Liability Issues in 3D Printing and Library Spaces

• Library Positioning: as Intermediary of access:
  • Information.
  • Technology.

• Liability: Primary versus Secondary.
  • Assumptions:
    1) Use by Patron → primary liability.
    2) Making a technology available → secondary liability.

• Risk Assessment:
  • Copyright.
  • Patent.
  • Trademark.
  • Tort: Negligence (including exculpatory clauses, i.e.,
    waivers of liability).
  • Intellectual Freedom Issues: Free Speech and Privacy.
What Works Are Protected by Copyright?

• “‘Literary works’ are works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied.” 17 U.S.C. § 101.
What Works Are Protected by Copyright?

• “Pictorial, graphic, and sculptural works include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans.” 17 U.S.C. § 101.
How is Copyright Infringed?

• By doing any of the following without the permission of the rights holder or when not permitted by law, e.g., the use falls outside of fair use…..

• **Reproducing** a work protected by copyright: downloading the code for a 3D design onto your computer.

• Making a **Public Display** of a work protected by copyright: posting the code for a 3D design onto your website or “maker” blog.

• **Public Distribution**: distributing copies of a work protected by copyright you “printed” (“reproducing”) to passers-by.

• Making a **Derivative Work** of a work protected by copyright:
Who is Responsible?

- The person or entity that infringed the copyright in a protected work.
  - **Direct infringement.** *Primary* liability: strict liability.
  - CONDUCT required, knowledge is not required!
  - Secondary liability requires primary liability, i.e., if patrons do not infringe then the library cannot be liable under either theory below...
Who is Responsible?

• The person or entity with control over and that benefits from the infringing activity.
  
  • **Vicarious infringement. Secondary** liability: strict liability.
  
  • RELATIONSHIP: control and financial benefit.

• The person that went so far as to encourage the infringement:
  
  • **Inducement infringement. Secondary** liability: not strict.
  
Who is Responsible?

• The person or entity that assisted in the infringement or allows it to continue.
  • **Contributory infringement.** Secondary liability: not strict.
  • CONDUCT: cause or contribute to the infringement with knowledge or a “reason to know” of the infringement.
  • CONDUCT: distributes a device that is not “capable of substantial noninfringing uses.” *Sony Corporation of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).
What is the Risk of Liability for the Library?

- **Direct:** Non-existent if a librarian does no printing!!!
  - If it does print: the librarian and a library may qualify for damage remission under 17 U.S.C. § 504 (applies to reproductions made in the course of your employment you thought were fair use).

- **Secondary (Vicarious):** Non-existent if the library does not incur direct financial benefit. Cost-recovery only!

- **Secondary:** Non-existent at present, under the....
  - **Inducement** standard of *Metro-Goldwyn-Mayer Studio, Inc. v. Grokster, Ltd.*, 125 S.Ct. 2764 (2005) (requires promotion of the technology to infringe: known source, technology tools and revenue): Do not advertise that your printers can be used to infringe copyright or have your makerspace be a source of revenue generation.
What is the Risk of Liability for the Library?

• **Secondary:** Non-existent at present, under the….
  
  • **Contributory** device distribution as 3D printers and other makerspace tools/technologies are “capable of substantial noninfringing uses.” *Sony Corporation of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984)

• **Secondary** (use of equipment): Non-existent if statutory requirements met:
  
  • *unsupervised* use of reproducing equipment (*BENIGN INSTRUCTION!*).

• **Secondary** (library network/system: patron posts or links to infringing content): Possibly, the library might be liable but…
  
  • damages are remitted and injunctive relief is proscribed by statute.
  • requires library to be a registered agent. 17 U.S.C. § 512.
  • library must “expeditiously disable or remove content.”
Questions and Answers
now or later on . . .

COPYRIGHT
What Can Be patented?

• The most common form of a patent is a **utility patent** (duration is 20 years): “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.” 35 U.S.C. § 101.
What Can Be patented?

• A **design patent** protects only the appearance of the article and not its structural or utilitarian features: “Whoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 171.
How is a Patent Infringed?

• **Direct:** “Whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.” 35 U.S.C. § 271(a).

• **Inducement:** “Whoever actively induces infringement of a patent shall be liable as an infringer.” 35 U.S.C.A. § 271(b).

• **Contributing** to infringement: “Whoever offers to sell or sells [or supplies] within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.” 35 U.S.C. § 271(c).
Who is Responsible?

• Direct infringement. **Primary and Strict Liability (required for secondary liability):** “whoever without authority **makes, uses, offers to sell, or sells** any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.” 35 U.S.C. § 271(a).

• **Inducement:** **Secondary; not strict, requires a “bad” actor (conduct):** “Whoever **actively induces** infringement of a patent shall be liable as an infringer.” 35 U.S.C.A. § 271(b).
  - Two elements: “alleged infringer **knew or should have known** his actions would induce actual **infringement** necessarily includes the requirement that he or she **knew of the patent.**” *DSU Medical Corp. v. JMS Co.*, 471 F.3d 1293, 1303 (Fed. Cir. 2006).
Who is Responsible?

• **Contributory infringement**: *Secondary not strict, requires a bad “mens rea.”* Knowledge standard: *especially made/adapted to infringe* and not capable of *substantial noninfringing* use.

  • “Under the plain language of the statute, a person who *provides a service* that assists another in committing patent infringement may be subject to liability under section 271(b) for active *inducement* of infringement, but *not* under section 271(c) for *contributory infringement*.” *PharmaStem Therapeutics, Inc. ViaCell, Inc.*, 491 F.3d 1342, 1357 (Fed. Cir. 2007).
What is the Risk of Liability for the Library?

• **Primary/Direct:** Non-existent if a librarian does no printing.

• **Inducement:** Secondary. Non-existent at present under 35 U.S.C.A. § 271(b) if the library does not **induce** the patron to infringe a patent. **BENIGN INSTRUCTION** of Patrons!
  
  
  • Avoid knowledge and willful blindness standards of *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S.Ct. 2060, 2069 (2011).
    
    • Elements: 1) High probability (subjective belief) and 2) deliberate avoidance.

• **Distribution/Contributory:** Secondary. Non-existent at present under 35 U.S.C. § 271(c).
  
  • Especially made/adapted standard of *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 525 (1964), is absent: a 3D printer is a device capable of “substantial noninfringing uses”.

  • Provision of a service not subject to section 271(c): *PharmaStem Therapies, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1357 (Fed. Cir. 2007).
Questions and Answers
now or later on . . .

PATENT
What Is Protected by Trademark?

• A **trademark** can be a slogan (it’s the real thing), name (Pillsbury), letters (IBM), numbers (4711 for cologne), drawing (Gerber baby face), device (orange back pocket tab for LEVI jeans), sound (NBC chime), sign (Golden Arches), product design (Honeywell circular thermostat), package configuration (pinch bottle for scotch), a color or combination of colors, even fragrances (yarn or magic markers).
What Is Protected by Trademark?

- **Trade dress** law is a special branch of trademark law and is an outgrowth of unfair competition. Trade dress can protect the following characteristics of a product: its color or combination of colors, size, shape or configuration, texture, weight, and graphics.
How is Trademark Infringed?

• As a trademark indicates that all goods provided in association with that mark come from the same source use of another mark as a mark that causes confusion as to the origin of goods or service can infringe another’s mark.
How is Trademark Infringed?

• **Dilution (tarnish or blur):** Mark must be famous but need not cause confusion.

• **Dilution by tarnishment** occurs when a mark is “linked to products of *shoddy quality*, or is portrayed in an *unwholesome or unsavory* context,” with the result that “the public will associate the lack of quality or lack of prestige in the defendant’s goods with the plaintiff’s unrelated goods.” *Hormel Foods Corp. v. Jim Henson Productions, Inc.*, 73 F.3d 497, 507 (2d Cir. 1994).
How is Trademark Infringed?

• **Dilution** by **blurring** causes a **weakening** in consumers’ **minds** of the connection between plaintiff’s mark and the plaintiff’s goods or services. Blurring involves “the whittling away of an established trademark’s selling power through its unauthorized use by others upon **dissimilar products**.” *Mead Data Central, Inc. v. Toyota Motor Sales, U.S.A., Inc.*, 875 F.2d 1026, 1031 (2d. Cir. 1989).
Who Is Responsible?

• The value of marks are three-fold: a mark assists consumers in identifying good and services from a particular source and so helps prevent consumer confusion, the mark protects the owner’s good will and standing with consumers, a mark offers a continuous method for relaying progress in product or service design, quality or features.

• **Direct infringement**: Primary liability: causes confusion as to the origin of goods or services.
Who is Responsible?

• **Trade Dress:** The trade dress must be inherently distinctive, unless it has acquired secondary meaning; the “junior” use must cause a likelihood of consumer confusion.
Who is Responsible?

- **Contributory: Inducement/Distribution.** Secondary Liability:
  - “[I]f a manufacturer or distributor intentionally induces another to infringe a trademark, or if it continues to supply its product to one whom it knows or has reason to know is engaging in trademark infringement, the manufacturer or distributor is contributorily responsible for any harm done as a result of the deceit.” *Inwood Laboratories, Inc. v. Ives laboratories, Inc.*, 456 U.S. 844, 854 (1982).
Understanding the Knowledge Standard

Who is Responsible?

- **Vicarious.** Joint ownership or control over infringing object.
  - “[A] finding that the defendant and the infringer have an apparent or actual partnership… or exercised joint ownership or control over the infringing product.” *Perfect 10, Inc. v. Visa International Service Association*, 494 F.3d 788, 807 (9th Cir. 2007).

- **Dilution (tarnishment or blurring):** used as a mark but need not cause confusion.
  - “While there is no authority directly on point, there would seem to be no logical reason why the doctrines of vicarious liability and contributory infringement should not apply to a claim under the federal anti-dilution law.” J. Thomas McCarthy, *MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION*, § 25:21.75. Contributory and vicarious liability under Lanham Act § 43(c): the anti-dilution act (4th ed., Database updated in Westlaw, December 2014).
What is the Risk of Liability for the Library?

• **Primary/Direct:** Non-existent if a librarian does no printing; if printing occurs…

• The concept of **Fair Use** exists in trademark law but is much narrower than fair use in copyright. Trademark Fair Use is codified at 15 U.S.C. § 1115(b)(4), exempts uses of a mark which are “otherwise than as a mark.”

• **Descriptive Fair Use:** “although trademark rights may be acquired in a word or image with descriptive qualities, the acquisition of such rights will not prevent others from using the word or image in good faith in its descriptive sense, and not as a trademark.” *Car-Freshner Corp. v. S.C. Johnson & Son, Inc.*, 70 F.3d 267, 269 (2d Cir. 1995).
  - Example in library signage: “maker-teen but not Makerbot®.”

• **Nominative Fair Use:** *New Kids on the Block v. News America Publishing*, 971 F.2d 302, 308 (9th Cir. 1991): Use of the plaintiffs’ trademark in one’s own goods and services if 1) the product must *not be readily identifiable* without the use of the trademark, 2) *no more* of the trademark is used by the plaintiff than is *reasonably necessary* to identify the product, and 3) the defendant must *not* act in such a way as to suggest *sponsorship or endorsement* by the plaintiff is Nominative Fair Use.
  - Example on the library website: “there are two Makerbot® printers available.”
What is the Risk of Liability for the Library?

- **Inducement/Contributory Liability:** Non-Existent if library does not induce infringement or avoids contributory knowledge requirements.
  - *Lockheed Martin Corp. v. Network Solutions, Inc.*, 194 F.3d 980, 984 (9th Cir. 1999) (AVOID: “Direct control and monitoring of the instrumentality used by a third party.” Id.). **BENIGN INSTRUCTION of Patrons!**
  - Library is not like a landlord or flea market proprietor absent sales of the knock-off on library premises.

- **Vicarious liability** avoided if financial benefit absent. *Perfect 10, Inc. v. Visa International Service Association*, 494 F.3d 788, 807 (9th Cir. 2007).
  - Avoid financial relationship; cost recovery only!

- **Dilution?:** Similar secondary liability and avoidance concepts apply.
Questions and Answers

now or later on . . .

TRADEMARK
What Relevant Concepts of Harm Exist?

• **Product Liability.** 3D Printer or an object created by a 3D printer: “A product is ‘defective’ if it has a manufacturing defect, a design defect, or if it is accompanied by an inadequate instruction or warning.” RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 2 (1998).

• **Negligence:** Requires four elements.
  - Duty of care (foreseeability),
  - Breach of that duty,
  - The failure to fulfill that duty was the proximate (legal) cause of the harm: foreseeable and without a superseding cause,
  - Causing harm (measureable).
How Could the Harm Occur?

• Flaw in the design file. Are 3D designs or instructions like products?: NO.

• Courts have imposed product liability law in rare cases of navigational and aeronautical charts. See Aetna Casualty & Surety Co. v. Jeppesen & Co., 642 F.2d 339, 341-343 (9th Cir. 1981) (concluding that defendant’s instrument approach chart was a “defective product” and observing that the “court’s finding that the product was defective is not clearly erroneous”).
How Could the Harm Occur?

• The object produced by the 3D printer is flawed. Is the object created by a 3D Printer manufactured within the concepts of Product Liability law?: NO.
  
  • The library or patron is not “engaged in the business of selling or otherwise distributing products.” RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 2 (1998), comment c.
  
  • Restatement (Second) of Torts § 402A, comment f (1965): “The rule does not apply to the housewife who, on one occasion, sells to her neighbor a jar of jam or a pound of sugar.”
How Could the Harm Occur?

• The 3D printer is broken, producing either flawed objects or the patron is injured during use, e.g., spewing molten filament. What to do? **USE A WARNING NOTICE!!!**

• “A defendant whose conduct creates a risk of physical or emotional harm can fail to exercise *reasonable care* by failing to warn of the danger if: the defendant *knows or has reason to know*: of that risk; and that *those encountering* the risk will be *unaware of it*; and a *warning* might be *effective in reducing the risk of harm.*”

How Could the Harm Occur?

- The 3D printer is functioning properly but is used to produce an object that harms the patron or another person.
  - A superseding cause is an act of a third person or other force which by its *intervention* prevents the actor from being liable for harm to another which his *antecedent negligence is a substantial factor* in bringing about. Restatement (Second) of Torts § 440, *Superseding Cause Defined*
What is the Risk of Liability for the Library?

• **Product defect:** Non-Existent under product (strict) liability standard as a single printed object is not “manufactured”:
  • “engaged in the business of selling or otherwise distributing products.”  
    RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 1 (1998), comment c.
  • See also, RESTATEMENT (SECOND) OF TORTS § 402A, comment f (1965) (“The rule does not apply to the housewife who, on one occasion, sells to her neighbor a jar of jam or a pound of sugar.”).

• **Printer Defect:** Unlikely under negligence if warning notice used (the library as gratuitous owner of the device):
  • Restatement (Second) of Torts § 388 (1965): know or reason to know and a failure to warn: of a dangerous condition or of facts likely to make it dangerous. Temporarily out of Order! or Warning: blade is very sharp!

What is the Risk of Liability for the Library?

- **Instruction Errors:** Non-existent under negligence.
  - The Library as publisher (“cheat sheet”): “publisher... has no duty to... independently investigate the accuracy of the text.” Winter v. G.P. Putnam’s Sons, 938 F.2d 1033, 1037-38 (9th Cir. 1991).
  - “warning is unnecessary... no publisher has a duty as a guarantor.” Id.
  - Reasonableness of reliance on gratuitous information. RESTATEMENT (SECOND) OF TORTS § 311, comment c (1965).
  - The library as the place where erroneous instructions from another source are obtained: Immunity for content (designs) obtained online. 47 U.S.C. § 230.

- **Use of printed object to harm another (Negligence):** Unlikely (Duty of care standard. Foreseeability. Proximate cause. Superseding cause. Public policy considerations.)
  - Not foreseeable that patron would harm another; criminal conduct breaks the chain of causation.

- Even if negligent, most states have **Statutory Immunity for Public Employees.** Applies to discretionary/planning decisions but not ministerial/operational decisions (whether to have a 3D printer in the library, but not maintenance or upgrades).
How Could Risk be further Minimized?

- **Exculpatory Agreements:** called *waivers*, operate as release from liability, a contractual promise not to sue for negligent but not reckless or intentional conduct.
  - Clear title and labels (Assumption of Risk, Release of Liability, etc.).
  - Singular purpose, e.g., do not combine with general registration.
  - Articulate the possible *equipment*, e.g., solvents, metal working tools, etc., *dangers*, e.g., fumes, sharp objects, etc., and *harms*, e.g., cuts, burns, etc.
  - Exculpatory provision in bold or caps: *conspicuous*!
  - Some states require the ability to bargain; present a choice: service is free if you sign, if you choose not to sign you pay a fee.
  - Minors: Contracts are voidable; exception: voluntary participation and noncommercial.

- **Indemnification:** a promise to make another whole, i.e., to cover the expenses associated with a harm suffered including legal expenses and damages.
  - Fault of the library; fault of the patron (in harming another patron).
Questions and Answers
now or later on . . .

HARMS & WAIVERS
What Content Limits are Possible?

• Makerspaces devices as a Nonpublic Forum.
  • United States v. American Library Association, 539 U.S. 194, 205 (2003): “public forum principles…are out of place… Internet access in public libraries is neither a ‘traditional’ nor a ‘designated’ public forum.”
  • Restrictions are subject to a rationale or reasonable basis test.
    • Make The Road by Walking, Inc. v. Turner, 378 F.3d 133 (2d Cir. 2004). “The government can reasonably exclude expression that undermines the purpose served by a nonpublic forum. The most common reason for such an exclusion is that the excluded expression is distracting or disruptive… Avoiding other negative effects of expression can also justify limits on speech in nonpublic fora… Also, where allowing private expression in a nonpublic forum may imply government endorsement of that expression, limiting or excluding speakers may be reasonable.” Id. at 148.

• Must also be viewpoint neutral.

• Consistency in printing policies; photocopier, PC station, makerspace devices, etc.
What Content Limits are Possible?

- 3D Printer device as a **Limited Public Forum**.
  - Speech occurring within the limits of the forum are subject to *intermediate scrutiny* 1) narrowly tailored to serve a 2) significant government interest, and 3) ample alternative channels of communication still available.
    - Reasonable time, place and manner (RTPM) are acceptable.
  - Speech occurring outside the limits of the forum are subject to a *rationale basis*.
    - Regulation must also be *viewpoint neutral*.

- 3D Printer device as a **Designated Public Forum**: No restrictions, print what you like, except….
  - *Content neutral* restrictions subject to *intermediate scrutiny*:
  - *Content based* restrictions subject to *strict scrutiny*: 1) compelling state interest, 2) narrowly tailored to that interest, and 3) no less restrictive means available.
What Patron Privacy Concerns Arise?

• State library confidentiality statute may apply to uses of the 3D printer: Record of 3D printing uses including loan of the device and objects printed can be a protected record.

• If you loan a 3D printer: 1) name or identity, 2) “borrows” and 3) “materials, resources, etc., not simply “documents.”

• If you maintain records of use, e.g., a sign-up sheet, use log or have a “surveillance device” in place: 1) name or identity, 2) “uses” not simply “borrows” and 3) “materials, resources, services,” etc., not simply “documents.”

• Patron Privacy: Find your state library privacy statute: http://www.ala.org/advocacy/privacyconfidentiality/privacy/stateprivacy.
<table>
<thead>
<tr>
<th>State</th>
<th>Inquiries</th>
<th>Uses</th>
<th>Borrows</th>
<th>Parental Exception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota:</td>
<td>&quot;patron’s name.&quot; M.S.A. § 13.40.</td>
<td>Possibly, but not all inquiries may contain a request for materials related to the device: &quot;materials requested.&quot;</td>
<td>Yes: “materials [] borrowed”</td>
<td>None.</td>
</tr>
<tr>
<td>Wisconsin:</td>
<td>“identity.” Wis. Stat. § 43.30.</td>
<td>Yes: “uses [] services.”</td>
<td>Yes: “uses [] other materials, resources, or services”</td>
<td>Yes: “Upon the request of a custodial parent or guardian of a child who is under age 16”</td>
</tr>
<tr>
<td>North Dakota:</td>
<td>“sufficient to identify a patron.” N.D.C.C. § 40-38-12.</td>
<td>Possibly if patron must first make a request before using a device (&quot;materials requested&quot;).</td>
<td>Possibly, if patrons must first make request (&quot;requested information&quot;).</td>
<td>None.</td>
</tr>
<tr>
<td>South Dakota:</td>
<td>“personally identifiable information.” S.D.C.L. § 14-2-51.</td>
<td>Yes, if record contains &quot;personally identifiable information.&quot;</td>
<td>Yes, if record contains &quot;personally identifiable information.&quot;</td>
<td>Yes: “upon the request of a parent of a child who is under eighteen years of age.”</td>
</tr>
</tbody>
</table>
Questions and Answers
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FREE SPEECH
& PRIVACY
Library Roles and the 3D Printer

• “NOTICE WARNING CONCERNING COPYRIGHT AND OTHER LEGAL RESTRICTIONS. The copyright (Title 17, United States Code), intellectual property (patent law for example under Title 35, United States Code) and other laws of the United States may govern the making of photocopies or other reproductions of content protected by copyright, patent and other laws. Libraries and archives furnish unsupervised photocopy or reproducing equipment for the convenience of and use by patrons. Under 17 U.S.C. § 108(f)(2) the provision of unsupervised photocopy or reproducing equipment for use by patrons does not excuse the person who uses the reproduction equipment from liability for copyright infringement for any such act, or for any later use of such copy or phonorecord, if it exceeds fair use as provided by section 107 or any other provision of the copyright law, nor does the provision of unsupervised photocopy or reproducing equipment for use by patrons excuse the person who uses the reproducing equipment from liability for patent, tort (such as products liability) or other laws. This institution reserves the right to refuse to make available or provide access to photocopy or other reproducing equipment if, in its judgment, use of such equipment would involve violation of copyright, patent or other laws.”

Questions and Answers
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THANK YOU!

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