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(19) **United States**(12) **Patent Application Publication**
HÖGLUND et al.(10) **Pub. No.: US 2023/0232433 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **WIRELESS DEVICE, NETWORK NODE, AND METHODS PERFORMED THEREBY, FOR HANDLING TRANSMISSION OF DATA****Publication Classification**(51) **Int. Cl.****H04W 72/51** (2006.01)**H04W 72/1268** (2006.01)**H04W 28/02** (2006.01)(52) **U.S. Cl.****CPC** **H04W 72/51** (2023.01); **H04W 72/1268** (2013.01); **H04W 28/0278** (2013.01)(71) Applicant: **Telefonaktiebolaget LM Ericsson (publ)**, Stockholm (SE)(72) Inventors: **Andreas HÖGLUND**, SOLNA (SE); **Oscar OHLSSON**, BROMMA (SE); **Henrik ENBUSKE**, STOCKHOLM (SE); **Luca FELTRIN**, SOLNA (SE); **Johan BERGMAN**, STOCKHOLM (SE); **Tuomas TIRRONEN**, HELSINKI (FI); **Olof LIBERG**, ENSKEDE (SE)(57) **ABSTRACT**

A method performed by a wireless device. The wireless device sends an indication to a network node including a value corresponding to a size of a buffer of detected or expected to be had during inactive state at a time of one or more transmissions. The sending is performed with the proviso that the size of the buffer is smaller than a threshold. The wireless device receives a grant from the network node based on the indication, and then sends data to the network node during inactive state, according to the grant received. The sending of the data is performed with the proviso that the size of the buffer is smaller than the threshold. The sending of the indication is performed prior to the sending of one or more data packets comprising at least a part of the first data.

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