



Patents and Entrepreneurship: A Research Project at BCLT

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Patents and Entrepreneurship

- Entrepreneurship is an important part of the US economy
 - Entrepreneurs may be underrepresented in the patent reform debate, partly due to constraints
 - Money, time
 - *Information and understanding*
- We as academic researchers have some knowledge, but there are many gaps in our understanding
 - And, in this area, the ground is constantly moving under our feet
- Beginning in 2007, the BCLT began working on a two-year Kauffman-funded project entitled “Intellectual Property and Entrepreneurship”
 - Professors Pam Samuelson and Rob Merges, PIs
 - Ted Sichelman and myself, Research Fellows

Goals of the Project

- Identify the aspects of the U.S. patent system that encourage and accelerate entrepreneurial activity and those aspects that act as actual or potential impediments to entrepreneurs, particularly in high growth technology sectors, such as computer software, Internet, biotechnology and cleantech;
- Formulate legal and policy proposals and recommendations designed to mitigate or eliminate such impediments while preserving or strengthening those aspects that promote entrepreneurship and entrepreneurial investments in innovation, and
- Disseminate the project's research findings and policy proposals to a national audience and raise the visibility of entrepreneurship considerations in major public policy debates about patent reform.

Research Questions

- What role do patent rights play in investors' decisions to invest in start-ups?
- How do investors and entrepreneurs assess the scope and value of their own and other firms' patent rights in the course of deciding which business opportunities to pursue or to fund or how to structure rounds of financing?
- Are patent rights more important to the entrepreneur than to more established companies (upstream/downstream)?
- Do start-ups apply for patents to protect their innovations and is this strategy a successful one? Do they apply for patents for other reasons? And why don't they apply for patents?

[Research Questions]

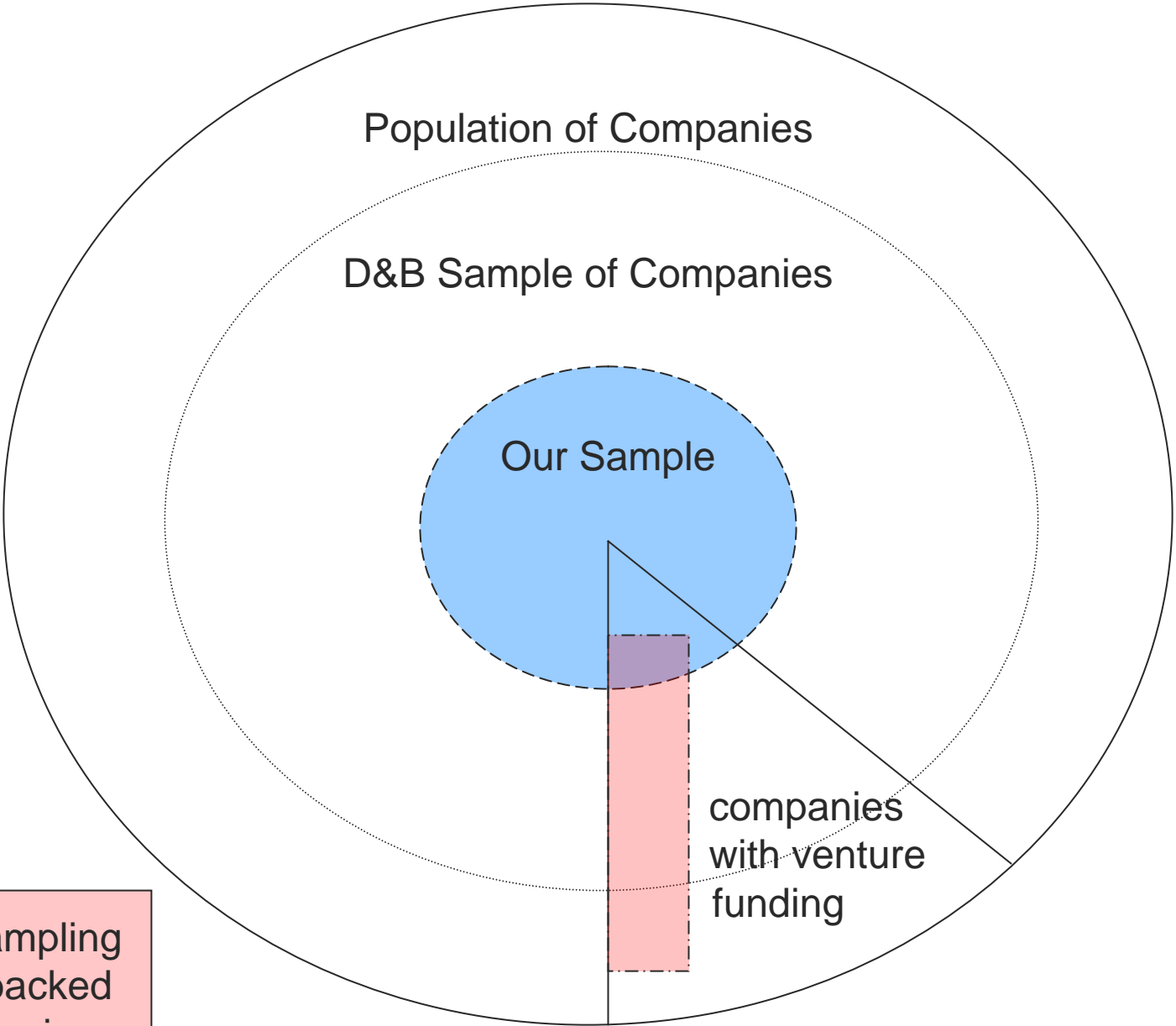
- How easily can entrepreneurs enter markets in industries where cross-licensing of patent rights is common?
- How do start-ups respond to a competitive environment that includes patents? How do they avoid infringing others' patents? Are licenses available to them? How often, and at what stages of growth, do they receive allegations of infringement, and what do they do in response?
- What effect has the proliferation of software and information patents had on opportunities for entrepreneurship in the software and digital information industries?
- How are entrepreneurs affected by “patent trolls” (that is, owners of patents who pursue patent litigation as a business model)?

Identify: Research Design

- We are in “data collection” mode
 - Case studies of companies
 - Biotechnology, software, Internet, cleantech
 - Experience with the patent system
 - Either as users, or responders
 - Strong interest in the role of patents for start-ups in the following situations:
 - Technology standards and standard-setting
 - Cross-licensing and patent “thickets”
 - Collaborative innovation, and “open source” models
 - Designing for “interoperability”
 - “Failures”

Identify: Research Design

- We are in “data collection” mode
 - Survey of “entrepreneurial companies”
 - We plan to survey over the next months 8,000-10,000 companies in our key sectors
 - Dun & Bradstreet sourced, no older than 10 years
 - By mail, email, and telephone / paper and internet
 - We will “over-sample” in venture-backed companies
 - VentureXpert, VentureSource
 - Strong interest in how patents play in investment decisions, and rich data on these companies



Over-sampling
in VC-backed
companies

The BCLT / Kauffman Survey

SURVEY: Entrepreneurial Companies and the Patent System

Statement of Confidentiality

The information you provide will be held in the strictest confidence. We will neither publish, release, nor disclose any information on, or identifiable with, individuals or their companies. Federal law requires us, as a recipient of federal funding, to abide by this commitment to strict confidentiality. Federal Register, 45 CFR 46.101(b)(2).

Instructions

This survey is designed to be responded to by founders or chief executives of companies. Please answer each item based on your best estimate. It is not necessary for you to search your files or to consult with your colleagues to provide more detailed answers. Instead, please answer to the best of your ability based on your understanding of your company. On the basis of pre-tests, it should typically require 10-15 minutes to complete this questionnaire.

Feel free to add comments to clarify your answers, to add additional answer categories, or to make other comments on the questions.

Please note that Dun & Bradstreet has provided us with some information on your company, including your company name, address, telephone number, and other basic information. We have opted in some instances not to ask questions to gather this information from you.

[Sample question]

17. How important or unimportant is each of the following in your company's plan to profit from its innovations?

	Critical	Very	Somewhat	Slightly	Not at all
a. First-mover advantage over competitors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Secrecy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Licensing restrictions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Patents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Copyright	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Trademarks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Other legal means	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Difficulty of reverse engineering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Other production, implementation, or marketing capabilities deployed along with the innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[Inside the survey]

- Section A: “About you and your company”
 - Founding, size, origins, competitors
- Section B: “About your company’s business model, innovation, and finance”
 - Innovation profile, Appropriability, Financing
- Section C: “About your company’s use of the U.S. patent system”
 - Filed patents, and reasons; Granted patents, and consequences
- Section D: “About your company’s response to an environment that includes patents”
 - In-licensing, external threats, and search/clearance
- Section E: “About your company and the patent system”
 - Information and Attitudes about how the patent system works

[In Sum...]

- There is much we still don't know about how patents work (or don't) for entrepreneurs
- Information, and from it, understanding, is a first step
- We invite you into our process
 - Help us by becoming a part of our extended “research family”