

Question: What happens when a patent is obtained based on traditional knowledge?

1. The patent should be revoked.
2. The patent should be maintained, but the "owners" of the traditional knowledge should be compensated.
3. The patent should be maintained, and the owners of the traditional knowledge need not be compensated.

Burning issues

- Was the patented idea “stolen” from the practitioners of traditional medicine?
- Do first-world countries “owe” third-world countries if they financially benefitted from their knowledge/resources?
- Can patents be used to stop traditional medical practices?

Important to note: a new patent cannot,
by definition, prevent the ongoing
practice of traditional medicine

If it did cover the traditional medicine, it
would be invalid by definition.

The ethical underpinnings of the patent system

- The patent system was established to reward disclosure of innovations to society.
- Without patents, most great innovations would remain trade secrets.
- The patent system balances the rights of inventors and the general society by granting limited exclusivity (20 years).

Importantly: Inventions that have already been disclosed cannot be patented (except in jurisdictions with a grace period)

Stradivarius violins: can they be
patented today??

The patent system also encourages progressive innovation

- Without the sharing of ideas, everyone would be "starting from scratch".
- With the sharing of ideas, people try to build on each other's ideas.
- As soon as an invention is published, competitors race to try to further improve the idea.

For the same reason that patents encourage innovation, allowing the patenting of improvements encourages ongoing innovation.

A case study: Shlomo and Rachel.

- In the year 2008, Shlomo invents the bicycle. He receives a patent for a bicycle, expiring in 2028.
- In 2010, Rachel reads Shlomo's patent and decides to add brakes to the bicycle. She also receives a patent with brakes, which expires in 2030 (2 years after Shlomo's).
- Shlomo has no rights in Rachel's patent.

While both patents are in force:

1. Shlomo is allowed to sell a bicycle without brakes, and to prevent others from selling any bicycle (with or without brakes). He cannot sell a bicycle with brakes, without Rachel's permission.
 2. Rachel is not allowed to sell any bicycle (even one with brakes) without Shlomo's permission. She has the right to prevent others from selling a bicycle with brakes.
- Note that neither Shlomo or Rachel is allowed to sell a bicycle with brakes, without the other's permission!

After Shlomo's patent expires, but Rachel's is still in force:

1. Shlomo is still allowed to sell a bicycle without brakes, but can no longer prevent others from doing the same. As before, he cannot sell a bicycle with brakes, without Rachel's permission.
2. Rachel is allowed to sell any bicycle (with or without brakes). As before, she has the right to prevent others from selling a bicycle with brakes.

Question:

Is it fair that Rachel has all the remaining patent rights, while Shlomo has none? Without Shlomo, Rachel would have never thought of her idea!!

Modified scenarios

- What if Shlomo did not (or could not) get a patent on the bicycle?
- What if Rachel's uncle lent her NIS 100,000 to conduct the research? Should he be given rights in her patent?

Application to traditional knowledge scenarios

- Question #1: Should traditional knowledge prevent attainment of a patent?

Hypothetical case study #1: Rimonacure Ltd.

- Rimonacure Ltd. performs a controlled study to confirm the traditional knowledge that pomegranate extracts work to treat skin inflammation. They try to (broadly) patent use of pomegranate extracts to treat skin inflammation.
- Result: No patent. The traditional knowledge is novelty-destroying prior art.

Hypothetical case study #2: Rimonacure Ltd.

- Rimonacure Ltd. develops a new formulation from pomegranate extracts for treating skin inflammation.
- Result: The new formulation is patentable if it exhibits unexpected properties.

Hypothetical case study #3: Rimonacure Ltd.

- Rimonacure Ltd. discovers a new therapeutic use for pomegranate extracts... or combines them with extracts from another plant... or isolates the active compound from the extracts.
- Result: A patent covering the advance only may be obtained if it exhibits unexpected properties.

In other words, traditional medicine is viewed no differently from any other prior art

And that's the way it should be

Question #2: Should the originators of the traditional medicine be compensated?

It sounds like a nice idea. But they are not inventors. Can Rimonacure Ltd. be compelled to give them rights without changing the rules?

Conclusions

- To be fair to all, any system has to have clear rules that are applied consistently, whether or not they seem equally fair in all circumstances.
- It's true that the patent system has limitations- not everyone is compensated.
- For the time being, as far as I know it's the best system we've got.