<u>DOCOMO</u> emerges as the third largest holder of 5G essential patents, and the top telecommunications carrier.

- Leading standardization activities in all phases of 5G and contributing to strengthening Japan's international competitiveness -

NTT DOCOMO, INC. ("DOCOMO") announced a research and analysis report on "5G-SEP and 5G Enabling Patents, and New Developments in 5G Standardization Contributions" by Cyber Creative Institute Co., Ltd. (press-released on May 17,

and hereinafter referred to as "the Research")*1, and in this Research, DOCOMO ranked third in the world in terms of the number of patents essential to the 5G standard (hereinafter referred to as "5G essential patents"), which are necessary to provide 5th generation mobile communication system (hereinafter referred to as "5G") services, and ranked first among telecommunications carriers worldwide. This is an improvement in ranking from the fifth place in the world in the previous research results (May 2023)*2.

The research is the sixth in a series of research and analysis reports (October 2020*3, April 2021*4, November 2021*5, June 2022*6, and May 2023) on 5G patents by Cyber Creative Institute Co., Ltd. In these researches, DOCOMO is consistently rated as having the highest number of 5G essential patents in the world. During this period, DOCOMO has been working vigorously at 3GPP*7, a standardization association that formulates specifications for 5G wireless communication technology, such as proposing technologies from basic 5G specifications to 5G-Advanced*8, expanded functions of 5G that will also bridge the gap to 6G, that Japanese carriers should incorporate into their services to provide better services to customers.

The 3GPP also presented a timeline for specifying requirements of the 6G standard, the next-generation mobile communication system*9. In addition to 5G-Advanced, DOCOMO will continue to contribute to the development of telecommunications technology in Japan and around the world.

Since the FRAND*10 declaration is voluntary to each company, there is also a problem of 5G patents that are not actually essential into the standard being included. DOCOMO has declared more than 2,200 patent families*11 of technologies essential to 5G as FRAND after thoroughly examining them for introduction to the 5G standard. In addition, we have actively proposed to ETSI*12, a standardization organization, to improve the transparency of the declaration*13, and will continue to make efforts to provide accurate information.

DOCOMO will continue to pursue R&D and standardization activities to provide better services to our customers and to pioneer the future of mobile communications.

- *1 https://www.cybersoken.com/topics/922/ (in Japanese)
- *2 https://www.cybersoken.com/topics/844/ (in Japanese)
- *3 https://www.cybersoken.com/topics/402/ (in Japanese)
- *4 https://www.cybersoken.com/topics/406/ (in Japanese)
- *5 https://www.cybersoken.com/topics/431/ (in Japanese)
- *6 https://www.cybersoken.com/topics/435/ (in Japanese)
- *7 Abbreviation for 3rd Generation Partnership Project. An international standardization project to develop standards for mobile communication systems.
- *8 https://www.3gpp.org/specifications-technologies/releases/release-18 (in Japanese only)
- *9 SP-231693/RP-233985, TSG SA Meeting #SP-102, Edinburgh, Scotland, 11th-15th Dec 2023
- *10 Abbreviation for Fair, Reasonable, And Non-Discriminatory terms and conditions. This means that the price and terms of the license are fair, reasonable, and non-discriminatory.
- *11 There are approximately 5,800 5G-related patent families application. More than 2,200 patent families have made mandatory declarations (with more to come). A patent family is a group of patents filed in more than one country on the same invention.
- *12 Abbreviation for European Telecommunications Standards Institute.
- *13 ETSI/IPR(24)040_003r1, "Incentives to increase transparency", ETSI IPR #40 Hybrid meeting, Sophia Antipolis, 15th Mar, 2024
- *DOCOMO's Standardization Initiatives

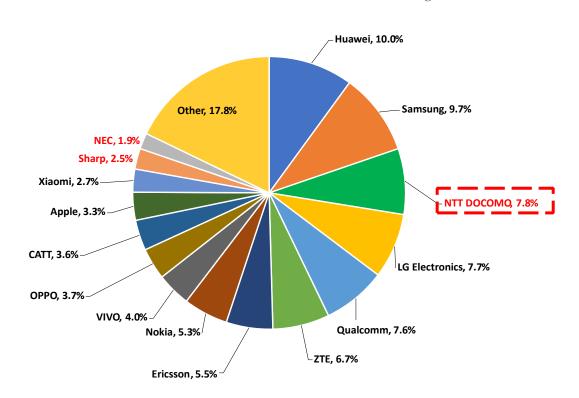
https://www.docomo.ne.jp/english/corporate/technology/rd/tech/standardization/

Reference

5G Essential Patents Holdings

Estimated 5G-SEPs

Distribution of Estimated Authentic 5G-SEPs Holdings



Source:

"New Movements in 5G-SEP, 5G Implementing Essential Patents and 5G Standardization Contributions"

by Cyber Creative Institute Co., Ltd.

https://www.cybersoken.com/en/topics/