



Opinion

A gene inventor? Patent nonsense



LUIGI
PALOMBI

Your genes belong to you – all 23,299 of them – but the moment they leave your body your genes are “isolated”. They have been transferred into an artificial state, a foreign place. And in this new state patent law says they are patentable subject matter.

As a result, thousands of patents have been granted to biotechnology companies, universities and others, including scientists. The scientists responsible for this transformation are named on the patents as “inventors”.

In 2005 a study published in the prestigious journal *Science* disclosed that about 20 per cent of the human genome was “the subject of US IP”. In other words, US inventors claimed to have invented 20 per cent of your genes.

“How is this happening? My genes weren’t invented; my parents gave me my genes,” you say, surprised and now a little miffed by the idea that someone is claiming to be the inventor of some of your genome.

Yet that’s what’s been happening for more than 20 years, and in 1998 the European Parliament passed a law called the European biotechnology directive to make it legal. Today the European Patent Office in Munich accepts that an isolated human gene is patentable subject matter. It has to. That’s the law.

In the United States and Australia, however, moves are afoot to stop the patenting of your genes which, let’s face it, no one invented. We all know that our genes belong to us and that they are natural phenomena. Just like all living things on this planet, they have either been created by God, if you’re a creationist, or have evolved, if you subscribe to Darwin’s theory. Either way, they are products of nature and according to the US Supreme Court are things that are “free to all men and reserved exclusively to none”.

This year the Senate’s community

affairs committee is conducting an inquiry into gene patents and their effect on the Australian people.

In May the American Civil Liberties Union launched legal proceedings against the US Patent Office and Myriad Genetics. The law suit challenges the validity of US patents granted to Myriad over the gene mutations that are responsible for breast and ovarian cancer in women who come from families that are predisposed to these forms of cancers.

Chris Hansen, the ACLU’s attorney, says: “It has long been a principle of law in the United States that you can’t patent a product of nature, like a basic element such as gold, and you can’t patent a law of nature such as gravity or $E=MC^2$. It is our position that many of the patent claims when they cover the gene itself, or the gene in certain mutated forms, represent both laws of nature and products of nature and are therefore inappropriate for patenting.”

On August 3 the Senate’s public hearings commence in Melbourne, but will also take place in Sydney and Canberra later that week. The Senate was galvanised into action in November last year after Senator Bill Heffernan first raised the issue in committee.

His interest was stoked by a lawyer’s letter that Genetic Technologies Limited, a publicly listed Australian company controlled by Dr Mervyn Jacobson, sent to every publicly funded laboratory that performed a genetic test designed to detect mutations to the BRCA1 and BRCA2 genes.

The BRCA1 and BRCA2 genes are in everyone, but mutations to these genes have been linked to breast and ovarian cancer. In the letter the laboratories were given seven days to confirm in writing that they would “cease using the patents” and “refer the performance of all BRCA1 and BRCA2 testing to Genetic Technologies”.

Genetic Technologies had acquired

the Australian patent rights from Myriad in 2002 and, after trying to assert its patent rights at the time, subsequently retreated, supposedly making a gift of them to the Australian people after the Howard government ordered the Australian Law Reform Commission to undertake an inquiry into gene patents.

After 18 months, in June 2004, the commission delivered its report to the government. Though it made a number of recommendations, strangely it did not recommend that gene patents be banned. In any event, the Howard government never responded to the report and the Rudd Government, so far, hasn’t either.

Government inaction is probably the reason why Genetic Technologies, forgetting about its gift, tried once again to assert its patent rights over the BRCA1 and 2 genes in July last year.

This time, the Senate has acted. Of course, no matter what the Senate’s report recommends it will ultimately be up to the Rudd Government to take the next step.

In the meantime, it will be another six years before the American Civil Liberties Union’s attempt to invalidate Myriad’s US BRCA patents will be definitely decided by the US Supreme Court.

Dr Luigi Palombi is the director of the Genetic Sequence Right project at the Australian National University, and the author of *Gene Cartels: Biotech Patents In The Age Of Free Trade*.

We all know that our genes belong to us and that they are natural phenomena.