



(19) **United States**

(12) **Patent Application Publication**
MAO

(10) **Pub. No.: US 2023/0232419 A1**

(43) **Pub. Date: Jul. 20, 2023**

(54) **SCHEDULING IN A RADIO
TELECOMMUNICATIONS NETWORK**

(71) Applicant: **Nokia Technologies Oy**, Espoo (FI)

(72) Inventor: **Xiaomao MAO**, Paris (FR)

(21) Appl. No.: **18/007,107**

(22) PCT Filed: **Aug. 6, 2020**

(86) PCT No.: **PCT/EP2020/072183**

§ 371 (c)(1),

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

Publication Classification

(51) **Int. Cl.**
H04W 72/232 (2006.01)
H04L 5/00 (2006.01)

(52) **U.S. Cl.**
CPC **H04W 72/232** (2023.01); **H04L 5/0053**
(2013.01)

(57) **ABSTRACT**

A mobile equipment comprising means for: receiving via signalling at a higher layer than a physical layer, a downlink

control information (DCI) format; receiving via signalling at a higher layer than the physical layer, information defining a look-up table for converting a received index to a scheduling sequence representing, based on the DCI format, scheduling information; receiving a DCI sequence at the physical layer, the DCI sequence comprising an index for indexing one of a plurality of predetermined different scheduling sequences; using the look-up table to convert the received index to a scheduling sequence representing, based on the DCI format, scheduling information; and using the DCI format to obtain the scheduling information, for configuring the mobile equipment for data communication, from the scheduling sequence representing, based on the DCI format, the scheduling information. A network node comprising means for: sending to a user equipment (UE), via signalling at a higher layer than a physical layer: a downlink control information (DCI) format, that enables the UE to obtain scheduling information, for scheduling the UE for data communication, from a scheduling sequence representing, based on the DCI format, the scheduling information; and information defining a look-up table for converting an index to a scheduling sequence representing, based on the DCI format, the scheduling information; and sending to the user equipment a DCI sequence at the physical layer, the DCI sequence comprising an index indexing one of a plurality of predetermined different scheduling sequences.

