

A Comparison of Entities that are Actively Using and not Using Mobile Communications Technologies

Hsin Yunsheng*

Department of Information Science and Technology, Nanjing Forestry University, Nanjing, China

Introduction

This study compared the technological significance and scope of patents held by practicing and non-practicing entities using 23867 claimed standard essential patents for three distinct wireless telecommunication standards (GSM, WCDMA, and LTE). We discovered that, in contrast to manufacturers and service providers, businesses that do not directly profit from innovation tend to have technologies of a relatively low quality but with a broad scope for the claimed standard essential patents. Regressions conducted for each sample split by generation showed that these relationships between invention characteristics and organizational types remained constant across wireless standard generations. In addition, the implications of our findings and arguments for theory and policy are discussed in this paper [1].

Description

There are a number of ways that standard essential patents (SEP), a subset of patents that are necessary to produce particular standardized goods or services, can be distinguished from "ordinary" patents. They typically have longer-lasting effects on subsequent technological development and related technologies and a higher market value than comparable patents that are not essential. SEPs face more competition for technology development and patenting than non-essential patents. In addition, this competition serves as a lens through which we can observe a distinction in the technology and patenting tendencies of businesses based on the market position and strategy of their products.

One of the most active industries in which a race toward standards appears to be important to a company's competitive advantage is the mobile telecommunications industry. According to one study the owners of the relevant SEPs receive approximately 30% of the consumer price of smartphones. As a result, any significant player in this industry must have a better understanding of the characteristics and strategies of competitors' technology standards. Non-practicing entities (NPEs) are also participating in the race toward technology standards, which is not only dominated by equipment and facility manufacturers. According to a study by Bessen and Meurer one of the most inviting environments for NPEs is the mobile telecommunications sector. NPEs generate revenue through patent licenses, litigations, or other patent-related intermediary services like patent aggregation and pooling even though they are not directly involved in manufacturing. NPEs all profit from asserting patent rights, despite the differences in their individual business models [2].

The patenting strategy of a company varies depending on its position in

the product market and the purposes for which it intends to use the patented technologies. Based on the characteristics of their SEPs, we previously identified distinct groups of businesses. NPEs' position in the mobile industry value chain must be distinct from that of manufacturers and service providers because of their "non-practicing" orientation. As a result, we expect their patenting strategies to be distinct. Using SEPs in mobile telecommunication technologies as a magnifying glass, we examine how a distinct firm's patent strategy differs from that of the other firms in this study. We focus on the differences between NPEs and the rest in terms of essential patent quality and scope. Although a few prior studies addressed the same issue, they were limited to patents that had been litigated, making them susceptible to selection bias [3].

Cases in litigation have shown that NPEs already have significant economic effects on the mobile telecommunications industry; however, if the hidden innovation costs incurred by the litigation cases to the relevant manufacturers and service providers are taken into consideration, the effects must be even more significant. The additional costs incurred by the relevant entities for inventing around, keeping an eye on patents held by others, managing litigation, and creating and filing patents for a variety of strategic purposes are among those hidden costs. Business managers must also have a better understanding of NPE's patenting strategies in this sector.

To be a commercially viable product, mobile handsets and other telecommunications equipment require thousands of distinct component technologies. As a result, many companies in the mobile telecommunication value chains, including manufacturers, service providers, parts suppliers, and NPEs, have different ownership interests in these component technologies. As a result, businesses are able to take advantage of emerging technologies in a manner that is more cooperative and complex than a standards war of life or death. As demonstrated by historical examples such as DVD vs. DivX in compact disk (CD) technology or direct current (DC) vs. alternating current (AC) in electric power almost all benefits of new technological standards go to the winning side that has dominated product markets. It is impossible for any one player to win the standards race in the mobile telecommunications industry due to the high level of technological complexity and the widespread fragmentation of technology ownership [4].

In contrast to the winner-take-all scenario, the developer reaps more subtle and integrated benefits from standardization in this technology, in addition to obvious advantages like dominance in product markets or tickets for the technology market. For instance, the in-house integrator of the standardized technology might have accumulated superior and more in-depth technological knowledge than its rivals, allowing it to develop a new product in a way that is both superior and more cost-effective. Essential patents are more likely to be based on the inventing company's "core technological competency" than non-essential patents. This is demonstrated by citing own patents (regardless of essentiality) for manufacturers and essential patents (regardless of ownership) for NPEs. It can also save time and effort spent developing an alternative technology or purchasing an external technology, both of which would be required if the rival technology had been standardized rather than its own. Thusly, firms partaking in the normalization game have motivators to plan both licensing and normalizing their new advancements [5].

Conclusion

In conclusion, SEPs are a type of patent that combines a company's core

*Address for Correspondence: Hsin Yunsheng, Department of Information Science and Technology, Nanjing Forestry University, Nanjing, China, E-mail: hsin@njfu.edu.cn

Copyright: © 2022 Yunsheng H. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 01 October 2022, Manuscript No. jmcj-22-83588; Editor assigned: 03 October 2022, Pre QC No. P-83588; Reviewed: 14 October 2022, QC No. Q-83588; Revised: 19 October 2022, Manuscript No. R-83588; Published: 26 October 2022, DOI: 10.37421/2165-7912.2022.12.488

competency, new technological development on a non-peripheral technological trajectory, the strategic intentions of the participants, and high economic values and stakes. We are able to better project a divergent participant behavior with these features than with the noisy and complicated features found in general patents. As a result, we use SEPs as a magnifying glass to see the technological features and strategies of businesses.

References

1. Fournier, Pierre, Alexandre Dumont, Caroline Tourigny and Geoffrey Dunkley et al. "Improved access to comprehensive emergency obstetric care and its effect on institutional maternal mortality in rural Mali." *Bull World Health Organ* 87 (2009): 30-38.
2. Hogan, Margaret C., Kyle J. Foreman, Mohsen Naghavi and Stephanie Y. Ahn. "Maternal mortality for 181 countries, 1980–2008: A systematic analysis of progress towards millennium development goal 5." *The Lancet* 375 (2010): 1609-1623.
3. Krasovec, K. "Auxiliary technologies related to transport and communication for obstetric emergencies." *Int J Gynaecol Obstet* 85 (2004): S14-S23.
4. Lee, Anne CC, Joy E. Lawn, Simon Cousens and Vishwajeet Kumaret al. "Linking families and facilities for care at birth: What works to avert intrapartum-related deaths?." *Int J Gynaecol Obstet* 107 (2009): S65-S88.
5. Thaddeus, Sereen and Deborah Maine. "Too far to walk: Maternal mortality in context." *Soc Sci Med* 38 (1994): 1091-1110.

How to cite this article: Yunsheng, Hsin. "A Comparison of Entities that are Actively Using and not Using Mobile Communications Technologies." *J Mass Communicat Journalism* 12 (2022): 488.