

To: rule-comments@ sec.gov
Subject: RFC File Number S7– 06–16

We, the undersigned, are professors and scholars of economics and law who research and write about innovation and the patent system. Several of us have also held responsible positions in the U.S. government. We write in response to RFC File Number S7– 06–16 and in particular questions 42-45, which ask for input about SEC item 101(c)(1)(iv) requiring disclosure of, “the importance to the segment and the duration and effect of all patents, trademarks, licenses, franchises and concessions held.”

Why This Matters

As the RFC notes, a broad range of industries benefit from intellectual property (IP). Accurate information on the IP holdings and transactions of publicly-traded firms facilitates price discovery in the market, and reduces transaction costs. Importantly, intangible assets like IP constitute a large share of the value of firms, and the US economy generally. (Corrado, et. al., 2009). Because of their public nature, patents and trademarks – both their mere existence, and subsidiary information on the documents and in related transactions – provide useful information concerning firms’ market value (Griliches, 1981; Hall, et al., 2005; Sandner and Block, 2011) and innovation activities (Hall and Harhoff, 2012) at a much more granular level than other publicly reported sources, like R&D spending. While public understanding of the innovation economy has been expanded by a large stream of empirical research using patent data, and more recently trademark information (Graham, et al., 2015), this research is only as good as the accuracy and completeness of the data it builds upon. Notably, similar studies on copyright and trade secrets have been largely lacking because, given that public disclosure is not required, information may be completely absent.

In contrast with information about patents and trademarks, good information about IP licensing is much less publicly available. Although IP royalties provide large in-bound trade flows to the United States (Bureau of Economic Analysis, 2014), remarkably little is known about the economic realities of IP transactions. Not only are licensing royalties economically impactful, but building a better understanding of how markets for technology operate in a modern, innovation economy is important for the transparency of markets, and to the public and policy-makers. Relatedly, data on “comparables” tend to be thin in the industry, a situation that may offer a sub-optimal market environment for startup firms: these young entities often rely on selling intangibles, but have low bargaining power, and limited resources to invest in search and price discovery. More disclosure might help since often IP licensing is largely hidden from public view. Many agreements are kept confidential, and even when they

are part of public proceedings like litigation, they are commonly kept under seal. (Biddle, Chien, Contreras, and Cotter, 2015). More generally, open data on innovation is currently siloed, fragmented, and unfederated across a number of repositories (some electronic and others physical) including the Administrative Office of the Courts, Secretary of State Offices, Copyright Office, IRS, USPTO, SEC, FDA, NSF, SBA and others, raising search and discovery costs and undermining the goals of open data. (Chien, 2016a).

The Gaps that SEC Disclosures Address

Disclosures in accordance with Item 101(c)(1)(iv) address a number of the gaps described above, with the potential to play an expanded role. In fact, IP license information is not widely available to the public through any other federal agency, even in cases where the IP was federally funded. (Rai and Sampat 2012). Thus the IP license information available through the SEC is an invaluable resource to the public. Several studies have benefited from using SEC licensing information, offering policy-relevant findings (see, for instance, Anand and Khanna, 2000, Hegde and Luo, 2016, and Chien, 2016b).

One major limitation with the existing SEC licensing information, however, is that it is often difficult to find and manipulate. An impediment arises since the data are not tagged or designed to be easily combined with other information sources. One of us, for example, has sought to determine which firms have SEC-registered patent licenses over a period of time for the purpose of establishing a public database of licenses obtained through FOIA requests. However, there is no straightforward way for the public to search for this information, in the SEC record or otherwise.

Thus the overall thrust of our comments is to commend the SEC on the valuable disclosures its requirements encourage and to recommend preserving and augmenting, rather than diminishing them, in order to 1) produce more useful data and 2) reduce the costs of discovering and using existing data disclosed to the SEC. In many cases, an SEC requirement will not require reporting entities to create new information (e.g., when disclosing patents or licenses) but it will greatly reduce the costs to third parties of searching for this information. For example, often full information about the ownership of IP, like patents, as well as the temporal and geographic reach of a patent family, is hidden from public view, inadvertently or purposefully. (See Comments of U.S. Department of Justice, Antitrust Division and the Federal Trade Commission, Docket No. PTO-P-2012-0047, February 1, 2013). But detailed patent disclosures of the type described in the RFC (at 23933, column 3, 3b. et seq) can reduce uncertainties and inaccuracies regarding a firm's IP holdings and how they relate to specific products and activities of the company. A more complete record of publicly-traded companies'

innovation activities are useful not only to researchers like us, but to the public and financial markets more generally.

Specific Responses to Questions

Response to Question 42:

Question 42 asks if the scope of 101(c)(1)(iv) should be retained, expanded, limited, and/or generalized. We recommend that it be expanded, and not generalized. In particular, the scope of 101(c)(1)(iv) should be broadened to expressly include the disclosure of IP-related security interests. Beyond IP licenses disclosed in the SEC context, little systematic empirical research has been done yet on security interests in which one or more categories of IP assets are used as collateral (Varner 2012, Ferguson 2009). Currently, the data on these security interests reside largely in state UCC Article 9 filing records, with both their coverage and accessibility varying widely from state to state. This fragmentation raises search costs and reduces transparency, and the SEC is uniquely empowered to remedy this problem through the disclosure of both (1) arrangements where the filing entity holds an IP-backed security interest and (2) arrangements where the filing entity holds the IP asset that is so encumbered.

For the reasons described above, we recommend requiring the disclosure of registered copyrights as well. While U.S. copyright protection does not require it, federal law allows for registration at the U.S. Copyright Office, with such records becoming searchable in a Library of Congress information system. Between 2008-2012, over 2.3 million copyrights were registered in the U.S. Copyright Office. (Olinar, et al., 2014). An example of relevant information relates to the duration of copyright protection, which is often defined by the life of an author: even when that information is available in the copyright registry, it can be difficult to otherwise ascertain. Such a large pool of information is relevant because copyright protection – like patenting – excludes competition, so is the basis of substantial economic value in many firms. Like the “patent cliffs” discussed in the RFC, the expiration of a copyright can have a significant negative impact on a firm’s ability to earn revenues and profits.

Responses to Question 43, 44, and 45:

Questions 43-45 asks about what information regarding a registrant’s reliance or use on intellectual property should be required, at what level (aggregate vs. specific), and of what industries. To maximize the usefulness of disclosed information while minimizing the cost burdens on firms (question 46), we believe that the SEC should require companies *of all industries* to disclose, to the best of their knowledge, information on the *specific* relationships between their intellectual property holdings and their products and services. Aggregate patent disclosures of the kind described in the

RFC are not as helpful as product-specific disclosures and we recommend consideration of specific rather than general disclosure requirements. In cases where this relationship is already established, for example in satisfaction of the patent “marking” doctrine which provides legal benefits to companies that mark (35 U.S.C. 287), actually or virtually, their products with the relevant patent numbers (USPTO 2014) or in the registration of copyright in association with specific products, there should be little or no incremental cost to the firm of specific over general disclosure. The “to the best of their knowledge” qualifier will allow the current industry-specific tailoring among responses described in the RFC to continue, and obviate the need for the SEC requirements to apply selectively to certain industries as contemplated in question 45.

Even if a relationship between IP and a product is not material, we recommend that the SEC nevertheless considering requiring it to be disclosed if it is within the knowledge of the firm and is readily available to report. The ability of a firm to make such disclosures may vary according to the firm’s size and resources on the one hand and the firm’s ultimate reporting burden on the other. We believe that striking a reasonable balance between a firm’s reporting burden and its ability to meet that burden is an important consideration for the SEC in setting disclosure requirements.

Further, we would recommend that, “to the best of their knowledge,” companies distinguish between material and non-material intellectual property holdings in their disclosures. In addition, if the SEC does not require submission of the actual legal instrument that is the subject matter of the disclosure but it is otherwise publicly discoverable, it should require a simple reference facilitating its access (for example, a copyright registration number).

In the spirit of encouraging not only the disclosure of information but also its easy discovery, we further recommend that the SEC, through reporting or disclosure requirements or technological means, enable third parties to easily access and search Item 101(c)(1)(iv) disclosures, whether lists of patents, licenses, or the like. In the current system, finding SEC-disclosed licenses is a laborious and manual process, and access to databases which collect these licenses can be cost-prohibitive for researchers, including economists and policy analysts in coordinate agencies and departments throughout the government.

We appreciate the opportunity to provide input to the SEC on its reporting requirements and remain available to elaborate or provide support on open data initiatives to implement same in the future.

Respectfully submitted,

Colleen V. Chien
Associate Professor, Santa Clara University School of Law

Former Senior Advisor, Innovation and Intellectual Property, White House Office of Science and Technology Policy (2013-2015)

Jorge Contreras

Associate Professor of Law, S.J. Quinney College of Law
University of Utah

Carol Corrado

Senior Advisor and Research Director, The Conference Board
Senior Policy Scholar, Center for Business and Public Policy
McDonough School of Business, Georgetown University

Stuart Graham

Associate Professor, Scheller College of Business
Georgia Institute of Technology
Former Chief Economist, U.S. Patent and Trademark Office (2010-2013)

Deepak Hegde

Associate Professor, Leonard N. Stern School of Business
New York University

Arti K. Rai

Elvin R. Latty Professor of Law, Duke Law School
Former Administrator, Office of External Affairs, U.S. Patent and Trademark Office
(2009-2010)

Saurabh Vishnubhakat

Associate Professor of Law, Texas A&M University
Former Expert Advisor, Office of Chief Economist, U.S. Patent and Trademark Office
(2010–2015)

References:

Anand, Bharat N. and Tarun Khanna (2000). "The Structure of Licensing Contracts," J. Indus. Econ., Vol. 48, pp. 103–135.

Jorge L. Contreras, Colleen V. Chien, Thomas F. Cotter, and Brad Biddle, "Study Proposal - Commercial Patent Licensing Data" University of Utah College of Law Research Paper No. 164. *available at*: <http://ssrn.com/abstract=2755706> or <http://dx.doi.org/10.2139/ssrn.2755706>

Bureau of Economic Analysis (2014). "U.S. International Services: Trade in Services in 2013 and Services Supplied Through Affiliates in 2012," *in* U.S. Department of Commerce, Survey of Current Business, 2014.

Chien, Colleen (2016a). "The Market for Software Innovation Through the Lens of Software Patent Sales and Licenses," *forthcoming in Berkeley Tech. L.J.*, *available at* <http://hooverip2.org/working-paper/wp16010/>.

Chien, Colleen (2016b). "Redesigning Patent Disclosure," *forthcoming in Vand. L. Rev.*, *draft available on request*.

Corrado, Carol, Charles Hulten and Daniel Sichel (2009). "Intangible Capital and US Economic Growth," Rev. Income & Wealth, Vol. 55(3), pp. 661–685.

Ferguson, Aneta (2009). "The Trademark Filing Trap," IDEA: Intell. Prop. L. Rev., Vol. 49, pp. 197–232.

Graham, Stuart, Alan Marco and Amanda Myers (2015). "Patent Transactions in the Marketplace: Lessons from the USPTO Patent Assignment Dataset," *forthcoming in J. Econ. & Mgmt. Strategy*, *available at* <http://ssrn.com/abstract=2489153>.

Griliches, Zvi (1981). "Market value, R&D, and patents," Econ. Letters, Vol. 7(2), pp. 183–187.

Hall, Bronwyn H., Adam Jaffe and Manuel Trajtenberg (2005). "Market Value and Patent Citations," RAND J. Econ., Vol. 36(1), pp. 16–38.

Hall, Bronwyn H. and Dietmar Harhoff (2012). "Recent Research on the Economics of Patents," Ann. Rev. Econ., Vol. 4(1), pp. 541–565.

Hegde, Deepak and Hong Luo (2016). "Patent Publication and the Market for Ideas," Harv. Bus. Sch. Working Paper 14-019, *available at* http://www.hbs.edu/faculty/Publication%20Files/14-019_726e14eb-8ebb-49d9-ae75-f368916cdf60.pdf.

Oliar, Dotan, Nathaniel Pattison and K. Ross Powell (2014). "Copyright Registrations: Who, What, When, Where, and Why," Texas L. Rev., Vol. 92, pp. 2211-2250.

Rai, Arti and Sampat, Bhaven (2012). "Accountability in the Patenting of Government Funded Research," Nature Biotech., Vol. 30(10), pp. 953–956.

Sandner, P.G. and J. Block (2012). "The Market Value of R&D, Patents, and Trademarks," Res. Pol'y, Vol. 40, pp. 969–985.

U.S. Patent & Trademark Office, U.S. Department of Commerce (2014). Report on Virtual Marking (Report to Congress), *available at* http://www.uspto.gov/sites/default/files/aia_implementation/VMreport.pdf.

Varner, Thomas R. (2012). “An Economic Perspective on Patent Licensing Structure and Provisions,” les Nouvelles, Vol. 47, pp. 28–36.

===

RFC Text

A broad range of industries benefit from intellectual property, both directly and indirectly,²⁰³ and intellectual property has become increasingly important to business performance.²⁰⁴ Certain industries produce or use significant amounts of intellectual property or rely more heavily on these rights.²⁰⁵ Accordingly, certain registrants provide detailed disclosure in response to Item 101(c)(1)(iv), and disclosure varies among registrants and across industries. In the biotechnology and pharmaceutical industries, registrants that provide detailed patent disclosure often disclose the jurisdiction in which the patent was filed, year of expiration type of patent (e.g., composition of matter, method of use, method of delivery or method of manufacturing), products or technologies to which the patent relates and how the patent was acquired (e.g., licensed from another entity or owned and filed by the registrant). Some registrants in these industries aggregate patent disclosure by groups of patents, potentially making disclosure about individual material patents difficult to discern. As registrants in the biotechnology and pharmaceutical industries regularly sell one or a few patented products that generate substantial revenue, disclosure of “patent cliffs,”²⁰⁶ which often result in material adverse financial effects, may be required in the risk factors section or MD&A. In the information technologies and services industry, registrants protect their intellectual property through the use of patents, trademarks, copyrights, trade secrets, licenses and confidentiality agreements.²⁰⁷ Registrants with large portfolios of intellectual property often disclose that their products, services and technologies are not dependent on any specific patent, trademark, copyright, trade secret or license. As a result, these registrants often provide only high-level discussions of their intellectual property portfolios, which include general statements of a registrant’s development, use and protection of its intellectual property. Registrants with smaller intellectual property portfolios tend to provide slightly more detailed discussions, including, for example, disclosure of their total number of issued patents, a range of years during which those patents expire and their total number of pending patent applications. In general, registrants in the information technologies and services industry use copyrights to

protect against the unauthorized copying of software programs 208 and trade secrets to protect proprietary and confidential information that derives its value from continued secrecy.²⁰⁹ Since Item 101(c)(1)(iv) does not require disclosure about copyrights or trade secrets, registrants currently make disclosure about such matters voluntarily.

42. Should we retain the current scope of Item 101(c)(1)(iv), which requires disclosure of a registrant's patents, trademarks, licenses, franchises and concessions? Should we expand the rule to include other types of intellectual property, such as copyrights? Should we remove the individual categories and instead require disclosure of "intellectual property"? If so, should we define that term and what should it encompass?

43. What, if any, additional information about a registrant's reliance on or use of technology and related intellectual property rights should we require and why? Should we revise Item 101(c)(1)(iv) to require more detailed intellectual property disclosure, similar to the disclosure currently provided by some biotechnology and pharmaceutical registrants? If so, should we require such detailed disclosures for all or only some of a registrant's intellectual property, such as those that are material to the business?

44. For registrants with large intellectual property portfolios, does aggregate disclosure of the total number of patents, trademarks and copyrights and a range of expiration dates provide investors with sufficient information? If not, what additional information do investors need about a company's portfolio of intellectual property? Would tabular disclosure or an alternate format or presentation of a registrant's intellectual property portfolio make the information more useful to investors? What would be the benefits and challenges of requiring disclosure of this information in this format?

45. Should we limit these disclosure requirements to registrants in particular industries? If so, which industries should we specify and why? Is disclosure about a registrant's intellectual property most useful in the context of the description of business, disclosure about trends and developments affecting results of operations, or in a discussion of risk and risk management? 46. What are the competitive costs of disclosure under Item 101(c)(1)(iv)?