

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
22 May 2020 (22.05.2020)



(10) International Publication Number
WO 2020/102358 A2

- (51) **International Patent Classification:**
H04L 5/00 (2006.01) *H04W 72/04* (2009.01)
- (21) **International Application Number:**
PCT/US2019/061189
- (22) **International Filing Date:**
13 November 2019 (13.11.2019)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
201841042779 14 November 2018 (14.11.2018) IN
16/681,554 12 November 2019 (12.11.2019) US
- (71) **Applicant: QUALCOMM INCORPORATED** [US/US];
ATTN: International IP Administration, 5775 Morehouse
Drive, San Diego, California 92121-1714 (US).
- (72) **Inventors: SUN, Jing;** 5775 Morehouse Drive, San Diego,
California 92121-1714 (US). **ZHANG, Xiaoxia;** 5775
Morehouse Drive, San Diego, California 92121-1714 (US).
BHATTAD, Kapil; 5775 Morehouse Drive, San Diego,
California 92121-1714 (US).
- (74) **Agent: ANDERSON, Thomas;** Holland & Hart LLP, P.O.
Box 11583, Salt Lake City, Utah 84147 (US).
- (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,
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, JO, JP, KE, KG, KH, KN, KP,
KR, 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, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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:

- *without international search report and to be republished
upon receipt of that report (Rule 48.2(g))*

- (54) **Title:** CONTROL SEARCH SPACE OVERLAP INDICATION

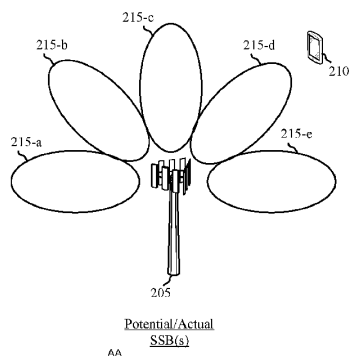


FIG. 2

(57) **Abstract:** A user equipment (UE) may receiving, from a base station, a syn-
chronization signal block (SSB) of a set of quasi-collocated (QCL) SSBs, the SSB
comprising an indication of a parameter indicating information associated with a
plurality of downlink control channel locations corresponding to the set of QCL
SSBs. The UE may determine, based at least in part on the parameter, the plurality
of downlink control channel locations corresponding to the set of QCL SSBs. The
UE may receive a downlink grant for a system information based at least in part
on monitoring one or more downlink control channel locations of the plurality of
downlink control channel locations. The UE may receive the system information
based at least in part on the downlink grant. The UE may establish a connection
with the base station based at least in part on the SSB and the received system
information.

AA SSB potentiel/courant

WO 2020/102358 A2