

CREATIVITY AND EFFICIENCY IN R&D

## How knowledge graphs help Kongsberg Automotive boost innovation



**"For the first time we have a common language. We can speak directly with the engineers and we can speak directly with the IP attorneys."**

– Kent Häll  
R&D Engineer and IP Analyst  
Kongsberg Automotive



Founded in Kongsberg, Norway, in 1987, Kongsberg Automotive has its origins as a division of Kongsberg Våpenfabrikk in the 1950s, as a producer of brakes and driveshafts for Volvo. Today the company develops a wide range of products for passenger cars, commercial vehicles and off-highway markets. Kongsberg Automotive has an in-house team of IP specialists that manages and develops the company's IP portfolio that currently consists of about 700 active patents.

### Keyword searches and different languages

Kent Häll is an R&D engineer and IP analyst at Kongsberg automotive. As an IP analyst, he plays a key role in the company's innovation workshops where specialists and engineers gather to solve innovation related challenges. Before acquiring IPRally, Kent and his colleagues relied on a combination of free online patent databases and traditional search tools. They still use one of the market leading traditional search platforms, which Kent describes as excellent for deep analysis, but less useful when it comes to the initial search.

"With the old tools you can only search by keywords or codes and it is difficult to find the search directions that pinpoints what the engineers are trying to solve. It is like looking for a needle in a hay stack. Ideally you want to give the engineers feedback during the workshops. But with the old tools we often had to do the search afterwards because it was too time consuming. The fact that inventors and attorneys speak different languages is also challenging, as you need to understand technology, but also how to translate it to legal terms."

### A magnitude of time savings

With IPRally, the searches can be carried out during the workshops, says Kent Häll. The search speed and how the AI breaks down the inventions to understandable graphs has benefited the workshops on several levels.

"What we do in the workshops now is that we let the inventors continue their work, and when they have narrowed down on their ideas, we can step in and start building the graphs in IPRally. We get really fast results. I will just put their notes into IPRally or type it in as we speak, I hit the search button and there it is. IPRally actually understands natural language, it doesn't care about the keywords, it will sort them for you."

"Already at the end of the session we have good results which are quite solid to work on for the next stages of the process. That's a big difference compared to before, we are talking about a magnitude of time savings. IPRally saves time when it comes to infringements, it saves time when it comes to identifying prior art, but it also saves time when it comes to coming up with new inventions. And in the long run it will most definitely save us money, because we do not need to utilize these big systems with booleans and codes and all that to do the initial research."

### Visualizing the essence of the inventions

Kent Häll describes IPRally as a new way of searching that is "technically supportive" and pushes you to think in new ways.

"The knowledge graphs highlight exactly what the invention is about. And the beauty of this is that for the first time we have a common language. We can speak directly with the engineers and we can speak directly with the IP attorneys. The technology is presented in such a way that both these groups can actually realize what's connected to what and how those things fit together. And that is like a eureka moment."