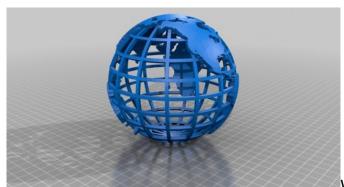
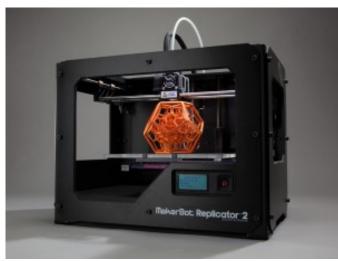
How DRM Will Infest the 3D Printing Revolution



While you were busy getting yourself all worked up and declaring 3D printing the beginning of a new age, one of the most maligned figures in modern patent law is preparing to rain on your parade. Nathan Myhrvold, former Microsoft CTO and founder of patent holder Intellectual Ventures, has managed to get an expansive patent on 3D printing DRM. That 3D printing revolution [1] we've been hoping for just got a lot trickier.

The system envisioned by Myhrvold would be used to prevent users of 3D printers from abusing "object production rights." The idea is that you would load a digital file into your computer and before any printing could take place, you would have to connect to some remote server that checks to make sure you have authorization to print the object. If this sounds familiar, that's because it's basically what happened to music in the wake of Napster.

Copyright law is a complicated beast, and it's not traditionally applicable to objects. However, a new device, invention, or design can be patented. This is where Intellectual Ventures (IV) makes its money, and probably why it's <u>interested in this kind of DRM</u> [2]. The company acquires patents on various technologies and inventions, then sues those it believes to be infringing. This has led to many calling IV a patent troll, and they probably have a point.



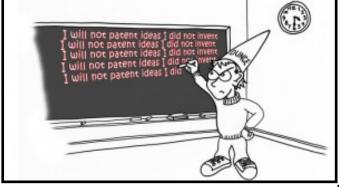
[3]So how do we get from where we are

How DRM Will Infest the 3D Printing Revolution

Published on Wireless Design & Development (http://www.wirelessdesignmag.com)

now to some sort of dystopian future where your printer is tattling on you to the copyright cops? There will be two forces pushing us that way, the first being the association with P2P (peer-to-peer file sharing). As increasing fidelity is achieved in 3D printing, the companies that sell you printers will more often be compared to those that provide P2P software. That's the primary legal headache these companies face. The makers of several popular file sharing apps have ended up in court, and I wouldn't be surprised to see something similar to happen to the MakerBot folks someday.

The second way 3D printing will see push-back is a little more ominous. There are already people out there investigating the feasibility of 3D printing gun parts [4]. It might not be doable now, but it will be one day. Before that happens, simpler weapons like "brass knuckles" made out of super-hard plastic could worry governments where such items are illegal. Weapon laws are not about intellectual property, but they get us to the same place — restricted use of 3D printing. Copyright concerns can and will piggyback on this issue.



[5]

The sellers of 3D printers probably won't be directly required by law to implement restrictions, but the deluge of lawsuits over printed guns and patented inventions might drive them to give in. Even Google had no choice but to implement harsh automated copyright detection algorithms on YouTube to limit its liability. We've seen these automated systems <u>fail time and time again</u> [6], though.

Every DRM scheme implemented so far has been cracked in some way. It's really a cruel joke on the average user — while DRM stymies their digital life, those that actually might be engaging in shady behavior will be able to print all the <u>patented objects</u> [7] they want. DRM won't actually solve any problems — it never does — but it might be an inevitable part of 3D printing's future.

Read More [8]

October 16, 2012

How DRM Will Infest the 3D Printing Revolution

Published on Wireless Design & Development (http://www.wirelessdesignmag.com)

Source URL (retrieved on 04/21/2014 - 7:12am):

http://www.wirelessdesignmag.com/news/2012/10/how-drm-will-infest-3d-printing-revolution

Links:

- [1] http://www.extremetech.com/extreme/129907-is-3d-printing-going-to-change-your-life-or-is-it-just-a-pie-in-the-sky-geeky-dream
- [2] http://www.technologyreview.com/view/429566/nathan-myhrvolds-cunning-planto-prevent-3-d/
- [3] http://www.extremetech.com/wp-content/uploads/2012/10/MakerBot-Replicator-2.jpg
- [4] http://www.extremetech.com/extreme/137269-the-3d-printed-gun-when-is-high-tech-too-hot-to-handle
- [5] http://www.extremetech.com/wp-content/uploads/2011/10/will not patent.jpg
- [6] http://www.extremetech.com/internet/135529-out-of-control-copyright-bots-are-making-a-mockery-of-the-dmca
- [7] http://www.extremetech.com/electronics/115185-the-pirate-bay-declares-3d-printed-physibles-as-the-next-frontier-of-piracy
- [8] http://www.extremetech.com/extreme/137955-how-drm-will-infest-the-3d-printing-revolution