

Intellectual Property Basics – Joint Interim Committee Meeting

January 22, 2014

Fargo, North Dakota





Our single greatest asset is
the innovation and the
ingenuity and creativity of
the American people.

- President Obama, 2010

What is intellectual property?

- Property right, recognized by law
 - ▣ Real property
 - ▣ Personal property
 - Tangible
 - Intangible
 - Intellectual property (IP)
- Has same attributes as other types
 - ▣ Can be bought, sold, bartered, pledged as collateral, etc.
 - ▣ Upon death, can be gifted, bequeathed, passed to heirs by operation of law



Types of Intellectual Property

An overview

Patents

- Federal law
- US Code, Title 35
- Rights vest in inventors
- Must apply for and be granted protection
- Right to exclude others from practicing the invention
- Civil remedies for infringement
 - Money damages
 - Injunctions
 - Block importation of infringing goods

Copyrights

- Federal law
- US Code, Title 17
- Protection attaches automatically
- Rights vest generally in authors
 - Key exception is works made for hire
- Exclusive rights in original works
- Remedies for infringement
 - Money damages
 - Injunctions
 - Criminal liability

Trademarks

- Parallel federal and state protection
- US Code, Title 15; NDCC Chapter 47-22
- Protection requires use in commerce
- Rights vest in user
 - Who enjoys the good will associated with the mark?
- Right to exclude others from making a confusingly similar use of the mark
- Civil remedies for infringement

Copyrights vs. Patents vs. Trademarks

- Copyrights protect original artistic expressions in a tangible medium
- Patents protect inventions, must have utility
- Trademarks protect brand identity, names, logos, customer good will

* * * * *

- Each grants a bundle of rights to its respective owner; either the exclusive right to do OR the right to exclude others from doing

Copyrights vs. Patents vs. Trademarks

- Overlap between Copyright and Trademark is possible
 - Logos
 - Mascots
 - Graphic designs

UND



BSU BISMARCK
STATE COLLEGE

Copyrights vs. Patents vs. Trademarks

- Overlap between Copyright and Trademark is possible
 - Logos
 - Mascots
 - Graphic designs
- Separate registrations – Different rights
- Different government entities
 - (federal) US Patent and Trademark Office / (state) Secretary of State
 - US Copyright Office

Trade Secrets

- NDCC Chapter 47-25.1
- Derive value from being secret
- Loss of secrecy = loss of protection
- Alternative to patenting
 - Fairly uncommon for universities
 - Know-how related to inventions
- Require active protection
 - Employment of safeguards
 - Physical
 - Technological
 - Contractual



Patents, Inventions, and Inventorship

US Constitution

Article I, Section 8



The Congress shall have Power...

To promote the Progress of Science and
useful Arts, by securing for limited Times to
Authors and Inventors the exclusive Right to
their respective Writings and Discoveries;

What is a patent?

A patent is the right – granted by the government – to exclude for a limited time others from practicing the protected invention (i.e., infringing the patent).

The patent holder may sue and seek damages from any party that infringes a patent while it is in force.

Requirements for patentability

- New
- Useful
- Non-obvious
- Apparatus
- Process
- Method
- “Anything under the sun that is made by man” – US Senate (1952)

Getting a patent

- Time
 - ▣ May take 2-5 years or longer
- Cost
 - ▣ Filing fees
 - ▣ Attorney fees
 - ▣ In the US alone can be \$10-\$15,000 or more
- Applications are examined to determine patentability
- No guarantees of success
- The rules can change in the middle of the game (e.g., isolated DNA fragments, business methods)

Idea → Invention ?

- Does it need to be perfected?

NO

- Should inventor believe that it works?
- Should inventor be able to explain it fully and sufficiently?
- If practical, should a prototype be built?
- Should it be drawn or diagrammed?
- Can there still be room for improvement?

YES

Who is an inventor?

- Must contribute to the claimed invention in a meaningful way
 - ▣ No free riders
- Conception / Reduction to practice
- Directing others vs. following directions
- Qualifications?
 - ▣ Education
 - ▣ Experience
 - ▣ Employment
 - ▣ EVERYONE!



Ownership of Patents

Who owns a patent?

- The inventor
- In case of joint inventions, each named inventor owns a joint, undivided interest
- No automatic transfers (unlike copyright)
- For ownership to be altered, there must be a bargained-for exchange
 - Contract
 - Employment agreement
 - Established policy

Institution ownership?

- Students and employees alike may wonder whether the institution has an ownership claim over their inventions.
- Unfortunately, there is no one-size fits-all solution to this question.
- The answer will usually turn on WHEN, WHERE, HOW and under WHAT CIRCUMSTANCES the invention arose.
 - Funding agreements for research

Bayh-Dole Act

- Pre-1980, US Government owned all inventions resulting from federally-funded research at universities
- Resulted in very little licensing and commercialization
- Bayh-Dole Act (35 USC § 200 et seq.) permitted universities to elect to retain title, commercialize own inventions
 - May assign ownership to non-profit foundations

Bayh-Dole Act

- Revolutionized the notion of 'technology transfer', getting inventions into public use
- Inventors entitled to compensation
- Government retains certain rights
- If university decides not to pursue, inventors have opportunity to obtain ownership
 - Must first seek approval from funding agency

Bayh-Dole Act

- Universities must comply with Bayh-Dole
- Cannot promise ownership to inventors, sponsors, others
- Does not mean, however, that industrial co-sponsors are deprived of commercialization opportunities
- Licenses, including exclusive licenses may be granted
- Option agreements are common

Employee Work

- Employees not always 'on the clock'
- Typically, inventions made under the following circumstances belong to the employer:
 - In the course of one's employment
 - At the specific direction of one's employer
 - At work and/or during working hours
 - Utilizing employer resources
 - Directly related to employment and/or duties

Employee Work

- Hypothetical # 1
 - Faculty member spontaneously and without institution support invents a revolutionary new consumer product.
- Hypothetical # 2
 - Facilities employee responsible for clearing snow on campus tinkers around in his home garage and invents a snow plow controller that enables more precise plowing around parked cars; tests it out at work.

IP and Academic Research

- A patent is not a bar to publication.
- But the inverse may be true!
- In many cases, protecting intellectual property goes hand-in-hand with or complements scholarly work
- IP protection may be required under grants or sponsored research agreements.

Rewarding Innovation

- Income Generation
 - Licensing Revenue from Use or Products
 - Inventors share 30 % or more of net licensing revenue
- Fosters Technical / Business Relationships
 - Sponsored Research Funding, Joint Ventures, New Businesses
 - Inventors can get additional research funding

Rewarding Innovation

- Enhances CV, profile
- No out of pocket costs = no risk
- The institution will cooperate to achieve objectives and vision
- Opportunity to form a start-up to commercialize new technology
 - First in line
 - Access to incubators, business consultants, technology parks

Student Work

- If the student is not also an employee, the institution may assert rights in inventions made under the following circumstances:
 - ▣ Under a sponsored research agreement
 - Institution has contractual obligation to a third party
 - ▣ In conjunction with a professor or other institution employee
 - May be preferable to consolidate ownership
 - ▣ Utilizing institutional resources
 - Institution has obligation to the public

Student Work

- Hypothetical # 1
 - Student, sitting in her dorm, utilizing journals/texts from campus library, invents a new data compression protocol that has the potential to overtake the MP3.
- Hypothetical # 2
 - Student is performing research in a biochemistry laboratory and, in conjunction with her professor, develops a new screening assay for detecting cancer.



Copyrights, Original Works and Authorship

US Constitution, Art. I, Sect. 8



The Congress shall have Power...

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries;



Only one thing is impossible
for God: To find any sense in
any copyright law on the
planet.

- *Mark Twain's Notebook, 1902-1903*

What is copyright?

- Copyright protects original expressions
 - ▣ Fixed in a tangible medium
- Protection attaches automatically
- Does NOT require
 - ▣ Notice
 - ▣ Registration
 - ▣ Publication
 - ▣ Intent
 - ▣ Success
 - ▣ Acclaim
 - ▣ Audience

The scope of copyright

Copyright over a work is the EXCLUSIVE right to:

- ▣ Reproduce the work
- ▣ Prepare derivatives (sequels, prequels, modifications, translations, etc.) based on the work
- ▣ Distribute copies by sale or other transfer
- ▣ Display the work publicly
- ▣ Perform the work publicly

Violation of these rights = INFRINGEMENT

What is protected? (17 USC § 102a)

- 1) literary works;
- 2) musical works, including any accompanying words;
- 3) dramatic works, including any accompanying music;
- 4) pantomimes and choreographic works;
- 5) pictorial, graphic, and sculptural works;
- 6) motion pictures and other audiovisual works;
- 7) sound recordings; and
- 8) architectural works.

Protection is NOT extended to

- Ideas
- Procedures
- Processes
- Systems
- Methods of operating
- Concepts
- Principles
- Discoveries
- Information (distinguish *collections of*)

Term

- Works created after January 1, 1978
- Life of author + 70 years
- Joint work, last surviving author
- Anonymous, Pseudonymous, or Works for hire, 95 years from publication or 120 years from date of creation, whichever is shorter
- A long time.

Enforcing Copyright

- Registration is a prerequisite to suit
- Must prove ownership, substantial similarity
- Defenses to copyright infringement
 - Non-infringing use
 - Fair Use
 - Independent creation
 - Invalidity of copyright
 - Misuse by copyright owner (e.g., unreasonable conduct; against public policy)
 - Abandonment by copyright owner (e.g., explicit grant of work into public domain)



Ownership of Copyrights

Who owns copyright?

- Generally speaking, the author or artist
- If a joint work, each author or artist, unless there is an agreement to the contrary
- Works for hire, generally owned by the Employer
 - Written agreements?
 - Scope of employment?
 - Control by employer?
 - Intent of parties?
 - Express assignment?

Who owns copyright?

- When in doubt, a party should obtain a written assignment
- Ownership of the physical work is NOT equal to ownership of Copyright in that work
- The grantor must intend that the grantee take Copyright as well
- Transfers may be recorded in the Copyright Office, but not required

Employee authors

- Classic work for hire analysis
- By law, owned by the Employer
- Academic custom
 - Permits faculty to hold copyright in their scholarly works
 - Facilitates publication, dissemination
- Institutions will assign ownership to author in accordance with custom
 - May wish to retain certain rights
 - EXCLUDES works made at the specific direction of the Employer

Student authors

- If not employed, work for hire does not apply
- By law, copyright owned by the student
- Exception if required to practice IP owned by the institution (e.g., device software)
- Institutions typically reserve certain, limited rights in theses, dissertations
 - Indexing, cataloging in libraries
 - A condition of granting a degree
 - Does NOT deprive author of copyright ownership or right to exploit

Joint Works

- Two or more authors contribute to a work with the shared intention that the contributions be merged to form a whole
- Each co-author owns an undivided equal share in the copyright
- Subject to a duty to account for profits
 - No similar requirement in patent law
- Benefits of consolidation



Transfers of Rights

Licenses

- Permission to practice a patented invention, use a copyrighted work
- Exclusive, Non-exclusive
- Industry-specific, territorial
- Opportunities to participate in protection strategies, share costs
- Access to licensor's know-how
- Licensing fees, royalties
- May be implied from circumstances

Assignments

- Complete transfer of ownership right
- Requires valuable consideration
- In the case of federally-funded inventions, prohibited under Bayh-Dole unless the recipient is an invention-management organization (e.g., a non-profit foundation)
- Transfers of copyright **MUST** be in writing



Management of IP

Management of IP

- Authority vested in State Board of Higher Education
- NDCC § 15-10-17(9): The [SBHE] may...Adopt rules promoting research, encouraging development of intellectual property and other inventions and discoveries by university system employees, and protecting and marketing the inventions and discoveries. The rules must govern ownership or transfer of ownership rights and distribution of income that may be derived from an invention or discovery resulting from research or employment in the university system. The rules may provide for transfer of ownership rights or distribution of income to a private, nonprofit entity created for the support of the university system or one of its institutions.

Management of IP

- SBHE Policy 611.2
 - Enables institutions to effectively manage IP
 - Institution-specific procedures adopted
 - UND
 - NDSU
- Policies reflect best practices in higher ed
- Establish expectations
- Clarify relationships
- Provide predictable outcomes

Identification and Capture

- Institutions are on the front line
- Actively promote disclosure
 - America Invents Act (AIA), enhanced focus on early protection
- Review disclosures for potentially protectable IP
- Pursue formal protection
- Explore commercialization opportunities

Commercialization

- Must plan for success
- Consolidation of ownership rights in a single entity
 - ▣ Marketability
 - ▣ Exclusive licensing
 - ▣ Ease of enforcement
- Cooperate with creators
 - ▣ Mutually beneficial relationship
- In case of joint authorship but split ownership, need to account for profits

Risk Avoidance

- Effective management is best defense
- Minimize litigation and disputes
 - ▣ Ownership
 - ▣ Inventorship
 - ▣ Authorship
- Prevent lost opportunities
 - ▣ Attract and retain quality faculty
 - ▣ Economic development

The “privilege” of ownership

- The owner of intellectual property is generally responsible for its
 - ▣ Protection
 - ▣ Commercialization
 - ▣ Monitoring
 - ▣ Enforcement
- Institutional ownership relieves individual creators of these burdens
 - ▣ Fixed – and generous – share of revenue
- Creators often approach the institutions even where policy would not apply



Thank you.