



US 20240214047A1

(19) **United States**

(12) **Patent Application Publication**
Ahmed et al.

(10) **Pub. No.: US 2024/0214047 A1**

(43) **Pub. Date: Jun. 27, 2024**

(54) **METHODS AND APPARATUSES FOR DETERMINING CHANNEL STATE INFORMATION INTERFERENCE MEASUREMENT RESOURCES FOR INTERFERENCE MEASUREMENT**

H04W 72/1273 (2006.01)

H04W 76/40 (2006.01)

(52) **U.S. Cl.**

CPC *H04B 7/0626* (2013.01); *H04B 17/336* (2015.01); *H04W 72/1273* (2013.01); *H04W 76/40* (2018.02)

(71) Applicant: **Telefonaktiebolaget LM Ericsson (publ)**, Stockholm (SE)

(72) Inventors: **Saad Naveed Ahmed**, Sundbyberg (SE); **Hong Ren**, Kanata (CA); **Wei Wang**, Kanata (CA)

(21) Appl. No.: **18/288,759**

(22) PCT Filed: **Apr. 30, 2021**

(86) PCT No.: **PCT/SE2021/050403**

§ 371 (c)(1),

(2) Date: **Oct. 27, 2023**

Publication Classification

(51) **Int. Cl.**

H04B 7/06 (2006.01)

H04B 17/336 (2006.01)

(57)

ABSTRACT

Embodiments described herein relate to methods and apparatuses for determining channel state information interference measurement, CSI-IM resources for interference measurement in a NR cell, wherein the NR cell is sharing a frequency carrier with a Long Term Evolution, LTE, cell under the control of a LTE base station. A method in an NR base station serving the NR cell comprises: generating a CSI-IM pattern for enabling at least one wireless device to perform interference measurements wherein the CSI-IM pattern comprises at least one CSI-IM resource in a Multicast-Broadcast Single-Frequency Network, MBSFN, slot of the LTE cell and at least one CSI-IM resource in a non-MBSFN slot of the LTE cell; and sending an indication of the CSI-IM pattern to the LTE base station.

