

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
24 March 2022 (24.03.2022)



(10) International Publication Number
WO 2022/059871 A1

- (51) International Patent Classification:
H04B 7/0413 (2017.01) *H04B 7/06* (2006.01)
H04B 7/0452 (2017.01)
- (21) International Application Number:
PCT/KR2021/002945
- (22) International Filing Date:
10 March 2021 (10.03.2021)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10-2020-0120102 17 September 2020 (17.09.2020) KR
10-2021-0014497 02 February 2021 (02.02.2021) KR
- (71) Applicant: **SAMSUNG ELECTRONICS CO., LTD.**
[KR/KR]; 129, Samsung-ro, Yeongtong-gu, Suwon-si,
Gyeonggi-do 16677 (KR).
- (72) Inventors: **KIM, Jonghwan**; 129, Samsung-ro, Yeong-
tong-gu, Suwon-si, Gyeonggi-do 16677 (KR). **SHIM, Sei-
joon**; 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeong-
gi-do 16677 (KR). **OH, Jongho**; 129, Samsung-ro, Yeong-
tong-gu, Suwon-si, Gyeonggi-do 16677 (KR). **HA, Kilsik**;
129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do
16677 (KR).
- (74) Agent: **YOON & LEE INTERNATIONAL PATENT &
LAW FIRM**; 3rd Fl, Ace Highend Tower-5, 226, Gasan
Digital 1-ro, Geumcheon-gu, Seoul 08502 (KR).
- (81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,

(54) Title: TRANSMISSION METHOD AND APPARATUS FOR MIMO SYSTEM

1500

0 (mbs)	1	2	3	4	5	6	7 (lbs)
ef	extType = 0x0y						
extLen (1 word)							
BeamGroupType=10b		numPortc [=number of scheduled layers-1]					
reserved	2nd ueID[14:8]						
2nd ueID[7:0]							
	...						
reserved	[numPortc+1]-th ueID[14:8]						
(numPortc+1)-th ueID[7:0]							

ef	New extType		
extLen (1 word)			
numUeId of 1st user		numUeId of 2nd user	
...			
...		numUeId of last user	
filler to ensure 4-byte boundary			

(57) Abstract: A communication technique for convergence between an IoT technology and a 5th generation (5G) communication system for supporting a higher data transmission rate beyond a 4th generation (4G) system, and a system thereof is provided. The method includes intelligence services (for example, smart homes, smart buildings, smart cities, smart cars or connected cars, healthcare, digital education, retail businesses, security and safety related services, and the like.) On the basis of a 5G communication technology and an IoT-related technology. A method includes determining a scheduling-related parameter for at least one user, and transmitting scheduling information indicating the scheduling-related parameter to a radio unit (RU), wherein the scheduling information includes a first section extension field including information relating to a user equipment identifier (ueID)

[Continued on next page]

CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN,
KP, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

related to the at least one user, and a second section extension field including information relating to a number of ueIDs corresponding to each user.