

Chapter 59

Intellectual Property and Licensing Strategies in Open Collaborative Innovation

Marcel Bogers

University of Southern Denmark, Denmark

Rudi Bekkers

Eindhoven University of Technology, The Netherlands

Ove Granstrand

Chalmers University of Technology, Sweden

ABSTRACT

Protecting intellectual property and controlling the use of their inventions is key to the strategy of many firms. At the same time, in order to be successful in open collaborative innovation, firms need to share their knowledge with others. This chapter presents, for moderate specialists, some strategic considerations with respect to managing intellectual property in open collaborative innovation. The chapter discusses how licensing strategies can be employed to balance various goals in collaborative efforts to innovate. In particular, licensing of intellectual property is presented as a way to manage protected knowledge that is developed and shared in collaborative innovation. Different elementary licensing schemes are presented. Open collaborative innovation can then consist of various “modules” of elementary licenses. The chapter finally proposes a few distinct strategies for governing knowledge exchange in collaborative innovation, including open exchange and layered schemes, thereby outlining some conditions for successful open collaborative innovation.

INTRODUCTION

Firms increasingly rely on external stakeholders to successfully innovate, as for example shown by the growing importance of inter-firm partnership and open innovation more generally (Dahlander

& Gann, 2010; Hagedoorn, 2002). Building on the increasing importance of open innovation, as a means to use and recombine internal and external knowledge to develop and commercialize valuable innovations (Chesbrough, 2003a), patent and know-how licensing and technology markets in general have become more important as a means to appropriate the benefits from in-

DOI: 10.4018/978-1-4666-2136-7.ch059

novation (Arora, Fosfuri, & Gambardella, 2001; Granstrand, 2000, 2004). As such, the question how to manage intellectual property (IP) is becoming increasingly important as more firms develop their open innovation strategies (Alexy, Criscuolo, & Salter, 2009; Chesbrough, 2003b).

Within the context of open innovation, there is moreover increasing recognition of a “coupled” process of open innovation in which firms co-create innovations with other stakeholders (e.g. through R&D collaborations) in which they need to cooperate and thus both obtain and share knowledge (Bogers & West, 2010; Enkel, Gassmann, & Chesbrough, 2009). Such open collaborative innovation therefore challenges firms and their collaborators in terms of protecting their knowledge and IP more generally.

As a central part of their open innovation strategy, firms should thus manage their IP portfolio by extracting value from internal knowledge and intellectual property rights (IPRs), while also acknowledging that protection at the same time may hamper innovativeness, adoption and diffusion.

To address the above issues, this chapter first provides an overview of the key elements related to the protection and control of knowledge, thereby also developing an overview of distinct licensing opportunities. Based on this, it subsequently proposes a number of strategies as ways to govern knowledge exchange in open innovation. As such, this chapter provides a typology of basic licensing schemes that can serve as building blocks for more complex licensing arrangements.

KNOWLEDGE PROTECTION AND INTELLECTUAL PROPERTY

As open innovation in general and collaborative innovation in particular have increased in both extent and importance, protecting the knowledge that is being shared has become an increasingly important but also challenging issue for the innovating organizations. There are several trends that exemplify

the growing importance of knowledge protection in general. For example, the growing importance of IP can be seen in the increasing number of patent applications (Granstrand, 2000; Grindley & Teece, 1997). That is, the rise of a “pro-IP era” or “pro-patent era” (Granstrand, 2000; Jaffe, 2000) has led to an increasing propensity for firms to file patents (e.g. Grindley & Teece, 1997)—now often considered as being a firm’s “crown jewels” among its assets, especially in high-technology industries (e.g. Coriat & Orsi, 2002). As a result, this raises the importance of intellectual capitalism (IC) (see e.g. Gerlach, 1992; Teece, 2000) in general and IP/IC management in particular (Arora, et al., 2001; Chesbrough, 2003b).

However, the existing institutions of patenting and IPRs at large have received an increasing amount of criticism in recent years (e.g. Boldrin & Levine, 2008; Coriat & Orsi, 2002; Dosi, Marengo, & Pasquali, 2006), thus also giving rise to new and often less protective strategies—not the least in the context of open innovation, e.g. in relationship to open source software (Henkel, 2006; Mazzoleni & Nelson, 1998; Shapiro, 2001; von Hippel & von Krogh, 2003). Moreover, there are indications that the transaction costs and societal costs of the patent system are increasing, which creates the need to reconsider the present patenting and licensing approaches (e.g. Davis, 2004; Jaffe & Lerner, 2004; Mazzoleni & Nelson, 1998). It has been argued that the legal provisions in the current patent regime are to a large extent over-protective, which may result in a slowdown in innovation, for example in software technologies (Harison, 2004). It has furthermore been argued that “patent thickets”¹ or “patent jungles” arise in some technologies and industries, creating an anti-commons, hold-ups, dead-locks and associated IP assembly problems, which in turn can have important anti-competitive (or anti-trust) implications and can hamper innovation and dynamic competition (Granstrand, 2000, 2003; Heller & Eisenberg, 1998). Patents can then be licensed, cross-licensed, and pooled, in order to accommodate certain developments,

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/intellectual-property-licensing-strategies-open/71026

Related Content

The Diffusion of Ignorance in On-Line Communities

Selene Arfini, Tommaso Bertolotti and Lorenzo Magnani (2018). *International Journal of Technoethics* (pp. 37-50).

www.irma-international.org/article/the-diffusion-of-ignorance-in-on-line-communities/198982

Intellectual Property Protection in Multimedia Grids

Irene Kafeza and Eleanna Kafeza (2008). *Intellectual Property Protection for Multimedia Information Technology* (pp. 381-398).

www.irma-international.org/chapter/intellectual-property-protection-multimedia-grids/24111

The Case for a Technology Solution to the Ethics Crisis in Academic Publishing

Keith Wright (2021). *International Journal of Technoethics* (pp. 1-20).

www.irma-international.org/article/the-case-for-a-technology-solution-to-the-ethics-crisis-in-academic-publishing/269432

Preservation of Cultural and Scientific Heritage by Means of Digital Libraries

Stylianos Korres and Eva Kokotsaki (2013). *Digital Rights Management: Concepts, Methodologies, Tools, and Applications* (pp. 1428-1446).

www.irma-international.org/chapter/preservation-cultural-scientific-heritage-means/71039

Human Implants: A Suggested Framework to Set Priorities

Laura Cabrera (2012). *Ethical Impact of Technological Advancements and Applications in Society* (pp. 243-253).

www.irma-international.org/chapter/human-implants-suggested-framework-set/66541