

This invention is a patented invention relating to a series of the flow in the order in which hydrogen is produced mainly by use of renewable energy, stored, transported to places of use such as urban areas and facilities including factories and hospitals and then used through conversion into electric power.

Accordingly, the individual acts, namely, production, storage and transportation of hydrogen would be regarded as "indirect infringement" referred to in Patent law, if being involved in a series of the flow in the order in which hydrogen is produced, stored, transported and then used through conversion into electric power in the above facilities, although being not in conflict with this patent.

This system basically eliminates the need for conventional power-transmission lines, because of transportation of electric power into the form of hydrogen with trailers and/or ships.

Disappearance of the power transmission facilities provides the considerable merits of reduction in maintenance and management costs as well as remarkable decrease in the risk of power failures owing to natural disasters such as storm and flood damages.

At the site of use, hydrogen is utilized through conversion into electric power or energy by using a hydrogen fuel cell system and/or a hydrogen fuel engine system.

On this occasion, the hydrogen fuel cell system results in only exhausting of water, and even the hydrogen fuel engine system supposed to generate nitrogen oxide (NOx) is considered to be smaller in NOx emissions than fossil fuel, and besides, free from carbon dioxide emissions causing the most important issue, so that these can be said to be a clean system. More efficient energy utilization is realized by applying also the resultant heat energy to heating and the like.

We are expecting that with this invention, many people will promote creation of a clean and sustainable next-generation society utilizing hydrogen.

About our patent relating to hydrogen energy utilization

