## Patents on beer: The brewing companies Carlsberg and Heineken want a market monopoly

Currently, **Carlsberg and Heineken** are two of the world's largest five breweries. They own well-known brands in Germany, such as **Carlsberg**, **Holsten**, **Astra**, **Duckstein**, **Feldschlösschen**, **Lübzer Hacker-Pschorr**, **Kulmbacher**, **Paulaner and Thurn & Taxis**. In Austria, Heineken owns the Brauunion - Gösser, **Schwechater**, **Zipfer**, **Puntigamer**, **Villacher und Reininghaus** belong to this union.

Normally, these companies are competitors, but have decided to act together on the patents. This means they can achieve a monopolistic position in the market – **together they can stipulate that their suppliers are only allowed to grow the patented barley. They then profit two-fold** – **from selling the beer and from the cultivation of the barley!** At the same time, they can prevent other breeders from breeding better barley. In this way the companies can extend their already dominant position on the market – to the detriment of farmers, breeders, other breweries and consumers.

The patents held by these brewing companies (EP2384110 and EP2373154) are not based on inventions, but only on random mutations in the genome of the barley. The so-called "invention" is based on random mutations in the genome of the barley commonly used in conventional breeding. Another patent held by the companies claims the use of plants for any further breeding (EP2575433). The use of the barley is supposed to make the brewing process somewhat simpler and cheaper as well as ensuring that the beer keeps for longer.

Random mutations in the genomes of plants can happen spontaneously, or be facilitated with simple tools. In the present case, the barley grains were brought into contact with a chemical that is meant to increase the mutation rate. Afterwards the plants with the desired traits were selected; whereby the traits that the scientists looked for were already known.

Using random mutation for conventional breeding is not uncommon. Nevertheless, Carlsberg and Heineken claim the barley as their "invention". **The scope of the patents is immense: The patents cover the barley, the brewing process and the beer itself**. Moreover, the patent is not confined to specific processes. If, in future, the described traits are discovered or developed through breeding in other varieties of barley, these would fall under the scope of the patent as granted. This is an abuse of patent law and a violation of currently valid prohibitions in European patent law.