

Are alternative battery chemistries getting more patents?

Between 2012-2021, the number of patent families filed in CPC class H01M10/054,13 which relates to alternative battery chemistries, has steadily increased. The trends follow those seen for redox flow and solid-state battery technology, with a steady growth in the number of patent families filed in this class.

What is a lithium-ion battery?

A lithium-ion battery is a type of rechargeable battery. It includes a positive electrode with a positive current collector, a first active material, and a second active material. The battery also includes a negative electrode with a negative current collector and a third active material, where the third active material is a lithium titanate material.

Does lithium titanate affect battery performance?

The use of lithium titanate in a battery is believed to reduce the likelihood of lithium plating during charging. Lithium plating is a phenomenon that can negatively impact the performance of lithium-ion batteries.

What is the capacity of the lithium-ion battery?

The lithium-ion battery has a capacity between approximately 10 mAh and 1000 mAh.

What is a negative current collector in a lithium ion battery?

The lithium-ion battery of claim 25, wherein the negative current collector is made of copper or a material selected from the group consisting of titanium, nickel, and aluminum. (27. The lithium-ion battery of claim 25, wherein the negative current collector comprises a material selected from the group consisting of titanium, nickel, and aluminum.)

Do lithium ion batteries have protection circuitry?

Conventional lithium-ion batteries may include protection circuitry to prevent damage in the event of a low voltage condition. These batteries may be utilized in devices that include protection circuitry, which reduces the current drain from the battery by disconnecting it when necessary.

The origins of the lithium-ion battery can be traced back to the 1960s, when researchers at Ford's scientific lab were developing a sodium-sulfur battery for a potential ...

Its patent on solid-state batteries is co-filed with Vitzro Cell and relates to an electrode for a lithium secondary battery with a polymer-encapsulated active material and its ...

Tulip has over 5000 patents from LG Energy and Panasonic covering lithium-ion battery technology and aims to license these to battery manufacturers globally. It has been ...

The recognized potential of the silicon-based anode for Li-ion batteries has led to significant investments in bringing this technology to market ... Knowmade is releasing a new Silicon ...

Huawei plans to invent solid-state battery tech, reveals new patent. Huawei has recently issued a new patent regarding solid-state battery tech would be a wonderful ...

As the drive towards renewable energy use gains pace, there has been an increase in global patent filings relating to battery technology. While lithium-ion batteries ...

As the drive towards renewable energy use gains pace, there has been an increase in global patent filings relating to battery technology. While lithium-ion batteries currently dominate the battery market, they have several ...

2009-12-02 Priority to CN2009202017336U priority Critical patent/CN201570531U/en 2010-09-01 Application granted granted Critical ... and can satisfied the demand of the modern ...

Li-ion batteries have advanced rapidly and now have increased energy density and long cyclic stability. ... Example anode materials that are the focus of patent activity are ...

Dragonfly Energy to be granted a new U.S. patent addressing the streamlined production of conventional Li-ion ion batteries and nonflammable solid-state lithium batteries in ...

RecycLiCo Battery Materials Inc. ("RecycLiCo" or the "Company"), TSX.V: AMY, OTCQB: AMYZF, FSE: ID4, a pioneer in sustainable lithium-ion battery recycling ...

Web: <https://vielec-electricite.fr>