evaluate progress toward SDGs

- Measure the performance of investments in sustainable technologies, and compare to non SDG related patents.
- Track progress of investments in sustainable R&D and technology over time.
- Learn which sustainable technologies make an impact and which are less relevant.

## Understand which UN SDGs companies invest in

- Identify interrelations between research and development strategies.
- Explore areas of potential research and development besides the core technology of companies in focus.
- Analyze whether competitors have research activities in similar technology fields.

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