## Public Ethics Radio

Public Ethics Radio • Centre for Applied Philosophy and Public Ethics
Australian National University • LPO Box 8260 • Canberra ACT 2601 Australia
contact@publicethicsradio.org

Episode 14, Matthew Rimmer on Intellectual Property and Clean Technologies

Released June 23, 2010

MATT PETERSON: This is Public Ethics Radio. I'm Matt Peterson.

We hear all the time that technological development is our best hope for transforming the oil economy and mitigating climate change. President Obama just did this in his Oval Office speech about the oil spill. He said that, "scientists and researchers are discovering clean energy technologies that will someday lead to entire new industries." The problem is that "the energy industry only spends a fraction of what the high-tech industry does on research and development."

Intellectual property issues lurk in the background of these public policy questions about energy research and development. If someone develops a fantastic new solar panel, the best choice for the environment would be to give it away as cheaply as possible so that the maximum number of poeple could get it. But giving a technology away undermines the incentives that private companies have to develop new technologies. If I can't profit, why would I invest in expensive research and development? Here, standard intellectual property rights are in tension with some public goods.

Similarly, climate change is a global problem. As poorer countries develop economically, their ecological footprint will grow. Affluent consumers have an interest in making this development as green as possible, but we are reluctant to let others free ride on our innovative work. To what extent should we share technologies with them, and on what terms?

Today on Public Ethics Radio, we address questions of intellectual property as it pertains to clean technologies. Christian Barry spoke to Prof. Matthew Rimmer. Rimmer is a Senior Lecturer at the Australian National University's College of Law, an Associate Director of the Australian Center for Intellectual Property in Agriculture, and a memer of the Climate Change Institute at the ANU. Christian spoke to Prof. Rimmer in Canberra.

**CHRISTIAN BARRY:** Matthew, I wonder if you could just talk about some of the different areas in which intellectual property has become an important practical concern and some of the policy issues that seem to be very much at stake in these different areas.

**MATTHEW RIMMER:** Intellectual property is an umbrella term that refers to an array of legal rights that provide some sort of protection for certain kinds of intangible

property. So the main big general areas of intellectual property are three-fold. There's the patent regime: the patent regime provides exclusive rights in relation to scientific inventions for twenty years, and it's a general regime since it provides protection for everything from, traditionally, mechanical inventions, but also chemicals, plants animals, microorganisms, human genes, human stem cells, information technology, business methods, as well as emerging technologies like nano-technology and synthetic biology and a variety of forms of clean technology. So the patent regime really deals with scientific inventions.

The trademark regime provides exclusive rights in relation to certain distinctive signs. Traditionally those signs are very much focused upon names and letters and logos. But with the expansion of trademark law you have an array of nontraditional signs also being protected, like scents and sounds and colors.

The third main area of intellectual property is copyright law. Copyright law provides certain protection in relation to cultural subject matter. So, literary works, artistic works, dramatic works, musical works, and also cinemagraphic films, television and radio broadcasts, and published editions. And copyright law has also been quite flexible to accommodate a range of new subject matter like, for instance, databases, computer programs, various forms of multimedia.

In addition to those three pillars of the intellectual property system, there's an array of sui generis regimes of intellectual property, which provide a particular protection in relation to specific technologies. So for instance the plant-breeders rights regime provides special exclusive rights in relation to certain forms of plant innovation. Geographical indications provide protection in relation to certain wines connected with particular places, like champagne for instance, and also in the European Union certain foods like Parma ham or Wensleydale cheese.

**CHRISTIAN BARRY:** I know with respect to intellectual property generally, one of the main rationales or justifications for having an intellectual property regime, is the sorts of incentives it provides to inventors. This is obviously something that gets emphasized when you're thinking about the development of new medicines. Without the incentives offered by intellectual property protection, these—the production of medicines that are essentially a public good won't get generated. And as you were mentioning before, this is also with respect to new technologies that deal with environmental issues, both that are reduce the impact of human activity on the environment, and that allow human beings to adapt to the changing climate. Could you talk just a little bit about some of those issues and what kinds of proposals are being developed to address them?

**MATTHEW RIMMER:** Well, really, it's a perennial debate in respect to intellectual property about what overarching purposes are being served by providing certain limited, exclusive rights in relation to some forms of intangible property. And there's always a tension between providing certain private rights to certain intellectual property owners, and trying to preserve the broader public interest in certain larger policy objecties like access to knowledge, the promotion of public health, the protection of the environment.

So, I guess in relation to intellectual property and climate change, there's been a very ferocious debate over the past year about reconciling the need to promote innovation in relation to clean technologies, covering everything from forms of renewable energy in wind and solar and geothermal energy, and also energy-efficient devices, and green transportation, and green transportation, and smart grids. And trying to stimulate some heavenly technologies to try to replace dependence on fossil fuels and various forms of polluting technologies.

So there's been a desparate attempt to try to encourage greater research and development with regard to a wide variety of clean technologies. By the same token, I guess, there has been a recognition that there has been a need to transfer those technologies to mid-tier countries like China, India, Brazil, and South Africa. An array of developing countries. But also least developed countries, and small island states. Because if one wants to properly combat global warming and climate change, one really has to ensure there has been a widespread diffusion of those clean technologies.

So that has led to some very fraught debates. So the United States Chamber of Commerce in particular has been masterminding a lobbying campaign to insist upon the United States Congress and, you know, international bodies to respect strong intellectual property rights protection in relation to clean technologies. And they have suggested that compulsory licensing is akin to piracy and theft and stealing. They have suggested that strong intellectual-property protection is the best way to facilitate techology transfer. And they've also resisted in particular pleas from least developed countries to try to have exclusions of certain inventions from intellectual property protection.

**MATT PETERSON:** You're listening to Public Ethics Radio.

**CHRISTIAN BARRY:** Was there any discussion at the climate talks about the ways in which—whether or not it wasn't broached, the idea that one way in which countries might contribute to mitigating climate change would be indirectly, say through their support of transfers of technologies to other countries?

**MATTHEW RIMMER:** As part of their negotiating strategy, the United States delegates try to exclude intellectual property from any agreement in relation to the Copenhagen negotations. And to that end they were supported by—to some extent— Australia, and Japan, and other developed countries. So their strategy was really to—

**CHRISTIAN BARRY:** To simply shut down...

**MATTHEW RIMMER:** —keep intellectual property entirely out the discussions entirely. Against that position, China, the BRICs countries, the G-77, and the small island states put forward five options in relation to dealing with intellectual property and climate change. First option was very much focused on promoting technology transfer, and the United Nations Framework Convention on Climate Change, the Kyoto Protocol, already has language about technology transfer in those texts. But there's been a real problem in

ensuring that developed countries honor such aspirational statements to ensure that there is proper transfer of technology into developing countries and least-developed countries.

So that was the first option on the table. The second option on the table was recognition that existing international agreements did not prevent nation-states from taking a number of measures to permit access to clean technologies. And a wide list of different options were put forward by countries participating in the Copenhagen negotations. Some countries suggested that there should be patent pooling. Some suggested that there should be a global intellectual property patent pool. Others promoted public licensing. So you know inventions that have been developed by public research organizations and universities would be licenced in a much more free way.

CHRISTIAN BARRY: Mm hm.

**MATTHEW RIMMER:** Some suggested that there should be a declaration on intellectual property and climate change, much like there was a Doha Declaration on—

CHRISTIAN BARRY: Access to medicines.

**MATTHEW RIMMER:** Access to essential medicines. But there was also other options put forward like differential pricing, shortening patent terms. So the normal kind of suite of options were kind of put forward under kind of the second option of in terms of measures.

The third option that was put forward was the exclusion of certain inventions from intellectual-property protection. This is kind of permissible, I guess, under Article 27 of the TRIPS Agreement, but there was some debate about whether only those countries who are vulnerable to climate change should be able to make use of such an option. So, say, Tuvalu, and Nauru and the Maldives, or whether that option should be available to least developed countries, or whether developing countries more generally should be able to make use of exclusions of certain subject matter from intellectual property protection. So the Bolivian government in particular was very keen on that particular option.

Fourth option was really compulsory licensing. So compulsory licensing is where you compel the holder of intellectual property to provide access to intellectual property in exchange for some compensation. Again, that's permissible under the TRIPS agreement, but there's concern that the TRIPS Agreement has been somewhat inflexible in terms of the regime that it set in place for compulsory licensing.

**CHRISTIAN BARRY:** Well, very few have been granted, right?

**MATTHEW RIMMER:** Well, it's been a kind of particular problem in relation to access essential medicines—

**CHRISTIAN BARRY:** Yes, exactly.

**MATTHEW RIMMER:** —that, although countries are permitted to engage in compulsory licensing, in practice it's been quite a rare occurence. And when it has happened, for instance in Thailand, it's been the subject of—

**CHRISTIAN BARRY:** It's been challenged.

**MATTHEW RIMMER:** —a great deal of debate and controversy. And fifthly, I guess there was quite a bit of discussion about whether or not there should be some sort of technology mechanisms to help facilitate access to clean technologies. So the suggestion was that there should be some sort of institutional structure established to facilitate access to clean technologies.

**CHRISTIAN BARRY:** What is, in your view, what sort of approach is the optimal one with respect to intellectual property and the environment in this case?

**MATTHEW RIMMER:** Well, I mean, I think what happened was that it proved impossible for there to be any consensus on the options put forward in relation to intellectual property, and it seemed that there could be greater hope of agreement and commitment on adjacent issues, dealing with certain kind of structures for innovation.

So really there are no prescriptions in the Copenhagen Accord for how you deal with intellectual property at all, and how these climate innovation centers kind of deal with access to innovation—

**CHRISTIAN BARRY:** What is the idea of an innovation center—would it operate on the basis of something parallel to prizes? That's, sort of—with access to innovation, that's obviously been—

**MATTHEW RIMMER:** No, it's not really kind of a prize model. Climate innovation centers seem to be much more of a model akin to, say, something like a copy of a research center in Australia. It's a kind of an entity that is designed to bridge a variety of key stakeholders, including, you know government, private companies, and private sector organizations.

So I guess a climate innovation center in some ways has been promoted as a kind of an evolution from say public-private partnerships, or from, you know, kind of particular technology agreements. But I guess it would be a question about how well they will operate. Sometimes they drew analogies with some of the agricultural centers that have been set up to deal with germplasm and access to seeds. And I guess they've had kind of a mixed success, some of those models in the past.

The other thing that was set up in term of the Copenhagen Accord was essentially a big climate fund. So Sachs has always been very keen on the model of a Global Fund, which he was a great promoter of being setting up to deal with HIV/AIDS, and tuberculosis and malaria. And he was always a great advocate of a similar fund being set up in relation to trying to combat some of the issues associated with climate change.

However, the Copenhagen Accord is somewhat hazy about how such a fund will actually be funded. It suggests that there will be contributions from the public sector, the private sector, and philanthropists as well.

And I guess the other thing to say is the Copenhagen Accord is nonbinding. Essentially. the meeting "took note" of the Copenhagen Accord, it didn't actually endorse it.

CHRISTIAN BARRY: To what extent—shrill rhetoric about theft aside—do you take seriously the claims that, absent some very strong intellectual property protection, there won't be the sorts of incentives that are required to develop clean technologies.

**MATTHEW RIMMER:** I guess the key company that has been very keen on strong protection of intellectual property rights in relation to clean technologies has been General Electric. General Electric is a huge conglomerate. You know, historically, the company evolved out of Edison's lightbulb technology, so I guess they've always had a very strong interest in energy, and also a kind of energy efficiency. And with their kind of Ecomagination program, they have encouraged all the parts of the company to develop a wide array of technologies that met certain kinds of environmental standards.

That company, their intellectual property chief, Carl Horton, has said: why would you invest in clean technologies absent intellectual property protection? So his argument is that really there would be no incentive for General Electric to make such a heavy investment in clean technologies if it couldn't be assured that it had certain exclusive rights in relation to those clean technologies.

But it should be acknowledged that really the patent system, it must be said, has not really worked very well in encouraging the development of clean technologies thus far. Because when you think about it, intellectual property, with its so-called technologyneutral approach, has been somewhat indiscriminate in providing incentives for both polluting technologies and clean technologies alike. So, you know, intellectual property protection is granted in relation to an array of dirty technologies, like cars and fossil fuels, relating to coal and petrol and a variety of other things, as well as clean technologies. And as a result the intellectual property system has not necessarily been a very good mechanism in terms of pushing researchers towards seeking out clean technologies.

**CHRISTIAN BARRY:** So one alternative might be simply to deny intellectual property protection to nonfriendly or at least much more limited protections.

**MATTHEW RIMMER:** Well, that's part of the debate in terms of—Article 27 of the TRIPS Agreement raises the possibility that you can exclude sorts of inventions if you want to protect the environment. And there's particular words about environmental protection in Article 27 which have taken on a much greater significance now that the impact of climate change has become much more well understood. And you're quite right, you could try to take one approach, which would be to exclude polluting

technologies from the benefits of patent protection, or IP protection. The other approach would be to exclude clean technologies from protection. I guess patent offices have been somewhat reluctant to play that role, traditionally.

**MATT PETERSON:** You're listening to Public Ethics Radio. We're talking to Prof. Matthew Rimmer of the Australian National University about intellectual property and clean technologies.

**CHRISTIAN BARRY:** You're a global planner, and given the imperfection of our knowledge of how these different incentives work, you're charged with drawing up a few guidelines about how we might develop environment friendly intellectual property regime. What would be some of the first measures you would at least want to explore?

**MATTHEW RIMMER:** Well, I think all the options that were under negotiation during the Copenhagen negotations were all perfectly legitimate options for an intellectual property regime. So I think technology transfer, compulsory licensing, even in certain cases exclusions of certain subject matter from protection, and you know devices like patent pooling and public-sector licensing are all sensible mechanisms to have in a system.

There's been quite a bit of enthusiasm for alternative means of stimulating research and development. So, the Knowledge Ecology International has been very keen on promoting prizes in a range of different sectors. But curiously enough prizes have taken hold much more in the field of clean technology, as opposed to medical technology. Whereas the United States Congress has resisted some of the proposals for medical innovation prizes, they have been quite happy to create legislative, government-backed clean technology prizes.

And then you also have certain private bodies like Virgin have established the Virgin Earth Challenge to promote research in respect of clean technologies. And when you think about it, the Nobel Prize is in some ways a classic prize. So you might recall that it was awarded to Al Gore and the intergovernmental committee working on climate change. It shouldn't be forgotten that the Nobel Prize was set up originally by a patent owner. Alfred Nobel made his money out of patenting dynamite. And really prizes are kind of quite interesting, quite apart from providing some sort of monetary incentive, they really work by providing some sort of reputational benefit to the winner of a particular prize. So I guess prizes have been kind of contemplated.

Some developers have been quite interested in using open-source style strategies to develop things like green cars or other kind of open innovation mechanisms to deal with the development of clean technologies. So kind of the full gamut of clean technologies options have been under discussion.

And as we've already talked about, you know, the notion of there being some sort of fund has really been realized with the Copenhagen Accord. But there, I guess, are ongoing

questions about what is the best means to encourage research and development in relation to kind of clean technologies.

CHRISTIAN BARRY: So—

**MATTHEW RIMMER:** I mean, we haven't really talked about trademarks, which is kind of another—

CHRISTIAN BARRY: You—

**MATTHEW RIMMER:** —dimension of the debate in relation to intellectual property and climate change.

**CHRISTIAN BARRY:** How's that?

**MATTHEW RIMMER:** Because companies are really engaging in green labelling and green branding in a very systematic fashion.

So think, for instance, BP's new logo, which is a kind of a sunflower, and they changed their name from you know British Petroleum to Beyond Petroleum. And you know similarly, as we talked about before, General Electric have sort of branded themselves in terms of Ecomagination. And a wide range of other kind of companies have been trying to portray their green credentials and their climate credentials in terms of their marketing and their branding.

Competition regulators around the world have started to be much more active about trying to deal with misleading, deceptive conduct in relation to green marketing and carbon offset claims. So the Australian Competition Consumer Commission has just taken action in the federal court over alleged misleading and deceptive conduct by a company, suggesting that you know they could provide some sorts of services in terms of carbon offsets. And the ACCC have developed guidelines both in relation to green marketing and in relation to carbon offsets. Federal Trade Commission has done something similar in the United States.

But there's been a great deal of concern about the problem of so-called greenwashing. So nongovernmental organizations have been particularly vocal about companies engaging in greenwashing. So Greenpeace have for a decade been maintaining a lively website on the problems of greenwashing. And some of the activist groups have engaged in culture jamming against the branding of some of these companies. Greenpeace were involved in a big battle with Esso, because they changed Esso's "S"s in their trademark to dollar signs, and Esso promptly sued them for trademark infringement.

But funniest of all has been the culture-jamming group called the Yes Men. The Yes Men have a habit of staging fake press releases and fake press conferences. And very funnily held a press conference in the name of the United States Chamber of Commerce, declaring that they had changed their position on climate change and now recognized that

climate change and global warming was indeed a problem. And they also said that they were indeed for a comprehensive and meaningful Copenhagen Agreement. And into the meeting rushed a real, authentic member of the United States Chamber of Commerce, saying that they were frauds, they were frauds, they're not real at all!

## CHRISTIAN BARRY: [Laughter]

**MATTHEW RIMMER:** Showing that they didn't have much humor, the United States Chamber of Commerce have then sued the Yes Men for trademark infringement, for unfair competition, and cybersquatting. And the Yes Men have been defended by the redoubtable Electronic Frontier Foundation, who've been arguing that you know, the Yes Men are, were really engaging in political speech that was protected by the First Amendment. So intellectual property rights shouldn't trump the consitutional protections of freedom of speech. But in any case, they have kind of engaged in fair use of those intellectual property materials.

I guess in the sphere of branding there's also been a lot of debate over who should run the new .eco domain name sites. There have been kind of two competiting, rival bids that have been made over who should be in charge of those particular domain names. So in the field of trademark law and passing off and misleading and deceptive conduct, and internet domain names, there's quite a bit of active debate about how companies can engage in green branding, whether its for individual trademarks or certification trademarks. Or how action might be taken against those companies or those entities that try to engage in greenwashing.

## CHRISTIAN BARRY: Good.

**MATT PETERSON:** Thanks for listening to Public Ethics Radio. The show is an independent production, supported by the Carnegie Council for Ethics in International Affairs, the Centre for Applied Philosophy and Public Ethics, an Australian Research Council Special Research Centre, the Australian National University, and Yale University. We'll be back soon with another conversation about public ethics. In the meantime, you can find us on the web at www.publicethicsradio.org.