

Intellectual Property Strategy for the Reiwa Era



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In Japan, the era name has changed from Heisei to Reiwa marking the dawn of a new era for the nation. Looking back at the history of mobile phones in Japan, handheld compact phones first appeared at the beginning of the Heisei era (early 1990s), so it is easy to see that the evolution of mobile phones during this period has truly been amazing. Of interest here is that it was NTT DOCOMO itself that drove this evolution forward. In this sense, I look forward to seeing what NTT DOCOMO will have created by the time that the Reiwa era comes to an end.

In addition to welcoming this new era in Japan, 2019 stands to be a year of major events such as the Rugby World Cup and the entry of Rakuten, Inc. into the Japanese mobile communications market. At the same time, pre-commercial service of 5G, or the “fifth generation mobile communications system,” is scheduled to begin in 2019. The 5G system has the potential of transforming not only mobile carriers but everyone’s lifestyle as well. In this article, I would like to take a look at this 5G megatrend from the viewpoint of intellectual property.

The various technologies and services of 5G have been discussed and international standards have been developed by the 3rd Generation Partnership Project (3GPP), an international standards organization. NTT DOCOMO has been actively participating in 3GPP since its founding in 1998 and has made many contributions toward advancing mobile communications, enhancing customer convenience, etc. Through these activities, NTT DOCOMO has acquired many patents in 3G and LTE that it licenses under fair, reasonable, and non-discriminatory terms. As of March 2019, NTT DOCOMO held about 14,000 patents, 40% of which fall under the category of essential patent^{*1} related to communications standards.

Discussions on 5G began at 3GPP in 2015, and since then, NTT DOCOMO has become even more involved in 3GPP standardization activities. According to a report [1] by an outside investigative agency,

NTT DOCOMO ranks first in the world in the number of 5G patent applications among carriers (and sixth among all companies). NTT DOCOMO has figured prominently within this friendly competition with other companies.

In terms of ultra-high-speed communications, ultra-low-latency, and simultaneous connection of many terminals, 5G will achieve levels way beyond what can be presently imagined. However, what we feel to be the true significance of 5G will be the solutions and services that use 5G.

NTT DOCOMO has launched the “5G Open Partner Program” to promote co-creation with its corporate customers. A variety of solutions are now being studied with an eye toward pre-commercial service launch.

The birth of new technologies supporting 5G leads to new patents and intellectual property, and NTT DOCOMO’s contribution to new technologies and related intellectual property is one proof of this process.

Making contributions to communications-related standardization activities is connected to the goal of embodying NTT DOCOMO ideas in the form of standardization and disseminating technology, but it also implies the generation of licensing revenues as a secondary effect. Taking technologies up to LTE, for example, NTT DOCOMO has obtained an appropriate amount of revenue by concluding licensing contracts with smartphone manufacturers and others. We can therefore expect a new source of licensing revenue with the future spread of 5G.

Furthermore, in addition to the introduction of 5G, NTT DOCOMO has made a turn toward business operations centered about the “membership base” of its “d POINT CLUB,” a point program that anyone can join regardless of whether they have a line subscription or not. This is the beginning of a major transition for NTT DOCOMO. There is no change here in NTT DOCOMO’s stance of deepening its relationship with customers—it is just the approach that will be changing greatly. This includes major reform through digital transformation^{*2} and the existence of new technologies.

Together with “5G rollout” and “transformation into business management,” it is also important to “innovate and take action” in the field of intellectual property. The NTT DOCOMO Intellectual Property Department is itself evolving. By producing new NTT DOCOMO intellectual property in cooperation with all concerned, we wish to contribute not only to NTT DOCOMO business but also to the sustainable development of industry and society.

REFERENCE

- [1] Cyber Creative Institute: “Cyber Creative Institute analyzes “Application trend of ETSI standard essential patent (5G-SEP) candidates contributing to realization of 5G and proposal trend of contributions for standards,” Feb. 2019. <https://www.cybersoken.com/file/press190206eng.pdf>

^{*1} Essential patent: A patent for which it is necessary to obtain a license from its owner to avoid infringement when manufacturing or selling a product complying with a standard.

^{*2} Digital transformation: The changes that the digital technology causes or influences in all aspects of human life.