<u>DOCOMO – Successively 4th largest 5G Essential Patent Holder in the World</u> <u>and 1st among Telecom Operators</u>

-World Top Level in Standard Essentiality Ratio-

In the report of "Cyber Creative Institute analyzes the factors behind the rapid increase in 5G-SEP and realized patents that support 5G standards and 5G business" *1, following the last survey (Nov, 2021)*2, NTT DOCOMO Inc. ("DOCOMO") is ranked as 4th in the world and 1st among telecom-carriers in number of holding patents essential to the 5th generation mobile communication system ("5G" for the system and "5G essential patent" for the patent) in executing services under the 5G standard.

This survey is the fourth following October 2020*3, April 2021*4, and November 2021. In the surveys, number of 5G essential patents has consistently been ranked top in the world. From the start of 5G launch to the present, for provisions of better services to customers, DOCOMO has been vigorously pursuing technical contributions to the 5G standardization meetings thereby such technologies can be incorporated into our services as a Japanese telecommunications carrier. For 5G Advanced and Beyond 5G ("B5G), we will continue to strive for further pursuit of standardization activities and acquisition of intellectual property rights, contributing to the development of communications technology worldwide and Japan.

Furthermore, according to this survey, DOCOMO is also evaluated as the world top level in the essentiality ratio in the FRAND*5 declared 5G essential patents. DoCoMo has carefully examined the adoption of the patent application technology in the 5G standard, and has made FRAND declarations with the technology of the 1,600 family*6 as 5G essential patents. For better transparency of the declaration, DOCOMO will continuously strive for providing and disseminating accurate information.

DoCoMo will continue to work on research and development and standardization activities for better services to customers and to open up the future of mobile communications.

^{*1} https://www.cybersoken.com/en/topics/2022/06/20/320/

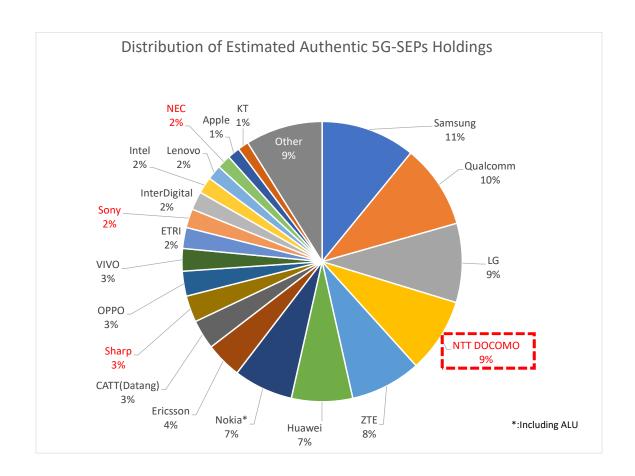
^{*2} See the topic released on 8/November/2021(https://www.cybersoken.com/en/topics/2022/06/08/240/#more-240)

 $^{*3\} https://www.cybersoken.com/file/press_5G_Patents, 5G-SEP_en.pdf$

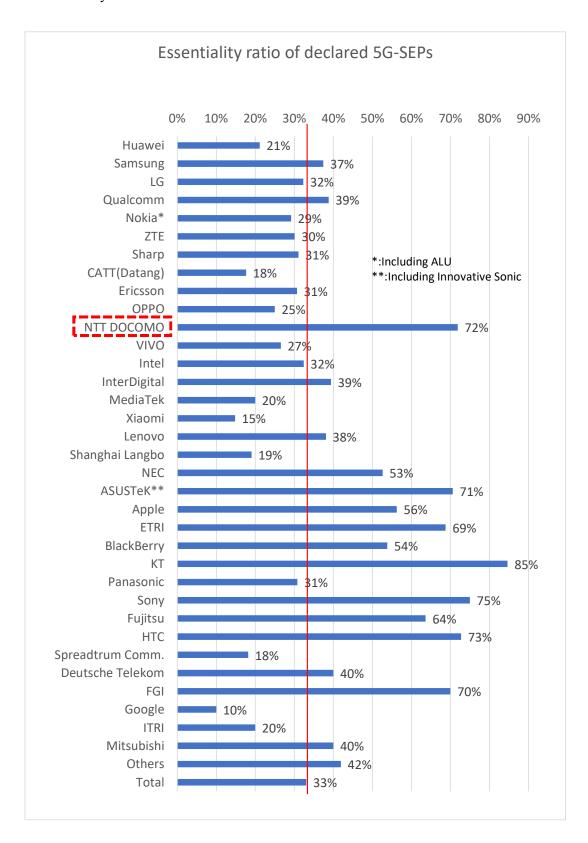
- *4 See the topic released on 2/April/2021 (https://www.cybersoken.com/en/topics/2020/10/12/240/)
- *5 Fair, Reasonable, and Non-Discriminatory terms and conditions. It means that the amount and terms of the license are fair, reasonable, and non-discriminatory.
- *6 the family of patent applications related to the 5G standard is approximately 3,600. Of these, approximately 1,600 families with mandatory declarations have accumulated (additional declarations are planned). A family is a group of patents filed for the same invention in multiple countries.
- * DOCOMO's Activities for Standardization https://www.nttdocomo.co.jp/corporate/technology/rd/tech/standardization/

Reference

1. 5G Essential Patents Holdings



2. Essentiality ratio in declared 5G-SEPs



Source: Press Release by Cyber Creative Institute Co., Ltd. (May 31, 2022)

https://www.cybersoken.com/en/topics/2022/06/20/320/