



# Greentech Patents

– can innovation save the world?

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Current climate targets can only be reached by a major acceleration in clean-energy innovation. The technologies needed to reduce CO<sub>2</sub> emissions in the coming decades are at the prototype stage today, and patent protection can secure their value for the future.

Since year 2000, more than 44,000 of the filed international patent applications are directed towards climate change challenges. Innovation in the “green” sector is key to provide affordable and practical solutions to replace current technologies in the next decades.

## **How can patents fight climate change?**

The effects of climate change threaten all life, and it is natural to think that any technology capable of helping us tackle this global challenge should be readily accessible and free for everyone to exploit.

In reality, bringing a great idea to the market often requires substantial funding. A patent gives temporary exclusive rights to produce, import and sell a product, and can therefore attract and secure the necessary investments to develop an invention from the prototype stage to the final product.

## **Case – Transforming waste into a resource**

Climate change can be mitigated not only by developing new methods to reduce emissions or energy consumption, but also by developing new methods to recycle materials for new purposes. Circular economy, which aims at using materials and resources in such a way that they can be (re)cycled indefinitely, is a way to do so.

Advanced Substrate Technologies (AST), a Danish biotech company, has recently developed and patented a method to recycle biomass waste from biogas production as part of a substrate for growing plants and fungi. The AST Substrate “Green Substrate” can be used in substrate mixes for both fungi cultivation and horticulture. The ability of fungi to degrade cellulose and hemi-cellulose ensures increased and efficient utilization of the total energy potential of the biomass.

Svend Hoff, CEO of AST states: *“The value of the AST patents resides in the fact that successful patents document that our innovations are novel and inventive. Greentech Innovations, whether they are processes, technologies or products, provide interesting energy, resource and climate potentials and with that financial benefits”.*

The first commercial AST-add-on plant is in operation. If you want to know more about AST and their Green Substrate, please contact Svend Hoff, phone no.: +45 40287155.



The European Patent Office (EPO) does not have a dedicated “green” fast track. However, it is possible to expedite patent prosecution through the PACE program. There are no special requirements or reasoning needed to qualify for this accelerated procedure and the request can be filed free of charge at any time.

Be aware that the accelerated program, and the resulting expedited processing, may not be of interest for all companies. It is not always in the best interest of a company to have a patent granted early, for example if a particular market is not yet mature to handle the products.

### **Accelerated patent track for greentech in Europe?**

Because climate change has become a key priority in national and international environmental policies, several jurisdictions have established measures to fast track “green” patent applications. In May 2009, the UK was the first to establish such a program, which was shortly thereafter followed by similar initiatives in Australia, Israel, Brazil, Japan, the Republic of Korea and the United States.

### **Trends in green technology**

If you are curious about the newest innovations in the climate field, you can search the patent databases. The Cooperative Patent Classification has introduced a dedicated classification scheme (code Y02) for technologies or applications related to the mitigation or adaptation against climate change.

Reflecting the current policies aimed at reducing emissions from fossil fuel, the greentech sectors that have seen the biggest innovative efforts relate to Reduction of greenhouse gas emissions (code Y02E), Change mitigation technologies in the production or processing of goods (code Y02P), and Climate change mitigation technologies related to transportation (code Y02T). If you want to know more about the classification and its subgroups, please follow [this link](#).