

1. Introduction

Welcome to Danish Sound Cluster's mapping tool for identifying new partners and expanding your network. This innovative tool is designed to simplify the often complex process of finding potential collaborators in the sound industry. Whether you are a private company, a university, an RTO (Research and Technology Organization), or another entity with a focus on innovation, this tool serves as a valuable resource to kickstart your search for partners in areas where you lack experience or a pre-existing network.

Leveraging data on entities that hold or have applied for audio-related patents globally over the past decade, this tool provides insights into entities with active or pending patents. By offering a range of filtering options, it allows you to pinpoint entities that possess complementary technological expertise, thus paving the way for fruitful collaborations and advancements in audio technology.

Explore the various features and functionalities of our mapping tool to uncover new opportunities and drive innovation within your field.

2. About

This tool has been designed with the purpose of easing the difficult process of identifying potential partners for innovation collaboration in the sound industry. It is meant for private companies of all sizes as well as universities, RTO's and other types of entities with innovative ambitions.

The tool is meant as an initial step in the search for partners in a domain, where you have no experiences or network to guide your search.

The tool is based on information on entities that hold or have applied for audio related patents during the last 10 years from all over the world. It contains information on entities that either hold an approved and active patent and entities that have patent filings that are currently pending.

3. How to use the tool

The tool can be used to search amongst all entities that hold or have pending patents in sound-related technology domains. By using the many filtering options provided, one can identify lists of potential partners for collaboration that might have competencies of technological expertise that can supplement your own to reach a fruitful collaboration.

- **Example:** Imagine you are a startup focusing on developing advanced noise-cancellation headphones. You have strong capabilities in hardware design but lack expertise in digital signal processing (DSP). Using the tool, you can search for entities that hold patents in DSP technology related to audio. By applying filters for recent patents, private companies, and high citation metrics, you identify a mid-sized company that has several influential patents in DSP for audio. This company could be a potential partner to help integrate advanced DSP algorithms into your headphones, thereby enhancing your product's competitive edge.

4. Points of attention

It is important to note, that the tool can only be a starting point in your search for new partners. There is no objective measure that can illustrate whether an entity is indeed interest in pursuing collaborative efforts. This tool can only give you an indication as to the technological or scientific efforts that the given entity has based on their patenting activities.

Furthermore, not all innovation is being patented. The inclination to patent a technology varies from one subsector to another, just like the propensity of larger companies to hold patents is greater, as the process of patenting can be both time consuming and expensive.

Therefore, it will always be necessary to contact potential partners to discuss their interest in collaboration and to explore mutual goals.

5. Filtering options in the tool

To reap the benefits of the tool, it's important to understand the various variables/ filtering options that the tool offers. This includes publication year, actor types, application domains, and citation metrics. These elements help to narrow and guide your search towards the type of partners that you are interested in.

The filtering options are described in more detail bellow:

a. Publication Year:

This variable indicates the year in which the patent was published, revealing temporal trends in innovation. In this context it can indicate whether the company holding the patent has recently come up with new innovation in the field, or if they have extensive experience with the technology from working with it for many years.

b. Application Domains:

In the context of patents related to audio technology, the application domains represent specific areas where innovations in sound and acoustic technologies are applied. These domains capture the diversity of uses for audio technology in various industries and consumer markets. Understanding these application domains is essential for recognizing how audio innovations are integrated into practical applications and for identifying key areas of growth and investment. In this context, it can be used to filter out technology domains of interest.

c. Actor Types in Audio Patents:

Different types of partners can be needed in different cases. This variable can help you to search for a certain type of entity.

- **Public Organizations:** This category includes government agencies, universities, and non-profit organizations. These entities often focus on foundational research and development in audio technologies, contributing to basic research that may be utilized by commercial entities later.

- **Private Company:** Private companies in the audio sector might range from startups to established firms not publicly traded. They typically aim to commercialize and advance audio technologies, focusing on market-driven innovations such as consumer audio devices, professional sound equipment, and proprietary audio processing software.
- **Private Person:** Individual inventors or entrepreneurs within the audio field often bring unique and innovative solutions to specific problems in audio technology. Their patents might include novel gadget designs, improvements in sound quality, or user-interface enhancements for audio products.

d. Citations and Percentiles:

Citations serve as a measure of the influence and relevance of a patent within the field of audio technology. A patent that is frequently cited by other patents indicates that it has played a significant role in advancing the field, either by introducing new concepts or by improving upon existing technologies and thus could be an influential one in the technology domain.

Percentiles under Citations: This metric ranks patents based on how frequently they are cited relative to others in the dataset. For example, a patent in the 90th percentile has received more citations than 90% of all patents, marking it as exceptionally influential. Such patents often underpin critical advancements in audio technology or establish new directions for research and development. This could indicate that the entity is amongst the most influential or knowledgeable in the field.

e. History of collaboration

There is no objective, public measure for whether or not an entity or person is interested in collaborating on innovation. It will always be necessary to reach out to the potential partner to clarify this. However, patents can be jointly taken by more than one entity. As a proxy for an entity's inclination to be interested in collaborative efforts, the tool contains a filter that describes whether or not, the entity has formerly collaborated on taking out patents.

6. Formalities:

The tool is developed by Danish Technological Institute for Danish Sound Cluster as part of a Collaborative project supported by Danish Agency for Higher Education and Science in spring/summer 2024.