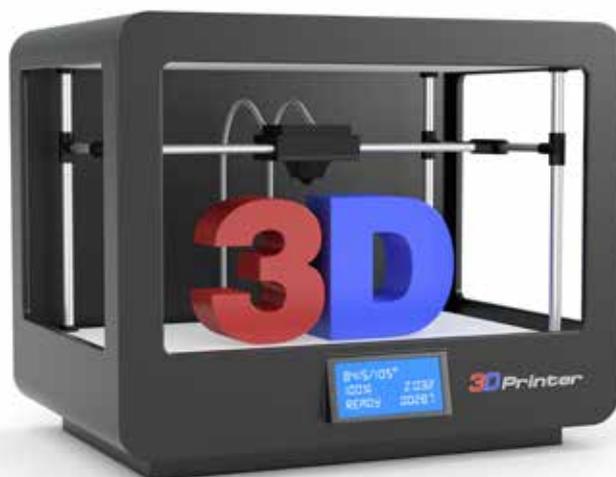




Author: **Ernst-Jan Louwers**,
attorney-at-law
Louwers IP|Technology Advocaten
Louwers@louwersadvocaten.nl



3D printing: threat or opportunity?

Introducing 3D printing

3D printing is seen as iconic for the so-called Third Industrial Revolution. Apart from interesting opportunities, these disruptive technologies may introduce new legal challenges. These include counterfeit, piracy, (product) liability issues and enforcement. The risk of infringement is accelerated by the ease of dissemination of illegal copies and the fact that 3D scanners and printers are available at affordable prices.

3D printing is an *additive* process where successive layers of material are laid down in different shapes, as opposed to traditional techniques which mostly rely on removal of material by methods such as cutting or drilling (*subtractive* processes). This not only covers printing 3-dimensional output from polymer or plastic material but also for instance



all kinds of metal 'sintering' or melting. The technologies is being applied in many areas such as consumer products, dresses, toys, gadgets, dental implants, medical prosthesis, chocolates and even parts of machines and airplanes.

3D copies

You buy one unit of a certain product (for instance a vase or toy rabbit), make a 3D scan of the product, process the scanned design in processing software and print multiple, identical copies. Printing can take place at home or at distributed print locations and shops. To make things even worse, the resulting CAD or STL file can be disseminated by internet to enable others to print true copies.

Sharing and enforcement

The developments are particularly challenging because of the ease of sharing and the difficulty of enforcement in the online environment. A comparison can be made to the struggle of the music industry and publishers with online music and e-books.

Product design

Product designs can be protected by design rights, patents, copyright or trade mark (and maybe also as trade secret). There have only been a few public conflicts involving 3D printing. For instance Fernando Sosa's 3D printed Iron Throne iPhone dock in the shape of the throne of swords from the Game of Thrones. HBO acted against this product and the parties settled. Nonetheless, more cases can be expected to emerge with 3D printing becoming mainstream.

Customization and mindset

But there is more. Consumers or professional consumers ('prosumers') create or adapt existing

product designs, which are becoming tailor-made and demand-driven. Some manufacturers offer the possibility to personalize products, like Nike. So who will be the owner of IP rights?

Furthermore, younger generations are less concerned about protection and may expect manufacturers to ease their proprietary restriction to enable sharing, remixing and creating mashups. Such mind shifts put pressure on brand owners to rethink their IP policies.

Liability

New supply chains and business models appear. Service providers emerge as facilitators. Could a 3D print shop be liable for IP infringement? A striking parallel can be drawn with Pirate Bay and eBay.

Closing remarks

3D printing may cause shifts to supply chains and commercial and legal relationships. Certain manufacturers can use 3D printing to enable on-demand supply of personalized products and spare parts. Brand owners may need to consider turning threats into opportunities.



Verifier: **Michael Zoebisch**
Partner
rwzh Rechtsanwälte Wachinger
Zoebisch Partnerschaft
zoebisch@rwzh.com