Invention, Innovation, and Intellectual Property

Public Discussion Materials

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IF...

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Content

Interactivity Foundation Guidebooks:
A Way to Start Discussions, Not Settle Arguments

	TYPICAL POLICY GUIDEBOOKS	I.F. CITIZEN DISCUSSION GUIDEBOOKS
WHY developed?	• To make or influence immediate decisions	• To provide a starting point for exploratory discussion
WHAT they contain	• Analysis of a problem • Recommendations for solving it	• Area of concern • Contrasting possibilities • Possible outcomes of possibilities
WHO develops them?	• Experts and/or representatives of interests groups	• Expert-specialists and citizen-generalists
HOW developed?	• In public • Decisions made by compromise or consensus	In "sanctuary" • Freedom to speak openly • Focus on ideas, not personalities or participants' own interests or purposes • Decisions made through convergence—while preserving contrasts

INTELLECTUAL PROPERTY (IP) POSSIBILITIES

POSSIBILITY	Motive		RESPONSE
	Concern(s)	Goal(s)	
A. Mandate Public Education	• Lack of understanding • Fear	• Equip individuals with knowledge of IP and how to get it	• Mandate public education • Government outreach
B. To the Victor Goes the Spoils	• Economic instability • Cost of litigation	• Reduce costs • Predictability • Innovation • Economic growth	• Lengthen IP limits • Protection from lawsuits
C. Free-for-All	• Current IP stymies innovation • IP benefits well-off	• Spur innovation • Equalize benefits of IP	• Minimize or eliminate IP • "Use It or Lose It" rule
D. Level the Intellectual Property Playing Field	• Costs of obtaining IP • Inefficiency • Concentration	• Confirm and validate creativity	• Spread IP around • Aggressive monitoring and review • Reduce costs of litigation
E. Intellectual Property of the People, by the People, and For the People	• Complexity of IP system and resulting cost	• Enable citizen inventors to navigate the IP system • Enable citizens to commercialize inventions	• Publicly provided technical assistance to citizen inventors • Incentives to those providing guidance • New rules and regulations to promote collaboration between experts and inventors
F. Intellectual Property Co-Operatives	• Warehousing IP • Offensive use of IP to attack other firms	• Open up access to IP	• All IP held by nonprofit, government supervised cooperatives • All IP available to anyone for a license fee

INTRODUCTION
PURPOSE AND ORIGIN OF THIS GUIDEBOOK

How This Guidebook Will Help Your Discussion

You are here because you're interested in discussing invention, innovation, and intellectual property (IP), which takes many forms, including patents, trademarks, and copyrighting. The materials in this Citizen Discussion Guidebook will you help keep your discussion exploratory rather than competitive or argumentative. It will encourage you to consider a wide range of concerns surrounding creations of the human mind and the ways that public policy might address them. For example, you will discuss what it means to invent something; why innovation might be important; and how public policy might respond to technological, economic, and social change. The more exploratory your discussion, the more likely you will leave thinking deeply about intellectual property as a social concern and how public policy might respond to it. You will also be better equipped to make choices as a citizen.

This booklet has two main parts: a short list of possible questions and answers about intellectual property policy, and brief descriptions of six possible public policy responses based on them. These will help launch your exploratory discussion. They will also help keep your discussion exploratory because they are contrasting and are themselves exploratory: general possibilities rather than "final answers."

Because they are contrasting, the descriptions you will find here demonstrate a variety of perspectives on intellectual property policy and suggest that there might be more. Because they are general or "conceptual," they should help you explore the "big questions" while encouraging you to avoid technical arguments over details. And because the descriptions that follow are all possibilities rather than final answers, they invite you to develop them further or to come up with entirely new ones of your own.

The panelists who gathered to produce this guidebook agreed that each of its possibilities would have consequences in the realms of international business, trade, and policy. These are not specified here, but might well be included should your discussion allow time for their consideration.

Who Developed the Guidebook?

This guidebook will serve as the point of departure for your exploratory discussion, not as a map of what's already been "discovered" through expert study, nor what's been agreed to by influential groups. Yet, it's far from a collection of random ideas. In reality, a great deal of careful, discussion-based collective thinking went into it.

The Interactivity Foundation (IF) is a non-partisan public interest foundation whose mission is to promote citizen discussions like the one you are about to have. One of IF's roles is to produce discussion materials, like this guidebook. Typically, IF guidebooks result from a series of discussions that unfold over the course of about a year, and are organized and conducted by a single IF Fellow, who also edits the materials into the form of a guidebook.

INTRODUCTION
PURPOSE AND ORIGIN OF THIS GUIDEBOOK

In this case, an internal IF discussion project lasting six months in early 2002 served as a starting point for a second series of discussions conducted during the fall of 2012.

Normally, participants in IF projects are selected for their ability to think creatively and constructively about the chosen area of concern. Discussion panelists are then divided into two groups, one of expert-specialists, the other of citizen-generalists. The special advantage of having two groups is that the resulting discussion guidebook will draw on different and complementary skills. The expert-specialists contribute professional and/or special knowledge; the citizen-generalists contribute their life experiences and/or more general insight. The two groups develop their thinking in parallel over the course of a project; when they come together at the end, each group's thinking enriches the other's.

The internal group responsible for the initial version of this guidebook was made up of generalists—IF fellows-in-training. The additional group that contributed to the final guidebook was evenly divided from the start between expert-specialists and citizen-generalists.

Another important feature of the IF process is that IF panels meet "in sanctuary"—meaning that panelists are guaranteed confidentiality from start to finish. In this way, they are

sheltered against the need to assert their authority, or defend a particular constituency or organization, or avoid "mistakes" or probing questions. They are free to think and speak openly and creatively. This also means that those who discuss IF guidebooks are free to focus on the ideas they present rather than the personalities or backgrounds of their "authors." Here, there was no difference between typical IF projects and the discussions on which this guidebook were based. Both phases of the intellectual property project—the first involving IF Fellows and the second involving a mixed group of generalists and intellectual-property specialists—were conducted in sanctuary.

In IF projects, discussion panels are free in another important sense: they make selections or decisions through a deliberate process of exploration and convergence rather than consensus or compromise. Panels can take their time to explore and develop a wide range of possibilities. Convergence occurs as panelists agree on a range of possibilities that they believe are worthy of public discussion rather than on the possibilities they personally or collectively endorse. In addition, throughout the sanctuary discussion process, any single panelist can keep alive a particular possibility simply by asking that it be preserved. This procedure helps ensure that the panels achieve their goal—developing a series of contrasting possibilities, rather than a single set of recommendations or conclusions. In this respect, too, the process followed by both the original internal IF project and the supplemental discussion series leading to this guidebook were identical. In both cases, participants made decisions by convergence and understood that particular possibilities would be included even at the urging of only one participant.

If you are interested in further information about the process used to develop IF guidebooks or IF's work more generally, we invite you to visit our website at **www.interactivityfoundation.org** and/or consult any of the free materials listed there.

Some Discussion Questions and Possible Answers

What things might count as "objects" of intellectual property (IP)—ideas, information, inventions, discoveries, creations, secrets—or anything that's new and might have value to someone?

What might we want IP (or a system of IP) to achieve—for individuals? For society?

1. **Justice (fair rewards) for creators/inventors**
2. **Affirmation for individuals as creators/inventors**
3. **Incentives**
   a. **To innovate for its own sake**
   b. **To innovate as a means to technological and/or economic advance**
4. **Easy access to information**
5. **A robust exchange of ideas**
6. **Predictability**
7. **Equality, equal opportunity**
8. **Enhanced consumer choice**
9. **A balance between individual rights and the public good**
10. **Efficiency**
11. **National security**
12. **A good domestic climate for U.S. business**
13. **A good international climate for U.S. business**
14. _____

Which of these might be most important? Why?

_____

_____

What matters most in achieving the right outcomes?

1. **Individuals' general knowledge of how the IP system works**
2. **The know-how to take an idea into the marketplace**
3. **How fair is the system?**
4. **Keeping the costs of legal wrangling down**
5. **How lasting, predictable, and enforceable are IP protections?**
6. **Making sure that IP isn't used as a tool to prevent innovation**

How might policy be used to affect the most important factor(s) in a positive way?

Who should be in charge of any new direction we might take in IP?

1. **Individual citizens**
2. **Nonprofits**
3. **Public schools**
4. **Legal, technical, and business experts**
5. **Businesses—either individually or organized by sector**
6. **Government officials**
7. **Some combination of these**

Policy **A**

Mandate Intellectual Property Education to Encourage More Widespread Innovation

Quick Version

The current intellectual property (IP) system works well enough for those who use it. But too few do, because they either don't understand what IP is or don't know how to obtain IP. If everyone were required to learn about IP, everyone would learn how to protect creative work. More people would innovate—to the benefit of individual inventors and society as a whole.

"Robot and Inventor"

What's Behind It

The essence of this possibility is that "the more people know, the more they invent." The United States has a well-developed and reasonably adaptable IP system of laws, regulations, and institutions. But it is also one of the most complex and least understood areas of law and policy. The system can't promote innovation fully and fairly unless inventors first understand how it can serve them. IP education would fill that gap. It would counter fear of the unknown and ensure that all citizens know how the system can help them protect their inventions. As a result, more inventors would use the system, and more of their inventions would see the light of day. Who knows, IP education might even encourage more citizens to see themselves as inventors?

What It Might Do

1. No change to main features of IP laws or institutions
2. Mandated public school education on the value of IP and how to obtain it
3. Supplementary public education building on past government agency outreach efforts

Possible Consequences

1. Overload of IP system (rise in patents, new educational responsibilities)
2. Push-back from public educators
3. Citizen empowerment
4. Increased innovation, risk taking, entrepreneurship

An Illustration: Teleportation

1. Inventor would know that it's possible to get IP protection, e.g., a patent
2. Inventor more likely to know the route to a patent, e.g., shopping it around
3. Invention might be less likely to be stolen

To the Victor Goes the Spoils

Quick Version

This possibility, like the first, accepts the basic framework of U.S. intellectual property (IP) policy, but sees a need for strengthening the protections it affords, whether to individual or corporate holders of IP.

"To the Victor Go the Spoils."

What's Behind It

The current system of IP is fast becoming a burden to economic players and an obstacle to the sharing of technology. In some cases, it is difficult to tell who has IP—or for how long. In others, IP protections are too short to justify the risk of large, long-term investments in new technologies. And in still others, obtaining IP protection itself represents a bottleneck in bringing new ideas to the commercial marketplace. Finally, the costs of defending IP in the courts is consuming ever-larger sums, sometimes even more than a firm's R&D budget. Businesses need relief; the economy needs to be unbound. Strengthening IP will achieve both.

What It Might Do

1. Lengthen terms of IP protection (possibly even "in perpetuity" or "forever")
2. No limits on the kinds of IP allowed, including for biological technologies (seeds, DNA)
3. Right of first refusal for improvements on patents
4. Employers have control over IP created by employees
5. Absolute protection from litigation

Possible Consequences

1. Possible concentration of IP/ power in the hands of those best able to use the system
2. Predictability, especially for individual firms that own IP (and a resulting greater willingness to invest in new technology)
3. Reduced litigation costs
4. Only significant innovations get protected

An Illustration: Teleportation

1. A single company would own it
2. Given the importance of this technology, that company might have unsurpassed power
3. Long-term stability for the owner (and perhaps economy)

Free-for-All

Quick Version

What is intellectual property? In this possibility, there would be no IP—or what IP there was would expire very quickly. The best way to promote innovation, and do so throughout society, would be to make new ideas and technologies freely (or cheaply) available to everyone.

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What's Behind It

IP protections are out of date. They tie up effort and creativity and therefore actually represent a barrier to innovation. Perhaps worse, IP tends to be useful only for people who have the money to obtain it, defend it, and use it to attack others. As a result, IP generally benefits only those with means: the well-off and wealthy corporations. The best response to these concerns might be to simply do away with IP entirely, or at least radically curtail the length of time IP can stay in force. If every new invention quickly leads to knock-offs, then more inventors will bring their ideas to the market and more of us would benefit from them.

What It Might Do

1. Get rid of IP (except the requirement that the inventor be acknowledged) in some areas; greatly lower time periods for IP protection in others
2. Establish a "use it or lose it" rule; if IP isn't used, it is forfeited

Possible Consequences

1. Reduction in investment in new technologies
2. Encourage innovation (e.g., open-source computer software)
3. Laziness
4. Increased availability of new technology and information might lessen or aggravate economic inequality, depending on individuals' ability to access it
5. American companies seeking stronger IP protection in foreign countries
6. What we now tend to think of as "stealing" would become "free borrowing"

An Illustration: Teleportation

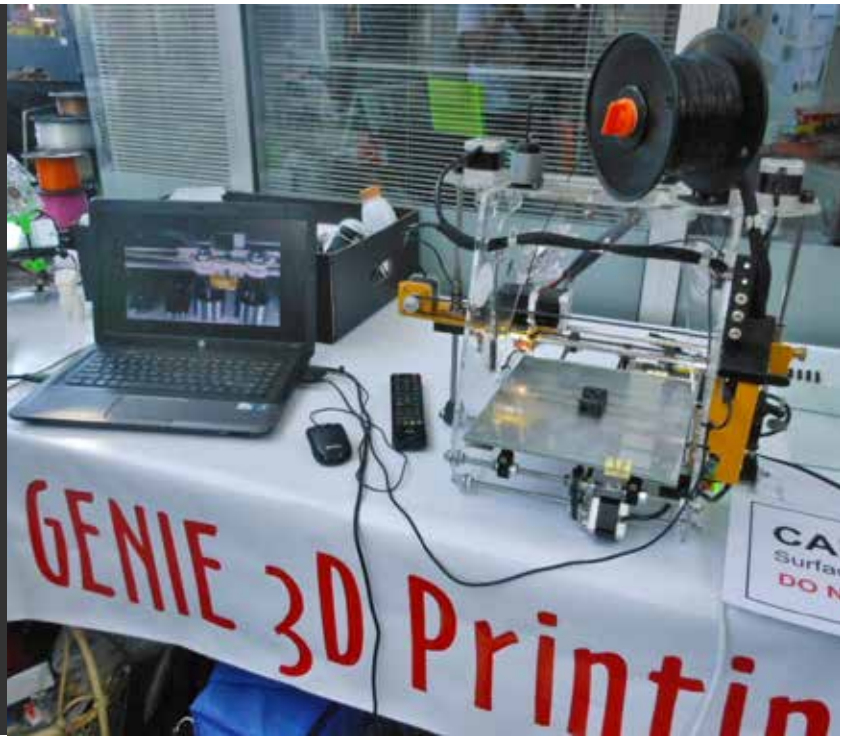
1. Teleportation for all
2. Whoever markets best would sell the most
3. Might never get developed because no way to recover cost

Policy **D**

Level the IP Playing Field

Quick Version

Creativity is basic to human nature. Intellectual property (IP) validates and protects what results from it and so is basic to human fulfillment. All individuals therefore need to have equal access to IP. This suggests a much more balanced approach than the one that governs our IP system today. To ensure that all citizens can use IP, this possibility envisions trimming some IP protections even as it makes some more widely available.



"Genie 3-D Printing Machine"

What's Behind It

Human fulfillment (as opposed to simple pleasure) is not just about getting rewards. Even more importantly, it involves actively using the capabilities that define us as human beings, one of which is the ability to invent or create. From this perspective, IP is better seen as a means of supporting and confirming our basic human nature than as a means of promoting innovation (and thereby wealth). It is not only fairness, then, but dignity itself that rebels against the use of large patent inventories and legal war chests to deprive weaker creators of IP protection. To see IP as a tool that everyone needs is to imagine a system that is, above all, equitable and not unduly costly. According to this possibility, such a system might start by "spreading IP around" by instituting aggressive monitoring and review, on the one hand, and limiting the costs of enforcing and defending IP on the other.

What It Might Do

1. Spread IP around
   a. Allow some IP (necessary because IP is instrumental to human fulfillment)
   b. Limits on concentration of IP
   c. Require use of IP (ban "warehousing" of IP)
2. Aggressive monitoring and review
   a. Require periodic requalification
   b. Grassroots efforts (e.g., reaction against Internet proposed Web IP)
3. Limit costs of litigation (e.g., by limiting time available for litigation)

Possible Consequences

1. Wider access to IP
2. Greater individual fulfillment as all are encouraged to invent/create
3. Reduction in frivolous litigation (litigation that is intended only to hamper a competitor)
4. Political push-back from large IP holders
5. Negative economic consequences from those industries that rely on strong IP
6. Disagreement based on different views of fulfillment
7. IP isn't warehoused but used to benefit the public
8. Reduced costs of litigation

An Illustration: Teleportation

1. Teleportation: the expression of an individual's creativity—not a way to profit
2. Still, someone will want to commercialize this new technology
3. How? Who? Despite these questions, this possibility would speed up the process

Policy **E**

IP of the People, by the People, and for the People

Quick Version

A society of inventors is a grand vision, but education may not be enough to make it happen. Not even a level playing field is likely to do the trick. Taking an idea and turning it into intellectual property (and from there into a commercial product) is just too complex. It requires technical help, help that most inventors don't have available. This possibility would provide it to them—on a public basis.

"2012 Maker Faire Education Day"

What's Behind It

When it comes to IP, even the brightest inventor needs guidance—lots of it. But without a sack full of money or a roster of investors (or lawyer friends), that guidance is hard to come by. This may be why companies like Apple and IBM file thousands of patent applications a year, while the rest of us just talk about it. But what if we had real help—the kind that those companies have on staff? What if we had engineers and lawyers who know how to navigate the IP system, and other experts who know how to transform IP into products that can actually make a profit. Perhaps if we did, and if that technical, legal, and business help was provided as a government service rather than billed at hundreds of dollars an hour, we'd stop talking and start inventing.

What It Might Do

1. Public support for developing and commercializing IP (administered by current public institutions)
   a. Available on a sliding scale
   b. With strings attached, based on the social value of potential IP (there would be a trade-off between accountability and flexibility)
   c. Draw on law firms, financial experts, universities
2. Incentives for those with lending expertise
3. Encourage collaboration between experts, inventors, and IP regulators with new rules and regulations

Possible Consequences

1. Enhanced individual ability to develop and commercialize IP
2. Expanded awareness of and use of IP
3. Coordination of law and business
4. Proliferation of bad ideas and useless technologies (like donut shops)
5. Less risk to the individual of losing money
6. Expensive for government

An Illustration: Teleportation

1. Know-how would help this move quickly from idea to IP (and commercial product)
2. Empowering the individual
3. Equitable, equal access, even for "wild" idea

Policy **F**

IP Cooperatives to Promote the Public Interest

Quick Version

As intellectual property (IP) is concentrated in fewer and fewer hands, economic power is concentrated and innovation choked off, both to the detriment of the public. A simple alternative would be to create government-regulated IP cooperatives, which would themselves operate as nonprofit entities but allocate earnings to their members based on the market value of each member's IP contributions. This possibility, neither legally nor institutionally radical, would remove inventors' incentive to warehouse IP while preserving their incentive to create.

"Electric Meters"

What's Behind It

A fair and efficient IP system should protect innovative ideas and technologies, which in turn should encourage their sharing. Unfortunately, the recent evolution of the U.S. IP system—in practice if not in declared policy—has deviated from these principles and now undermines them in key ways. Current policy allows firms to "warehouse" IP, which means they can shelve rather than use it. Firms can also use IP purely "offensively," or to attack other firms, which can deter competition directly or cause other firms to use precious resources in their own defense. As a result, practice has significantly diverged from policy intent. This possibility envisions a clear reorientation of policy so that practice might again conform to the broad purposes that have long undergirded IP policy. The key innovation would be the creation of IP "cooperatives." Such co-ops, operating in the public interest, would make IP freely available while compensating inventors based on the fair market value of the IP they contributed to the trust. Co-ops would be regulated by the government in much the same way as utilities.

What It Might Do

1. No private IP; all IP managed by co-ops
   a. Open access to all IP on a paid basis (licensing)
   b. Compensation to creators according to market value
2. Co-ops themselves would be nonprofits and would be over-seen by the government
3. Only co-ops (not individuals or corporations) could litigate

Possible Consequences

1. Reduced litigation
2. IP used rather than being ware-housed
3. Encouragement of self-regulation in the form of industry-wide standards
4. Manipulation of pool creation
5. May diminish innovation
6. May give government too much power

An Illustration: Teleportation

1. IP for teleportation would be housed in a cooperative
2. Originator of the technology would receive proceeds for use
3. All would have access to it
4. Teleportation based on common technology

Notes

Other Publications of the Interactivity Foundation

Discussion Guides

What Might Childhood Look Like in the Future (2014)
Shaping Our Towns and Cities (2013)
Crime and Punishment (2013)
The Future of the Family (2013)
The Future of the Arts & Society (2013)
The Human Impact on Climate Change (2013)
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The United States' Democratic Promise (2011)*
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Future Possibilities for Civil Rights Policy (2011)*
The Future of K–12 Education (2011)*
Food: What Might Be For Dinner (2011)*
Health Care: The Case of Depression (3rd ed. 2010)
Privacy & Privacy Rights (2nd ed. 2010)
How Will We All Retire? (2010)
Anticipating Human Genetic Technology (2009)
The Future of Regulation (2009)
Property (2009)
Science (2009)
Rewarding Work (2009)

* Also available in Spanish

Other IF Publications

Let's Talk Politics: Restoring Civility Through Exploratory Discussion (2013)
Julius "Jay" Stern: A Biography (2010)
Contrasting Possibilities and the Interactivity Foundation Discussion Process (2nd ed. 2009)
Facilitation Guidebook for Small Group Citizen Discussions (2nd ed. 2009)
Support Materials for the IF Discussion Process (2009)
Teaching Tips (2009)
Guidebook for Student-Centered Classroom Discussions (2008)
Public Discussion as the Exploration and Development of Contrasting Conceptual Possibilities (2008)
Facilitation Guidebook (2005)

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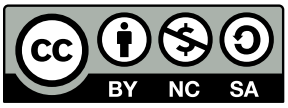

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