Solid state battery technology patents

Can patent data be used to analyze the development of battery technology?
Hence,patent data is widely appliedto analyze the development of battery technology [16]. For instance,the European Patent Office cooperating with the International Energy Agency provided key insights into technological innovation in batteries and electricity storage based on patent analysis [6].

Can solid-state batteries overcome the safety issues of liquid electrolytes?
Solid-state batteries (SSB) mayovercome the safety issues of liquid electrolytes due to the adoption of solid-state electrolytes [1]. New types of solid electrolytes have triggered a surge in SSB development [3].

Why do we need a solid state battery?
The electrolyte is a priority area of technology development,and the advances in developing solid-state batteries are perfecting conductivity,reducing interfacial resistance,and improving density and stability. By contrast,the opportunities are to reduce cost,prevent short circuits,and prolong the life cycle.

What is a process patent?
For instance,a process patent can describe a manufacturing methodas a "method for producing a sulfide solid-state battery" or "a solid battery interface contact improving method". However,sometimes it also can be expressed as a "process for preparing solid-state batteries",or "manufacturing a solid-state battery'.

Are product patents more active than process patents in SSB technology?
Our findings indicate product patents are far more activethan process patents in the SSB technology field,which implies many opportunities exist for process inventions to improve SSB's performance. Third,patent holders also have numerous opportunities to perfect SSB's technology functions.

Are composite electrolytes a promising solution for a solid-state electrolyte?
Therefore,composite electrolytes are considered as being a promising solutionfor producing solid electrolytes on an industrial scale. Notably,combining inorganic electrolytes and polymers may also be an opportunity for developing solid-state electrolytes with high ionic conductivity and a wide electrochemical stability window.

Below, we present our analysis of the latest patent landscape overview, highlight key players and their strategic maneuvers, and offer insights for organizations seeking to ...

An inorganic solid-state electrolyte is a solid material suitable for electrically isolating the positive and negative electrodes of a lithium secondary battery while also providing a...

Hyundai is pursuing a major step forward in solid-state battery technology with a newly published patent application in the United States. The patent covers a method allowing ...

Solid state battery technology patents

Q2 2025 marked a significant period for solid-state battery technology, with over 1,510 new patent applications published. Leading patent applicants included industry giants ...

Intellectual Property Landscape Q2 2025 marked a significant period for solid-state battery technology, with over 1,510 new patent applications published. Leading patent ...

This study systematically analyzes patents to categorize innovations addressing key challenges in SSB design and manufacturing, focusing on performance, safety, ...

This study systematically analyzes patents to categorize innovations addressing key challenges in SSB design and manufacturing, focusing on performance, safety, and scalability. The methodology focuses on ...

The paper adopts the technology of Natural Language Processing (NLP) to analyze patent documents and reveal the advances and opportunities for developing solid ...

Even though patent activity in lithium-ion batteries more than doubled from 2010 to 2018, the report shows that the portion of patent activity involving solid-state electrolytes ...

Even though patent activity in lithium-ion batteries more than doubled from 2010 to 2018, the report shows that the portion of patent activity involving solid-state electrolytes grew 450% during this period, highlighting the ...

Contact us for free full report

Web: https://www.economieopgaven.nl/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346